

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Parts 1, 61, 141, and 143**

[Docket No. 25910; Notice No. 95-11]

RIN: 2120-AE71

Pilot, Flight Instructor, Ground Instructor, and Pilot School Certification Rules

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This action proposes to revise the Federal Aviation Regulations that prescribe the certification and training requirements for pilots, flight instructors, and ground instructors and the operation of pilot schools approved by the FAA. In order to be more compatible with the current operating environment and the evolving demands of the National Airspace System, the proposals are intended to update training, certification, and recency of experience requirements. The proposals respond to comments to the FAA from the public, internal FAA review, and comments from the International Civil Aviation Organization.

DATES: Comments must be received on or before December 11, 1995.

ADDRESSES: Comments on the proposals may be delivered or mailed in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC-10), Docket No. 25910, 800 Independence Avenue, SW., Washington, DC 20591. All comments must be marked "Docket No. 25910." Comments may be examined in the Rules Docket, Room 915G, weekdays between 8:30 a.m. and 5 p.m., except on Federal holidays.

FOR FURTHER INFORMATION CONTACT: John Lynch, Certification Branch, AFS-840, General Aviation and Commercial Division, Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3844.

SUPPLEMENTARY INFORMATION:**Comments Invited**

Interested persons are invited to participate in this rulemaking by submitting written data, views, or arguments as they desire. Comments relating to the potential economic, environmental, energy, or federalism impact of the proposals contained in this notice are also invited.

The comments should identify the regulatory docket or notice number and should be submitted in triplicate to the Rules Docket address specified above. All comments received on or before the closing date for comments will be considered by the Administrator before action is taken on the proposed amendments, and the proposals contained in this notice may be changed in light of comments received. All comments received as well as a report summarizing any substantive public contact with FAA personnel on this rulemaking will be filed in the docket. The docket is available for public inspection before and after the closing date for submitting comments. The FAA will acknowledge receipt of a comment if the commenter submits with the comment a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 25910." When the comment is received, the postcard will be dated, time stamped, and returned to the commenter.

The FAA has proposed specific flight and ground time requirements in various sections of this NPRM. These specific time requirements may be modified in light of the comments received in response to this NPRM.

Availability of the NPRM

Any person may obtain a copy of this NPRM by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center, APA-220, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3484. Requests should be identified by the NPRM number or docket number of this proposed rule. Persons interested in being placed on a mailing list for future proposed rules should also request a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

General Aviation Policy Statement

On September 8, 1993, Administrator David R. Hinson issued a general aviation policy statement in which he recognized that the general aviation industry is a critically important part of the nation's economy and the national transportation system. Administrator Hinson stated the following:

General aviation plays a crucial role in flight training for all segments of aviation and provides unique personal and recreational opportunities. It makes vital contributions to activities ranging from business aviation, to agricultural operations, to Warbird preservation, to glider and balloon flights. Accordingly, it is the policy of the FAA to

foster and promote general aviation while continuing to improve its safety record. These goals are neither contradictory nor separable. They are best achieved by cooperating with the aviation community to define mutual concerns and joint efforts to accomplish objectives. We will strive to achieve the goals through voluntary compliance and methods designed to reduce the regulatory burden on general aviation.

The FAA's general aviation programs will focus on:

1. Safety—To protect recent gains and aim for a new threshold.
2. FAA Services—To provide the general aviation community with responsive, customer-driven certification, air traffic, and other services.
3. Product Innovation and Competitiveness—To ensure the technological advancement of general aviation.
4. System Access and Capacity—To maximize general aviation's ability to operate in the National Airspace System.
5. Affordability—To promote economic and efficient general aviation operations, expand participation, and stimulate industry growth.

Accordingly, this rulemaking project was and is designed to meet these general aviation goals and provide economic relief from unnecessary, burdensome regulations. Throughout the development of this notice, the FAA has been in partnership with the general aviation community in developing and revising the rules in parts 61, 141, and 143 to ensure aviation safety and yet delete unnecessary, burdensome rules. The FAA is committed to this partnership with our general aviation constituents, and will continue the partnership through the notice and final rule phases of this rulemaking action.

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A. Background

Since September of 1987, the FAA has been conducting a regulatory review of parts 61, 141, and 143 of the Federal Aviation Regulations (FAR). These regulations pertain to certification and training requirements for pilots, flight instructors, and ground instructors and the operation of pilot schools that are approved by the FAA. This regulatory review is being undertaken in response to advancements in aviation technology, training, and changes in the National Airspace System (NAS) that have occurred since the last major revisions to these parts in the early 1970's. The FAA has received numerous petitions for exemption and letters from the public suggesting changes to the current regulations. To date, there have been 41 amendments and approximately 3,616 exemption actions to parts 61 and 141. Recommendations and comments from the National Transportation Safety Board (NTSB), the public, and the FAA have also demonstrated the need for the regulatory review. A major goal of the review is to identify differences between the rules and the level of training

demanding of pilots in today's aviation environment.

In support of this regulatory review, the FAA completed a historical review of parts 61, 141, and 143 in January 1988. During this review, the FAA also received input from pilot schools and college and university aviation departments operating under parts 61 and 141. Three major areas were identified during this review: first, issues of immediate concern recommended by the NTSB and public comments; second, the requirements for aircraft operations in today's environment; and finally, the requirements for pilots in the year 2010 and beyond. Accordingly, the regulatory review was divided into three phases corresponding to the needs identified above. The final rule for Phase 1, Amendment Nos. 61-90 and 141-4 (56 FR 11308; March 15, 1991; effective on April 15, 1991), contained the following:

1. New requirement to obtain training and a flight instructor endorsement to serve as pilot in command of a tailwheel airplane;

2. New requirement to obtain training and a flight instructor endorsement to serve as pilot in command of a pressurized airplane capable of high altitude flight above 25,000 MSL;

3. New requirement for an applicant to complete a training curricula and receive a flight instructor endorsement prior to qualifying in an airplane that requires a type rating;

4. New requirement to permit completion of a phase of the WINGS program as satisfactory completion of a biennial flight review (BFR);

5. New requirement for pilot applicants to receive ground training on stall awareness, spin entry, spins, and spin recovery techniques;

6. New requirement for pilot applicants to receive flight training on flights at slow airspeeds with realistic distractions and the recognition of and recovery from stalls;

7. New requirement for flight instructor applicants to receive and demonstrate actual spin training;

8. New requirement for flight instructor applicants to perform a spin demonstration on retests when the reason for the failure was due to deficiencies of knowledge or skill relating to stall awareness, spin entry, spins, or spin recovery techniques;

9. New requirement that FAA inspectors and designated pilot examiners may accept instructor endorsements for the spin demonstration on practical tests for flight instructor applicants;

10. New requirement in part 141 that a chief or assistant chief flight instructor only has to be available by telephone, radio, or other electronic means during the time that instruction is given for an approved course of training;

11. New requirement in part 141 for initial designation of assistant chief flight instructors that are one half the requirements of chief flight instructors;

12. New requirement to eliminate the 100-hour currency experience requirement in part 141 for chief flight instructors to obtain initial designation; and

13. New requirement to eliminate the 25 mile distance restriction for establishing satellite bases in part 141.

This NPRM represents Phase 2 of the regulatory review. Phase 2 addresses issues affecting parts 1, 61, 141, and 143. Prior to drafting and publishing this NPRM, the FAA issued a notice of hearing (54 FR 22732; May 25, 1989) that announced 4 public hearings and outlined the general topics for this NPRM. Four public hearings were held before the drafting and publishing of this NPRM as part of Phase 2. The hearings were held in Washington, DC (September 12–13, 1989); Chicago, Illinois (September 19–20, 1989); Los Angeles, California (October 3–4, 1989); and Orlando, Florida (October 16–17, 1989).

Phase 2 also involves a Pilot and Flight Instructor Job Task Analysis (JTA), completed on March 31, 1989, which consolidated the results of a study on areas of pilot knowledge, skills, abilities, and attitudes required in today's aviation environment. The JTA provided the framework for this phase of the regulatory review and provides information for use in training programs and practical test standards. A copy of the JTA is available for examination in Docket No. 25627 and for purchase on a diskette through the National Technical Information Service (NTIS), Springfield, Virginia 22161, (703) 487-4650. The cost of the diskette is \$55 in the United States and the NTIS order number is PB89-167845CAU.

Most of the JTA consisted of data, based on experts' opinions, used to quantify the relative importance of knowledge, skills, abilities, and attitudes. The JTA also included a panel that discussed current and future pilot training needs. A transcript of the panel's deliberations is contained in Docket No. 25627. The panel's objective was to project pilot training needs 3 to 10 years into the future. The panel discussed changing technology, airline pilot requirements, airspace, training, instructors, and aviation economics.

In addition, on February 9 and 10, 1993, the FAA conducted information gathering meetings with a number of aviation organizations and schools on the comments received in Docket No. 25627. These meetings concerned issues raised during the public hearings that were held in Washington, DC (September 12–13, 1989); Chicago, Illinois (September 19–20, 1989); Los Angeles, California (October 3–4, 1989); and Orlando, Florida (October 16–17, 1989), and the information received during the JTA that was completed on March 31, 1989. Because so much time had passed since the time of the hearings, receipt of comments to the docket, and the JTA, the FAA decided to update its information. The invitees were selected as a result of their organizations' and schools' past involvement in this regulatory review. The FAA is committed to developing rules that are fair and reasonable, and yet maintain a high degree of pilot training and qualification. The following organizations and schools attended these meetings: General Aviation and Manufacturing Association (GAMA), National Air Transport Association (NATA), Jeppesen-Sanderson, National Association of Flight Instructors (NAFI), Balloon Federation of America (BFA), Farrington Aircraft, Aircraft Owners and Pilots Association (AOPA), AOPA Safety Foundation, Experimental Aircraft Association (EAA), Helicopter Association International (HAI), Soaring Society of America (SSA), Embry Riddle Aeronautical University (ERAU), Parks College of St. Louis, and American Flyers.

There have been some preliminary discussions for conducting a Phase 3 of this regulatory review. However, no schedule has been established for Phase 3. If a Phase 3 is conducted, it would be a comprehensive, long-term effort to address pilot, flight instructor, and ground instructor requirements for the year 2010 and beyond.

1. Notice No. 92-10, Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking at Training Centers

On August 11, 1992, the FAA issued notice of proposed rulemaking (NPRM) No. 92-10, "Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking at Training Centers" (57 FR 35888-35938). Although the flight simulator NPRM contains several issues related to this NPRM, the FAA has tried to make these rulemaking projects separate and distinct from one another. Despite the efforts to coordinate these two rulemaking actions, some overlap still exists. However, if any

discrepancies have occurred, the matter will be resolved in the final rule.

2. Experimental Aircraft Association (EAA) Petition

On January 3, 1994, the FAA published, without comment or endorsement, a petition for rulemaking submitted by EAA (59 FR 31). In their petition, the EAA requested the following changes to the recreational pilot certificate:

(1) Eliminating the requirement that a recreational pilot hold at least a 3rd-class medical certificate;

(2) Requiring a recreational pilot to self certify that he or she has no known medical deficiency that would make him or her unable to fly;

(3) Eliminating the 50 nautical mile limitation for those pilots who obtain additional training;

(4) Permitting a pilot with a higher certificate or rating who no longer has a medical certificate, but who self certifies that he or she is physically fit to fly, to exercise the privileges of a recreational pilot certificate, subject to the limitations of the recreational pilot certificate; and

(5) Eliminating the recreational pilot certificate limitations for cross country, night flight, and flight into airspace requiring communication with air traffic control for those pilots with higher certificates and ratings who no longer have medical certificates, but who self certify that they are physically fit to fly.

The comment period for the EAA petition closed on March 4, 1994. There were over one thousand comments received. The majority of commenters voiced overwhelming support for the petition, but did not provide any data or analysis. Some commenters, including the Civil Aviation Medical Association (CAMA), opposed the EAA petition. CAMA expressed concern with the impact on public health and welfare of the proposed elimination of medical standards for pilots who exercise the privileges of a recreational pilot certificate. One specific concern of those commenters who opposed the EAA petition was the carrying of passengers by a pilot who does not hold a medical certificate. The FAA has reviewed all comments received in developing this rulemaking action. The vast majority of commenters responding to this petition were individual members of the aviation community and many were members of the EAA.

In this notice, the FAA is proposing to permit most of what EAA has requested. The FAA is not proposing to eliminate the recreational pilot limitations for cross country, night flight, and flight into airspace requiring

communication with air traffic control for those pilots with higher certificates and ratings who no longer have medical certificates, but who self certify that they are physically fit to fly. The FAA may reconsider this issue, however, based on comments received.

3. General Discussion of Principal Issues in This NPRM

This NPRM incorporates many of the concepts developed through the public hearings, the JTA, and the public comments received in Docket Nos. 25627 and 25910.

Docket No. 25627 was established to receive comments throughout the entire regulatory review and will remain open until the FAA publishes a notice of its closing. This docket facilitates the orderly flow of collecting comments, recommendations, and ideas from the public. Docket No. 25910 was established to receive specific comments from the public on NPRM No. 89-14, which was the Phase 1 proposal.

The proposals in this NPRM cover a broad range of issues. The major proposals included in this NPRM are as follows: (1) Clarify and standardize terminology; (2) establish a new powered-lift category rating; (3) establish separate class ratings for nonpowered and powered gliders; (4) establish a flight instructor certificate in the lighter-than-air category; (5) establish instrument ratings for single-engine airplanes, multiengine airplanes, airships, and powered-lifts; (6) revise the recency of experience requirements; (7) revise recreational pilot certification and authorization requirements; (8) require human factors training for all certificates and ratings; (9) replace flight proficiency requirements for training and certification with more general approved areas of operation; (10) revise the training times for the aeronautical experience requirements to permit the student and the instructor to tailor the training to the individual student's needs; (11) remove and reserve part 143 and establish a new subpart I in part 61 for ground instructors; (12) require ground instructor certificates to be based on aircraft category; (13) require applicants for a ground instructor certificate to accomplish a practical test; (14) revise the certification and test courses in part 141 to accommodate all aircraft categories and new technology; (15) establish a check instructor position to perform student and instructor checks and tests at part 141 pilot schools; (16) delete exceptions that permit pilots to be certified without meeting the English language fluency requirements; (17) revise the medical

eligibility requirements for applying for all certificate levels and ratings by only requiring applicants to hold a third class medical certificate; and (18) delete the requirement for recreational pilots to hold a medical certificate.

Due to the length of this notice, the preamble addresses the proposed changes to parts 61, 141, and 143 in two major sections. First, a general subject discussion of major issues is presented. Second, proposed changes are discussed briefly in a section-by-section analysis.

It should be noted that parts 61 and 141 are republished here in their entirety. All sections, except those specifically noted, include a modified format, standardized terminology, and the deletion of gender references. Several sections, which are noted in the section-by-section discussion contain no revisions or editorial changes. Three of these sections, §§ 61.58, 61.63, and 61.67, have been proposed to be revised in NPRM No. 92-10, "Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking at Training Centers," (57 FR 35888-35938; August 11, 1992). In addition to proposed additions, deletions, and substantive changes to the regulations, the FAA seeks in this proposal to continue its policy of simplifying regulations through editorial style changes. Wherever possible, the rules are broken down into brief sentences and outline format. Therefore, some section numbering would change under this proposal. In addition, the FAA has proposed numerous non-substantive changes to the regulations, and where necessary has proposed numerous revisions involving clarity and conformity.

B. Part 61 Issues

1. Definition of Terms

The FAA proposes to establish a new § 61.1a, "Clarification of Terms." The intent of the section is to ensure more consistent use of terms throughout the text under part 61. The terms to be clarified include:

a. Aeronautical Experience

This term means pilot time obtained in an aircraft, flight simulator, or flight training device for meeting the appropriate training and flight time for an airman certificate, rating, flight review, or recency of flight experience, of part 61.

b. Airman Certificate

This term describes a pilot certificate (other than a student pilot certificate), flight instructor certificate, or a ground instructor certificate that is issued under part 61. This would not include other

airmen as described in the Federal Aviation Act of 1958, as amended, which also applies the term to repairmen, mechanics, aircraft dispatchers, parachute riggers, other flight crewmembers, and air traffic controllers.

c. Authorized Ground Instructor

This proposal includes a provision to incorporate part 143, Ground Instructors, into part 61. The term would describe a person who holds a current ground instructor certificate with ratings that apply to the training being given, and who is authorized by the Administrator to give that training.

d. Authorized Flight Instructor

This term would clarify that a flight instructor must hold a current flight instructor certificate with ratings that apply to the training being given, and be authorized by the Administrator to give that training.

e. Cross-Country Time

The FAA proposes to describe cross country time for three separate circumstances: (1) For persons who hold a private, commercial, or airline transport pilot certificate; (2) for persons applying for a private or commercial pilot certificate or instrument rating; and (3) for military pilots. These issues are addressed further in the discussion of logging of pilot time.

f. Examiner

The term would refer to persons authorized to conduct practical tests or knowledge tests under part 61.

g. Flight Training

The term would refer to training received from an authorized flight instructor in actual flight in an aircraft.

h. Ground Training

The term would refer to training other than flight training received from either an authorized ground instructor or an authorized flight instructor.

i. Instrument Approach

This term would define an instrument approach as an approach procedure defined in part 97 and conducted to an established minimum descent altitude (MDA) or decision height (DH), or if necessary, to a higher altitude selected for safety reasons by ATC.

j. Instrument Training

The term would refer to time in which instrument training is received from an authorized flight instructor under actual or simulated instrument flight conditions.

k. Knowledge Test

The term "knowledge test" would replace "written test." The FAA believes the term "knowledge test" is a more inclusive term, referring to either tests administered with pencil and paper or by computer on the aeronautical knowledge areas in part 61.

l. Practical Test

The term "practical test" would include both oral and flight testing or testing in an approved flight simulator or flight training device on the approved areas of operation for an airman certificate, rating, or authorization.

m. Supervised Pilot-in-Command (PIC) Time

The term "supervised PIC time" would mean aeronautical experience flight time in an aircraft that applies to either a student pilot or pilot who is not rated in the aircraft, but is under the supervision and authorization to conduct the flight from an authorized flight instructor. The purpose for this proposal is to permit student pilots and pilots who are not rated in the aircraft, to log PIC time when the sole manipulator of the controls. This will be a change to the FAA's existing policy on who can log PIC time. In the past, the logging of PIC time in § 61.51 required the person to be a rated pilot, the sole manipulator of the controls, and be rated in the aircraft. Furthermore, depending on the crew complement specifications set forth in the aircraft's flight manual, the flight instructor may be onboard the aircraft in an assigned crewmember position. The flight instructor is expected to perform essential crew member functions, evaluate the person's ability to act as a PIC, and as always perform essential safety-related functions in the case of emergencies.

n. Training Time

A definition of the term "training time" would mean training received: (1) In actual flight from an authorized flight instructor; (2) on the ground from an authorized ground or flight instructor; or (3) in a flight simulator or flight training device from an authorized ground or flight instructor.

2. Areas of Operation

The FAA proposes a significant change in the regulatory descriptions of the procedures and maneuvers required of applicants for the various pilot certificates and ratings. Under the proposed new concept, the FAR would specify general areas of operation to be covered in flight training and practical tests for pilot and flight instructor

certificates and ratings and in training and testing for ground instructors. Many specific flight proficiency requirements currently in the FAR would be deleted. The specific tasks for the training and practical tests would be listed in the standards for each practical test for each certificate and rating. The purpose of this approach is to permit greater flexibility in updating the training and testing maneuvers and procedures required of pilot and flight instructor applicants.

For example, under current § 61.107 an applicant for a private pilot certificate with an airplane category and single-engine class rating must receive training on "emergency operations, including simulated aircraft and equipment malfunctions." The proposed areas of operation for the same applicant would require training on "emergency operations;" however, the tasks for the required training and practical test for an airplane category and single-engine class rating would include a task for emergency approach and landing (simulated) and a task for system and equipment malfunctions.

For convenience, the areas of operation for each category and, in some cases, for each class of aircraft under each certificate or rating would be listed separately. This would result in a certain amount of redundancy because many areas of operation would be common to more than one category and class of aircraft. However, the FAA proposes this method of listing areas of operation to avoid requiring users to consult more than one list to identify the areas pertinent to their individual situation.

In conjunction with using general terms to refer to maneuvers, the term "slow flight" would be used in place of previously used terms such as "minimum controllable airspeed" and the more recent term, "flight at slow airspeeds with realistic distractions." The FAA is not proposing a change in the concept; the details of the maneuvers and procedures will continue to be established through the appropriate practical test standards.

The use of areas of operation is consistent with public response to the issue addressed in the Notice of Hearings of whether the specific tasks or requirements in the Practical Test Standards (PTS) should be included in the FAR. The FAA believes the PTS should remain separate from the regulations to maintain the flexibility needed for revising and updating the PTS. Some commenters suggested listing specific areas of operation rather than specific pilot operations in the regulations regarding pilot operations.

The use of areas of operation would permit the practical test requirements, and hence, specific training requirements, to keep pace with technological change. For example, the current rule lists pilot operation procedures for equipment that is no longer common and does not include procedures for newer equipment (e.g., Electronic Flight Instrument System (EFIS), LORAN-C).

3. New Aircraft Category, Classes

This proposal would establish a new aircraft category for pilot certification—the powered-lift. The FAA also proposes to establish two aircraft classes within the glider category: powered glider and nonpowered glider.

a. Powered-Lift

The FAA anticipates that one of the most significant future developments in the NAS will be the introduction of a new category of aircraft, the powered-lift, into civil application. According to the FAA's Interim Airworthiness Criteria Powered-Lift Transport Category Aircraft (Department of Transportation, Federal Aviation Administration, Southwest Region, July 1988), powered-lifts resemble airplanes and rotorcraft in many respects. The document addresses airworthiness standards for multiengine turbine transport category aircraft that use power for lift, propulsion, and control.

Powered-lift aircraft have vertical take-off and landing and hovering capability like helicopters, but they also may fly at higher airspeeds like airplanes. The low airspeed capability may be provided by either aircraft configuration changes (tilt-wing, tilt-rotor, tilt-propeller), thrust vectoring, direct-lift engines, or other powered-lift concepts.

Powered-lift aircraft will require a new set of pilot knowledge, skills, and abilities. Therefore, the FAA proposes to create a new powered-lift aircraft category rating in § 61.5 for certification of private, commercial, and airline transport pilots, and for flight instructor and ground instructor certificates. The FAA also proposes to create a corresponding instrument rating for powered-lift aircraft. The FAA does not propose to extend recreational pilot certification in proposed subpart D to include the powered-lift category rating.

The FAA has considered various approaches to pilot certification for powered-lift aircraft. For example, the FAA considered whether powered-lift should be a separate category, with or without class ratings, such as tilt-rotor, tilt-wing, ducted fan, and vectored thrust. Another approach considered

was creating a powered-lift class rating within the rotorcraft category. The FAA also considered proposing to require a type rating for every make and model of powered-lift aircraft.

Based on available information, the FAA has concluded that safety needs will be met by establishing a separate aircraft category only. Under proposed § 61.31, type ratings would not be required for powered-lift aircraft except for large aircraft or as specified by the Administrator under aircraft type certificate procedures. The FAA has determined that requiring additional requirements beyond this type rating requirement at this time might discourage the development of smaller powered-lift aircraft intended for general aviation. Thus, it does not appear feasible to establish class ratings at this time.

In general, the aeronautical experience hour-requirements for powered-lift category ratings would parallel those for airplanes and helicopters. For example, proposed § 61.87, Solo flight requirements, would require powered-lift student pilots to meet the same requirements as both airplane and helicopter student pilots. Similar overlap would occur in the areas of operation for private and commercial pilot training and certification.

Aeronautical knowledge requirements for commercial pilot certification would be the same as those for helicopters (a single set of aeronautical knowledge areas is proposed for all aircraft categories at the private pilot level). Areas of operation for the instrument rating under proposed § 61.65 would be the same as for airplanes.

b. Glider Class Ratings

The FAA proposes to divide the glider category into two classes for pilot certificates and ratings: powered glider and nonpowered glider. The term "powered glider" includes self-launching sailplanes, powered sailplanes, motorized sailplanes, and motorgliders. Some of these aircraft are designed primarily for high performance and competitive flying; others are more suitable for training. The low power-to-weight ratio and relatively low wing loadings generally found in powered gliders produce performance characteristics that are similar to low-powered, light fixed-wing aircraft. Specific knowledge and skills are needed for the safe and efficient operation of these aircraft in the NAS.

Powered gliders may be flown long distances and through complicated airspace by pilots holding only glider category ratings, which does not imply

knowledge of communication or radio navigation procedures. Powered gliders require knowledge levels similar to those of powered aircraft. The FAA believes that another option to establishing glider class ratings would be to treat powered gliders as single-engine airplanes. However, the FAA believes that treating powered gliders as airplanes would be a more restrictive approach. Therefore, the FAA proposes to pursue the class rating approach.

The FAA proposes to convert current glider pilot and flight instructor certificates to the new class ratings over a 2-year period. A person who currently holds a private or commercial pilot certificate with a glider category rating could also obtain a nonpowered class rating if the person passed a practical test in a nonpowered glider, or obtain a powered class rating if the person passed a practical test in a powered glider.

Currently, the FAR does not address powered gliders. For example, §§ 61.107 and 61.127, which address flight proficiency for private and commercial pilot applicants, require training in glider launches by ground (auto or winch) or aero tows, and limits the applicant's certificate to the type of tow selected. The PTS for gliders include a powered glider self-launch limitation and specific tasks for powered gliders. The FAA also has addressed the unique characteristics of powered gliders in Advisory Circular (AC) 61-94, "Pilot Transition Course for Self-Launching or Powered Sailplanes (Motorgliders)." The AC recommends procedures and standards for glider pilots who want to accomplish a practical test in powered gliders.

For holders of a flight instructor-glider certificate, the conversion would be based on the type of training the instructor has given. To obtain a flight instructor certificate for nonpowered gliders, an instructor would be required to have given at least 20 hours of flight training in a nonpowered glider and recommended at least one student for a practical test for a glider category rating (the proposed rule does not specify powered or nonpowered), and that student would have to have passed. To obtain a flight instructor certificate for powered gliders, a flight instructor with a glider category rating could be eligible to obtain a flight instructor certificate with a glider category and powered class rating if the instructor had given 20 hours of flight training in a powered glider and recommended at least one student for a practical test for a glider category and powered class rating, and that student would have to have passed.

4. New Instrument Ratings

The FAA proposes to amend § 61.5 to establish four additional instrument ratings: Airship, single-engine airplane, multiengine airplane, and powered-lift. Corresponding flight instructor instrument ratings for those specific aircraft also are proposed.

a. Airship Instrument Rating

Under the current FAR, the commercial pilot certificate for airships includes training and testing on instrument flight maneuvers and procedures and instrument flight rules (IFR). Currently, there is no separate instrument rating for airship pilots. The proposal to establish a separate instrument rating for airships is in response to current trends in design and certification of airships. These trends are toward smaller airships with specific intended uses, such as daytime aerial advertising. These airships are not designed or equipped for flight in instrument conditions, and therefore, pilots who train in these aircraft must either incur the expense of training in IFR-equipped airships or seek an exemption from the regulation. Industry experience indicates that the smaller, non-IFR-equipped airships in which the pilots train are generally the same airships those pilots will fly when they are certificated. Therefore, the FAA has concluded it is reasonable to separate the instrument rating requirements from the commercial pilot certification requirements.

Historically, the airship industry has consisted of larger blimps and dirigibles that are certificated for operations including IFR, visual flight rules (VFR), and day and night flight. But very few airships operate in the United States, and the growth of the industry has been slow, with few pilots being certificated. However, the FAA notes that smaller, foreign-built airships are being operated in the United States. It is hoped that these signs of growth of the industry will be accompanied by the need for more airship pilots. A separate airship instrument rating will remove an obstacle to certification of commercial airship pilots desiring to fly these smaller airships, and help foster growth of this small segment of the aviation industry.

The FAA proposes to delete airship instrument knowledge requirements from existing § 61.125 and delete current § 61.135, which refers to aeronautical experience requirements. The FAA proposes to incorporate in § 61.65, flight training and skill requirements for airship instrument ratings. For pilots who do not hold an

airship instrument rating, § 61.139 would be amended to require a limitation to the commercial pilot certificate-airship that prohibits the carriage of passengers for hire in airships on cross-country flight or at night.

The proposal includes a system of conversion of current commercial certificates to commercial certificates with an instrument rating. Under proposed § 61.5, "Certificates and ratings issued under this part," the holder of a commercial pilot certificate with a lighter-than-air category rating and an airship class rating would be permitted to exchange that certificate for a certificate with an instrument-airship rating, if that person receives an endorsement from an authorized flight instructor who holds an instrument-airship rating on the flight instructor certificate, and that flight instructor has observed that person perform 10 hours of PIC time in an airship under IFR, or that person passes the instrument proficiency test of § 61.57 in an airship, and the test was conducted by an examiner.

b. Instrument Ratings—Airplanes

The FAA proposes to amend § 61.5 to establish separate instrument ratings for single-engine and multiengine airplanes and to establish corresponding instrument ratings for flight instructor certificates.

Under the proposal a person who passes the practical test for an instrument rating in a single-engine airplane would be issued a pilot certificate with an instrument-airplane single-engine rating. If that person holds a multiengine airplane class rating and desires an instrument-airplane multiengine rating, the person would be required to pass a practical test for an instrument rating in a multiengine airplane. The proposal would permit a person who holds both a single engine and multiengine airplane class rating and passes a practical test for an instrument-airplane multiengine rating, to be allowed to exercise instrument privileges in single-engine airplanes.

In addition, a person who desires to train students who want an instrument-airplane single-engine rating would be required to pass a practical test for a flight instructor certificate with an instrument-airplane single-engine rating. If that person desires to train students who want an instrument-airplane multiengine rating, the person would be required to pass a practical test for a flight instructor certificate with an instrument-airplane multiengine rating. A person who passes a practical test for a flight instructor-instrument-

airplane multiengine rating and also holds a flight instructor single-engine airplane class rating would be permitted to train students for an instrument-airplane single-engine rating.

This proposal is consistent with FAA policy in effect since October 1984, which requires applicants for multiengine airplane class ratings to demonstrate instrument proficiency on their multiengine practical test if they have an airplane instrument rating and desire IFR privileges for their multiengine rating. The policy was instituted based on an NTSB recommendation that followed an investigation of a 1981 multiengine airplane accident. The NTSB concluded that the accident may have been caused by excessive airloads generated by a nose-up control input by the pilot at high speed. This resulted in an in-flight breakup of the aircraft. The pilot had acquired his instrument rating in a single engine airplane, had limited experience in operation of multiengine airplanes in instrument meteorological conditions, and had no multiengine instrument training.

Under the current FAA policy, applicants for a multiengine airplane class rating who hold an instrument rating for airplanes are required to demonstrate instrument proficiency in multiengine airplanes. If the applicant chooses not to demonstrate instrument proficiency, their multiengine airplane rating is limited to VFR privileges only. If an applicant with single-engine and multiengine class ratings takes the instrument practical test in a multiengine airplane, no restriction is added to the certificate. For example, a certificated pilot who holds a multiengine class rating with instrument privileges for airplanes, and who applies for an airplane single-engine class rating, may, upon successful completion of the airplane single-engine practical test, exercise instrument privileges in both classes of aircraft without showing instrument proficiency in single-engine airplanes.

The FAA proposes to allow 2 years for pilots and flight instructors who currently hold single-engine and multiengine airplane class ratings and an instrument—airplane rating to convert to the new single-engine and multiengine instrument ratings. With the exception of those pilots who received an instrument rating before the current policy became effective, the proposed conversion would ensure that pilots who obtain instrument privileges in multiengine airplanes have demonstrated instrument proficiency in multiengine airplanes.

Under the proposed rule, a person who holds a private or commercial pilot certificate with an airplane category rating and an instrument—airplane rating would be permitted to exchange that certificate for the new proposed certificate. The new private or commercial pilot certificate, as appropriate, would have either an instrument—airplane single-engine rating or instrument—multiengine class rating. For example, a person would be entitled to obtain an instrument—airplane single-engine rating if that person had an airplane single-engine class rating and had satisfactorily completed the practical test for an instrument rating in a single-engine airplane.

Under the proposal, a person could exchange their certificate for a certificate with an instrument-airplane multiengine rating if one of the following conditions were met:

- (1) That person had an airplane multiengine class rating and had satisfactorily completed the practical test for an instrument rating in a multiengine airplane;
- (2) That person had an airplane multiengine class rating and had satisfactorily completed the practical test for an instrument rating in a single engine airplane and also demonstrated instrument proficiency during the practical test for the multiengine class rating such that the person's certificate did not bear the limitation "Airplane Multiengine VFR Only;" or
- (3) That person had an airplane multiengine class rating and had satisfactorily completed the practical test for an instrument rating in a single-engine airplane before October 1, 1984, the date on which the FAA policy, which requires multiengine candidates to demonstrate instrument proficiency when seeking instrument privileges, took effect.

Under the proposal, in any of the above three cases, a pilot with a single-engine airplane class rating would also be entitled to the privileges of an instrument-airplane single-engine rating. A person with a flight instructor certificate and an instrument-airplane rating would be able to obtain a flight instructor certificate with an instrument-airplane single-engine or an instrument-airplane multiengine rating.

A person would be able to receive a flight instructor certificate with an instrument-airplane single-engine rating by having given at least 20 hours of flight training in a single-engine airplane for the issuance of an instrument-airplane rating as a certificated flight instructor. The person also would be required to have

recommended at least one student for a practical test for the issuance of an instrument-airplane rating and the recommended student would have had to pass the practical test.

A person would be able to receive a flight instructor certificate with an instrument-airplane multiengine rating by having given at least 20 hours of flight training in a multiengine airplane for the issuance of an instrument-airplane rating as a certificated flight instructor. The person also would be required to have recommended at least one student for a practical test for the issuance of an instrument-airplane rating and the recommended student would have had to pass the practical test.

The FAA invites comments on the conversion process proposed for the instrument-airplane ratings.

c. Instrument Rating—Powered-lift

In addition to proposing a new powered-lift aircraft category rating, the FAA proposes to amend § 61.5 to establish a new instrument rating for powered-lift. The FAA also proposes to establish a corresponding powered-lift instrument rating for the flight instructor certificate. The FAA invites comments on the proposal to establish this new instrument-powered-lift rating and the powered-lift instrument rating for the flight instructor certificate.

5. Lighter-Than-Air Flight Instructor Certificate

Under current regulations, any commercially licensed lighter-than-air pilot may provide flight training in the class of aircraft in which commercial privileges are held (i.e., airship or free balloon). A lighter-than-air commercial pilot who gives training under the authority of existing § 61.139 is not bound by any of the recordkeeping requirements, authorizations, and limitations that apply to certificated flight instructors for the other categories of aircraft. Under the current PTS, commercial lighter-than-air applicants must be tested in all phases of the flight instructor area even if the applicant does not plan to train.

Several balloon operators who made presentations at the public hearings or submitted comments to the docket favored the establishment of a flight instructor-balloon rating. Two balloon organizations indicated that, with the exception of those instructors associated with part 141 schools, the current training in balloons does not provide quality control measures for flight instructors. Several commenters said that the training and renewal requirements for balloon instructors

should be the same or similar to those required of other aircraft flight instructors. The commenters also recommended that a proposal for a flight instructor-balloon rating should require: (1) A minimum number of hours as PIC; (2) a biennial renewal requirement; and (3) a passing grade on written and practical tests. In addition, the commenters recommended that such a proposal should provide for existing balloon instructors to convert to the new system.

Comments also were submitted to the docket that opposed the addition of a flight instructor-balloon rating. One commenter stated a majority of balloon instructors would not elect to obtain a flight instructor certificate, creating a hardship for future pilots. Several commenters also disagreed with the suggestion that a specific number of hours as PIC should be required of current commercial pilots to obtain their flight instructor certificates. The commenters stated that existing commercial pilots have earned instructor privileges in accordance with today's FAR and that there is no need for a minimum hour cutoff.

The FAA has determined that a flight instructor certificate should be created for the lighter-than-air category. The present system of incorporating training privileges into commercial certificates is a burden on commercial pilots who do not instruct. The intent of this proposal is to ensure that those who perform flight training in all aircraft categories and classes are subject to flight instructor training and renewal requirements. The FAA proposes to revise § 61.5 to establish a flight instructor-airship rating and a flight instructor-balloon rating.

The proposed revision to § 61.3 includes a clause to permit holders of a commercial certificate with an airship or a free balloon class rating to train in the appropriate aircraft for 2 years after issuance of the final rule. A revision to § 61.187 is proposed that would require a person who trains an applicant for a lighter-than-air flight instructor certificate to meet the same requirements as a person who trains other flight instructor applicants.

Under the FAA's proposal, a person who trains flight instructor applicants for a lighter-than-air category rating would be required to have held a flight instructor certificate for at least 24 months and to have given at least 20 hours of flight training. This is the same minimum-hour requirement recommended by the Great Eastern Balloon Association during the public hearings. The FAA also has included a provision for a person who trains flight

instructor applicants in an FAA-approved course. This person could either meet the 24-month and 20-hour requirement or: (1) Have trained and endorsed at least 5 persons for a pilot certificate or rating practical test; (2) have a record that reflects that at least 80 percent of the persons whom the flight instructor has endorsed for a practical test passed that test on their first attempt; and (3) have given at least 40 hours of flight training as a certificated flight instructor.

The proposal also includes a provision for practicing lighter-than-air instructors (with commercial certificates) that requires them to obtain flight instructor certificates with lighter-than-air category ratings without passing a practical test. The proposal would revise § 61.201 to provide a 2-year transition period for holders of a commercial certificate with an airship or a free balloon class rating to obtain a flight instructor certificate with an airship or a balloon rating. If this proposal is adopted, the FAA is considering allowing the conversion process to begin before the effective date of the proposed rule.

Under the proposal, to obtain a flight instructor certificate with a lighter-than-air category rating, an applicant would need to present a valid commercial certificate with a lighter-than-air category rating and the appropriate class rating and have given at least 20 hours of flight training in airships or free balloons, as appropriate, as a commercial pilot. The applicant would also be required to have recommended at least one student for the issuance of a rating in an airship or balloon, as appropriate, and the student would have had to pass the practical test.

The proposal includes a revision to § 61.125 to remove the requirements for applicants for a commercial certificate, with a lighter-than-air category rating and an airship or balloon class rating, to obtain knowledge on training.

6. Revision of Ground Instructor Certificates and Ratings; Inclusion in Part 61

Part 143, "Ground Instructors," is outdated and inadequate for defining ground instructors' privileges and limitations, or their training and certification requirements. Under the current system, the ground instructor certificate is obtained on the basis of written tests only, with no practical test. Although a recency of experience requirement exists, there is no provision for renewal of ground instructor certificates. In addition, ground instructor certificates will be revised to distinguish ratings on the basis of

aircraft category (i.e., ground instructor-airplane, ground instructor-rotorcraft, ground instructor-glider, etc).

To make the ground instructor certificate more compatible with the demands of current training requirements, the FAA proposes to revise regulations on ground instructors and address the ground instructor certificate in a new subpart I in part 61. Current part 143, Ground Instructors, would be removed and reserved. Under the proposal, ground instructor certificates would be specific to aircraft categories. A practical test, as well as a knowledge test, would be required. The ground instructor certificate would still not expire, but new recency of experience requirements are proposed in order for a person to continue exercising the privileges of the certificate. This proposal would establish recordkeeping requirements for ground instructors and clarify ground instructors' privileges and limitations.

During the public hearings, commenters agreed that parts 61 and 143 could be combined, provided the ground instructor certificate is retained. Commenters, including Embry-Riddle Aeronautical University (ERAU), Experimental Aircraft Association (EAA), and General Aviation Manufacturers Association (GAMA) recommended that applicants for a ground instructor certificate be required to pass a practical test. The test would include an oral segment, but not a flight segment.

This proposal is based largely on the public comment. The proposal also reflects guidance contained in FAA Order 8700.1, "General Aviation Operations Inspector's Handbook," chapter 159, "Issuance of Ground Instructor Certificate and Added Ratings." subpart I is modeled on existing and proposed regulations for training and certification of flight instructors. The intent of the proposal is to recognize the importance of proper ground training and to make the ground instructor certificate more meaningful.

A number of issues, particularly administrative issues, currently addressed in part 143, such as replacement of a lost certificate, testing procedures, and change of address, are addressed in these respective categories in the proposal, along with other certificates and ratings. The proposed subpart I primarily addresses issues unique to the ground instructor certificate. Some of the major differences between proposed subpart I and part 143 would include the following:

7. Eligibility and Tests

The proposal for the ground instructor certificate and rating would establish a requirement for English-language ability, and would include the testing requirements. The required tests would include a test on the fundamentals of instructing, except for persons who are certificated teachers at or above the seventh grade level, employed as college or university instructors, or already hold a ground or flight instructor certificate. An additional knowledge test specific to the aircraft rating sought and an instrument knowledge test in the case of an instrument rating, would be required as well as a practical test.

Another proposed provision would preclude the holder of a flight instructor certificate from taking tests for and obtaining a ground instructor certificate with the same aircraft category as already specified on the person's flight instructor certificate. This provision is needed because the ground instructor certificate would not grant additional privileges, but the process of obtaining it only adds to the FAA's workload because of the additional tests. However, the applicant may seek a ground instructor rating for a different aircraft category (i.e., a person who holds flight instructor-airplane single engine may apply for a ground instructor-rotorcraft, etc.).

Some commenters recommended that a single "aviation instructor certificate," be established in lieu of separate flight or ground instructor certificates. An aviation instructor certificate could specify ground or flight instructor privileges or both. After reviewing this recommendation, the FAA believes the required knowledge, skills, and abilities needed to instruct in the different aircraft categories and classes and differences between flight instructing and ground instructing makes this difficult to comprehend how this would be better than the current system. However, the FAA does request comments on this issue.

8. Training Requirements

An applicant for a ground instructor certificate would have to receive ground training on required aeronautical knowledge areas and fundamentals of instructing from a person who meets minimum experience requirements. The person giving the training would have to have at least 24 months experience as a ground instructor or flight instructor, and have given at least 40 hours of flight or ground training. However, if the ground instructor candidate is receiving training in a course approved under part 141, the person giving the training could

either meet the 24-month and 40-hour experience requirement, or could have given 100 hours of ground or flight training. As an alternative, the applicant, under the proposal, could also accomplish the preparation through an independent, or home study program. Such preparation would have to be reviewed by an authorized instructor who meets the same experience requirements; the instructor would be required to sign an endorsement of the applicant's independent course of study.

9. Proficiency

The practical test for a ground instructor certificate would cover approved areas of operation including preparing and conducting lesson plans, evaluating student knowledge, and analyzing and correcting common student errors. An applicant would be required to teach a ground school lesson as part of the practical test. The training for the practical test would have to be given by a person who meets the same minimum experience requirements as for the knowledge test, although no minimum amount of training would be specified. The practical test would be administered by an examiner. An applicant for an additional ground instructor rating would not be required to take a practical test.

10. Privileges and Limitations

Subject to the limitations specified in part 61, a ground instructor would be permitted to give ground training for aeronautical knowledge areas; give endorsements required for pilot, ground instructor, and flight instructor certificates and ratings; give the ground training portion of the flight review; and give recommendations for knowledge tests.

11. Records

Under the proposed recordkeeping requirements, a ground instructor would note in a student's logbook or training record information for each training session; i.e., the amount of time of the lesson, date, and topics. The ground instructor would be required to maintain a record of the following information: the name of each student whose logbook or training record that instructor endorsed for satisfactory completion of a course; the name of each student endorsed for a knowledge test and the results of the test; the name of each student endorsed or recommended for a practical test and the date of the endorsement or recommendation; and a copy of the training syllabus for each student trained. The records would be required

to be kept for 3 years. In addition, although the proposed rule does not specify this, ground instructors should log the time during which they give ground training, to demonstrate sufficient experience giving ground training to ground instructor applicants.

12. Recency of Experience

Existing § 143.19 specifies that a ground instructor may not perform the duties of a ground instructor unless, within the 12 months before intending to perform the duties, the instructor has served for at least 3 months as a ground instructor, or the FAA has determined that the instructor meets the standards prescribed in part 143. Proposed § 61.225, "Recency of experience for a holder of a ground instructor certificate," would state that a person's ground instructor certificate remains current for providing ground training for airman certification purposes, provided that person has either: (1) Trained at least one student and endorsed that student for a practical test; or (2) received an endorsement from a flight instructor or ground instructor indicating that the person had demonstrated satisfactory knowledge in the areas of operation that apply to the person's ground instructor ratings. The FAA believes these provisions will ensure that ground instructors stay current on industry developments, without imposing significant costs and burdens on persons who hold ground instructor certificates.

13. Conversion to New System of Ground Instructor Certificate

The proposal would establish a 2-year period during which holders of ground instructor certificates could convert those certificates to the new system. The holder of a ground instructor certificate with a basic rating or an advanced rating would be permitted to exchange that certificate for a ground instructor certificate with an airplane category rating. The holder of a ground instructor certificate with an advanced rating and an instrument rating would be permitted to exchange that certificate for a ground instructor certificate with an airplane category rating and instrument rating. The holder of a ground instructor certificate who also holds a flight instructor certificate would be permitted to exchange the ground instructor certificate for a ground instructor certificate with the same aircraft category and instrument ratings as on that person's flight instructor certificate.

14. Medical Certificates

a. Medical Eligibility Requirement for Applying for a Pilot or Flight Instructor Certificate

The FAA proposes to change the medical certificate requirements for eligibility for pilot and flight instructor certificates. Under the proposed revision to § 61.23 and other sections, applicants would only need a third-class medical certificate to be eligible to apply for a private, commercial, or an airline transport pilot or flight instructor certificate. Requirements for exercising the privileges of each certificate would remain as they are now. That is, a second-class medical certificate still would be required to exercise the privileges of a commercial pilot certificate, and a first-class medical certificate would be required to exercise the privileges of an ATP certificate.

The concept behind the proposed changes is that pilots should be encouraged to continue training and earning new pilot certificates, regardless of whether they intend to use the certificates. In some cases, pilots may qualify for a third-class medical certificate, which is sufficient for undergoing training and taking a practical test for a commercial or ATP certificate, but may not meet the requirements for a second- or first-class medical certificate. The FAA believes that lack of the more stringent medical certificate should not prevent the pilots from earning the more advanced pilot certificates and enhancing their pilot skills and proficiency.

The FAA proposes to include a provision in § 61.39, "Prerequisites for practical tests," requiring an applicant to hold at least a third-class medical certificate, if a medical certificate is required. Section 61.39 currently requires a practical test applicant to hold a current medical certificate that applies to the certificate sought or, in the case of a rating to be added to a pilot certificate, at least a valid third-class medical certificate. Corresponding changes are also proposed to the subparts addressing the various certificates and ratings.

b. Medical Requirements for Recreational Pilots and Holders of a Higher Pilot Certificate Exercising the Privileges of a Recreational Pilot Certificate

The FAA is proposing to allow pilots who hold recreational pilot certificates and those higher rated pilots who elect only to exercise recreational pilot privileges to operate aircraft without a medical certificate. Specifically, this proposal would include student pilots

who are seeking a recreational pilot certificate, holders of a recreational pilot certificate, and holders of a higher pilot certificate who elect only to exercise the privileges of a recreational pilot certificate. This proposal would be a significant departure from long-standing FAA policy.

Since the early 1930s all pilots, except glider and balloon pilots, have been required to hold medical certificates in order to exercise the privileges of their pilot certificates. The FAA determined that medical certificates were required for the purpose of ensuring the safety of the pilot in command and passengers, and also for the safety of people and property on the ground. As a result of the EAA petition discussed earlier and the interest shown in the general aviation community, the FAA is seeking wider comment on whether recreational pilots and holders of a higher pilot certificate who elect to exercise the privileges of a recreational pilot certificate should be required to hold medical certificates. The FAA is also seeking data on any safety or other public interest concerns that may arise from obviating any review of medical qualifications by medical professionals.

Pilots applying for a recreational pilot certificate would be required to certify at the time of application that they have no known medical condition or deficiency that makes them unable to operate the aircraft in a safe manner. This requirement parallels the provisions that are now provided to balloon and glider pilots under the current rules. This proposal would prohibit pilots from exercising the privileges of a recreational pilot certificate if they have a known medical condition or deficiency that would make them unable to operate the aircraft in a safe manner or if they are taking any medication or receiving other treatment for a medical condition that would make them unable to operate the aircraft in a safe manner. (This ongoing obligation is discussed in more detail under the section-by-section analysis.) The FAA is not proposing specific medical standards for this pilot self-evaluation but instead are proposing that pilots self-evaluate prior to each flight whether they have any medical conditions that would inhibit their ability to operate the aircraft in a safe manner. The FAA would rely on the pilot's knowledge and judgment as to their medical fitness for conducting each flight. The FAA strongly encourages the public to comment on whether there should be specific medical standards upon which the pilot should base their self-evaluation. If so, what should those standards be? In

particular, the FAA would like comments in response to the following questions:

(1) Should the rule specifically prohibit holders of pilot certificates who do not also hold medical certificates from flying if they know or should know that they have certain conditions? For example, should the rule exclude persons who believe that they have no known medical deficiencies even if they know, or have any reason to know, that they have:

(a) A visual problem, e.g., vision uncorrectable to at least 20/30?

(b) An equilibrium problem?

(c) Alcoholism to the extent that the intake of alcohol has caused damage to their physical health, personal or social functioning, or is required to enable them to perform normal functions?

(d) A drug dependence?

(e) A personality disorder, neurosis, or a mental condition that makes them unable to safely operate a vehicle or machinery?

(f) Epilepsy or a disturbance of consciousness without satisfactory medical explanation of the cause?

(g) A convulsive disorder, disturbance of consciousness, or neurologic condition that makes them unable to safely operate a vehicle or machinery?

(h) A myocardial infarction (heart attack), angina pectoris, or a coronary heart disease?

(i) Diabetes?

(j) An organic, functional, or structural disease, defect, or limitation that makes them unable to safely operate a vehicle or machinery?

(k) Any other serious medical problem that makes them unable to safely operate a vehicle or machinery?

(2) Should the rule state that pilots who have failed a medical examination by the FAA be prohibited from claiming that they have no known medical deficiencies?

(3) Should the rule state that pilots who have had their medical certificate revoked or suspended be prohibited from claiming that they have no known medical deficiencies?

(4) Should the rule state that pilots who hold or have held a medical special issuance be prohibited from claiming that they have no known medical deficiencies?

(5) What, if any, documentation should the FAA require persons without an airman medical certificate to execute in order to identify that they have evaluated their medical fitness to fly and that, to the best of their knowledge and belief, they are medically qualified to pilot an aircraft? How often (before each flight, annually)? What kind of documentation?

(6) How, if at all, should the FAA require pilots without a medical certificate to disclose to passengers that they have not been medically certificated by the FAA?

The FAA recognizes that broad scale medical self-evaluation could create substantial obstacles to the FAA's ability to enforce § 61.53. Therefore, the FAA also requests comments on the following issues:

(7) How would the FAA enforce and monitor compliance with § 61.53(b)?

(8) Should pilots who do not hold medical certificates be obligated to provide the FAA with their medical history/records upon request, either as part of a specific investigation or randomly as part of a compliance program?

(9) Should the FAA be able to require pilots who do not hold medical certificates to undergo medical testing when any uncertainty exists as to whether or not they have any medical problems?

Under this proposal, pilots with an airplane, rotorcraft, or a glider rating and who elect to only exercise recreational pilot privileges would be eligible to conduct "recreational pilot" operations without having to hold or obtain a medical certificate. Therefore, a person's pilot certificate may represent apparent authority to conduct those operations even when that person may not be medically qualified under part 67 of this chapter. Under the current rule, these operations would require the pilots to hold and have in their possession a current medical certificate. Because of the possible enforcement problems associated with determining an individual's actual authority to operate, the FAA is also seeking comments on the following:

(10) Should pilots who have known medical deficiencies be required to surrender their airman certificates?

(11) If pilots are allowed to keep their airmen certificates when they have a known medical deficiency, should the FAA require the airmen certificates to be stamped "NOT VALID UNLESS ACCOMPANIED BY A CURRENT MEDICAL CERTIFICATE?" The FAA is strongly encouraging the public to express their concerns regarding these questions as well as any other issues pertinent to this proposal.

The FAA requests comments on whether the limited operational scope of a recreational pilot certificate, under which all the above pilots would be required to operate, makes requiring these pilots to submit to medical examinations an unnecessarily burdensome process. Section 61.101 lists the limitations of a recreational

pilot certificate, which includes, among other things, the following limitations:

A recreational pilot may not operate an aircraft—with more than one passenger on board the aircraft; that is certificated for more than 4 occupants; with more than one powerplant; with a powerplant of more than 180 horsepower; with a retractable landing gear; that is classified as a multiengine airplane, powered-lift, glider, airship, or balloon; carrying a passenger or property for compensation or hire nor may the pilot operate for compensation or hire; in furtherance of a business; between sunset and sunrise; in airspace in which communication with air traffic control is required; at an altitude of more than 10,000 feet MSL or 2,000 feet AGL, whichever is higher; when the flight or surface visibility is less than 3 statute miles; without visual reference to the surface; on a flight outside the United States; to demonstrate that aircraft in flight to a prospective buyer; used in a passenger-carrying airlift and sponsored by a charitable organization; and that is towing any object.

The FAA is also proposing to allow recreational pilots who have received the cross-country training required for private pilot certification to fly beyond the 50 nautical mile limit which is now required by the current § 61.101.

The FAA acknowledges that there are a number of difficult issues surrounding this concept, and that the data and analysis currently developed are limited at best. The FAA is therefore requesting comments that provide supporting data and analysis on the likely effects of changing the FAA's long-standing medical certification policy for pilots. In particular, the FAA would like comments on the potential impact on safety.

On November 17, 1994, the National Transportation Safety Board (NTSB) provided the FAA with general aviation accident data involving medical incapacitation since 1982 for balloon and glider pilots. There have been a total of 7 accidents involving balloon and glider pilots since 1982 where a finding was made on medical incapacitation as a cause or factor involved in the accident. Out of those 7 accidents, 4 pilots had valid medical certificates, 2 pilots had held a medical certificate but the certificates were expired, and only 1 pilot did not hold a medical certificate. There were 5 fatalities, 1 serious injury, and 1 minor injury. The NTSB's data and brief summaries showed the following information:

(1) Date: June 18, 1983, Category of Aircraft: Balloon, Crew Injuries: 1 fatal, Passenger/Gnd personnel injury: 0,

Medical Certification: Yes, Miscellaneous statistics: Male, age 58, Brief summary: After takeoff, the pilot collapsed to the floor of the gondola and had difficulty breathing. The balloon hit the porch of a house and was substantially damaged. The pilot died from acute myocardial infarction.

(2) Date: February 20, 1986, Category of Aircraft: Glider, Crew Injuries: 1 fatal, Passenger/Gnd personnel injuries: 0, Medical Certification: Yes, Miscellaneous statistics: Male, age 65, Brief summary: Medical examination of the pilot revealed that the pilot had a history of heart condition and at the time of the accident the pilot experienced an heart arrhythmia associated with a myocardial infarction.

(3) Date: February 24, 1990, Category of Aircraft: Glider, Crew Injuries: 1 fatal, Passenger/Gnd personnel injury: 0, Medical Certification: None, Miscellaneous statistics: Male, age 53, Brief summary: Pilot had a history of epileptic seizures. Toxicological

analysis revealed the drug carbamazepine present in the blood and urine samples at therapeutic levels. The drug was an anticonvulsant which causes drowsiness.

(4) Date: July 31, 1990, Category of Aircraft: Glider, Crew Injuries: 1 minor, Passenger/Gnd personnel injury: 0, Medical Certification: Yes, Miscellaneous statistics: Female, age 56, Brief summary: Pilot had reported she had injured her right arm during flight into turbulent conditions. She stated she was unable to control the pitch of the glider due to her injuries and had to parachute out.

(5) Date: July 19, 1991, Category of Aircraft: Glider, Crew Injuries: 1 fatal, Passenger/Gnd personnel injury: 0, Medical Certification: Medical certificate had lapsed, Miscellaneous statistics: Male, age 63, Brief summary: An autopsy revealed the pilot had cardiovascular disease, including coronary atherosclerosis with thrombosis of bypass graft.

(6) Date: July 31, 1991, Category of Aircraft: Glider, Crew Injuries: 1 fatal, Passenger/Gnd personnel injury: 0, Medical Certification: Unknown, Miscellaneous statistics: Male, age 25, Brief summary: Pilot reported a midair collision with another glider. The NTSB's finding determination was the failure of the pilot to maintain an adequate visual lookout and the collision induced incapacitation.

(7) Date: September 21, 1991, Category of Aircraft: Glider, Crew Injuries: 1 serious, Passenger/Gnd personnel injury: 0, Medical Certification: Medical certificate had lapsed, Miscellaneous statistics: Male, age 72, Brief summary: Pilot reported that he blacked out.

In addition, the NTSB supplied the FAA with the following total general aviation aircraft accident data and statistics involving medical incapacitation as a cause or factor in their finding during the years 1982 through 1993:

	Aircraft	Accidents	Fatal Accidents	Injuries			
				Fatal	Serious	Minor	None
1982	10	10	8	11	1	0	42
1983	7	7	5	6	1	0	6
1984	15	15	10	21	6	2	21
1985	14	14	9	11	2	4	117
1986	12	12	7	9	1	1	307
1987	14	14	11	56	0	0	112
1988	13	13	7	7	6	3	104
1989	7	7	6	7	0	0	2
1990	7	7	6	8	0	1	0
1991	20	20	14	15	6	5	23
1992	13	13	10	19	4	1	69
1993	6	6	3	3	1	0	209
Totals	132	132	96	170	28	17	1012

*This data does not differentiate between those pilots who held current, valid medical certificates at the time of the accident and those who allowed their medical certificates to lapse or never held medical certificates. Furthermore, this data did not filter out those accidents that were a result of a medical incapacitation involving an injury sustained during the flight or alcohol or illegal drug incapacitation.

15. Required Pilot Possession of Pilot and Medical Certificates

The FAA proposes to clarify the requirement in § 61.3 that a pilot, flight instructor, ground instructor, or medical certificate must be in the person's "personal possession" whenever that person exercises the privileges of the certificate. The FAA's intent is to have pilots and instructors carry their certificates on or near their person while exercising the privileges of that certificate.

A legal decision has demonstrated that the current requirement can be interpreted in more than one manner. For example, "personal possession" was interpreted to permit a pilot to exercise the privileges of a pilot certificate while the certificate remained behind in the

pilot's residence or automobile. The general purpose of the regulation, however, is to enable pilots or required flight crewmembers to present their certificate to an authorized person upon request and at the time of that request.

The FAA proposes to replace the reference "personal possession" with the requirement that a certificate be in the "person's physical possession or readily available." This way, a pilot certificate would be available when requested by an authorized person. Additionally, a person who carries their pilot and medical certificates in their briefcase or in a purse aboard the aircraft would still be in compliance with the rule. However, this does not mean that person could state their pilot and medical certificates are located at

their home in a desk drawer and still be in compliance with the term in the "person's physical possession or readily available."

16. Issuance of U.S. Pilot Certificates on the Basis of Foreign Pilot Licenses

The FAA proposes several changes to § 61.75, regarding issuance of a U.S. pilot certificate on the basis of a foreign pilot license. The FAA proposes to amend § 61.75 to require that when a foreign pilot certificate is not in the English language, the person must provide a signed English transcription of the license and its limitations from the foreign government's aviation agency. An English-language transcription would help avoid incorrect issuance of a U.S. pilot

certificate, letter of authorization, or appropriate ratings through inaccurate translations. This amendment would also help to ensure that all requirements of § 61.75 are met and there is no endorsement on the certificate stating that the pilot has not met all of the standards of the International Civil Aviation Organization (ICAO) for that license. This proposal would require evidence of meeting medical standards on which foreign certificates are based and an English-language transcription of the foreign medical certificate.

The FAA also proposes to revise § 61.75 to eliminate the issuance of commercial pilot certificates when issuing U.S. pilot certificates on the basis of a foreign pilot license. Under the proposed amendment, the U.S. would honor or accept a foreign-issued pilot certificate for the issuance of a U.S. private pilot certificate only. This would replace the current practice of issuing a private pilot certificate to the holder of a foreign private pilot license, and a commercial pilot certificate to the holder of a foreign commercial, senior commercial, or ATP license. This change would be mainly for clarification because current policy is to endorse the U.S. commercial pilot certificate as "not valid for operations for compensation or hire," which effectively limits the certificate to private pilot privileges only. The proposed rule would delete language specifically disallowing the U.S. certificate to be used for agricultural operations. However, persons who have been issued commercial pilot certificates on the basis of their foreign pilot certificate prior to the effective date of this rule would be allowed to continue to hold that pilot certificate. However, if the person seeks an additional rating, then the certificate would be reissued at the private pilot certificate level.

The FAA also proposes to revise § 61.75 to delete language that bases the pilot privileges on those authorized by the foreign pilot license. Under the proposal, the holder of a U.S. private pilot certificate issued under § 61.75 would be permitted to act as a pilot of a U.S.-registered civil aircraft in accordance with private pilot privileges authorized by part 61 that are placed on the U.S. certificate. This will clarify that operating authority is derived from the U.S. private pilot certificate issued, which contains the privileges and limitations. Any additional limitations and restrictions (e.g., weight of aircraft) that are on the foreign pilot license are incorporated by reference onto the U.S. private pilot certificate. The proposed rule language would further clarify that personal possession of the foreign pilot

license is required in order to exercise the privileges of the U.S. private pilot certificate. Finally, the proposal would clarify that the pilot would not be allowed to exercise the privileges on the U.S. certificate if the foreign pilot license was revoked or suspended.

Under current § 61.75, FAA practice permits persons who cannot read, speak, write, and understand the English language to be issued a pilot certificate with certain limitations restricting operations in airspace requiring the use of the English language. In accordance with this proposal, the practice would be discontinued and persons issued certificates under this section would be required to be able to read, speak, write, and understand the English language. However, those persons who cannot read, speak, write, and understand the English language and who have been issued pilot certificates with limitations that restrict operations in airspace requiring the use of the English language prior to the effective date of this rule would be allowed to continue to hold that certificate. If the person seeks an additional rating or higher level pilot certificate, then the certificate would not be issued unless the person is able to read, speak, write, and understand the English language.

The regulation currently requires evidence that the applicant meet the medical standards for the foreign pilot license on which the application for a U.S. certificate is based. This evidence may include a U.S. medical certificate. The proposed rule would state specifically that the applicant must hold a current medical certificate, either issued under part 67, or issued by the state that issued the foreign pilot license.

Special Purpose Pilot Authorization

The FAA proposes to revise the rules regarding the issuance of special purpose pilot certificates for the operation of U.S.-registered civil airplanes leased by a person who is not a U.S. citizen. The FAA proposes to replace the issuance of special purpose pilot certificates with the issuance of special purpose pilot authorizations that will be issued by a Flight Standards District Office (FSDO). Persons who have been issued special purpose pilot certificates, prior to effective date of this rule, would continue to be allowed to exercise the privileges of that certificate until the certificate expires. However, once the special purpose pilot certificate expires, the pilot would be required to surrender the certificate for a special purpose pilot authorization and comply

with the provisions contained in proposed § 61.77.

Standardization of the "Age 60 Limitation" for Airmen Employed by Foreign Air Carriers in Scheduled International Air Services or Non-Scheduled International Air Transport Operations

The FAA proposes to clarify §§ 61.3 and 61.77 relating to the "Age 60 Limitation" with part 121. This proposal will cover all U.S. and foreign pilots, who are 60 years of age or older, and who are employed by a foreign air carrier that operates U.S.-registered civil aircraft for compensation or hire in scheduled international air services and non-scheduled international air transport operations. This proposal will make the rules of part 61 consistent with the standards contained in part 121.

17. Logging Flight Time

The FAA proposes revisions in the logging of pilot flight time. The proposals are contained in § 61.1a, Clarification of terms, and in § 61.51, Pilot logbooks.

The FAA proposes these revisions largely in response to public concern regarding various aspects of the rules on logging flight time. Many of the participants at the public hearings encouraged the FAA to clarify the existing regulations. For example, some recommended that the term "solo flight time" be deleted and that student pilots be permitted to log "solo" time as PIC time.

Proposed § 61.1a would clarify that pilot time is any time a person operates as a required pilot, receives training from an authorized instructor, or gives training in an aircraft, flight simulator, or flight training device. Flight time would be clarified as pilot time that commences when an aircraft moves under its own power for the purpose of flight and ends when the aircraft comes to rest at the point of landing. The FAA proposes that in the case of a nonpowered glider, flight time would begin when the nonpowered glider commences being towed for the purpose of flight and would end when the nonpowered glider comes to rest at the destination.

In § 61.1a, the FAA proposes to describe cross-country time for three separate circumstances: For persons who hold a private, commercial, or airline transport pilot certificate; for persons applying for a private or commercial pilot certificate or instrument rating; and for military pilots. For holders of private, commercial, or airline transport pilot

certificates, the criteria for cross-country flight would include landing at a point other than the point of departure and use of dead reckoning, pilotage, or navigation aids to navigate. No minimum distance would be specified. However, for persons applying for a private or commercial pilot certificate or for an instrument rating, the point of landing would be required to be more than 50 nautical miles from the point of departure. For a military pilot who holds or is qualified for a private or commercial pilot certificate under § 61.73, cross-country time would be flight over a distance of more than 50 nautical miles. However, the FAA recognizes that military flight operations may require pilots to navigate and fly considerable distances without landing at a point other than the point of departure. Therefore, proposed § 61.1a would not require that a landing occur at any point other than the departure point.

Proposed § 61.51 would eliminate reference to "solo" time as a type of pilot experience or training equivalent to PIC time. The proposal would permit student pilot certificate holders to log PIC time when they: are the sole occupant of the aircraft; have a supervised PIC flight endorsement; and are undergoing a course of training for a pilot certificate or rating or are logging PIC time toward a certificate or rating. The description of solo flight time in current § 61.51 would be eliminated under the proposal.

The proposal would specify that, except when a flight instructor gives flight training, only one person at a time may log PIC flight time. This provision is intended to eliminate current confusion, particularly regarding the current provision that permits any pilot to log PIC time when acting as PIC of an aircraft on which more than one pilot is required under the regulations under which the flight is conducted.

Instead, the proposal would state that the holder of a pilot certificate may log PIC time only when that pilot: (1) Has the final authority and responsibility for the operation and safety of the flight; (2) holds the appropriate ratings; (3) has been designated PIC before the flight; and (4) the PIC time occurred in actual flight conditions and in an aircraft.

Although the current regulation also specifies that a flight instructor may log as PIC time all flight time during which the person acts as a flight instructor, the proposed rule would provide more detail regarding the conditions under which this occurs. For example, the flight instructor would have to be authorized to conduct the training; hold at least a third-class medical certificate;

and occupy a pilot station with functioning flight controls. To log PIC time the certificated pilot receiving flight training would have to be qualified to conduct the flight in accordance with the FAR; manipulate the controls of the aircraft; and be undergoing a course of training for the issuance of a certificate or rating or obtaining recency of experience requirements. In addition, the aircraft would have to have dual functioning flight controls and engine controls that could be reached from either pilot station.

The proposal would not significantly alter the current requirements regarding logging of instrument time. However, the proposal would state that if a safety pilot is required, the name and pilot certificate number of the safety pilot must be recorded and the location and kind of each completed instrument approach. The current rule does not require the safety pilot's certificate number.

The proposal would specify the information that should be recorded regarding flight training toward a certificate, rating, or flight review. This would include a description of the training given, the length of the lesson, the instructor's signature, certificate number, and certificate expiration date.

The proposal would modify the current provision of § 61.51 that applies to the requirement for presentation of the person's logbook. The proposal would list the other records a person must present, in addition to the logbook, upon the request of an authorized official. The other documents include the pilot certificate, medical certificate, or any other record required under part 61. Both the current rule and proposed rule refer to officials representing the Administrator and the NTSB. However, the current rule also refers to a State or local law enforcement officer; the proposal would expand this to include any law enforcement officer.

18. Recency of Experience Requirements

The FAA proposes to modify a number of the recency of experience requirements in § 61.57.

The current requirement for three takeoffs and three landings within the preceding 90 days would be modified to allow night takeoffs and landings to also count for daytime currency. However, the takeoffs and landings would have to be to a complete stop, whether accomplished during day or night or in an airplane with tailwheel landing gear or tricycle landing gear. In retaining the current requirements, night operations will involve knowledge, skill, and ability that are sufficient for currency

for daytime operations. However, safety will be better served if the regulation requires full-stop landings, at least for the purpose of meeting the requirements of proposed § 61.57, rather than encouraging "touch-and-go" operations. A landing is not completed until the airplane is stopped and off the runway. As an example, crosswinds may cause a wing to lift suddenly, or mistakes can be made during a hasty effort to "clean up" the airplane (i.e., retract flaps, turn off carburetor heat, etc.).

Additional language is proposed that would require each takeoff and landing to involve a flight in the traffic pattern at the recommended traffic pattern altitude for the airport. This language is intended for pilots of helicopters and powered-lift aircraft, which could takeoff and land in virtually one spot. However, the intent of the rule is that pilots perform a complete takeoff and landing operation, including operating in the airport traffic pattern.

19. Instrument Currency

In addition, the FAA proposes to revise the requirements for instrument currency. Currently, § 61.57 sets the minimum requirements for recent instrument flight experience. For aircraft other than gliders, a pilot must have logged at least 6 hours of instrument time under actual or simulated IFR conditions, at least 3 of which were in flight in the category of aircraft involved, within the past 6 calendar months. The pilot must also have conducted at least six instrument approaches in that time. A pilot who does not meet the requirement of 6 hours and six approaches during the prescribed time or 6 months thereafter must pass an instrument proficiency test.

The revision in instrument currency requirements proposed here for aircraft other than gliders is based on a petition for rulemaking from Newton W. Miller, who advocates changing the requirements to emphasize instrument approaches and reduce the number of hours flown under simulated or actual instrument conditions to meet recency of experience requirements. The petition, summarized in the **Federal Register** on October 25, 1984 (49 FR 42943; Docket No. 24247), advocates decreasing the required flight hours to 2 or 3 hours (including at least 1 hour in the category of aircraft involved) and increasing the number of required approaches to 10 or 12. The petitioner argues that the 6 hours of simulated instrument flight may be flown largely in straight and level flight, which probably is relatively unchallenging to most instrument-rated pilots and does

not significantly contribute to maintaining instrument proficiency. The petitioner also states that 6 hours is an economic burden to many pilots and encourages pilots "to fly while not legally current." The petitioner states that aircraft control combined with the complex demands of following approach plates and communicating with ATC are much more germane to IFR proficiency. Therefore, the petitioner states, the number of required approaches should be increased. The petitioner states that 10 or 12 approaches could be conducted in 2 hours of flight time.

One comment was submitted in response to that petition. In that comment, the Air Line Pilots Association (ALPA) stated that the present regulation does not ensure proficiency, because a pilot may take an instrument proficiency test and not fly in instrument conditions for up to 6 months but still be legally current.

The petitioner raises an important issue in focusing on the quality of the time spent in instrument flight, especially simulated instrument flight, although the FAA disagrees that the current regulation encourages pilots to disregard the FAR and fly illegally. Therefore, the FAA proposes to revise the instrument recency of experience requirements. Under the proposal, to act as PIC under IFR, or in weather conditions less than the minimums prescribed for VFR, within the preceding 6 calendar months for aircraft other than gliders, a pilot would be required to have performed and logged: (1) At least six precision instrument approaches; (2) at least six nonprecision instrument approaches, (3) holding procedures; (4) intercepting and tracking VOR radials and NDB bearings; (5) recovery from unusual flight attitudes; and (6) flight by reference to instruments. However, these maneuvers and procedures would not be required to be performed in actual or simulated instrument flight. No minimum number of hours of simulated or actual instrument flight time would be specified.

Proposed § 61.1a would define an instrument approach as an approach procedure defined in part 97 and conducted to an established minimum descent altitude (MDA) or decision height (DH), or if necessary, to a higher altitude selected for safety reasons by ATC. Part 97 prescribes Standard Instrument Approach Procedures (SIAP) for instrument letdown to airports in the United States.

These proposed requirements could be met either in actual flight and in the category of aircraft for which instrument

privileges are sought, or in an approved flight simulator or flight training device representative of the category of aircraft for which instrument privileges are sought.

Instrument recency of experience in gliders would change mainly in format under the proposal. Pilots would be required to perform and log at least 3 hours of instrument time in actual flight, of which at least one-half must have been in a glider or single-engine airplane if the pilot does not carry passengers. If the pilot does carry passengers, the pilot must have performed and logged at least 3 hours of instrument time in a glider.

The FAA also proposes to clarify the requirements for an instrument proficiency test. Currently, the instrument proficiency test would be required for a person who has not met the instrument recency requirements within the prescribed time or within 6 calendar months after that time. The FAA proposes to clarify this issue by amending § 61.57 to require that the test include a representative number of tasks required for original certification of an instrument rating.

The FAA issued an NPRM on April 11, 1994 (59 FR 17162) to waive the recency of experience requirements of § 61.57 for PICs of parts 121 and 135 operators. Specifically, that NPRM proposed relief to PICs of parts 121 and 135 operators from having to comply with the recency of experience requirements, (i.e., general, night, and instrument) of § 61.57. Parts 121 and 135 have recency of experience requirements that are at least equivalent to the recency of experience requirements of § 61.57, so duplication of these requirements are unnecessary. The final rule is scheduled for issuance in 1994.

The proposals in this NPRM would extend the exception requirements for the general and night recency experience requirements of § 61.57 to PICs of part 125 operators, but not the instrument recency experience requirements. The FAA believes the training programs and structured operational controls placed on PICs in part 125 operations are adequate in ensuring that there will not be a degradation in safety. The FAA believes that the redundant recency of experience requirements in part 125, in addition to the structured training programs and operational controls placed on PICs of part 125 operators more than adequately cover any safety concerns provided by exempting these PICs from the recency of experience requirements of § 61.57.

20. English Language Ability Requirements

The FAA proposes to standardize English language fluency requirements for all certificates and ratings and to eliminate exceptions in certain rules that permit pilots to be certificated without meeting English language fluency requirements, under certain restrictions.

The proposal to eliminate exceptions to the English language requirements would affect all pilot and flight instructor applicants. This proposal would be addressed in each of the eligibility paragraphs of each pilot certificate level and would require all applicants to be able to read, speak, and understand the English language. Under the proposal, the reference to operating limitations would be deleted, and all applicants would be required to meet the language requirements. A similar provision in current § 61.75, which provides for placement of limitations on a pilot certificate issued on the basis of a foreign pilot license, also would be deleted. As with the pilot certificates and ratings, the applicant for a U.S. pilot certificate, on the basis of a foreign pilot license, would have to be able to read, speak, write, and understand the English language.

The FAA has grown increasingly concerned that pilots' inability to sufficiently read, speak, and understand English during radio communication and in dealing with air traffic control poses a serious safety hazard. The exceptions referred to have not effectively kept such pilots out of airspace in which command of the English language is essential, and for safety reasons, the FAA believes all pilots who operate in the National Airspace System (NAS) should meet the English language requirements. Current holders who cannot read, speak, write, and understand the English language, but have been issued pilot certificates with limitations that restrict operations in airspace requiring the use of the English language prior to effective date of this rule would be allowed to continue to hold that certificate. If the person seeks an additional rating or higher level pilot certificate, then the certificate will not be issued unless the person is able to read, speak, write, and understand the English language.

The proposal would eliminate, as superfluous, current language in § 61.151 that requires applicants for the ATP certificate to speak English without accent or speech impediment that would interfere with two-way radio conversation. The FAA believes that the requirement to speak English means

speaking well enough to participate clearly and safely in radio communications.

21. Flight Training Given by a Flight Instructor Not Certificated by the FAA

Existing § 61.41, "Flight instruction received from flight instructors not certificated by the FAA," permits flight training received by a flight instructor who is not certificated by the FAA to be credited toward the requirements for a U.S. pilot certificate or rating. However, the instructor is required to either be a: (1) Member of 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; or (2) flight instructor authorized to give that flight training by the licensing authority of a foreign contracting State to the Convention on International Civil Aviation and the flight training is given outside the United States.

Section 61.41 contradicts existing § 61.3, which states that flight training must be given by the holder of a flight instructor certificate issued by the Administrator. The exceptions to this requirement do not include flight instructors who are not certificated by the FAA. The absence of an exception for these flight instructors has caused confusion in relation to § 61.41. Currently, the FAA permits flight training received by a flight instructor who meets the requirements of § 61.41 to be credited toward the requirements found in part 61.

The FAA proposes to revise § 61.3 to ensure that, under certain circumstances, the recipient of flight training from a flight instructor who is not certificated by the FAA, may credit that flight training toward the requirements in part 61. Such a privilege is granted in the existing regulation but is subject to misinterpretation.

22. Second-in-Command (SIC) Training and Recent Experience

The FAA proposes to clarify the familiarization review requirements under § 61.55 for pilots serving as SIC of an aircraft that requires more than one pilot. Under the proposal, a person serving as SIC would be required to have completed, within the previous 12 calendar months, a familiarization review on specific subjects for the type of aircraft in which privileges are requested. As with other issues in this proposal, the FAA seeks greater structure and standardization.

The proposed section would maintain current provisions providing exceptions to the training requirements. For example, the training requirements do

not and would not apply to pilots qualified as PIC or SIC under parts 121, 125, or 135. In addition, pilots designated as SIC for the purpose of receiving flight training required under § 61.55, where no passengers or cargo are carried on the aircraft do not and would not have to meet the training requirements. Exceptions to the training requirements would also continue to be made for pilots holding a commercial pilot or ATP certificate in the case of ferry flights, test flights, or evaluation flights, provided no persons or cargo unnecessary for conducting the flight are carried aboard the aircraft.

23. Knowledge Tests

As discussed in the section on Clarification of Terms, the FAA proposes to use the term "knowledge test" to replace the term "written test." Knowledge tests will include tests administered by computer, which already are acceptable to the FAA; this term will update the FAR terminology to conform with the educational community.

In addition, the FAA proposes to require that applicants for knowledge tests obtain a logbook endorsement from an instructor in order to be eligible to take a knowledge test. This will end the current practice in which applicants request an FAA inspector from a FSDO to review and discuss their home study materials as evidence that they have completed a home study course. This practice constitutes an unnecessary workload for the FAA and is a role more properly filled by ground or flight instructors. Home study would still be acceptable; the only change would be that an instructor's endorsement would be required, but a review by the FAA would not.

The FAA proposes to continue requiring an endorsement to take the knowledge test to dissuade applicants from taking the test with inadequate preparation, again, to avoid undue administrative burden. Many applicants taking and retaking the knowledge tests might delay grading and response time, which would be unfair to applicants who completed courses and prepared for the tests.

24. Standardized Syllabus

The Notice of Hearings (54 FR 22732; May 25, 1989) invited public comment on whether parts 61 and 141 should be consolidated into one regulation and whether all training should be performed from a standardized curriculum. Under the current system, pilot and flight instructor training is conducted to meet the criteria and requirements of aeronautical knowledge

and flight proficiency, as set out in part 61 and the PTS. There is no requirement in part 61 for an applicant to complete an FAA-approved ground and flight training syllabus before obtaining a pilot or instructor certificate or rating.

Part 141 provides a specific method for meeting the part 61 requirements through training programs conducted at approved schools that offer standardized curricula and are monitored by the FAA to ensure quality training. Part 61 requires specific course structure and organization, detailed recordkeeping, increased standardization of training, and increased supervision of training. Testing standards are the same for pilots trained at non-approved schools or by independent instructors.

Although many of the comments received in response to the Notice of Hearings and at the public hearings supported consolidating parts 61 and 141, many commenters also wanted to maintain the current system of approving FAA pilot schools under part 141 and having schools and independent instructors operate under part 61 only.

However, during the public hearings, many participants agreed that performing training under a standard curriculum or syllabus may be beneficial. Nevertheless, they disagreed on whether the written training program should be prepared by the FAA or developed by industry and approved by the FAA. Many recommended that outlines be generated by the school and approved by the FAA. Some commenters noted that peculiarities of geographic area may not be included in a syllabus generated by the FAA. Participants suggested that a general syllabus could be published in an advisory circular format as guidance.

Based on the public comments and its own study of the issue, the FAA believes that part 61 and part 141 should not be combined or consolidated. However, the FAA is proposing that all training for pilot, flight instructor, and ground instructor certificates and ratings should be performed according to a written syllabus. The intent of this proposal is to encourage all training to be conducted according to a more organized and standardized format. This approach to training would give students and trainees the benefit of more structured training programs, an advantage that currently exists in training conducted under part 141 (or parts 121 and 135). The FAA believes that many independent instructors and pilot schools conducting training under part 61 already understand this and use

written syllabi although no regulatory requirement exists. However, the FAA would like to see this approach become the industry norm.

The FAA proposes to establish a new § 61.9 to require an instructor who provides training for an airman certificate or rating issued under part 61 to use a written syllabus that includes a summary of total training time; planned training time for each lesson; a detailed description of training to be covered in each lesson; and the aeronautical knowledge areas and approved areas of operation that apply to the airman certificate or rating. Because this requirement would apply to training conducted under part 61, and schools that conduct training under part 61 are not directly subject to FAA approval or certification, the instructor would bear responsibility for ensuring that all necessary areas of aeronautical knowledge and operation were covered in the training program. The proposal also would require the instructor to give a copy of the syllabus to the student at the outset of the training and ensure that the student completed the syllabus before the practical test.

The FAA does not, at this time, propose to require instructors to submit the syllabi for FAA approval. This would constitute a major administrative workload for the FAA and for instructors. However, the instructor would be required to maintain a copy of the syllabus, make it available for FAA inspection upon request, and provide each student with a record of the training accomplished. This proposal would revise § 61.189 to require each flight instructor to retain for 3 years a copy of the syllabus for each person trained by that instructor. Proposed § 61.219 would include the same requirement for ground instructors.

The FAA does not intend for each instructor to produce a personal syllabus for each course of training, although there is nothing to preclude such an effort should an instructor prefer to do that. Syllabi could be based on training courses published by manufacturers and training organizations.

The FAA believes that the use of training syllabi would provide more continuity in training conducted under part 61. This is particularly important for students who change instructors in the midst of a training program.

25. Training and Endorsements

The FAA proposes several initiatives to enhance pilot training and preparation. These efforts include additional training and instructor endorsements that cover human factors

training, windshear avoidance training, and special aircraft certification training for pilots. In addition, current endorsement requirements for complex and high performance airplanes would be clarified under the proposal.

26. Endorsement for Complex and High Performance Airplanes

The FAA proposes to amend current § 61.31, which deals with high performance and complex airplanes. Under this proposed revision, complex and high performance airplane endorsements would be discussed in separate paragraphs of § 61.31. One endorsement would be required for a pilot flying an airplane with retractable landing gear, flaps, and a controllable propeller (commonly referred to as a "complex airplane"). A separate endorsement would be required to operate a high performance airplane, which would be redefined from "more than 200 hp" to "200 hp or more." This proposed requirement for separate endorsements, one for complex airplanes and one for high performance airplanes, could be achieved simultaneously in a complex airplane of 200 horsepower (hp) or more.

Before giving the endorsements prescribed by § 61.31, the instructor would be required to provide both ground and flight training in the airplane to ensure the pilot is proficient on the operation and systems of the airplane.

In addition, § 61.31 currently requires endorsements only for holders of private or commercial pilot certificates. The FAA proposes to extend this requirement to holders of ATP certificates because it is possible to earn the certificate in a low horsepower, non-complex, single-engine airplane.

27. Aircraft Type Specific Training

In December 1991, the FAA issued a Special Certification Review Report on the Piper Malibu and Mirage airplanes. This review was a result of seven in-flight structural breakups involving Piper Malibu and Mirage airplanes. Although the review process did not discover any major design deficiencies, the special certification team that reviewed the airplane did make approximately 60 recommendations concerning design improvements and operational clarifications on the airplane.

The Special Certification Review team consisted of FAA engineers, inspectors, and pilots who were tasked with reviewing the certification process, service history, and operation of the Malibu and Mirage airplanes. The report issued on the airplanes was reviewed by

the FAA's Small Airplane Directorate and an action plan was developed. The plan included some possible airworthiness directives and recommendations for improved pilot training, policy revision, and rulemaking. Both the review team and Small Airplane Directorate concluded there is a need to improve the education and training of pilots in these high performance, complex airplanes. The FAA stated in the report that both the aviation community and the FAA have the responsibility for ensuring that pilots have the knowledge, skills, and abilities to operate these kinds of airplanes in normal, abnormal, and emergency situation.

In response to this Special Certification Review of the Piper Malibu and Mirage, the FAA is proposing to amend § 61.31 by adding a new paragraph that will require aircraft type specific training and a flight instructor endorsement for any aircraft that the Administrator has determined is necessary to ensure that pilots are adequately trained in normal, abnormal, and emergency situations on these kinds of airplanes. The FAA believes that pilots need this additional training to possess the necessary knowledge, skills, and abilities to operate these kinds of high performance, complex airplanes. The FAA proposes to require additional training and a flight instructor endorsement for a person to serve as a PIC of an aircraft that the Administrator has determined requires type specific training.

28. Human Factors

The FAA proposes to introduce human factor training requirements for all levels of pilot certification. The training requirements would include aeronautical decision making (ADM) and judgment training for pilots at all certificate levels. Although research on aeronautical human factors has been underway for many years, these concepts represent relatively recent advances in training methodology. The traditional approach to training is to focus on technical aspects of aerodynamics, aircraft characteristics and systems, airspace, meteorology, and regulations. The presumption is that the flight crewmembers will integrate these subject areas to respond properly to the situations faced in actual flight conditions.

The intent of adding the benefits of human factors training research to the pilot training regimen is to assist pilots in integrating available information and arriving at correct decisions. Based on this research, it is now feasible to systematically and explicitly study

ADM and judgment, rather than relying on pilots to adopt these practices intuitively or relying completely on their experience. Much of this research is based on accident investigations that indicate that decision making processes contributed to or caused the accident. The FAA believes that pilots in the future will benefit from accident analysis and training methodologies designed to overcome lapses in judgment.

29. Aeronautical Decision Making and Judgment Training

The training manual "Aeronautical Decision Making for Student and Private Pilots," prepared by the AOPA Air Safety Foundation for the FAA (Report No. DOT/FAA/PM-86/41), divides pilot activities into three basic categories. First are procedural activities, including management of the powerplant, fuel, navigation, communications, and other aspects of aircraft configuration. The second category is perceptual and motor activities, including aircraft control, and geographic orientation. The third category is decision making activities. The training manual covers self assessments of skill, knowledge, physical and psychological capabilities, hazard assessment, navigation planning, and flight priority assessment. The FAA has determined that aeronautical decision making is necessary, because flying involves a continuous stream of decisions about the crew, aircraft, environment, and operation. These decisions include pre-flight, "go/no-go" decisions, and in-flight decisions, which are designed to neutralize (by eliminating or reducing) risks in flight.

Of the three pilot activity categories, decision making accounted for 51.6 percent of fatal accidents in an analysis of data for a 5-year period, according to the AOPA manual. The objective of the manual, and aeronautical decision making (ADM) and judgment training in general, is to teach pilots to avoid situations that require luck or skill beyond their capabilities, and to reduce the level of judgment-related accidents.

With a solid base of conventional skills and knowledge, aeronautical decision making and judgment training can provide a structured approach to pilot reaction to event changes in flight. This training can be especially valuable to pilots with less experience to help confront the unexpected. These "event changes," in addition to preflight decisions, may include mechanical problems, new instructions from Air Traffic Control, or unexpected weather. These changes call for decisions in which poor judgment may entail a high degree of risk. A common example of

the target of such training is the non-instrument-rated private pilot who either fails to obtain a complete weather briefing or unexpectedly encounters poor weather but nevertheless is inclined to continue a flight into instrument meteorological conditions.

Aeronautical decision making and judgment training follow a three-pronged approach:

- Provide an analytical method for making decisions and evaluating risks.
- Address pilots' hazardous attitudes and substitute attitudes that promote good judgment.
- Address the need to overcome high stress, which reduces judgment and decision-making abilities.

Under the proposal, the requirement for ADM and judgment training would be placed under the knowledge requirements for all pilot certificate levels and all instrument ratings in proposed parts 61 and 141. The aviation community is directed to existing FAA-sponsored guidance material as well as additional educational materials available from other sources. Furthermore, the FAA plans to issue an advisory circular that will address the essential elements of ADM and judgment training that pertain to the various certificate levels.

30. Windshear Avoidance

The FAA believes that understanding windshear would enhance safety for general aviation pilots and, therefore, proposes to require ground training on windshear for all pilot certificate levels and the instrument rating. This proposal is based on the increased information available on windshear and industry expert opinion obtained through the FAA Pilot and Flight Instructor JTA, in which windshear is listed as a critical area of pilot knowledge.

The proposal would add a knowledge requirement on windshear avoidance to the current requirements on recognition of critical weather situations and the proposed aeronautical knowledge areas for an instrument rating, a recreational, private, commercial, and an ATP certificate. In the commercial pilot requirements of § 61.125, "airplanes," the windshear knowledge requirement would be added as part of a new meteorology knowledge requirement because this paragraph, unlike the paragraphs relating to rotorcraft, gliders, airships, and balloons, currently does not mention meteorology or weather as a knowledge requirement. The aviation industry's awareness of the importance of the windshear phenomenon and its understanding of the problem has increased markedly in recent years. A National Research Council (NRC) study

stated that windshear is "an infrequent but highly significant hazard to aircraft landing or taking off,"¹ and recommended a series of measures to reduce windshear accidents.

As a result of the study and the Council's recommendations, the FAA sponsored the development of a comprehensive Windshear Training Aid. Advisory Circular 00-54, "Pilot Windshear Guide," constitutes one section of the two-volume Windshear Training Aid and was issued on November 25, 1988. In addition, the FAA has implemented and expanded ground and flight training requirements for flightcrew members employed in parts 121 and 135 air carrier and commercial operations. In air carrier operations, the FAA pursues a "systems concept" that includes an improved low-altitude windshear weather forecasting technique, ground-based windshear detection equipment, airborne windshear detection equipment, and improved pilot training.

The NRC report stressed, however, that all classes of pilots should understand the windshear phenomenon, including general aviation pilots. The report noted that general aviation pilots usually are not as well trained as air transport pilots and that they rarely have access to advanced training simulators. According to the report, "the most practical and immediate solution appears to be an extensive education program to warn general aviation pilots of the hazards associated with low-altitude windshear and to teach both avoidance and escape procedures."² In the report, NRC stated that the risk posed by windshear can be reduced "very soon by an education campaign directed at all classes of pilots."³ The lack of awareness regarding windshear—including the origins, nature, and potential hazards of downbursts and wind variability—was found to be most acute within the general aviation community because of the diverse pilot skill and training levels. The report also stressed the need for standardized terminology for pilot-controller transmissions on windshear conditions and reports.

NTSB statistics indicate that general aviation has an average of 16 windshear-related accidents per year based on figures for 1979 through 1988. Those 16 accidents, including 1.3 fatal accidents, have resulted in an average of 3.8 fatalities and 4.4 serious injuries related

¹ United States. National Research Council. *Low-Altitude Wind Shear and Its Hazard to Aviation*. Washington: National Academy Press, 1983. Page 1.

² *Ibid.*, p. 1.

³ *Ibid.*, p. iii.

to windshear per year. However, the NRC report noted that low-altitude windshear may have been a factor in additional accidents that were described as weather-caused or weather-related. According to the report, "The rarity and lack of a reliable statistical data base on windshear-related accidents, shear encounters, or even the frequency of occurrence of potentially hazardous wind shears does not diminish the importance or severity of the safety problem. The potentially catastrophic consequences of an encounter during takeoff or approach and landing require that wind shear always be taken into account as a primary safety consideration when weather conditions are such that strong wind shears may be present. The widespread lack of appreciation among pilots, traffic controllers, and aircraft operations personnel of the seriousness of the possible safety hazards has exacerbated the problem."⁴

Currently, FAA written examination questions on windshear are primarily limited to weather theory questions focusing on the definition of windshear and the effect of windshears on aircraft during final approach. This proposal would broaden windshear training to include at least the following elements: Windshear weather, particularly microbursts, and clues that indicate its presence; effects of windshear on aircraft; windshear recognition from the cockpit and avoidance techniques; necessary precautions and standard operating techniques when windshear is suspected; and recovery techniques to be used in inadvertent windshear encounters.

Several sources of information are available for this proposed ground training requirement, and if the proposal is adopted, the FAA plans to issue a new advisory circular addressing avoidance for general aviation. In Advisory Circular 00-54, the FAA stresses the need to learn to recognize signs of windshear and avoid encountering the condition. Other reference material, such as AC 61-23B, "Pilot's Handbook of Aeronautical Knowledge," and AC 00-6A, "Aviation Weather," have basic discussions of windshear.

Although part 61 currently does not specifically require windshear avoidance training for the ATP certificate, part 121 contains windshear requirements for air carrier flight crewmembers. Beginning January 1, 1991, part 121 air carrier flight crewmembers were required to receive ground training in recognizing and

avoiding severe weather and escaping severe weather, in case of inadvertent encounters, including low-altitude windshear (§§ 121.404 and 121.419). Flight training in windshear avoidance maneuvers and procedures also is required by §§ 121.424 and 121.427. Pilots working in part 135 (air taxi and commercial operators) operations are required to receive sufficient ground training in meteorology to ensure a practical knowledge of weather phenomena, including the principals of frontal systems, icing, fog, thunderstorms, windshear, and, if appropriate, high altitude weather situations (§ 135.345). As previously mentioned, the prescribed knowledge in § 61.153 regarding weather for ATP candidates does not specifically state windshear avoidance training. Therefore, the FAA, to avoid any misunderstanding, proposes to add a knowledge requirement on windshear avoidance to § 61.153.

31. Aeronautical Experience Requirements

The FAA proposes to revise the minimum flight training hours of aeronautical experience and minimum solo flight hours of aeronautical experience that are required for the recreational and private pilot certificates and ratings under parts 61 and 141. Additional flexibility, under certain conditions, is proposed for pilot schools operating under part 141.

Under parts 61 and 141, the FAA proposes to revise the amounts of required dual and solo hours for the recreational and private pilot certificates and ratings. In part, this is based on information from the Sierra Academy of Aeronautics, a part 141 pilot school. In addition, the FAA believes that solo flight time is often not used constructively in training programs. Therefore, the FAA is proposing to permit the instructor and student to tailor the dual and solo training time requirements toward the individual student's needs. For example, a student who is seeking a private pilot certificate, and who has previous aviation experience and takes readily to the training may be able to complete training for a private pilot certificate with only the minimum 40 hours of flight time that includes at least 20 hours of flight training time from an authorized flight instructor and 20 hours of supervised PIC flight time. However, a student pilot who does not have previous aviation experience or who trains infrequently may need more time than the minimum 40 hours of flight time, 20 hours of flight training time from an authorized flight

instructor, and 5 hours of supervised PIC flight time. The student pilot and flight instructor may need to tailor the training to require 35 hours of flight training time from an authorized flight instructor and 5 hours of supervised PIC flight time.

Under proposed § 61.113, "Airship rating: Aeronautical experience," the requirement for 5 hours of PIC flight training while under the supervision of an authorized flight instructor is not intended to mean the instructor must be present in the aircraft. For example, if the airship required a SIC, the SIC could be a qualified pilot who was not necessarily an instructor, as long as the flight instructor provided flight supervision.

Finally, the proposed aeronautical experience requirements would place greater emphasis on experience in category and class of aircraft.

32. Instrument Rating

The FAA proposes several significant changes in the requirements to obtain an instrument rating. The FAA proposes to eliminate the requirement for a minimum of 125 hours of total flight time experience before a person may apply for an instrument rating. The FAA believes that this requirement should be eliminated to encourage more pilots to seek an instrument rating. This parallels current ICAO standards, which do not prescribe minimum pilot flight experience as a prerequisite for an instrument rating. The FAA believes that safety benefits were realized when the requirement was reduced to 125 hours and that allowing pilots to become eligible for the instrument rating as soon as possible will produce further benefits. The proposal would also delete the requirement for the minimum of 50 hours of cross-country flight time to more closely align the instrument rating eligibility requirements with ICAO standards.

In 1985, the FAA issued Amendment No. 61-75 (50 FR 19290: May 7, 1985) which reduced the total flight experience requirements for the issuance of an instrument rating. At that time, the FAA stated that the amendment was in response to recognized current training technology and that the FAA supported the concept of training to prescribed standards for an instrument rating. The FAA stated in the amendment that it recognized many pilots delay starting instrument training until they have accumulated 150 to 160 hours of flight time. The FAA estimated that it would take a pilot 3 to 4 years to accumulate 150 to 160 hours of flight time. During the development of Amendment No. 61-75, the FAA

⁴Ibid's, p. 130.

conducted a training experiment to examine the relationship of pilot experience, as defined by total flight time, to the acquisition of instrument skills. The results of that experiment concluded that the: (1) Amount of prior flight time had no effect on the acquisitions and demonstration of instrument flight skills within the pre-instrument flight experience ranges examined in connection with the experiment; and (2) reduction of the former required total flight experience, prior to the issuance of Amendment No. 61-75, for an instrument rating to a lower total flight experience encouraged pilots to obtain their instrument ratings. In light of the ever increasing complex NAS that pilots are required to operate in, it should encourage pilots to start their instrument training as soon as possible.

In Amendment No. 61-75, the FAA cited a 1981 study conducted by Walton Graham, "A Study of General Aviation Safety," part II, Volume 1, prepared for Trans Urban East Organization, New York, by Questek, Inc., November 1981. In that study, the FAA noted the following accident rates:

<i>Fatal/Serious Accident Rates, IFR Rated Pilots Compared to Non-IFR Rated Pilots</i>	
Flight Under IFR	
Conditions By:	
Non-IFR Rated Plt.	1 Acc./1,449 hours
IFR Rated Plt	1 Acc./12,186 hours
Flight Under VFR	
Conditions By:	
Non-IFR Rated Plt.	1 Acc./61,900 hours
IFR Rated Plt	1 Acc./94,819 hours

The FAA stated the statistics in that study supported the need for Amendment No. 61-75. As in the case of Amendment No. 61-75, the FAA believes this proposal will encourage non instrument-rated pilots to seek instrument training at an earlier stage in their aviation training, and will result in:

- (1) A higher level of safety and competency in coping with sophisticated aircraft equipment, navigation aids, and communication systems;
- (2) The restructuring of flying courses under parts 61 and 141 to provide supervised instrument flight rule experience during the training curriculum; and
- (3) The encouragement of continued training to meet both the currency and higher certification levels.

The proposal would continue to require at least 40 hours of simulated or actual instrument flight training, which may include 20 hours in an approved

flight simulator or flight training device and 15 hours of instrument flight training in the aircraft for an instrument rating.

Proposed § 61.65 also would state that a person who completes an instrument rating practical test for a multiengine airplane, while holding a single-engine airplane class rating would be considered to have met the single-engine airplane instrument rating requirements. The currently required flight instruction and skill would be addressed under proposed areas of operation. A significant proposed change for airplanes is that proposed § 61.65 would add a requirement that the 250-nautical mile (nm) IFR cross-country flight contain one route greater than 100 nm between airports, and that this cross-country flight include an instrument approach at each airport. However, the proposal would delete the language in the current rule that requires the cross-country flight to be in "simulated or actual IFR conditions." The FAA intends that the flight be conducted under instrument flight rules but not necessarily under actual or simulated instrument conditions. An instrument approach would be required at each airport, and approaches using VOR, NDB, and ILS radio navigation aids would be required during the flight.

Similarly, for the instrument rating-helicopter, the cross-country requirement would be 100 nm under IFR but not necessarily simulated or actual instrument conditions. The proposal would add the requirement that one of the routes be greater than 50 nm between airports, and that an instrument approach be conducted at each airport on the route.

The requirements of the proposed areas of operation would be very similar to the current requirements, although in certain cases they would be more general. For example, the requirement that the applicant be endorsed as having been trained and found competent in instrument approaches to published minimums using VOR, ADF, and ILS systems would be replaced with a requirement that the applicant receive and log training in instrument approach procedures. This would permit the PTS to specify, as required, other types of approach procedures appropriate to the IFR environment.

The instrument rating areas of operation are listed separately by aircraft. Although this causes some redundancy, it is similar to the organization of the current regulation, and is intended to assist users by eliminating or minimizing cross-referencing. The proposed rule contains areas of operation for airplane category

(the practical test would vary between single-engine and multiengine), helicopter class, airship class, and powered-lift category.

Applicants for the instrument rating would be required to present endorsements for the knowledge and practical tests as well as pass the required knowledge test. The required areas of aeronautical knowledge would remain similar to the currently required areas of ground instruction, including applicable FAR, the "Airman's Information Manual," the air traffic control system, IFR navigation and approaches, IFR en route and approach procedure charts, aeronautical decision making and judgment, weather, and windshear avoidance.

33. Recreational Pilot Certificate

The FAA proposes to revise the eligibility requirements for the recreational pilot certificate as follows: (1) must be able to read, speak, write, and understand the English language, with no provisions or limitations to the contrary; and (2) would not be required to hold a medical certificate. In addition, an applicant would have to affix a signed and dated statement to the application certifying they do not have any known medical limitations that prevent the person from operating the aircraft for the aircraft category and class rating sought.

The FAA is proposing to allow holders of recreational pilot certificates and holders of a higher pilot certificate who elect to only exercise the privileges of a recreational pilot certificate to operate without holding medical certificates. This action is responsive to the EAA petition and the interests of the general aviation community, as discussed earlier. The FAA is requesting comments on this proposal and the accompanying proposed changes to § 61.53. For more details see the section-by-section analysis for § 61.53.

The FAA proposes to revise the aeronautical experience requirements for a recreational pilot certificate by requiring an applicant to accomplish and log at least 30 hours of flight time that includes at least 15 hours of flight training time from an authorized flight instructor and 3 hours of supervised PIC flight time. The purpose for this proposal is to respond to comments heard during the public hearings to allow the student and the flight instructor to tailor the required training to individual student needs.

For example, a student who has previous aviation experience and takes readily to the training may be able to complete training for a recreational pilot certificate with only the minimum 30

hours of flight time that includes at least 15 hours of flight training time from an authorized flight instructor and 15 hours of supervised PIC flight time. However, a student pilot who does not have previous aviation experience or who trains infrequently may need more time than the minimum 30 hours of flight time, 15 hours of flight training time from an authorized flight instructor, and 3 hours of supervised PIC flight time. The student pilot and flight instructor may need to tailor the training to require 27 hours of flight training time from an authorized flight instructor and 3 hours of supervised PIC flight time.

The FAA proposes to revise the privileges and limitation requirement for a recreational pilot certificate by allowing a recreational pilot to act as PIC of an aircraft on a flight that exceeds 50 nautical miles from the departure airport, without receiving training for a private pilot certificate. However, the pilot would be required to receive the proposed training and an endorsement to conduct a flight that exceeds 50 nautical miles.

These proposed revisions will improve interest in the recreational pilot certificate and will encourage more people to seek pilot certification.

34. Preflight Planning

The FAA proposes to revise the aeronautical knowledge areas for a recreational or private pilot certificate to reflect the requirements for preflight action found in § 91.103.

The current aeronautical knowledge requirements for the private pilot certificate applicant with an airplane or rotorcraft category rating include VFR navigation, using pilotage, dead reckoning, and radio aids. These requirements have been interpreted to include the preflight action items in § 91.103. The proposal to add the items found in § 91.103 to the proposed aeronautical knowledge areas would avoid any misinterpretation of the applicant's aeronautical knowledge requirements.

35. Limitations on Cross-Country Endorsements

The FAA proposes to revise § 61.93 to clarify the cross-country flight requirements for students and recreational pilots seeking a private pilot certificate. Under the proposal, the limitations placed in the student's logbook for a supervised PIC cross-country flight would have to be met at the time of the student's departure.

The existing rule, which requires that each supervised PIC cross-country flight be subject to conditions listed in the

student's logbook is ambiguous. Incidents have occurred where a student has departed on a cross-country flight without adhering to limitations in the student's logbook. Also, the dispatching flight instructor may not be the student's principal instructor and may not be familiar with the student's personal limitations. The proposal would permit the principal instructor to list limitations considered necessary for the safety of flight (e.g., weather minimums, maximum crosswind components, time frames for departure and completion) that would have to be met before a student could depart on a cross-country flight.

This proposal also would require a revision of the language in § 61.195 on flight instructor authorizations to be compatible with language proposed in § 61.93.

36. Night Flight Training

The FAA proposes to clarify and modify night flight training requirements for private pilot and commercial pilot applicants. The FAA proposes to require night operations as an area of operation for airplanes, powered-lift, and rotorcraft ratings.

An exception would be permitted for pilots whose training and certification occurs in geographic latitudes where there is no nighttime for extended periods. In the United States, this only applies to persons who receive their training in Alaska. The proposed rule would permit a 1-year exception for these pilots. Within 1 year after receiving their certificate with a night flying limitation, pilots would be required to obtain the minimum 3 hours of night flight training and have the restriction removed.

Another exception would be proposed for persons with medical restrictions against night flight, because of vision problems. Persons in this group would be permitted to carry the night flight limitation on their certificates indefinitely.

This proposal would require more pilots to gain exposure to night flight. Experience shows that, even if pilots have no intention of flying at night, situations arise in which they might encounter delays and be tempted to complete a trip after dark. It is critical for pilots to understand how different night operations are from daytime operations and to understand their personal limitations.

However, a person who has been issued a pilot certificate without meeting the night flying requirements of this proposal, prior to effective date of this rule, would be allowed to continue to hold that pilot certificate with the

night flying limitation. If the person seeks an additional rating or higher pilot certificate level, the person would be required to comply with the night flying requirements that are appropriate to the pilot certificate level.

37. Private Pilot Limitations

The FAA proposes several significant changes to the current § 61.118 [proposed § 61.113], "Private pilot privileges and limitations: Pilot in command."

Under the current regulation, a private pilot may serve the public in humanitarian-type missions, if the pilot is not compensated. The FAA has granted exemptions to public service organizations to permit reasonable reimbursement to volunteer private pilots for expenses incurred for serving the public in such flights. The FAA proposes to permit private pilots to be reimbursed for aircraft operating expenses (i.e., fuel, oil, and airport expenditures) incurred while serving the public in certain public humanitarian missions (i.e., Civil Air Patrol, Sheriff Department, etc.).

Under the proposal, search and location activity would be permitted when the activity is under the direction and control of local, state, and federal law enforcement agencies. The FAA believes that skilled private pilots are a valuable resource to enforcement agencies conducting search and location missions and that this resource should be available under controlled conditions. The proposal is intended to permit private pilots to conduct searches in conjunction with search and location operations. The FAA considers a search and location operation as a flight or series of flights authorized by and under the direction and control of local, state, or federal law enforcement agencies for the purpose of searching for lost or injured persons and communicating the location of these persons to the appropriate authorities. The proposal is intended to include a pilot and the minimum essential number of persons required to perform observation, map reading, and communication duties. For example, under the proposal, a private pilot could act as PIC of an aircraft carrying fire fighters searching for a fire. This proposed paragraph would not permit a private pilot to transport fire fighters from one location to another. In addition, the proposal is not intended to involve private pilots in the transportation of emergency response personnel and victims.

The FAA also proposes to clarify how a private pilot may share expenses with passengers. Under the current rules, a

private pilot may only share the operating expenses of a flight with passengers. The FAA proposes to specify that these operating expenses be restricted to fuel, oil, and airport parking expenditures only, and that these expenses be shared equally between the pilot and the passengers.

The FAA also proposes to clarify the provisions permitting private pilots to conduct flight operations for charitable events. Under the proposal, the regulation would specify that, if a private pilot functioned as a PIC of an aircraft for a passenger-carrying airlift sponsored by a charitable organization, the sponsor of the airlift would have to provide a signed letter with information on the event, and a photocopy of the pilot's pilot certificate, medical certificate, and logbook entries showing compliance with recency of experience requirements and the 200-hour minimum total experience requirement.

Other aspects of the provisions for private pilots' operations in charitable events would remain largely the same. Aircraft maintenance would be required to be in accordance with subpart E of part 91, although the specific reference in current rule to a required 100-hour inspection and compliance with § 91.409 would be deleted.

Nevertheless, those requirements are applicable and would continue under the proposal. In addition, reference to specific U.S. Department of Treasury documents would be replaced with a more general requirement that the charitable organization be identified as such by the Department of the Treasury.

Under this proposal, specific reference to private pilots engaged in aircraft sales would be deleted. The existing rule states that a private pilot, who is an aircraft salesman and who has logged at least 200 hours of flight time, is permitted to demonstrate an aircraft in flight to a prospective buyer. This proposed revision does not eliminate this private pilot privilege, however, because it is covered in the proposed § 61.113(b).

Finally, a new provision would be added to clarify that a private pilot who meets the requirements of § 61.69 may act as PIC of an aircraft towing a glider and log that flight time. This is consistent with current and proposed § 61.69.

38. Glider Towing

Section 61.69, "Glider towing: Experience and instruction requirements," currently provides two means for a person to qualify as a PIC of an aircraft towing a glider. The proposed rule would retain the first alternative in § 61.69, which requires

the person to have made and logged at least three flights as sole manipulator of the controls of an aircraft towing a glider while accompanied by a qualified pilot. Under this proposal, the second alternative in § 61.69, would be removed. This alternative allows for the person to have made at least three flights as sole manipulator of the controls of an aircraft simulating glider towing flight procedures and at least three flights as pilot or observer in a glider being towed by an aircraft. The FAA believes that safety will be better served if a person's first experience actually towing a glider occurs while that person is accompanied by a qualified pilot, rather than flying solo, as may be the case currently.

39. Eligibility for Commercial Pilot Certificate

The FAA proposes changes to current § 61.123, "Eligibility requirements: General" and § 61.129, "Airplane rating: Aeronautical experience." Section 61.123 currently requires applicants for the commercial pilot certificate with an airplane category rating either to have a private pilot certificate or to have passed the private pilot written and practical tests. Under this proposal, § 61.123 would list the private pilot certificate as a prerequisite for commercial pilot certificate applicants for all aircraft categories. This would, in effect, require applicants to take the private and commercial practical tests separately, so that applicants actually have a private pilot certificate when they apply for the commercial pilot certificate.

The proposed change is not intended to require that the private pilot certificate necessarily be in the same category and class of aircraft for which the applicant seeks a commercial pilot certificate.

The other proposed changes to eligibility requirements for commercial pilot certificate applicants would affect English language ability; applicants would be required to read, speak, write, and understand the English language, and no exceptions would be made. In addition, a third-class medical certificate, rather than a second-class medical certificate, would be required. Proposed § 61.23 would require, as is currently the case, that a person hold at least a second-class medical certificate to exercise the privileges of a commercial pilot certificate.

Current holders who cannot read, speak, write, and understand the English language, but have been issued pilot certificates with limitations that restrict operations in airspace requiring the use of the English language, would

be allowed to continue to hold their certificates. However, if a person seeks an additional rating or higher level pilot certificate, then the certificate will not be issued unless the person is able to read, speak, write, and understand the English language.

40. Use of Turbojet Airplanes for Commercial Pilot Certification

The FAA proposes to revise § 61.129, the aeronautical experience requirements for a commercial pilot certificate with an airplane category rating, to permit the use of turbine powered airplanes. The existing rule requires a minimum of 10 hours of flight training and practice given by an authorized instructor in operations in airplanes with retractable landing gear, flaps, and a controllable pitch propeller. However, some commercial pilot applicants may wish to complete their training in turbine-powered airplanes, and some military pilots may not have demonstrated procedures pertaining to the use of a controllable pitch propeller. Because a turbine-powered airplane does not necessarily have a propeller, training and demonstration of flight proficiency in such an airplane does not satisfy existing requirements. However, a turbine-powered airplane clearly meets the regulatory intent of requiring an applicant to demonstrate proficiency in a relatively complex airplane.

As proposed, an applicant could perform the 10 hours of flight training and practice given by an authorized instructor in either a turbine powered airplane or an airplane with retractable landing gear, flaps, and a controllable pitch propeller. The 10 hours of flight training and practice could also be met with a combination of hours in the two airplanes.

Existing § 61.127, which requires demonstration of flight proficiency in an airplane equipped with a retractable landing gear, flaps, and controllable propeller(s), would be revised to include turbine-powered airplanes.

41. Commercial Pilot Experience—Cross Country Training Flight

The FAA proposes to establish two new cross-country flight training requirements for commercial pilot certificate applicants for airplane, helicopter, gyroplane, airship, and powered-lift ratings: a daytime VFR cross-country flight and a nighttime VFR cross-country flight. Both flights would have to be in the same category and class of aircraft for which the commercial pilot certificate was sought.

The FAA proposes these additional cross-country requirements because current training requirements appear

inadequate and are outdated. The intent of the proposals is to increase applicants' exposure to the demands and pressures of cross-country navigation under both day and night conditions, in increasingly complex airspace conditions, and at commercial pilot level standards. The FAA believes that this additional experience under flight instructor supervision will help produce better trained commercial pilot applicants.

42. ATP Requirements

The FAA proposes several changes in the eligibility requirements for the ATP certificate. The English language capability requirement would be simplified and standardized with other certificate levels. The reference in current § 61.151 to accent or speech impediment that would interfere with two-way radio conversation would be deleted. At least a third-class medical certificate, rather than a first-class medical certificate, would be required for the certificate (although a first-class medical certificate still would be required to exercise the privileges of the certificate). In addition, the current requirement in § 61.151 for a high school education or equivalent would be deleted. The FAA believes that because of the higher levels of education typically attained by ATP certificate applicants, this is now an obsolete requirement.

The provision in current § 61.157 permitting ATP certificate applicants to obtain an instrument rating in conjunction with the ATP certificate is obsolete. Therefore, the FAA proposes to require in § 61.151 that an applicant for an ATP certificate either must hold a commercial pilot certificate *and* instrument rating that applies to the category and class of aircraft for which the ATP certificate is sought or, if a U.S. military pilot, meet the requirements of § 61.73 for a commercial pilot certificate and instrument rating. An applicant who holds a foreign pilot license would be required, under the proposal, to hold either a foreign ATP certificate or commercial pilot license and instrument rating with the appropriate aircraft category and class rating. Currently, it is rare for an ATP applicant to lack an instrument rating, and in the current NAS an instrument rating is, for practical purposes, a prerequisite for the ATP certificate.

Under the proposal, applicants under 23 years of age could continue to take the knowledge test for the ATP certificate. The proposal would eliminate the current provision in § 61.153 that requires applicants to meet the eligibility requirements (other than

the age minimum) before taking the written, or knowledge, test. Thus, in this NPRM, it would not be necessary to meet any of the eligibility requirements to take the knowledge test, but the eligibility requirements would apply to a person seeking to take the practical test. However, an applicant would have to be at least 23 years old to take the practical test; the FAA proposes to delete the exception to this requirement currently found in § 61.39. This revision proposes that an applicant meet the 23 year old age requirement to be eligible to take the practical test for an ATP certificate.

The FAA also proposes to clarify, reorganize, and update the aeronautical knowledge areas covered under § 61.153. Whereas airplane and rotorcraft aeronautical knowledge currently is covered under separate sections that are cross-referenced, the proposal would list a single set of required aeronautical knowledge areas. The current reference to "air navigation facilities on Federal airways such as rotating beacons, course lights, and radio ranges" would be deleted. Other items, such as flight crew physiological factors and aeronautical decision making, judgment, and windshear avoidance would be added.

Aeronautical skill areas currently addressed in §§ 61.157 (airplane rating) and 61.163 (rotorcraft) would be addressed in proposed § 61.155, "Flight proficiency." This proposed section contains a single set of areas of operation for the single-engine airplane, multiengine airplane, helicopter, and powered-lift ATP ratings.

The practical test for the ATP certificate—airplane, rotorcraft, or powered-lift—would be based on the approved areas of operation listed in proposed § 61.155.

To apply for a practical test for an ATP certificate, a person must meet the eligibility requirements for the certificate, as well as meet the aeronautical knowledge and experience requirements.

An applicant who is seeking a type rating on an ATP certificate or adding a type rating to a ATP certificate would be required to receive and log ground and flight training on the approved areas of operation and receive a logbook endorsement that the training was completed, except in the case of an employee of a part 121 or 135 certificate holder. In that case, the employee would be permitted to present a training record that shows satisfactory completion of the certificate holder's approved PIC training program for the aircraft type rating sought.

The areas of operation contained in the rules are written in general terms to align it with the standards for practical tests. The FAA believes this will permit flexibility in the test and reflect current needs of the NAS environment in which the holder of the ATP certificate would operate. Applicants would prepare for the test, in part, by referring to the appropriate practical test standards. As an example, the areas of operation include preflight preparation and procedures; inflight procedures; instrument procedures; takeoff and departure; landings; normal, abnormal, and emergency procedures; and postflight procedures.

Under the proposal, aeronautical experience requirements would be reorganized for clarity and easier reference. The proposal would not change the specific hour requirements.

Powered-lift requirements would be patterned on the airplane requirements. However, for powered-lift, no provision is contained in the proposed rule for flight engineer time to be credited toward the required 1,500 hours of total time as a pilot. The reasons that provisions for flight engineer time is not being allowed for the powered-lift rating is because to date, the existing powered-lifts under development are not designed with a flight engineer station.

In proposed § 61.157, "Aeronautical experience: Airplane category rating," SIC time acquired in an airplane with a flight manual or type certificate that requires more than one pilot would still count toward meeting the pilot time experience requirements. All SIC time in an airplane for a part 121 or 135 certificate holder for which a SIC was required also would be counted.

The FAA proposes to delete the provision that requires a pilot who seeks an airline transport pilot certificate in a small helicopter to obtain a helicopter type rating. The FAA believes that small helicopters should not be treated differently than the other small aircraft. Historically, the FAA policy on requiring a pilot who seeks an airline transport pilot certificate in a small helicopter to obtain a helicopter type rating was based on the operating requirements of part 127, "Certification of Operations of Scheduled Air Carriers with Helicopters." Specifically, § 127.173(a) is the rule the FAA based its determination on requiring a pilot who seeks an airline transport pilot certificate in a small helicopter to obtain a helicopter type rating. Upon a closer reading of existing § 61.5(b)(5)(iii), however, it is stated that ratings are issued under this part for, "Small helicopters for operations requiring an airline transport pilot certificate."

Currently, part 127 is not active, and there are not any part 127 scheduled air carriers with helicopters. The FAA has determined that it is not necessary for a person who seeks an airline transport pilot certificate in a small helicopter to obtain a helicopter type rating. The continuation of this past policy places an additional restriction on small helicopters that is not required of other small aircraft and can no longer be justified. Therefore, the FAA proposes to treat the type rating requirements for helicopters as it currently does for the other aircraft, which only requires a type rating if the aircraft is a large aircraft (other than lighter-than-air), turbojet-powered airplanes, or other aircraft type ratings specified by the Administrator through the aircraft type certification procedures.

43. Pilot in Command Hour Requirement for Initial Flight Instructor Applicants

The FAA proposes to require an applicant for a flight instructor certificate to have logged at least 15 hours as PIC in the category and class of aircraft for which the rating is sought. This is also required in existing § 61.191 for a flight instructor to apply for an additional flight instructor rating. However, such a requirement does not exist for the application of an original flight instructor certificate. The FAA believes that an applicant for any flight instructor rating should have logged at least 15 hours as PIC in the category and class of aircraft for the rating sought. This proposal will not impose any additional economic burden on flight instructor candidates, who normally obtain their original flight instructor certificate in an aircraft in which they have received most of their training. The proposal is intended to eliminate an area of inconsistency in the regulation.

44. Experience Required for Training Flight Instructor Candidates

In addition to adding the generalized areas of operation to the flight instructor requirements of § 61.187, the FAA proposes two amendments to the current § 61.187. The first is a clarification of the requirement that persons giving flight training to flight instructor candidates have 24 months experience. Second, an exception would be specified for that 24-month requirement.

Section 61.187 currently requires that persons who give flight training to flight instructor candidates have a minimum base of experience. They must have given at least 200 hours of flight training, and they must have held a flight instructor certificate during the 24

months immediately preceding the date the training is given to a flight instructor candidate. This current rule may be read to mean that a person who had been active as a flight instructor for 2 years or more, but then became inactive as a flight instructor, might be excluded from giving flight training to flight instructor candidates upon resuming flight training activity.

The FAA does not interpret § 61.187 in this manner, particularly when it is read in conjunction with § 61.19. To clarify this issue, the proposed change would eliminate the words "immediately preceding." This proposal would clarify that the 24 months of experience are cumulative time and need not be accumulated consecutively and immediately preceding the giving of training to flight instructor candidates. However, an instructor who otherwise meets the 24-month and 200-hour experience criteria would need to have their flight instructor certificate reinstated before giving such flight training.

A further proposed change to this rule would apply to flight instructors serving in an FAA-approved course. This provision would allow such flight instructors either to meet the 24-month and 200-hour experience requirement, or to meet other prerequisites. The alternative qualifications would be to have trained and endorsed at least 5 persons for a pilot certificate or rating practical test; have a record reflecting that at least 80 percent of the persons whom the flight instructor has endorsed for a practical test passed that test on their first attempt; and have given a minimum amount of flight training. In the case of airplanes, the minimum amount of flight training given would be 400 hours; in the case of gliders, the minimum amount of flight training given would be 100 hours; and in the case of lighter-than-air, the minimum amount of flight training given would be 40 hours.

The intent of this option is to permit a person who has held a flight instructor certificate for less than 24 months to give training to flight instructor candidates. For example, the FAA believes that some full-time instructors may meet the 400-hour requirement before accumulating 24 months of training experience. Within the structure of an approved training program, the FAA believes that such instructors should be permitted to train flight instructor candidates. The FAA has determined that the second option would provide at least an equivalent level of safety to the current minimum of 24 months and 200 hours of experience.

45. Flight Instructor Renewal Requirements

The FAA proposes to modify procedures for renewal of the flight instructor certificate. Under the proposal, § 61.197 would be revised to clarify current requirements.

The current regulation requires flight instructors to pass the practical test for a flight instructor certificate and the rating involved, or portions of that test as determined by the FAA, or to renew their certificates through several other methods. Similarly, the proposal would state that a person who holds an unexpired flight instructor certificate would be permitted to renew that certificate for an additional 24 calendar months by passing a practical test for renewal of that certificate. The proposal would add that passing a practical test for an additional flight instructor rating also would be acceptable for renewal of the expiring flight instructor certificate.

Current § 61.197 also states that flight instructors may renew their certificates without taking the practical test if their record of instruction shows they are competent flight instructors. The proposal would specify what the FAA considers an acceptable record of training, for the 24-calendar month duration period of the instructor's certificate, the instructor would have to have endorsed at least 5 students for a practical test for a certificate or rating and at least 80 percent of the students would have to have passed their tests on the first attempt.

The proposal would modify one other possible method of renewing a flight instructor certificate. Under the current rule, a person may renew a flight instructor certificate, without taking the practical test, if the person has a satisfactory record as a company check pilot, chief flight instructor, PIC of an aircraft operated under part 121, or other activity involving the regular evaluation of pilots. This would be somewhat modified, a proposal that would include any person who has served, during the preceding 24-calendar month duration period of the person's flight instructor certificate, as a company check pilot, chief flight instructor, company check airman or flight instructor in a part 121 or 135 operation, or a comparable position involving the regular evaluation of pilots. Similar to the current rule, the proposal would stipulate that the person demonstrate to a FSDO of having satisfactory knowledge of current pilot training, certification, and standards.

46. Flight Instructor Duty Time Limitations

One issue discussed under this regulatory review was whether to limit instructor flight and duty time by limiting the hours of training given in simulators and ground trainers, as well as training given in flight. The FAA has decided to propose one change in the current flight time limitation for flight instructors, but does not propose to limit duty time involving training given in flight simulators and flight training devices.

Section 61.195 currently states that a flight instructor may not conduct more than 8 hours of flight instruction in any 24-consecutive hour period. The FAA proposes to revise this section by proposing that a flight instructor may not conduct more than 8 hour of flight instruction, other commercial flying, or any combination of both in any 24-consecutive hour period.

47. Flight Training From a Control Seat

Section 91.109 lists the requirements an aircraft must meet to be used in flight training. However, no regulation requires a flight instructor to be in a control seat of the aircraft while giving flight training. The FAA proposes to revise §§ 61.51 and 61.195 to require that all flight training be given from a control seat in the aircraft.

Section 91.109 requires, with the exception of a balloon, that the aircraft have fully functioning dual controls. The regulation provides that instrument flight training be given in a single-engine airplane equipped with a single, functioning, throwover control wheel in place of fixed, dual controls of the elevator and ailerons. Section 91.109 also requires a safety pilot to be in a control seat during simulated instrument flight conditions.

In § 61.51, the FAA proposes to require a flight instructor to occupy a pilot station in the aircraft that has functioning flight controls to log PIC flight time. The FAA also proposes to amend § 61.195 to require that all flight training be given from a control seat of an aircraft that meets the requirements of § 91.109.

C. Part 141 Issues

1. Approval of Training Courses That Permit Pilot Schools To Train to a Standard

The FAA proposes to permit pilot schools certificated under part 141 to train students to a performance standard without necessarily meeting the minimum hours of training prescribed in the appendices. However, these proposed courses would not be

permitted for pilot schools with provisional pilot school certificates or for courses in which pilot schools have examining authority.

Pilot schools would be required to specify planned ground and flight training time requirements for these courses. These time requirements would include cross-country flight time, night flight time, and any additional ground and flight training. Students would have to meet these planned time requirements to complete the course.

To apply for initial approval of a course that trains students to a standard, the school would be required to meet the following requirements, which appear in proposed § 141.55: (1) Hold a pilot school certificate and have held that certificate for at least the prior 24 calendar months; and (2) have an FAA inspector or a designated examiner who is not an employee of the school give the practical or knowledge test. The initial approval would be for 24 calendar months.

Under proposed § 141.55, a course that received initial approval could receive final approval by complying with the following: The school would be required to demonstrate that, during the time the course was conducted under initial approval, the school trained at least 10 students for a pilot, flight instructor, or ground instructor certificate or rating and at least 80 percent of those students passed the practical test on the first attempt. The practical test must have been conducted by an FAA inspector, or by a designated examiner who is not an employee of the school.

The FAA's experience indicates that most applicants require more than the minimum number of hours required under part 61 or part 141 to attain normal performance standards as reflected in the practical test standard (PTS) and as practiced throughout the flight training industry. Nevertheless, a number of pilot schools have students who are ready to accomplish the practical tests prior to reaching the minimum number of flight hours specified in the FAR. The FAA's experience with pilot schools that have similar courses approved under exemption indicates that such flexibility presents no detriment to safety, under the closely supervised training environment of these schools.

The proposal to permit pilot schools to train students to a standard follows a precedent established with the Advanced Qualification Program (AQP) in Special Federal Aviation Regulation (SFAR) No. 58, which applies to personnel trained under parts 121 and 135. The AQP was created partially in

response to recommendations the Administrator received on June 8, 1988, from the Joint Government-Industry Task Force on flight crew performance. One of the recommendations was to provide for the approval of training programs based on course content and training rather than using specific program hours.

This proposal also addresses a petition for rulemaking submitted April 20, 1990, by the Sierra Academy of Aeronautics, which was summarized in the **Federal Register** on June 12, 1990 (55 FR 23749; Docket No. 26221). No comments on the petition were received. The petitioner requested to adjust the ratio of dual flight training to solo training in its training course for a commercial pilot certificate in helicopters. The Sierra Academy stated that it prefers to conduct all flight training in helicopters, even though appendix F permits 100 hours of the total 150 hours of flight training in aircraft other than helicopters or gyroplanes. The Sierra Academy requested the decrease of the solo flight training requirement from 100 hours to 70 hours and the increase of the dual flight training from 50 hours to 80 hours. The Sierra Academy stated that the increase in the number of dual flight training hours is necessary because many of the maneuvers and procedures required under the PTS necessitate that an instructor be on board the aircraft for safety reasons. The petition stated that the change would make FAA-approved commercial pilot training conducted exclusively in helicopters economically viable, as well as safer. Under the proposed revision to § 141.55, the Sierra Academy would be able to apply for approval of courses to train students as described in its petition.

2. Check Instructors

Currently, pilot or provisional pilot schools are required to designate a chief instructor for each approved training course. In addition, pilot schools may designate an assistant chief instructor for an approved training course. The FAA proposes to establish a check instructor position that a pilot school could designate an instructor to perform instructor proficiency checks, stage checks, and end-of-course tests—the check instructor position.

The FAA has determined that the proposed check instructor position would be necessary at larger schools. Often the chief instructors at these schools need to designate more responsibility to other instructors. Under this proposal, a school would be required to have an enrollment of at

least 50 students at the time the check instructor is designated.

The check instructor would be required to meet certain minimum criteria and be approved by the FAA FSDO that has jurisdiction over the school. For checks and tests that relate to either flight or ground training courses, a check instructor would be required to have passed an oral test given by the chief instructor on: (1) Teaching methods; (2) the applicable provisions of the "Airman's Information Manual," parts 61, 91, and 141; and (3) the objectives and course completion standards of the approved training course for the designation sought.

A person who desires to become a check instructor for tests and checks that relate to a flight training course would be required to: (1) Hold a commercial pilot certificate or an ATP certificate; (2) hold a current flight instructor certificate with category and class ratings appropriate to the designation sought; (3) hold the appropriate instrument rating for the training course, if required; (4) hold at least a current second-class medical certificate, if the course is for a rating in an aircraft other than a glider or balloon; (5) present a signed and dated statement by the person certifying that the person has no known medical defects that make the person unable to pilot a glider or balloon, if the course is for a rating in a glider or balloon; (6) meet the PIC recent flight experience requirements of § 61.57; and (7) pass a flight test, given by the chief instructor, on the flight procedures and maneuvers of the approved training course for the designation sought. A person who desires to become a check instructor for tests and checks that relate to ground training courses would be required to hold a current ground instructor certificate with category and class ratings appropriate to the designation sought.

Commenters to NPRM No. 89-14, in which the FAA proposed to reduce the experience criteria for chief and assistant chief instructor candidates, noted that such actions enhance the status of instructors by permitting them to apply for a supervisory position earlier in their careers. The proposed check instructor position would permit instructors to apply for supervisory positions and to be given increased responsibility.

The proposal to establish the check instructor position would help the FAA clarify to whom a chief instructor can designate the authority to conduct student stage checks, end-of-course tests, and instructor proficiency checks. The FAA would also eliminate the term

"designated assistant." During the public hearings, commenters noted that the term is interpreted differently. Under the proposed revisions to §§ 141.79, 141.81, and 141.85, the chief instructor, assistant chief instructor, or check instructor would give instructor proficiency checks, stage checks, and end-of-course test.

3. Quality of Training Requirements

In response to comments provided at the public hearings, the FAA proposes to clarify the existing requirements for a pilot school to apply for and to maintain a pilot school certificate.

Current § 141.63 requires a pilot school that applies for examining authority in a particular course to demonstrate that 9 of the 10 most recent graduates of that particular course had passed an interim or final test on the first attempt.

Current § 141.83 requires that each holder of a provisional or pilot school certificate provide a high enough quality of training so that at least 8 out of the 10 of the school's students or graduates that were most recently tested, by an FAA inspector or designated pilot examiner, passed an interim or a final test on the first attempt.

Commenters at the public hearings noted that the existing requirement for a specific number of students to pass an interim or stage check may reduce a school's ability to monitor student and instructor performance. For example, the commenters noted that these interim or stage checks are used to: (1) Evaluate a student's performance; and (2) ensure that instructors train students according to the school's procedures and performance standards. The commenters stated that the quality of training criteria should be based on experience with the students who have completed a training course, not students who are enrolled in a training course. Some commenters even noted that, under this requirement, pilot schools would not be able to develop tests that exceed the standards set in the PTS. Other commenters noted that the existing regulations have been interpreted to mean that the requirement for the 10 most recent students to pass any test on the first attempt must be met continuously. For example, if two students in a row failed a test, the school may risk losing its examining authority.

The FAA has determined that a pilot school should be permitted to evaluate its own students and instructors throughout the training course without jeopardizing the school's certificate or examining authority. Therefore, the FAA proposes to revise the current

regulation on the number of students who are required to pass the practical or knowledge test and to eliminate the requirement for interim tests to be used to evaluate a school's quality of training. The number of students who pass the practical test would apply to training courses that require the applicant to pass a practical test to obtain a certificate or rating. The number of students who pass the knowledge test would apply to ground training courses.

Proposed § 141.63 would require 90 percent of the graduates of a flight course, in which the school desires to obtain examining authority or retain examining authority, to pass a final test given by an FAA inspector, or by a designated examiner who is not an employee of the school, on the first attempt. Under this proposal if 40 students graduate from an approved course, but only 10 of those students receive a final test given by an FAA inspector, or by a designated examiner who is not an employee of the school, then 90 percent of those 10 students would have had to have passed the test on the first attempt. The 90 percentage would be applicable for the 24-calendar months duration period of the school's examining authority. If the school only conducts ground school courses, then at least 90 percent of the school's students must have passed the required knowledge test given by the FAA, or by a designated examiner who is not an employee of the school.

The FAA proposes similar revisions to §§ 141.5, 141.27, 141.55 and 141.83. These revisions would require that an applicant seeking approval or renewal of a training course have at least 80 percent of their graduates from the course to have passed the practical test on the first attempt. The 80 percent is not required to be based on all students, but only on those students who take the practical test given by an FAA inspector, or by a designated examiner who is not an employee of the school.

4. Temporary Chief Instructor

The FAA proposes to revise § 141.87, "Change of chief instructor," to allow the assistant chief instructor to act in the capacity of the chief instructor for 60 days and to permit the assistant chief instructor or check instructor to perform stage and end-of-course tests.

The current rule requires that, pending designation and approval of a new chief instructor, each stage and end-of-course test be given by an FAA inspector or a designated pilot examiner. Commenters at the public hearings noted that this requirement could be an administrative burden to

the pilot school, its students, and the FAA.

The FAA has determined that an assistant chief instructor would be a safe temporary substitute for a chief instructor, because of their familiarization with school operations and they are already approved by the FAA. This proposal would provide a time frame for a new chief instructor to be designated and would provide stability to the pilot school's students.

5. Transfer Between Part 141 Schools

The FAA proposes to revise § 141.67 to delete the current requirement for a student at a pilot school with examining authority to complete all of the training course at the same school. The proposal would permit up to one-half of a student's credits to be transferred from another pilot school. The amount of credits that could be transferred would be based on the student's performance on a test given by the receiving pilot school. This test could include a flight check, a review of the student's aeronautical knowledge, or both. This criteria, as well as the other criteria proposed for the transfer between part 141 schools, is similar to the current criteria in § 141.77 for the transfer between pilot schools that do not have examining authority.

6. Maintenance Requirements

The FAA proposes to revise § 141.39 by expanding the maintenance requirements for aircraft used by a pilot school for flight training and solo flights.

Current § 141.39 requires applicants for a pilot or provisional pilot school certificate to maintain and inspect all aircraft in accordance with the requirements of part 91 that apply to aircraft used to give flight training for hire.

Section 91.409 requires all aircraft used to give flight training for hire to receive an inspection every 12 calendar months or every 100 hours in service. A pilot school may inspect aircraft under a progressive inspection program approved by the FAA in lieu of the requirements in § 91.409.

Aircraft used by pilot schools often receive greater wear and deterioration than other general aviation aircraft. For example, because of the high number of takeoffs and landings, training aircraft are subject to frequent and abrupt changes in engine power settings. This could cause rapid and extreme cylinder head temperature fluctuations resulting in premature wear and possible powerplant failure. Incidents of powerplant failure have been the cause of some pilot school accidents and

incidents. In one incident, an aircraft engine that had been operated for 97 hours beyond the manufacturer's recommended time between overhauls sustained internal failure, and the aircraft was forced to land.

The inspection of pilot schools during the National Aviation Safety Inspection Program (NASIP) found training aircraft to be in a generally safe condition for flight; however, some airworthiness problems were found. Examples included pilot schools that have: (1) Not complied with Airworthiness Directives (ADs), especially those required on a recurring basis; (2) not recorded time in service on aircraft engines or propellers; (3) exceeded inspection intervals; and (4) performed modifications that were not approved.

The FAA proposes to revise § 141.39 by: (1) Clarifying that the rule would apply to all pilot and provisional pilot schools, as opposed to applicants; (2) clarifying that aircraft would have to be maintained in accordance with subpart E of part 91, which includes requirements for maintenance, preventive maintenance, and alterations; and (3) requiring aircraft to be maintained in accordance with an inspection program for each airframe, aircraft engine, propeller, appliance, and component part.

This proposed inspection program, which a pilot school may currently use under § 91.409, could be: (1) A current inspection program recommended by the manufacturer; (2) an inspection program that is currently in use by the holder of a certificate issued under part 121 or part 135; or (3) an inspection program established by the applicant and approved by the Administrator.

If an applicant desires to establish an inspection program, the program would be required to be in writing and would need to include at least: (1) Instructions and procedures for the conduct of inspections for the particular make and model of aircraft, including necessary tests and checks; (2) instructions and procedures for inspecting the parts and areas of each airframe, aircraft engine, propeller, appliance, and component part required to be inspected, including survival and emergency equipment; and (3) a schedule for performing the required program inspections, expressed in terms of the time in service, calendar time, number of system operations, or any combination of these.

The FAA also proposes that all aircraft used for the demonstration of instrument skills be equipped and maintained for operations under IFR. This revision would revise the current rule, which requires that: (1) Aircraft for use in en route operations under IFR

and instrument approaches be equipped and maintained for operations under IFR operations; and (2) aircraft used for training in control and precision maneuvering by reference to instruments be equipped as provided for in the approved course of training.

7. Ground School Instructor Requirements

The FAA proposes to eliminate: (1) The requirement in § 141.35 for a ground school instructor to have 1 year of experience prior to serving as a ground school's chief instructor; and (2) the requirement in § 141.36 for a ground school instructor to have 6 months of experience prior to serving as a ground school's assistant chief instructor.

The FAA has granted exemptions to this requirement in existing § 141.35 for persons who have equivalent experience to meet the level of safety required by part 141. The FAA has stated in those grants of exemption that an applicant for a chief or assistant chief ground instructor who is approved by the Administrator would not need to meet these experience requirements.

8. Instructor Proficiency Requirements

The FAA proposes to revise the initial and recurrent proficiency checks a flight instructor is required to accomplish. The current rule requires each flight instructor to accomplish a proficiency check in each type of aircraft every 12 months.

The FAA proposes to revise § 141.79 by: (1) Permitting the assistant chief instructor and the check instructor to give these checks; (2) requiring the initial check for each course of training to be accomplished in the make and model of aircraft used in that training course; and (3) requiring recurrent checks to be accomplished in any make and model of aircraft in which the instructor trains students. Under the proposal, a flight instructor who trains students in a Cessna 172 and a Piper Arrow, for example, would be required to accomplish an initial check in each airplane. However, the recurrent check could be in either the Cessna 172 or the Piper Arrow.

This proposal also responds to a comment from Tar Heel Aviation to DOT's Regulatory Review, request for comments (57 FR 4744; February 7, 1992), which was in response to the President's request for comments on regulations that obstruct economic growth. The commenter suggested that each flight instructor accomplish: (1) One annual standardization flight in any aircraft in which the instructor trains students; or (2) one annual standardization flight that alternates

between complex and non-complex aircraft.

9. *Renewal of Certificate*

Currently, § 141.27 states that a pilot school that meets the requirements under part 141 for the issuance of the pilot school certificate will have its certificate renewed for 24 months. The FAA proposes to clarify the requirements a pilot school needs to meet to have its certificate renewed.

Under the proposal, the FAA would determine if: (1) The school's personnel, aircraft, facility, airport, approved training courses, and training records meet the requirements of part 141; (2) within 24 months prior to the date application is made for renewal of its pilot school certificate, the school trained at least a total of 10 students in any of its approved training courses and recommended those students for a certificate, rating, or a qualification, and those students completed a practical test, knowledge test, or end-of-course test; and (3) within 24 months prior to the date application is made for renewal of its pilot school certificate, at least 80 percent of the school's students passed the required practical test for the pilot, flight instructor, or ground instructor certificate or rating sought. The proposal would permit a pilot school that does not meet the renewal requirements listed in items (2) and (3) to apply for a provisional pilot school certificate.

In addition, the FAA proposes to eliminate the requirement that a provisional pilot school apply for a pilot school certificate not less than 30 days prior to the expiration of the provisional pilot school certificate. The purpose for this proposal is to encourage schools to apply for their pilot school certificate as soon as they meet the requirements and thus will give FAA FSDO's more time to complete certification of the school in a timely manner. In the past, some schools have complained that they have had to wait for their certificates, because of the heavy workloads in their local FAA FSDO. The FAA believes this proposal will benefit the schools by allowing the FAA to respond to school applications in a more timely manner.

10. *Recordkeeping Requirements for Pilot Schools With Examining Authority*

The FAA proposes to revise the recordkeeping requirements in § 141.67 for pilot schools with examining authority. The current rule requires a pilot school with examining authority to submit a copy of the appropriate training record for each person recommended by the pilot school for a pilot certificate or rating to the FAA FSDO.

The FAA proposes to eliminate the current requirements and to require pilot schools with examining authority to: (1) Maintain a record of all temporary airman certificates it issues; (2) submit each graduate's application for airman certificate within 7 days after the graduate passes the required knowledge or practical test; (3) make the proposed record of all temporary airman certificates available to the Administrator on request; and (4) surrender the proposed record of all temporary airman certificates to the Administrator on expiration of the school's examining authority.

These proposed records of all temporary airman certificates would have to be a chronological listing that includes: (1) The name of each student to whom a temporary airman certificate was issued; (2) the date of issuance; (3) the student's permanent mailing address and telephone number; (4) the title of the training course; (5) the name of the person who conducted the knowledge or practical test; (6) the type of temporary airman certificate or rating issued; and (7) the date the graduate's airman application file was sent to the FAA for processing of a permanent airman certificate.

In addition the school would be required to maintain a photocopy record containing each student's: (1) Graduation certificate; (2) airman application; (3) temporary airman certificate; (4) superseded airman certificate (if applicable); and (5) knowledge or practical test results.

11. *Reorganization of Requirements for Courses That Are Approved Under Part 141*

The FAA proposes to reorganize in the part 141 appendixes the criteria for training courses a pilot school could offer. This proposal would eliminate some courses, expand other courses, and establish criteria for new courses. The FAA proposes to give pilot schools and provisional pilot schools that request approval for a training course within the first year after the effective date of this rule the option to request approval of their current training courses or their proposed training courses. This option would give pilot schools and provisional pilot schools up to 3 years to request approval for a training course based on this NPRM.

The FAA's proposed reorganization would: (1) Eliminate test courses; (2) replace test preparation courses with special preparation courses; (3) expand the proposed special preparation courses to include additional subjects; and (4) propose additional courses. Each

course is discussed later according to the title of the proposed appendix.

The proposal to eliminate test courses would delete existing appendix B, "Private Test Course," and appendix E, "Commercial Test Course." FAA Order 8700.1 chapter 141 defines a test course as "a course of training for students who have accomplished more than half of the required time under part 61." The FAA believes that criteria for such courses would not be necessary. A pilot school that desires to offer a similar course could apply for approval of a course that would train students to a performance standard.

The proposed kind of special preparation courses are: (1) Agricultural aircraft operations; (2) rotorcraft external-load operations; (3) pilot refresher; (4) flight instructor refresher; (5) ground instructor refresher; (6) special operations; and (7) test pilot.

The private pilot and commercial pilot certification courses would be revised to apply to all aircraft categories, rather than only to the airplane category. This would eliminate appendix F, "Rotorcraft, Glider, Lighter-Than-Air Aircraft, and Aircraft Rating Courses." The FAA also proposes to add the following certification courses: (1) Recreational pilot; (2) airline transport pilot; (3) flight instructor; (4) flight instructor instrument; and (5) ground instructor. Unlike current certification courses, the revised course would include minimum eligibility requirements, which are discussed later.

Revisions to the courses would correspond to the proposals in part 61 to: (1) Establish a powered-lift category rating; (2) establish separate class ratings for nonpowered gliders and powered gliders; (3) establish an instrument rating for airships; (4) establish instrument ratings for single-engine and multiengine airplanes; (5) establish a flight instructor certificate in the lighter-than-air category; (6) certificate ground instructors under part 61; (7) revise ground instructor ratings; (8) revise aeronautical knowledge areas; and (9) replace flight proficiency requirements with approved areas of operation.

The proposed appendixes would require students who desire to enroll in the flight portion of the course to meet specific eligibility requirements. They would require an applicant to hold: (1) The necessary pilot or flight instructor certificate; (2) the necessary medical certificate or present a signed and dated statement by the person certifying that the person has no known medical defects that make the person unable to pilot a glider or balloon, as required; and (3) any necessary ratings on the

pilot or flight instructor certificate. For example, a person who desires to enroll in the flight portion of a private pilot certification course would be required to hold at least a student pilot certificate and a third-class medical certificate or the proposed medical requirements for a rating in a glider or balloon. The proposed requirements are similar to the eligibility requirements found in part 61 for pilot, flight instructor, and ground instructor applicants. The proposed eligibility requirements would not impose on applicants new requirements that are not found in part 61. Part 141 would still contain the certification requirements for pilot schools and part 61 would still contain the certification requirements for pilot, flight instructor, and ground instructor applicants.

The proposal for these eligibility requirements would permit students who do not meet the minimum eligibility requirements of part 61 or part 141 to enroll in the ground portion of a course. The FAA believes that any person should be able to enroll in the ground portion of a course to enhance aeronautical knowledge.

In the past, there have been instances in which a student has desired to enroll in the ground portion of a course prior to meeting the minimum eligibility requirements for the certificate. For example, a student who desires to enroll in the ground portion of the flight instructor certification course may not hold a commercial pilot certificate. However, that student may be scheduled to accomplish the practical test for the commercial pilot certificate, which would let the student meet the eligibility requirements. In another example, a student may desire to enroll in the ground portion of a flight instructor certification course to see if flight training is a career alternative. Currently, the FAA has issued an exemption to Cochise Community College in Douglas, Arizona, that permits its students to enroll in the ground portion of the school's flight instructor certification course while the student waits for scheduling of the commercial pilot practical test.

The FAA proposes, throughout the appendixes, to replace the term "solo practice" with "supervised PIC practice." The FAA believes this phraseology will more clearly define the flight instructor's responsibilities when their students are performing solo flight. The intent of this proposed phraseology is to ensure that flight instructors more closely monitor and direct their students when they are performing solo flight.

12. Appendix A—Recreational Pilot Certification Course

The FAA proposes to establish criteria for courses that provide a means for students to receive training and for pilot schools to give training for a recreational pilot certificate under part 141.

To enroll in the flight portion of the course, a person would be required to hold a student pilot certificate.

The course would require a minimum of 20 hours of ground training on the same aeronautical knowledge areas that are proposed in part 61 for a recreational pilot certificate. The knowledge area would include ground training on:

- (1) The applicable FAR for recreational pilot privileges, limitations, and flight operations that apply to the aircraft rating sought;
- (2) Accident reporting requirements of the NTSB;
- (3) Use of the applicable portions of the "Airman's Information Manual" and FAA advisory circulars;
- (4) Use of aeronautical charts for VFR navigation using pilotage with the aid of a magnetic compass;
- (5) The recognition of critical weather situations from the ground and in flight, windshear avoidance, and the procurement and use of aeronautical weather reports and forecasts;
- (6) The safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence;
- (7) The effects of density altitude on takeoff and climb performance;
- (8) Weight and balance computations;
- (9) Principles of aerodynamics, powerplants, and aircraft systems;
- (10) Stall awareness, spin entry, spins, and spin recovery techniques, if applying for an airplane-single engine rating;
- (11) Aeronautical decision making and judgment; and
- (12) Preflight action that includes—
 - a. How to obtain information on runway lengths at airports of intended use, data on takeoff and landing distances, weather reports and forecasts, and fuel requirements;
 - b. How to plan for alternatives if the planned flight cannot be completed; and
 - c. Proper planning procedures for possible traffic delays.

The proposed course would consist of at least a minimum of 30 hours of flight training (of which 15 hours must be with an authorized flight instructor and 3 hours must be supervised PIC training), which is the same as in the proposed part 61 requirements. The difference between the total minimum

flight training hours (30 hours) and the hours of training with an authorized flight (15 hours) and supervised PIC training (3 hours) is 12 hours, which will allow the schools to develop their recreational pilot certification course with the individual student in mind. For example, a student who has previous aviation experience and takes readily to the training may be able to complete training for a recreational private pilot certificate with only the minimum 30 hours of flight time that includes at least 15 hours of flight training time from an authorized flight instructor and 15 hours of supervised PIC flight time. However, a student pilot who does not have previous aviation experience or who trains infrequently may need more time than the minimum 30 hours of flight time, 15 hours of flight training time from an authorized flight instructor, and 3 hours of supervised PIC flight time. The student pilot and flight instructor may need to tailor the training to require 27 hours of flight training time from an authorized flight instructor and 3 hours of supervised PIC flight time, or some combination of those hours.

The FAA has elected to remain silent on the matter of the maximum time that may be credited for stage and end-of-course tests for the approved training course requirements. The FAA believes that the individual school and the local FAA FSDO is the better place for deciding how much time should be permitted for stage checks and end-of-course tests for each syllabus. The school and the approving FAA FSDO should evaluate each syllabus, and determine how much time a certain stage check or end-of-course test may be credited toward the total approved course requirement. After receiving course approval, the FAA and the school must continue to monitor the average length of time that it takes to conduct a specific stage check or end-of-course test, and be prepared to modify the syllabus when needed.

13. Appendix B—Private Pilot Certification Course

The FAA proposes to establish this appendix, which would include certification courses for a private pilot certificate with all category and class ratings. It would include courses currently found in appendix A and sections C.II, D.II, E.II, and E.III of appendix F. The proposed appendix would reflect the proposals in part 61 to establish a powered-lift category rating, and to establish separate class ratings for nonpowered gliders and powered gliders.

Persons who desire to enroll in the flight portion of a course would be required to hold: (1) A student pilot certificate; and (2) a third-class medical certificate, or in the case of course of training for glider or balloon rating, have a signed and dated application that they have no known medical defects that makes them unable to pilot a glider or balloon.

The proposed minimum ground training requirements would consist of the same aeronautical knowledge areas proposed in part 61 for a private pilot certificate.

The proposed flight training would consist of the same approved areas of operation proposed in part 61 for a private pilot certificate. The FAA is proposing to permit each school to tailor the course requirements around the individual student's needs. For example, a student who is seeking a private pilot certificate, and who has previous aviation experience and takes readily to the training may be able to complete training for a private pilot certificate with only the minimum 35 hours of flight time that included 20 hours of flight training time from an authorized flight instructor and 15 hours of supervised PIC flight time. However, a student pilot who does not have previous aviation experience or who trains infrequently may need more time than the minimum 35 hours of flight time, 20 hours of flight training time from an authorized flight instructor, and 5 hours of supervised PIC flight time. The student pilot and flight instructor may need to tailor the training to require 30 hours of flight training time from an authorized flight instructor and 5 hours of supervised PIC flight time, or some combination of those hours.

Current appendix A requires an applicant for a private pilot certificate with an airplane category rating to perform five takeoffs and five landings at night. The FAA proposes to require an applicant for a private pilot certificate with an airplane, rotorcraft, or powered-lift category rating to receive at least 3 hours and 10 takeoffs and 10 landings night flight training. However, the FAA proposes to include the provision in § 61.110 of this chapter that will exempt certain applicants from the night flying certification requirements.

The proposed time with a flight instructor on the areas of operation or in supervised PIC practice differ from the current requirements. The FAA proposes few minimum requirements or no minimum requirements. However, the training course would be required to include hours or flights for students to receive training on the approved areas

of operation and for students to perform directed PIC practice that helps the student develop proficiency, resourcefulness, self-confidence, and self-reliance.

The existing appendix contains provisions that permit a school to credit stage checks and end-of-course tests toward the total hour course requirements. Currently, a maximum of 3 hours may be credited toward the total ground portion of the approved private pilot course requirements. A maximum of 4 hours may be credited toward the total flight portion of the approved private pilot course requirements. Under this proposal, the FAA has elected to remain silent on the maximum time that may be credited for a specific stage check and end-of-course test for the approved training course requirements. The FAA believes that the individual school, after receiving approval from their FAA FSDO, is the better place for deciding how much time should be permitted for a specific stage check and end-of-course test of each syllabus. The school and the approving FAA FSDO should evaluate each syllabus, and determine how much time a certain stage check or end-of-course test may be credited toward the total approved course requirement. After receiving course approval, the FAA and the school must continue to monitor the average length of time that it takes to conduct a specific stage check or end-of-course test, and be prepared to modify the syllabus when needed.

14. Appendix C—Instrument Rating Course

The FAA proposes to revise appendix C to include all instrument ratings, rather than the airplane only. It includes courses currently found in appendixes C, F, and H.

The proposed appendix would include courses for the proposed instrument-powered-lift rating, instrument-airship rating, instrument-airplane single-engine rating, and instrument-airplane multiengine rating.

To enroll in the flight portion of the course, a student would be required to hold: (1) A private pilot certificate with an aircraft category and class rating appropriate to the instrument rating for which the course applies; and (2) at least third-class medical certificate.

The proposed ground training content would be the same as proposed in part 61 for an instrument rating, and includes windshear avoidance and aeronautical decisionmaking and judgment. The appendix would require the same amount of ground training that currently exists for an initial instrument rating, which is the same as currently

required for an airplane-instrument rating. As a result of this reorganization of the appendixes of part 141, this would, in effect, lower the minimum required ground training requirements from 35 hours to 30 hours for an initial instrument rating in a helicopter. A proposed 20 hours of ground training would be required if the course is for an additional instrument rating, which differs from the current requirement for 15 hours in the test preparation course. Because of the lowering of the pilot experience requirements for applying for an instrument rating, the different knowledge, skills, and abilities required for the different instrument ratings, and the emphasis for more detailed ground training requirements, the FAA believes the increase is necessary.

The flight training would be on the same approved areas of operation as proposed in part 61 for an instrument rating. In addition, the revised appendix would clarify the existing requirement for a cross-country flight by requiring a minimum straight-line distance between airports for one of the legs; this is also proposed in part 61.

A minimum of 35 hours of flight training would be required for all five types of instrument ratings, which is the same amount currently required for an instrument rating in an airplane or a helicopter. A percentage of the minimum hours in a course for a rating in an airplane, rotorcraft, or powered-lift could be given in a flight training device by an authorized flight instructor.

The existing appendix contains provisions that permit stage checks and end-of-course tests to be credited toward the total hour course requirements. Under this proposal, the FAA has elected to remain silent on the maximum time that may be credited for a specific stage check and end-of-course test for the approved training course requirements. The FAA believes that the individual school, after receiving approval from their FAA FSDO, should decide how much time should be permitted for a specific stage check and end-of-course test for each syllabus. The school and the approving FAA FSDO should evaluate each syllabus, and determine how much time a certain stage check or end-of-course test may be credited toward the total approved course requirement. After receiving course approval, the FAA and the school must continue to monitor the average length of time that it takes to conduct a specific stage check or end-of-course test, and be prepared to modify the syllabus when needed.

15. Appendix D—Commercial Pilot Certification Course

The FAA proposes to establish this appendix, which includes certification courses for a commercial pilot certificate with all category and class ratings. It would include courses currently found in appendix D and in sections C.III, D.III, E.IV, and E.V of appendix F. The proposed appendix would include the proposals in part 61 to establish a powered-lift category rating and to establish separate class ratings for nonpowered gliders and powered gliders.

To enroll in the flight portion of the course, a person would be required to: (1) Hold a private pilot certificate with the category and class rating appropriate to the ratings for which the course applies; and (2) hold at least a third-class medical certificate or present a signed and dated statement by the person certifying that the person has no known medical defect that makes the person unable to pilot a glider or balloon.

In addition, if the course is for a rating in an aircraft other than a gyroplane, glider, or balloon, the student would be required to: (1) Hold an instrument rating appropriate to the aircraft category and class rating for which the course applies; or (2) be concurrently enrolled in an instrument rating course for which the course applies and satisfactorily accomplish the required practical test prior to completing the commercial pilot practical test.

The proposed ground training would be the same aeronautical knowledge areas as proposed in part 61 for a commercial pilot certificate. The proposed ground training would also permit an applicant for an airplane category rating to complete ground training on an airplane with flaps, retractable landing gear, and a controllable propeller or an airplane with a turbine-powered engine, which is also proposed in part 61. The minimum hours of ground training are the same as in current commercial pilot courses. A minimum of 100 hours of training would be required for the powered-lift category rating, which is currently required for an airplane category rating.

The proposed flight training would be the same as the approved areas of operation proposed in part 61 for a commercial pilot certificate. In addition, the revised appendix would include the proposed modifications to the cross-country flight requirements in part 61.

The proposed time with a flight instructor on the areas of operation or in supervised PIC practice parallel the proposals for commercial pilot

certification in part 61. The training course would be required to include hours or flights for students to receive training on the approved areas of operation and for students to perform supervised PIC practice that helps develop proficiency, resourcefulness, self-confidence, and self-reliance.

The existing appendix contains provisions that permit stage checks and end-of-course tests to be credited toward the total hour course requirements. The FAA has elected to remain silent on the maximum time that may be credited for stage and end-of-course tests for the same reasons stated in appendix A.

16. Appendix E—Airline Transport Pilot Certification Course

The FAA proposes to establish appendix E as a certification course for an airline transport pilot certificate. It includes information currently found in appendix H, section 6. The proposed appendix would include the proposal in part 61 to establish a powered-lift category rating.

To enroll in the flight portion of the course a person would be required to: (1) Hold a commercial pilot certificate with the category and class ratings for which the course applies and hold no restrictions; (2) hold at least a third-class medical certificate; and (3) upon completion of the course, meet the aeronautical requirements in part 61 for an ATP certificate that is appropriate to the ratings for which the course applies.

The proposed ground training would consist of the same elements as those proposed in part 61 for an ATP certificate, including windshear avoidance, aeronautical decisionmaking and judgment. The course would continue to require 40 hours of ground training.

The proposed flight training would consist of the same approved areas of operation as proposed in part 61 for an ATP certificate. The course would continue to require 25 hours of flight training with at least 15 hours of instrument flight training. The FAA has elected to remain silent on the maximum time that may be credited for stage and end-of-course tests for the same reasons previously stated in appendix A.

17. Appendix F—Flight Instructor Certification Course

The FAA proposes to establish a separate appendix for certification courses for an initial flight instructor certificate with a category and class rating and for an additional category or class rating on a flight instructor certificate. The course for an instrument rating on a flight instructor certificate is

addressed in proposed appendix G. The course in this appendix is currently found in appendix H, sections 3 and 4.

This proposed appendix would include the proposals in part 61 to: (1) Establish a powered-lift category rating; (2) establish separate class ratings for nonpowered gliders and powered gliders; and (3) establish a flight instructor certificate for the lighter-than-air category.

To enroll in the flight portion of the course, a person would be required to hold: (1) A commercial or an ATP certificate with an aircraft category and class rating appropriate to the rating for which the course applies; (2) an instrument rating in an aircraft that is appropriate to the aircraft category and class for which the course applies (this would be required for an airplane, airship, or powered-lift rating); and (3) at least a third-class medical certificate or a signed and dated statement by the person certifying that the person has no known medical defect that makes the person unable to pilot a glider or balloon, as appropriate.

The proposed ground training would consist of the same aeronautical knowledge areas as proposed in part 61 for a flight instructor certificate. The course would continue to require a minimum of 40 hours of ground training for an initial flight instructor certificate and 20 hours for an additional flight instructor rating.

The proposed flight training would consist of the same approved areas of operation as proposed in part 61 for a flight instructor certificate. The minimum hours of flight training required would vary with the category or class of aircraft. A course for a rating in an airplane, a rotorcraft, or an airship would require a minimum of 25 hours of training. A course for a rating in a nonpowered glider would require 10 hours and 10 flights of training. A course for a rating in a powered glider would require 10 hours of training. A course for a balloon class rating would require 8 flights of training. The FAA has elected to remain silent on the maximum time that may be credited for stage check and end-of-course tests for the same reasons previously stated in the earlier discussion.

18. Appendix G—Flight Instructor Instrument (Aircraft Category and Class) Certification Course

The FAA proposes to establish a separate appendix for certification courses for a flight instructor certificate with an instrument rating. This proposed appendix would include the proposals in part 61 to: (1) Establish a powered-lift category and instrument

rating; (2) establish an instrument rating for airships; (3) establish instrument ratings for single-engine and multiengine airplanes; and (4) establish a flight instructor certificate for the lighter-than-air category.

To enroll in the flight portion of the course, a person would be required to hold: (1) A commercial or an ATP certificate with an aircraft category and class rating appropriate to the rating for which the course applies; (2) a flight instructor certificate with an aircraft category and class rating that is appropriate to the instrument rating for which the course applies; and (3) at least a third-class medical certificate.

The proposed course would require a minimum of 15 hours of ground training on the same aeronautical knowledge areas as proposed in part 61 for a flight instructor certificate. The proposed course would also require a minimum of 15 hours of flight training on same approved areas of operation as proposed in part 61 for a flight instructor certificate. The FAA has elected to remain silent on the maximum time that may be credited for stage check and end-of-course tests for the same reasons previously stated in the earlier discussion.

19. Appendix H—Ground Instructor Certification Course

The FAA proposes to establish this appendix for the approval of a certification course for a ground instructor certificate. An equivalent course is not found in current part 141.

This proposed appendix would include the proposals in part 61 to: (1) Revise ground instructor ratings; (2) include ground instructors under part 61; (3) establish a powered-lift category rating; (4) establish separate class ratings for nonpowered gliders and powered gliders; (5) establish an instrument rating for airships; and (6) establish instrument ratings for single-engine and multiengine airplanes.

The proposed course would require ground training on the same aeronautical knowledge areas as proposed in part 61. A person who enrolls for an initial ground instructor certificate would be required to receive a minimum of 20 hours of ground training. A person who enrolls for an additional ground instructor rating would be required to receive a minimum of 10 hours of ground training. The current provision in appendix H, section 3, "Flight Instructor Certification Course," states that the initial ground training can be lowered by one-half if the person has prior experience in education is proposed to apply also to ground instructors.

Reference the maximum time that may be credited for stage checks and end-of-course tests, the FAA has elected to remain silent on this matter for the same reasons previously stated in appendix A.

20. Appendix I—Aircraft Category or Class Rating Course

The FAA proposes to establish an appendix for certification courses for adding either a category or a class rating on a pilot certificate. The course in this appendix is currently found in sections F.II and F.III of appendix F. The proposed appendix includes proposals in part 61 to establish a powered-lift category rating, and to establish separate class ratings for nonpowered gliders and powered gliders.

To enroll in the flight portion of the proposed course, a person would be required to hold: (1) The minimum level pilot certificate that is appropriate to the additional category or class aircraft rating for which the course applies; and (2) at least a third-class medical certificate for aircraft ratings that require a medical certificate for that pilot certificate level to obtain an additional rating at the recreational pilot certificate level or an additional glider or balloon rating, persons must provide a signed and dated statement certifying that they have no known medical defects that makes them unable to pilot the aircraft.

Each course approved under this appendix would be required to consist of the minimum requirements found under appendixes A, B, C, D, or E for the category or class rating for which the course is approved at the appropriate pilot certificate level.

21. Appendix J—Aircraft Type Rating Course, Other Than Airline Transport Pilot

The FAA proposes to establish appendix J for certification courses for adding a type rating on a pilot certificate. The course in this appendix is currently found in appendix F, section F.IV. The proposed course would include the proposal in part 61 to establish a powered-lift category rating.

To enroll in the flight portion of the proposed course, a person would be required to: (1) Hold at least a private pilot certificate; (2) hold at least a third-class medical certificate, if a medical certificate is required for the type of aircraft rating sought; and (3) hold an instrument rating or be concurrently enrolled in a course for an instrument rating in the category and class that is appropriate to the aircraft type rating for which the course applies (if the aircraft does not hold a VFR limitation). A

person who is concurrently enrolled in a course for an instrument rating would be required to satisfactorily accomplish the required practical test concurrently with the aircraft type rating practical test.

The minimum number of hours of ground training proposed would include at least 15 hours of training. The minimum number of hours of flight training proposed would include at least 25 hours of flight training of which at least 15 hours must be instrument flight training in the aircraft for which the course applies.

22. Appendix K—Special Preparation Courses

The FAA proposes to establish special preparation courses within appendix K. These courses are similar to the current test preparation courses, but would expand the concept of specialized courses. The proposed appendix would include the proposals in part 61 to: (1) Certificate ground instructors under part 61; (2) revise aeronautical knowledge areas; and (3) replace flight proficiency requirements with approved areas of operation.

The proposed appendix would establish: (1) Flight instructor refresher courses; (2) ground instructor refresher courses; (3) special operations courses; and (4) test pilot courses.

To enroll in the flight portion of the proposed courses, a person would be required to hold: (1) A pilot certificate that is appropriate to the operating privileges or authorizations that graduation from the course covers; and (2) at least a third-class medical certificate, if a medical certificate is required in part 61 of this chapter; or a signed and dated statement by the person certifying that the person has no known medical defect that makes the person unable to pilot a glider or balloon.

As noted above, a person who enrolls in the flight portion of the proposed courses would be required to hold a pilot, flight instructor, or ground instructor certificate that is appropriate to the operating privileges or authorization that graduation from the course covers. For example, if after graduation the person operates an aircraft under part 133—Rotorcraft External-Load Operations, that person would be required to hold at least a commercial pilot certificate with a rotorcraft-helicopter rating. Each student enrolled in these courses would be required to satisfactorily accomplish stage checks and end-of-course tests to graduate.

The proposed agricultural aircraft operations would continue to require a

minimum of 25 hours of ground training and 15 hours of flight training as found in appendix H, section 8. This proposal would eliminate the option in appendix H to include up to 5 hours of supervised PIC practice. The ground training requirements would be clarified and expanded to include: (1) Agricultural aircraft operations; (2) safe operating procedures for handling and dispensing agricultural and industrial chemicals, including operating in and around congested areas; and (3) applicable provisions of part 137. The flight training requirements would be clarified to include training on maneuvers and procedures applicable to agricultural aircraft operations.

The proposed course on rotorcraft external-load operations would continue to require a minimum of 10 hours of ground training and 15 hours of flight training, as found in current appendix H, section 9. The ground training requirements would be clarified to include: (1) Rotorcraft external-load operations; (2) safe operating procedures for external-load operation, including operating in and around congested areas; and (3) applicable provisions of part 133. The flight training requirements would be clarified to include training on maneuvers and procedures applicable to external-load operations.

The FAA proposes to establish basic criteria for a test pilot course. The proposed course requirements would include ground training on the following: (1) Aircraft maintenance, quality assurance, and certification test flight operations; (2) safe operating practices and procedures for performing aircraft maintenance, quality assurance, and certification test flight operations; (3) appropriate parts of the FAR that pertain to aircraft maintenance, quality assurance, and certification tests; and (4) test pilot duties and responsibilities. The minimum number of hours required for the ground training would be approved by the FAA Flight Standards District Office (FSDO). The course would also require a minimum of 15 hours of flight training on test pilot duties and responsibilities. However, in accordance with proposed § 141.55, a school may submit a syllabus that is less than the minimum hours.

The FAA proposes to establish minimum criteria for special operations courses, including pipeline patrol, shoreline patrol, and aerial photography. The criteria in appendix K would be general. The specifics of each course would be approved by the FAA FSDO. The intent of the proposal is to provide an incentive and flexibility for part 141 pilot schools to develop

specialized courses and improve business opportunities.

The FAA proposes to revise the pilot refresher course in appendix H, section 7. The course would continue to require 4 hours of ground training and 6 hours of flight training. The proposed course would not specifically include the current option for up to 2 hours of the 6 hours to be directed solo practice, but would permit the school more flexibility in designing a syllabus that best fits the student's needs. The ground training requirements would include: (1) Aeronautical knowledge areas that are applicable to the student's pilot certificate level, aircraft category and class rating, or instrument rating, as appropriate; (2) safe operating pilot practices and procedures; and (3) applicable provisions of parts 61 and 91 for pilots. The flight training requirements would be clarified to include flight training on the approved areas of operation that are applicable to level of the student's pilot certificate, aircraft category and class rating, or instrument rating, as appropriate, for performing pilot-in-command duties and responsibilities.

On April 6, 1994, the FAA issued amendment No. 61-95, "Renewal of Flight Instructor Certificates" (59 FR 17646). In that final rule, the FAA revised § 61.197(c) by deleting the current 24-hour requirements for an approved flight instructor refresher course. In light of that final rule action, the FAA is proposing similar rulemaking action in this notice to parallel amendment No. 61-95. In this appendix, the FAA proposes establishing a flight instructor refresher course that would require ground training, flight training, or any combination of ground and flight training similar amendment No. 61-95. The ground training would include the: (1) Aeronautical knowledge areas of part 61 that apply to student, recreational, private, and commercial pilot certificates and instrument ratings; (2) aeronautical knowledge areas that apply to flight instructors; (3) safe pilot operating practices and procedures, including airport operations and operating in the National Airspace System (NAS); and (4) applicable provisions of parts 61 and 91 that apply to holders of pilot and flight instructor certificates. The flight training course would include a review of: (1) The approved areas of operations that are applicable to student, recreational, private, and commercial pilot certificates and instrument ratings; and (2) the necessary skills, competency, and proficiency for performing flight instructor duties and responsibilities.

In addition, the FAA proposes to establish criteria for ground instructor refresher courses. The proposed contents of this course would require ground training on the following: (1) Aeronautical knowledge areas of part 61 that apply to student, recreational, private, and commercial pilot certificates and instrument ratings; (2) aeronautical knowledge of areas that apply to ground instructor certificates; (3) safe pilot operating practices and procedures, including airport operations and operating in the NAS; and (4) applicable provisions of parts 61 and 91 that apply to pilots and ground instructor certificates.

23. Appendix L—Pilot Ground School Course

The FAA proposes to revise existing appendix G, "Pilot Ground School Course," and move it to proposed appendix L. The current provision to permit stage and end-of-course tests to be credited toward the overall training course requirements would not be specifically included in the revised appendix. However, the FAA has elected to remain silent on the maximum time that may be credited for stage and end-of-course tests for the same reasons previously stated in the earlier discussions of appendixes A, B, C, and D.

D. Section by Section Discussion of Part 1—Definitions and Abbreviations

The FAA proposes to clarify and redefine certain definitions in part 1. The intent of this proposal is to ensure more consistent use of terms throughout the text of parts 61 and 141. The terms to be clarified include:

1. Balloon means:

Balloon is an aircraft that is not engine driven, but sustains flight with either gas buoyancy or with an airborne heater.

The term, "balloon" would replace the term "free balloon." The term "balloon" will include gas balloons and balloons with an airborne heater. The FAA believes the term "balloon" is more descriptive in defining this class of aircraft.

This definition coincides with the FAA proposal to delete references to the phrase "hot air balloon without airborne heaters" throughout part 61, and classify balloons as "gas balloons" and "balloons with airborne heaters." The phrase "hot air balloon without an airborne heater" is a balloon that was in existence at one time, but is no longer available. Accordingly, the FAA would establish separate practical tests for "gas balloon" and tests in "balloons with airborne heaters." Administratively, this

proposal will, in effect, permit a person who receives the required training and performs the practical test in a gas balloon to be limited to operating a gas balloon. Accordingly, that person's certificate would contain a limitation, "Limited to gas balloons." Vice versa, a person who receives the required training and performs the practical test in a balloon with an airborne heater would be limited to operating a balloon with an airborne heater. Accordingly, that person's certificate would contain a limitation, "Limited to a balloon with an airborne heater."

2. *Flight time* means:

a. Pilot time that commences when an aircraft moves under its own power for the purpose of flight and ends when the aircraft comes to rest after landing; or

b. For a nonpowered glider, that time when the glider commences being towed for the purpose of flight and ends when the glider comes to rest after landing.

The term is being rewritten to apply to nonpowered aircraft as well as powered aircraft. For powered aircraft, flight time would mean pilot time commencing when an aircraft moves under its own power for the purpose of flight and ending when the aircraft comes to rest after landing. For a nonpowered glider, the term would refer to the time when the glider commences being towed for the purpose of flight until the glider comes to rest after landing.

3. *Pilot in command* means:

a. A person who has final authority and responsibility for the operation and safety of the flight;

b. A person who holds the appropriate category, class, and type rating, if appropriate;

c. A person who has been designated as pilot in command before or during the flight; and

d. Involves a flight that occurs in actual flight conditions in an aircraft.

This proposal would clarify the definition to allow only one person at a time to log PIC time.

E. Section by Section Discussion of Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors

The FAA proposes to change the title of part 61 to "Certification: Pilots, Flight Instructors, and Ground Instructors." The reason for this change is the proposed elimination of part 143 and the relocation of the certification of ground instructors into part 61.

Subpart A—General

Section 61.1 Applicability

Proposed § 61.1 would be revised by adding the term "authorization."

Proposed § 61.1 would be revised by deleting the reference to § 61.71 and inserting a reference to "training courses specifically approved by the Administrator under other parts of this chapter." This would include training programs under SFAR 58, proposed training centers, and part 141 pilot schools.

Section 61.1a Clarification of Terms

Proposed § 61.1a would be established to clarify terms used throughout part 61. The clarified terms are: Aeronautical experience; airman certificate; authorized ground instructor; authorized flight instructor; cross-country time; examiner; flight training; ground training; instrument approach; instrument training; knowledge test; pilot time; training time; supervised PIC time; and practical test.

Section 61.2 Certification of Foreign Pilots, Flight Instructors, and Ground Instructors

Proposed § 61.2 would include a provision for ground instructor certificates under part 61. In addition, the significant revisions in proposed § 61.2 would permit a person who is not a citizen of the United States or a resident alien of the United States to: (1) Complete a knowledge or practical test outside the United States; (2) Be issued an additional category, class, instrument, or type rating, as applicable on a U.S. pilot certificate; and (3) Be issued an additional, renewal, or reinstatement of a category, class, or instrument rating for a U.S. flight instructor or ground instructor certificate.

This proposal is a result of FlightSafety International's (FSI) petition for exemption from § 61.2. FSI's petition requested relief from § 61.2 to be allowed to issue type ratings to foreign nationals who hold U.S. pilot certificates at its training facility located in Velizy, Villacoublay, France. On February 22, 1989, the FAA granted FSI's petition permitting additional ratings to be added to foreign nationals' U.S. pilot certificates while located outside the United States. The current provisions of § 61.2 limit FSI and other U.S. training and airplane manufacturing companies from expanding their business into the international aviation market.

Section 61.3 Requirement for Certificates, Ratings, and Authorizations.

The significant proposed changes in § 61.3 are as follows:

(1) Includes the certification of ground instructor certificates and ratings in part 61;

(2) Establishes an instrument rating for airships;

(3) Establishes a flight instructor certificate for the lighter-than-air category;

(4) Replaces the phrase "personal possession" with "physical possession, or readily accessible in the aircraft;"

(5) Clarifies the "age 60 limitation," that is applicable to persons who serve as pilot crewmembers for a foreign air carrier when that carrier is operating a U.S.-registered civil aircraft with more than 30 passenger seats, excluding any required crewmember seat, and/or a 7500 pound payload capacity for compensation or hire in scheduled international air services or non-scheduled international air transport operations;

(6) Clarifies that a person who acts as a PIC or as a required flight crewmember of a civil aircraft of U.S. registry would be required to hold either an airman certificate or a special purpose flight authorization;

(7) Addresses the pilot certificate requirements for operating aircraft of foreign registry within the United States;

(8) Clarifies the requirements for a person to have their medical certificate in their physical possession or readily accessible in the aircraft. Furthermore, this proposal would specifically identify when it is permitted for a person *not* to have their medical certificate in their physical possession or readily accessible in the aircraft;

(9) Parallels the provisions of § 61.41 for allowing training received from a flight instructor who is not certificated by the FAA;

(10) Provides that a flight instructor certificate is not necessary, if the:

a. Training is in accordance with a part 121 or part 135 air carrier approved training program;

b. Training is given by the holder of an ATP certificate under § 61.169 of this part; and

c. Person receiving the training and the person giving the training are employees of that air carrier. This proposal would provide that a flight instructor certificate is not necessary, if the training was conducted in accordance with the provisions of § 61.41.

(11) Replaces the references to each instrument rating needed for each class of aircraft category with the phrase "appropriate aircraft category, class, type rating, if required, and instrument rating." Because of the proposed instrument rating for an airship, the existing requirement for a pilot to hold a commercial certificate with a lighter-than-air category and airship class rating

to operate an airship under instrument flight rules (IFR) or instrument meteorological conditions (IMC) would be deleted. Pilots of gliders would still be required to hold an instrument rating for a single-engine airplane;

(12) Aligns the "age 60" rules of part 121 to part 61. This proposal states that a pilot who is 60 years of age or older may not act as a pilot crewmember while engaging in any scheduled international air services, non-scheduled international air transportation, or common carriage operation for compensation or hire in a civil aircraft that has a passenger seating configuration of more than 30 seats, excluding any required crewmember seat or payload capacity of more than 7500 pounds (3400 kg);

(13) Requires a pilot that is required to hold a special purpose pilot authorization, issued in accordance with § 61.77, to have that authorization in their possession in the aircraft when exercising the privileges of that authorization; and

(14) Permits the following exceptions during the proposed 2-year transition period of these rule changes:

a. A pilot with a commercial pilot certificate with a lighter-than-air category rating, which was issued before the effective date of this rule, would be permitted to give training in an airship or balloon, as appropriate;

b. A pilot with a commercial pilot certificate with a lighter-than-air category rating and airship class rating would be permitted to operate an airship under IFR or IMC; and

c. A pilot with a commercial or private pilot certificate with an instrument-airplane rating would be permitted to operate an airplane under IFR or IMC.

Section 61.5 Certificates and Ratings Issued Under This Part

The significant proposed changes in § 61.5 are as follows:

(1) Includes ground instructor certificates and ratings in part 61;

(2) Revises ground instructor certificates and ratings;

(3) Establishes a powered-lift category rating;

(4) Establishes an instrument rating for powered-lifts;

(5) Establishes nonpowered and powered class ratings under the glider category;

(6) Establishes separate instrument ratings for single-engine and multiengine airplanes;

(7) Establishes an instrument rating for airships;

(8) Establishes a flight instructor certificate for the lighter-than-air category;

(9) Deletes the word "small" in the reference to turbojet airplanes in the paragraph that applies to aircraft type ratings. The word "small" is unnecessary because current requirements require the PIC of all turbojet airplanes to have a type rating whether it is a large or small turbojet airplane;

(10) Eliminates the reference to Advisory Circular 61-1, "Aircraft Type Ratings." The reference is obsolete because the advisory circular has been revised. The list of type ratings is incorporated into Advisory Circular No. 61-89D, "Pilot Certificates: Aircraft Type Ratings," which also consists of type rating curricula;

(11) Deletes the provision that requires a pilot who seeks an ATP certificate in a small helicopter to obtain a helicopter type rating. Small helicopters should not be treated differently than the other small aircraft. Historically, the FAA policy on requiring a pilot who seeks an ATP certificate in a small helicopter to obtain a helicopter type rating was based on the operating requirements of part 127, "Certification of Operations of Scheduled Air Carriers with Helicopters." Specifically, § 127.173(a) requires a pilot who seeks an ATP certificate in a small helicopter to obtain a helicopter type rating. However, a closer reading of existing § 61.5(b)(5)(iii) states, "small helicopters for operations requiring an ATP certificate." Currently, part 127 is not active, and there are not any part 127 scheduled air carriers with helicopters. The FAA has determined that it is not necessary for a person who seeks an ATP certificate in a small helicopter to obtain a helicopter type rating. Continuing this past policy places an additional restriction on small helicopters that is not required of other small aircraft and can no longer be justified. Therefore, the FAA proposes to treat the type rating requirements for helicopters as it currently does for the other aircraft, which would only require a type rating if the aircraft is a large aircraft other than lighter-than-air, turbojet-powered airplanes, or is another aircraft type rating that is specified by the Administrator through the aircraft type certification procedures;

(12) Includes a provision for allowing a pilot to exchange a current pilot certificate for a pilot certificate with the proposed instrument ratings and glider class ratings; and

(13) Allows a pilot with a flight or ground instructor certificate to exchange that certificate for a flight or ground instructor certificate with the proposed ratings in §§ 61.201 and 61.227.

Section 61.7 Obsolete Certificates and Ratings

The FAA proposes to revise § 61.7 by adding a new paragraph that would list the category, class, and instrument ratings that are proposed to be eliminated. In this section, the FAA also proposes to:

(1) Revise ground instructor certificates and ratings;

(2) Establish nonpowered and powered class ratings under the glider category; and

(3) Establish separate instrument ratings for single-engine and multiengine airplanes.

Section 61.9 Written Syllabus for Conducting Training

The FAA proposes to eliminate existing § 61.9, "Exchange of obsolete certificates and ratings." This section, which lists the requirements for exchanging the certificates and ratings that were adopted in 1973, is no longer necessary.

The FAA proposes a new § 61.9 that would establish requirements for written training syllabus. This syllabus would be required by an instructor who gives flight or ground training to a pilot for an airman certificate or rating.

Section 61.11 Expired Pilot Certificates and Reissuance

Minor editorial and format changes are proposed.

Section 61.13 Awarding of Airman Certificates, Ratings, and Authorizations

The FAA proposes to replace the title of § 61.13, "Application and qualification," with the title "Awarding of airman certificates, ratings, and authorizations" and to revise the format of this section.

The significant proposed changes in this section are as follows:

(1) Includes ground instructor certificates in part 61;

(2) Replaces the phrase "flight proficiency requirements" with "approved areas of operation";

(3) Deletes the provision that permits the use of aircraft for a practical test that cannot perform all of the approved areas of operation for that practical test because of limitations listed in that aircraft's type certificate; and

(4) Clarifies that a limitation placed on a person's airman certificate may be removed if the pilot demonstrates to an examiner satisfactory proficiency in the area of operation for which the airman certificate level and rating are sought.

Section 61.14 Refusal to Submit to a Drug Test

No modifications are proposed.

Section 61.15 Offenses Involving Alcohol or Drugs

No modifications are proposed.

Section 61.16 Refusal to Submit to an Alcohol Test or to Furnish Test Results

No modifications are proposed.

Section 61.17 Temporary Certificate

The FAA proposes to revise this section to include the ground instructor certificate in part 61. The existing 90-day limit on temporary ground instructor certificates or ratings in existing § 143.5 would, in effect, be increased to 120 days, which is the current limit for the other temporary pilot and flight instructor certificates and ratings.

Section 61.19 Duration of Pilot and Instructor Certificates

The significant proposed changes in this section are as follows:

- (1) Include ground instructor certificates under part 61; and
- (2) Change the title of proposed § 61.19, "Duration of pilot and flight instructor certificates" to read, "Duration of pilot and instructor certificates."

Section 61.21 Duration of a Category II Pilot Authorization

The FAA proposes editorial and format changes.

Section 61.23 Duration and Requirement for a Medical Certificate

The significant proposed changes in this section are as follows:

- (1) Change the title of this section from "Duration of medical certificates" to "Duration and requirement for a medical certificate";
- (2) Redesignate the current paragraphs of this section;
- (3) Permit a pilot to apply for any pilot or flight instructor certificate, for which a medical certificate is required, with a third-class medical certificate. A higher medical certificate level would continue to be required for flight operations requiring an ATP certificate or a commercial pilot certificate;
- (4) Clarify current requirements for a person who is exercising the privileges of their flight instructor certificate while serving as a PIC or as a required crewmember, then that person would be required to hold a third-class medical certificate. However, if the flight instructor is not serving as a PIC or as a required crewmember, then that person would not be required to hold a medical certificate; and

(5) Permit student pilots who are seeking a recreational pilot certificate and certificated recreational pilots to operate aircraft without a medical certificate, provided they have an application on file that certifies they do not have any known medical deficiencies that make them unable to pilot the aircraft. This would also permit higher certificated pilots who are only exercising the privileges of a recreational pilot certificate to be afforded the same privileges.

Section 61.25 Change of Name

Format and minor editorial changes are proposed.

Section 61.27 Voluntary Surrender or Exchange of Certificate

This section would be revised by dividing the existing language into two paragraphs. The purpose of this proposal, as throughout this notice, is to rewrite the rules in an outline format instead of the current narrative format.

Section 61.29 Replacement of a Lost or Destroyed Airman or Medical Certificate or Knowledge Test Report

The proposed revisions to § 61.29 are as follows:

- (1) Change the title of the section to "Replacement of a lost or destroyed airman or medical certificate or knowledge test report";
- (2) Delete listing the cost of replacing a lost or destroyed airman or medical certificate. This proposal would establish the procedures for obtaining a lost or destroyed airman certificate, medical certificate, or knowledge test report. The cost for replacement of lost or destroyed airman certificate, medical certificate, or knowledge test report would be in part 187, "Cost of Services and Transfer of Fees to part 187 from parts 47, 49, 61, 63, 65, and 143"; and
- (3) Delete some unnecessary explanations of the procedures for replacing a lost or destroyed airman or medical certificate. These existing provisions are merely explanatory and are not of a regulatory nature, so the FAA proposes to delete them.

Section 61.31 Type Rating, Additional Training, and Authorization Requirements

The FAA proposes to change the title of this section from "General limitations" to "Type rating, additional training, and authorization requirements."

The significant proposed revisions to this section are as follows:

- (1) Delete the provision requiring a type rating in helicopters for operations requiring an ATP certificate. This

proposal will parallel helicopters with the other classes of aircraft that only require a type rating for: Large aircraft (except lighter-than-air), turbojet-powered airplanes, and those aircraft specified by the Administrator through aircraft type certificate procedures;

(2) Establish an aircraft category rating for the new powered-lift aircraft;

(3) Replace the current requirement for a pilot to receive training and an endorsement in an airplane with "more than 200 horsepower" to "200 horsepower or more";

(4) Separate the current requirements for a pilot to receive training and an endorsement to operate an airplane that has a retractable landing gear, flaps, and controllable propeller and an endorsement to operate a high performance airplane that has an engine of 200 horsepower or more;

(5) Establish a requirement for a pilot to receive aircraft type specific training. The purpose of this proposal, as earlier discussed in the "General Discussion of Principal Issues" under the paragraph title of this notice noted as "Aircraft Type Specific Training," would require a person to receive additional training and a flight instructor endorsement for that person to serve as a PIC of an aircraft that the Administrator has determined requires type specific training;

(6) Require pilots to receive additional training for operating "pressurized aircraft." Current provisions only require pilots to receive additional training in "pressurized airplanes." This proposal is to capture the possible development of pressurized "powered-lift," and any other pressurized aircraft that may be manufactured in the future;

(7) Require a pilot seeking an aircraft type rating to perform to ATP standards. This proposal will codify the existing policy for FAA pilot certification standards; and

(8) Add an exception in proposed paragraph (j), to include the powered-lift aircraft, because no class ratings are being established. In addition, the powered-lift would be added as an exception to the category and class rating requirements of this section for aircraft not type certificated as airplanes, rotorcraft, gliders, powered-lift, or lighter-than-air aircraft.

Section 61.33 Tests: General Procedure

This section would revise the format by replacing the phrase "persons, designated by the Administrator" with the word "examiners."

Section 61.35 Knowledge Test: Prerequisites and Passing Grades

Proposed § 61.35 would be retitled to read, "Knowledge test: Prerequisites and passing grades," instead of "Written test prerequisites and passing grades."

The proposed revisions to § 61.35 are as follows:

- (1) Replace the term "written test" with "knowledge test";
- (2) Require an applicant to receive an endorsement that states the applicant completed ground training or a home study course on the aeronautical knowledge requirements for each certificate or rating and that the applicant is prepared for the knowledge test;
- (3) Include and clarify the current requirements for the presentation of personal identification found in FAA Order 8700.1. These identification procedures were established in response to the Drug Enforcement Assistance Act of 1988 (Pub. L. 100-690, November 18, 1988). The proposal would require an applicant's identification to consist of:
 - a. The applicant's photograph;
 - b. The applicant's signature;
 - c. The applicant's date of birth, which shows the applicant meets or will meet the age requirements for the certificate sought before the expiration date of the knowledge test report; and
 - d. The applicant's actual residential address, if different from the applicant's mailing address.

Acceptable types of identification include, but are not limited to, a driver's license, a government identification card, a passport, or other forms of identification that meet the personal identification criteria. The photograph of the applicant would be reproduced on the airman identity card portion of the airman certificate; and

- (4) Include applicants for ATP certificates and ratings into proposed § 61.35. Currently, § 61.35 does not apply to the written test for an ATP certificate or a rating associated with that certificate. The passing requirements for a written test for an ATP certificate or a rating associated with that certificate are found in existing § 61.167. Existing § 61.167 states that an applicant for an ATP certificate or rating must pass the knowledge test with a 70 percent minimum passing grade. Under § 61.35, the minimum passing grade is specified by the Administrator. The FAA has determined provisions in § 61.35 and § 61.167 are similar, and therefore, duplication is not necessary.

Section 61.37 Knowledge Tests: Cheating or Other Unauthorized Conduct

The phrase "Except as authorized by the Administrator" is proposed to be deleted.

Section 61.39 Prerequisites for Practical Tests

The significant proposed changes to § 61.39 are as follows:

- (1) Replace the words "flight test" or "oral test" with the word "practical test";
- (2) Replace the words "written test" with "knowledge test";
- (3) Permit an applicant to hold at least a third-class medical certificate to be eligible for a practical test;
- (4) Clarify that applicants for an ATP certificate be at least 23 years of age at the time of the practical test;
- (5) Revise the existing provision for applicants for ATP certificates and ratings to allow them to take a practical test with an expired airman knowledge test report;
- (6) Include the current prerequisites for practical tests procedures found in FAA Order 8700.1. The proposal would require an applicant to:
 - a. Present the airman knowledge test report at the time the applicant applies for the practical test; and
 - b. Complete and sign the application form.
- (7) Clarify the eligibility prerequisites for a practical test, but the proposal does not contain any additional requirements from the existing requirements;
- (8) Clarify the current provision for an applicant who is employed as a flight crewmember under part 121, part 125, or part 135, or as a flight crewmember in military transportation service to take a practical test with an expired airman knowledge test report. The proposal would clarify that to be afforded the relief provided by proposed § 61.39, the applicant would have to either:
 - a. Be employed as a flight crewmember by a U.S. air carrier or commercial operator under parts 121, 125, or 135 of this chapter and be employed by such a certificate holder at the time of the practical test and—
 - (i) Have satisfactorily accomplished that operator's approved PIC aircraft qualification training program, which is appropriate to the certificate and rating sought; and
 - (ii) Have satisfactorily accomplished that operator's approved requalification training requirements, which are appropriate to the certificate and rating sought; or
 - b. Be employed as a flight crewmember by a U.S. scheduled

military air transportation service operator and—

- (i) Be employed by such an operator at the time of the practical test; and
- (ii) Have accomplished that operator's PIC aircraft qualification training program, which is appropriate to the certificate and rating sought.

Section 61.41 Flight Training Received From Flight Instructors Not Certificated by the FAA.

The FAA proposes to revise § 61.41 for the purposes of simplifying this section. The proposal would replace the word "instruction" with the word "training," and clarify that flight instructors not certificated by the FAA are not authorized to give any of the endorsements required under part 61, only the training.

Section 61.43 Practical Tests: General Procedures

The significant proposed changes to § 61.43 are as follows:

- (1) Replace the term "flight test" with "practical test" and "maneuvers and procedures" with "approved areas of operation."
- (2) Include applicants for ATP certificates or ratings by replacing the phrase "an applicant for a private or commercial pilot certificate, or for an aircraft or instrument rating on that certificate" with "an applicant for a certificate or rating, issued under this part."
- (3) Modify the wording of this section for clarity and simplicity purposes. Proposed § 61.43 would be revised to state that an applicant would be required to:
 - a. Perform the approved areas of operation for the certificate or rating sought within the approved standards;
 - b. Demonstrate mastery of the aircraft throughout the practical test with the successful outcome of each task performed never seriously in doubt;
 - c. Demonstrate satisfactory airmanship throughout the practical test;
 - d. Demonstrate sound judgment throughout the practical test; and
 - e. Demonstrate single-pilot competence if the aircraft is type certificated for single-pilot operations.
- (4) Require an applicant, who wants to accomplish a practical test in an aircraft that is type certificated for single-pilot operations, to demonstrate single-pilot competence. The proposal would require an applicant for a certificate or rating to demonstrate single-pilot competence in the aircraft in which the practical test is taken, if that aircraft is type certificated for one pilot. Most aircraft that are type

certificated for one pilot are currently operated by one pilot. However, some aircraft (e.g., the Cessna Citation 501 and 551) are type certificated for one pilot, but are operated by either one- or two-pilot crews. The FAA realizes that some pilots may desire to operate an aircraft type certificated for one pilot with a two-pilot crew. In this situation, the applicant would have the option not to demonstrate single-pilot competence, but a limitation would be placed on the applicant's airman certificate that states a SIC is required. This limitation could later be removed if the pilot demonstrates single-pilot competence. This proposal is consistent with FAA Order 8700.1, "General Aviation Operations Inspector's Handbook," regarding aircraft that are type certificated for one pilot, but are operated with both one- and two-pilot crews. The proposal would not change regulations for applicants that apply for a certificate or rating in aircraft that are usually operated by one pilot. These applicants already are required to demonstrate single-pilot competence on the practical test; and

(5) Codify the procedures, which are currently found in FAA Order 8700.1, that address the issue of the examiner or the applicant may discontinue the practical test due to inclement weather conditions, aircraft airworthiness, or other flight safety concerns.

Section 61.45 Practical Tests: Required Aircraft and Equipment

Proposed § 61.45 would be retitled to read, "Practical tests: Required aircraft and equipment," instead of "Flight tests: Required aircraft and equipment." The FAA proposes to revise this section by replacing the term, "flight test" with "practical test" and "flight proficiency requirements" with "approved areas of operation."

The significant proposed changes to § 61.45 are as follows:

(1) Exclude explicitly the use of ultralights and hang gliders as acceptable aircraft for use in practical tests. The use of ultralights and hang gliders are unacceptable aircraft for use in pilot certificate tests. Aircraft other than ultralights, and the pilots who operate them, are subject to extensive Federal regulations found throughout the FAR. Ultralights are subject to separate standards in part 103, which provides that ultralights are not required to meet the airworthiness certification, pilot certification, aircraft registration, or aircraft marking requirements of the other aircraft. Section 103.1 states, in part, that ultralight vehicles "are used or intended to be used for recreation or sport purposes only";

(2) Exclude balloons from the current requirement for pilot seats in an aircraft used for the practical test. Section 61.45 currently requires that the aircraft used for a flight test have "pilot seats with adequate visibility for each pilot to operate the aircraft safely." Most balloons do not have seats and this requirement is customarily waived for balloon practical tests;

(3) Require a lighter-than-air aircraft used for a practical test to have required controls easily reached and operable in a normal manner by both pilots. Permit an examiner to waive the requirement that states "controls easily reached and operable in a normal manner". However, the examiner must determine that the lighter-than-air aircraft used for the practical test can be operated safely; and

(4) Require applicants for any practical test to perform the test in a two-place aircraft. This would eliminate the provision for an applicant for a gyroplane class rating to accomplish the practical test in a single place gyroplane. In the past, the FAA has permitted examiners to observe the practical test from the ground when the aircraft was a single-place aircraft. Predominately, gyroplanes were single-place aircraft that required examiners to monitor the practical test from the ground. However, the FAA has determined there are a significant number of two-place gyroplanes that render the current provisions no longer necessary. After discussions with many of the primary manufacturers of gyroplanes, the FAA believes that there are an adequate number of two-place gyroplanes that make the existing rule unnecessary. The FAA believes the importance of the practical test makes it extremely necessary that examiners be able to observe applicants during the practical test.

(5) Permit the use of aircraft with a primary airworthiness certificate to be used for a flight test. The purpose for this proposal is a result of an oversight that occurred during the issuance of the Primary Aircraft Final Rule (57 FR 41360; September 9, 1992). In the SUPPLEMENTARY INFORMATION section (in the paragraphs entitled "Rental and Flight Instruction" and "Pilot Certification") of that final rule, the FAA stated that the use of primary aircraft are permitted to be used for rental, flight instruction, and pilot certification. However, the FAA did not provide for this in that final rule.

Section 61.47 Status of an Examiner Who is Authorized by the Administrator to Conduct Practical Tests

The FAA proposes to change the title of the section from "Flight tests: Status of FAA inspectors and other authorized flight examiners" to "Status of an examiner who is authorized by the Administrator to conduct practical tests." Additionally, this section would contain minor editorial and format revisions.

Section 61.49 Retesting After Failure

The FAA proposes to reformat this section. In addition, the FAA proposes to delete the existing requirement for an applicant to wait 30 days before reapplying for a practical test following a second and subsequent disapprovals. In lieu of the 30-day waiting period, the applicant would be required to receive an endorsement from an authorized ground or flight instructor, as appropriate.

Section 61.51 Pilot Logbooks

The significant proposed changes to this section are as follows:

(1) Clarifies the procedure in logging PIC flight time;

(2) Eliminates the term "solo flight time" and replaces it with the term "supervised PIC time";

(3) Clarifies when a flight instructor and a certificated pilot who are on board an aircraft at the same time may each log PIC flight time;

(4) Permits student pilots who meet certain provisions to log PIC flight time;

(5) Requires the pilot who logs SIC flight time to meet the requirements of § 61.55;

(6) Specifies the necessary information when a pilot logs instrument time for the purpose of meeting the instrument currency requirements;

(7) Specifies the necessary information when a pilot logs training time; and

(8) Specifies the requirements that a flight instructor would need to meet to log PIC flight time.

Section 61.53 Operations During Medical Deficiency

The FAA is proposing to make two significant changes to this section. First, in response to the proposed changes that would permit pilots to exercise the privileges of a recreational pilot certificate without holding a medical certificate, the FAA is proposing to divide § 61.53 into two paragraphs. Paragraph (a) would apply to operations that require pilots to hold medical certificates issued under part 67. Paragraph (b) would apply to operations

in which pilots are not required to hold medical certificates. While paragraph (b) was developed primarily in response to FAA's petition that proposes to permit a pilot without a medical certificate to exercise the privileges of a recreational pilot certificate, it also if adopted, would apply to glider and balloon operations.

Under proposed paragraph (b), a pilot who chooses to exercise recreational pilot privileges or flight in a glider or balloon would not be required to obtain a medical certificate. The pilot, however, still would be required to self evaluate themselves on their current medical condition prior to exercising their pilot certificate privileges. As long as the pilot had no reason to believe that they were not medically fit for piloting, the pilot would be able to conduct these limited operations. As a result, a pilot who fails a medical exam given by an aviation medical examiner (AME) would be able to exercise their pilot certificate provided the pilot exercised recreational pilot privileges only or was piloting a glider or balloon operations. Pilots would be required to self evaluate themselves utilizing their judgment that they are medically fit to fly. In addition, pilots who hold special issuance medical certificates, which require routine check-ups by an AME, may decide to give up their medical certificates and only fly in recreational pilot operations if they believe that they are medically fit to fly. Pilots experiencing medical symptoms that would prevent them from safely exercising the privileges of their certificate, or that raise a reasonable concern, would be on notice that they cannot claim they have no known medical deficiencies. As an example, a pilot who is under physician's care for, or is currently suffering from angina pectoris or a coronary heart disease would not be able to exercise their pilot certificate as the pilot in command or as a required flight crewmember under the provisions of this proposed rule. Another example would be a pilot who is under a physician's care for, or is currently suffering "blackouts" would not be able to exercise their pilot certificate as the pilot in command or as a required flight crewmember under the provisions of this proposed rule. The proposed rule changes will require each pilot to self evaluate their current medical condition and then exercise reasonable judgment prior to exercising their pilot certificate. The FAA has not established a list of disqualifying medical conditions because the intent of this proposal is not to establish another class of medical certification to replace

the 3rd class medical certificate. However, depending on the responses received from the public on this proposal, the FAA reserves the right to establish a list of disqualifying medical conditions in the final rule if there is a need shown for it. The FAA recognizes that many of its regulations require pilots to exercise reasonable judgment and is dependent on all pilots adhering to an unwritten "honor code."

Section 61.55 Second in Command Qualifications

The FAA proposes to revise this section by being more specific about the SIC training requirements.

Section 61.56 Flight Review

This section is being reprinted without changes. Amendment No. 61-93 "Amendment of the Annual and Biennial Flight Review Requirements", which became effective on August 31, 1993 (58 FR 40562; July 28, 1993), revised this entire section. Amendment No. 61-93 amended this section by deleting the requirement that recreational pilots and noninstrument-rated private pilots with fewer than 400 hours of flight time (hereafter, the "affected pilots") receive 1 hour of ground and 1 hour of flight instruction annually. The final rule amended the biennial flight review by requiring all pilots to receive a minimum of 1 hour of ground instruction and 1 hour of flight instruction. Additionally, the final rule provided that flight instructors who renew their flight instructor's certificate by means of an approved flight instructor refresher course need not accomplish the 1 hour of ground instruction previously required in the BFR.

Section 61.57 Recent Flight Experience: Pilot in Command

The proposed changes in this section are as follows:

- (1) Require each pilot to make at least three takeoffs and three landings to a full stop within the preceding 90 days;
- (2) Require the three takeoffs and three landings made to a full stop to involve a flight in the traffic pattern at the recommended traffic pattern altitude for the airport;
- (3) Delete the clarification of night (the definition already exists in § 1.1);
- (4) Modify the requirements for recent instrument experience;
- (5) Modify the requirements for the instrument proficiency test; and
- (6) Extend the exception requirements for the general and night recency experience requirements of § 61.57 to PICs of part 125 operators as that

afforded PICs of part 121 and part 135 operators.

Section 61.58 Pilot-in-Command Proficiency Test: Operation of Aircraft Requiring More Than One Required Pilot

This section has been addressed in a separate NPRM that is entitled, "Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking at Training Centers," and was issued on July 15, 1992 (57 FR 35915; August 11, 1992).

The existing section is republished with minor editorial and format modifications. Those minor editorial modifications would include a proposal to revise existing § 61.58(b)(3), (c)(2), and (e) by eliminating reference to part 127, because there are no part 127 operators and haven't been for years. Furthermore, the FAA proposes to add part 125 operators to existing § 61.58(b)(3), (c)(2), and (e) in reference to persons conducting operations under part 125. Part 125 operators were not addressed in this section when the part was initially established on February 3, 1981, and therefore the FAA proposes to include part 125 pilots. Section 61.59 Falsification, reproduction, or alteration of applications, certificates, logbooks, reports, or records.

The only proposed change to this section involves § 61.59(a)(2) by revising the word "or" to "of" in the phrase "* * * exercise of the privileges, or any certificate * * *" to read "* * * exercise of the privileges of any certificate * * *" The purpose for this change is to correct the mistake in the rule that occurred when the rule was first issued. Other than for this minor change, no further changes are anticipated.

Section 61.60 Change of Address

This section would be revised to include ground instructor certificates under part 61.

Subpart B—Aircraft Ratings and Special Certificates

Section 61.61 Applicability

Because the issuance of an additional rating for a flight instructor certificate is contained in subpart H of part 61, the FAA proposes to delete the words "or instructor" from this section. Subpart B prescribes the requirements for additional aircraft ratings.

Section 61.63 Additional Aircraft Ratings (Other Than Airline Transport Pilot)

The significant proposed changes in this section are as follows:

- (1) Change the title of paragraph (c) of this proposed section to read

“Additional type rating, or an addition of an aircraft type rating associated with an additional aircraft class rating,” and rewrite the provisions for an additional aircraft type rating.

(2) Revise the required aeronautical experience and training for persons seeking an additional aircraft category and class rating. Regarding the required aeronautical experience and training for an additional category rating, a person would not be required to perform the supervised PIC time, but would be required to meet the specified aeronautical experience and training time required for the category and class rating sought and pilot certificate level held. As an example, a person who holds a private pilot certificate with an airplane single engine land rating, and seeks to add a rotorcraft category with a helicopter class rating to that person's pilot certificate, would be required (in addition to the eligibility and endorsement requirements of § 61.103) to comply with the following aeronautical experience and training of subpart E:

a. Receive training on the aeronautical knowledge areas listed in § 61.105(b), that apply to the helicopter rating sought;

b. Receive training in a helicopter on the approved areas of operation listed in § 61.107(d);

c. Accomplish the following training—

(i) Three hours of cross-country flight training in a helicopter;

(ii) Except as provided in § 61.110, 3 hours of night flight training in a helicopter that includes—

(A) One cross country flight of at least more than 50 nautical miles duration; and

(B) Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of flight training in preparation for the practical test in a helicopter, which must have been performed within the 60-day period preceding the date of the test; and

d. Satisfactorily accomplish a practical test in a helicopter on the approved areas of operation listed in § 61.107(d).

(3) Eliminate the provision that requires a person to meet the specified aeronautical experience and training time required for the class rating sought. The person would be required to receive the required training, but no specified amount of training would be required. The person would be trained to the standards established for the aircraft rating sought and the pilot certificate level held. As an example, a person who holds a private pilot certificate with an

airplane category and single engine land class rating, who seeks to add an airplane category and multiengine land class rating to the pilot's certificate would be required (in addition to the eligibility and endorsement requirements of § 61.103) to comply with the following aeronautical experience and training of subpart E:

a. Receive training on the aeronautical knowledge areas listed in § 61.105(b) that apply to the aircraft rating sought;

b. Receive training in a multiengine airplane on the approved areas of operation listed in § 61.107(c); and

c. Satisfactorily accomplish a practical test in a multiengine airplane on the approved areas of operation listed in § 61.107(c).

(4) Clarify when an applicant would be required to accomplish a knowledge test. The proposal would specify that an applicant who already holds an airplane, rotorcraft, powered-lift, or airship rating, and is only seeking an additional aircraft category, class, and type rating, would not be required to accomplish another knowledge test. However, an applicant would still be required to have an endorsement in the applicant's logbook or training record from an authorized flight instructor or ground instructor, and that endorsement must attest that the person is competent on the aeronautical knowledge areas, that relate to the pilot certificate for the aircraft category/class rating sought.

(5) Restrict the issuance of “VFR only” limitation for an aircraft type rating to only those aircraft that cannot be used to accomplish the practical test under IFR, because its type certificate makes the aircraft incapable of operating under IFR.

(6) Reformat the section for clarity.

Section 61.65 Instrument Rating Requirements

The significant proposed changes in this section are as follows:

(1) Includes revised aeronautical knowledge areas and areas of operation for an instrument rating for the airplane category-single engine class rating, airplane category-multiengine class rating, rotorcraft category-helicopter class rating, lighter-than-air category-airship class rating, and powered-lift category rating.

(2) Includes revised instrument training for an instrument rating for the airplane category-single engine class rating, airplane category-multiengine class rating, rotorcraft category-helicopter class rating, lighter-than-air category-airship class rating, and powered-lift category rating. A person who applies for an instrument rating

must have received and logged the following training:

a. At least 40 hours of instrument training from an authorized flight instructor-instrument or ground instructor-instrument on the approved areas of operation of this section;

b. At least 20 hours of the instrument training may be met by training received from an authorized flight instructor-instrument or ground instructor-instrument in an approved flight simulator or training device;

c. At least 5 hours of instrument flight training from an authorized flight instructor-instrument in the category and class aircraft for the instrument rating sought;

d. Instrument training specific to airplanes on cross-country flight procedures that includes at least one cross-country IFR flight in the class airplane for the instrument rating sought and consists of—

(i) A distance of at least 250 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 100 nautical miles between airports;

(ii) An instrument approach at each airport; and

(iii) Approaches using VOR, NDB, and ILS radio navigation aids.

e. Instrument training specific to helicopters on cross-country flight procedures that includes at least one cross-country IFR flight in a helicopter and consists of—

(i) A distance of at least 100 nautical miles along airways or ATC-directed routing, with one of the routes being at least a straight-line distance of 50 nautical miles between airports;

(ii) An instrument approach at each airport; and

(iii) Approaches using VOR, NDB, and ILS radio navigation aids.

f. Instrument training specific to airships on cross-country flight procedures that includes at least one cross-country IFR flight in an airship and consists of—

(i) A distance of at least 50 nautical miles along airways or ATC-directed routing, with one of the routes being at least a straight-line distance of 25 nautical miles between airports;

(ii) An instrument approach at each airport; and

(iii) Approaches using VOR, NDB, and ILS radio navigation aids.

g. Instrument training specific to powered-lift on cross-country flight procedures that includes at least one cross-country IFR flight in a powered-lift and consists of—

(i) A distance of at least 250 nautical miles along airways or ATC-directed routing, with one of the routes being at

least a straight-line distance of 100 nautical miles between airports;

(ii) An instrument approach at each airport; and

(iii) Approaches using VOR, NDB, and ILS radio navigation aids.

(3) Requires applicants to be able to write in the English language.

(4) Includes training in windshear avoidance, aeronautical decision making and judgment in the aeronautical knowledge requirements, and flight deck resource management, to include crew communications and coordination.

(5) Replaces the term "flight proficiency requirements" with "approved areas of operation."

(6) Requires an applicant to receive training or complete a home study program, and receive an endorsement from a ground or flight instructor on the required aeronautical knowledge areas of this section that are appropriate to the instrument rating sought.

(7) Specifies that an applicant is not required to accomplish another knowledge test, when that person is seeking an additional instrument rating. However, the applicant would still be required to have received and logged ground training from an authorized flight instructor-instrument or ground instructor-instrument, or have accomplished a home study course of training on the approved aeronautical knowledge areas that apply to the instrument rating sought. In addition, the applicant would still be required to have received a logbook or training record endorsement, from the authorized instructor, who gave that person training or reviewed their home study course, certifying the person is prepared to satisfactorily accomplish the required knowledge test.

(8) Specifies that an applicant for a practical test must receive an endorsement from the flight instructor who gave the applicant training and that endorsement must state the applicant is prepared for the practical test. The FAA believes this step-by-step listing of eligibility requirements would help the applicant and the examiner to determine readily which requirements are to be met.

(9) Specifies the minimum distance requirement for cross-country flight training should be measured from one airport to another. This proposal is in agreement with the current FAA interpretation on this issue.

(10) Deletes the requirement that the applicant for an instrument rating must have logged at least 125 hours of total flight time. This proposal would correspond with the current ICAO requirements for an instrument rating,

which do not require a minimum amount of total flight time. The FAA also proposes to eliminate the requirement for an applicant to have logged at least 50 hours of cross-country flight as a rated pilot.

(11) Specifies that an applicant who completes an instrument practical test in a multiengine airplane and who holds an airplane category and single-engine class rating is considered to have met the requirements for an instrument rating in a single-engine airplane.

Section 61.67 Category II Pilot Authorization Requirements

This section has been addressed in a separate NPRM that is entitled, "Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking at Training Centers," and was issued on July 15, 1992 (57 FR 35918; August 11, 1992). The existing section is republished without change.

Section 61.69 Glider Towing: Experience and Training Requirements

The FAA proposes to revise the title of this section to read, "Glider towing: Experience and training requirements." The title of existing § 61.69 reads "Glider towing: Experience and instruction requirements." The significant proposed changes in this section are as follows:

(1) Clarifies the requirements for a pilot who desires to act as a PIC of an aircraft towing a glider and the requirements for a pilot who accompanies that person. The proposal clarifies that the accompanying pilot is required to have at least 10 flight hours as a PIC of an aircraft towing a flight, not the applicant. The present wording is confusing and has been misunderstood to mean that a pilot cannot be a PIC until the pilot has made and logged 10 flights as a PIC.

(2) Deletes the current alternative provision in paragraph (c) of this section that permits a pilot, who desires to act as a PIC of an aircraft towing gliders, to log three flights as the sole manipulator of the controls of an aircraft simulating glider towing flight procedures and three flights as a pilot or observer in a glider being towed by another aircraft. Merely logging three flights as sole manipulator of the controls of an aircraft while simulating glider towing flight procedures, or as a pilot or observer in a glider being towed by another aircraft, does not adequately maintain a pilot's proficiency for serving as a PIC towing a glider. The FAA proposes to require a pilot to make at least three flights as the sole manipulator of the controls of an aircraft towing a glider, while

accompanied by a pilot who meets the requirements of this proposed section.

Section 61.71 Graduate of an Approved Training Program, Other Than Under This Part: Special Rules.

The title of this section is proposed to be changed from "Graduates of certificated flying schools: Special rules" to "Graduate of an approved training program, other than under this part: Special rules."

The significant proposed changes in this section are as follows:

(1) Permits the crediting of training conducted under parts 141- or 142- approved training programs.

(2) Permits the issuance of an ATP certificate, type rating, or both, to a person who has satisfactorily accomplished an approved training program and a PIC proficiency check for that aircraft type, in accordance with the PIC requirements of subparts N and O of part 121 of this chapter. The person must apply for that ATP certificate/type rating within 60 calendar days from the date the person satisfactorily completed the training program and PIC proficiency check in that airplane type. The FAA believes the training, checking, and qualification for a PIC, under subparts N and O of part 121, meet the requirements of part 61 for the ATP certificate/type rating.

For pilots of certain part 135 air carriers, on May 8, 1992, the FAA issued Exemption No. 5450 (57 FR 23253; June 2, 1992) to Regional Airline Association member airlines and similarly situated commuter air carriers that operate under part 135. That exemption permits a person who is an employee of a part 135 air carrier that operates airplane types requiring two pilots and having a passenger seating configuration of 10 seats or more (excluding any pilot seat) to train, check, and qualify under subparts N and O of part 121. This proposal will provide for pilots of part 135 air carriers in the same way that Exemption No. 5450 now provides for pilots who are employees of Regional Airline Association's member airlines and similarly qualified commuter air carriers to be issued ATP certificates and type ratings.

(3) Deletes the existing requirement for an applicant seeking instrument rating, who graduates from a pilot school certificated under part 141, to hold a commercial pilot certificate and a second-class medical certificate. This proposal would be in alignment with the proposed revision to § 61.65, and the current rules of ICAO Annex I. Under § 61.65 and ICAO Annex I, an applicant for an instrument rating will only be

required to hold a private pilot certificate. This proposal will keep the requirements for an instrument rating the same whether the applicant is trained under part 61 or part 141. The FAA also hopes to encourage more private pilots to seek instrument ratings. In 1975, the FAA lowered the minimum flight time requirement for an instrument rating from 200 hours to 125 hours with the stated goal of encouraging private pilots to seek instrument ratings. Because a commercial pilot certificate or a second-class medical certificate is not required to exercise private pilot privileges, the requirement for the applicant to hold these certificates conflicts with the FAA's goal.

(4) Deletes the requirement that graduates of pilot schools with examining authority must apply for a certificate or rating within 90 days. These graduates would have 60 days to apply, the same as graduates from pilots schools without examining authority.

Section 61.73 Military Pilots or Former Military Pilots: Special Rules

The significant proposed changes in this section are as follows:

(1) Clarifies the existing requirements for military or former military pilots who apply for a commercial pilot certificate or an aircraft category, class, instrument, or type rating. This proposal clarifies that military and former military pilots are required to have graduated from a military pilot training course or military pilot flight school and received official military aeronautical orders, before applying for their FAA pilot certificate. This, in effect, requires military pilots to have graduated from the course and have aeronautical orders in their possession, prior to applying for the required knowledge test or rating, as appropriate.

(2) Deletes the provision in existing § 61.73(a) that permits military pilots to apply for a private pilot certificate. Historically, military pilots have not chosen a private pilot certificate, because a commercial pilot certificate can be issued without any further requirements. Therefore, the provision allowing military pilots to be issued a private pilot certificate would be deleted, and only a commercial pilot certificate would be issued. A military pilot, who in the past elected a private pilot certificate instead of a commercial pilot certificate, would be permitted to retain that private pilot certificate.

(3) Deletes the last sentence in existing § 61.73(g)(6), "However, a Tactical (Pink) instrument card issued by the U.S. Army is not acceptable." This sentence is obsolete because

Tactical (Pink) Instrument cards were last issued by the Army in 1971.

(4) Moves the content of § 61.73(d)(2) to proposed § 61.73(d)(5) and deletes the phrase "or his certificate is endorsed with the following limitation: VFR only." Since 1972, all U.S. military pilot training requires instrument qualification training, and so this phrase is no longer needed. Current and former military pilots who currently hold pilot certificates with the "VFR only" limitation would continue to remain valid. After demonstrating instrument competency in the type of airplane for which the type rating is sought, the limitation would be removed.

(5) Includes an administrative clarification for elevating type ratings on the superseded pilot certificate to the ATP certificate level.

(6) Modifies the format, deletes obsolete phraseology, and clarifies the wording of this section.

Section 61.75 Private Pilot Certificate Issued on Basis of a Foreign Pilot License

The title of proposed § 61.75 would be changed from "Pilot certificate issued on basis of a foreign pilot license" to "Private pilot certificate issued on basis of a foreign pilot license."

The significant proposed changes in this section are as follows:

(1) Deletes the existing provision that permits a pilot with a foreign commercial, senior commercial, or ATP license to apply for a U.S. commercial pilot certificate. The proposal would permit those pilots to apply only for a U.S. private pilot certificate when the issuance is based on their foreign pilot certificate.

(2) Adds a provision that would require pilots with a foreign pilot license to submit a transcription of their foreign pilot license and medical certificate in the English language, unless the licenses and limitations are in the English language.

(3) Deletes the existing provision that permits an applicant to receive a U.S. pilot certificate when the applicant cannot read, speak, write, and understand the English language.

(4) Adds a provision that restricts foreign pilot license holders from exercising their U.S. pilot certificate while under an order of revocation or suspension.

(5) Adds a provision that would permit applicants to use their medical certificate issued by the country that issued the foreign pilot license in lieu of a medical certificate issued under part 67.

(6) Adds a provision that states that a holder of a private pilot certificate,

issued under this section, is limited to the privileges placed on that certificate by the Administrator.

(7) Adds a provision that states that a holder of a private pilot certificate, issued under this section, is subject to the limitations and restrictions on the person's U.S. certificate and foreign pilot license.

(8) Adds a provision that states that the U.S. private pilot certificate, issued under this section, is valid only when that person has their foreign pilot license in their personal possession or readily accessible in the aircraft.

Section 61.77 Special Purpose Flight Authorization: Operation of U.S.-Registered Civil Aircraft Leased by a Person Who Is Not a U.S. Citizen

The title of proposed § 61.77 would be changed from "Special purpose pilot certificate: Operation of U.S.-registered civil aircraft leased by a person not a U.S. citizen" to read "Special purpose flight authorization: Operation of U.S.-registered civil aircraft leased by a person who is not a U.S. citizen."

The significant proposed changes in this section are as follows:

The proposal replaces the issuance of special purpose pilot certificates with special purpose pilot authorizations and expands the use of a special purpose flight authorization to all aircraft. The proposal would also revise the eligibility requirements for a special purpose flight authorization and the related privileges.

The significant proposed changes in this section are as follows:

(1) Permits a pilot who holds an airman certificate or license, issued by another ICAO-member state, to operate a U.S.-registered civil aircraft in foreign air transportation operations with a special purpose pilot authorization, issued for 60 calendar months by the Administrator, in lieu of the current requirement of issuing special purpose pilot certificates. This proposal would eliminate the need to issue special purpose pilot certificates. The FAA believes this proposal will reduce administrative burdens and provide the relief that has been routinely granted through the exemption process. Persons who have been issued a special purpose pilot certificate, prior to the effective date of this rule, would continue to be allowed to exercise the privileges of that certificate until the certificate expires. However, once the special purpose pilot certificate expires, the pilot would be required to surrender the certificate for a special purpose pilot authorization and comply with the provisions contained in proposed § 61.77.

ICAO's Annex 1—"Personnel Licensing, Chapter 1—General Rules and Definitions Concerning Licenses," contains in part, standards and recommendations pertaining to the required licenses for flight crewmembers. Section 1.2.1 (authority to act as a flight crewmember) states that:

A person shall not act as a flight crewmember of an aircraft unless a valid license is held showing compliance with the specifications of this Annex and appropriate to the duties to be performed by that person. The license shall have been issued by the state of registry of that aircraft or by any other contracting State and rendered valid by the State of the registry.

Section 1.2.2 (Method of rendering a license valid) states that: When a contracting state renders valid a license issued by another contracting State, as an alternative to the issuance of its own license, it shall establish validity by suitable authorization to be carried with the former license accepting it as the equivalent of the latter the validity of the authorization shall not extend beyond the period of validity of the license.

The FAA's data shows that approximately 14,100 special purpose pilot certificates have been issued in accordance with § 61.77 and approximately 5,300 have been issued in accordance with § 63.23. The FAA believes the process for issuing certificates and the requirement for continued surveillance of these certificates involves considerable expenditure of human and budgetary resources at the FSDO.

(2) Permits a special purpose pilot authorization to be issued to persons to operate any size aircraft instead of the current requirement which limits the eligibility to pilots which operate aircraft with more than 30 passenger seats, excluding any required crewmember seat, and/or 7,500 pounds of payload capacity.

The current § 61.77 states, in part, that the holder of a foreign pilot certificate or license issued by a foreign contracting State to the Convention on International Civil Aviation, who meets the requirements of this section, may hold a special purpose pilot certificate authorizing the holder to perform pilot duties on a civil aircraft of U.S. registry, leased to a person not a citizen of the United States, carrying persons or property for compensation or hire. Currently, special purpose pilot certificates are issued under this section only for aircraft types that can have a maximum passenger seating configuration, excluding any flight

crewmember seat, of more than 30 seats or a maximum payload capacity (as defined in § 135.2 of this chapter) of more than 7,500 pounds. The current rules do not permit the issuance of special purpose pilot certificates for the operation of aircraft having 30 or less passenger seats, excluding any required crewmember seat, and/or a payload capacity of 7,500 pounds (3400 kg) or less.

The FAA has received a number of petitions for exemption to § 61.77. The FAA has granted several exemptions to permit persons who are not citizens of the United States, to carry persons or property for compensation or hire in aircraft having 30 or less passenger seats, excluding any required crewmember seat, and/or a payload capacity of 7500 pounds (3400 kg) or less.

Section 305 of the FAA Act mandates that the FAA encourage and foster the development of civil aeronautics and air commerce in the U.S. and abroad. The FAA believes it is in the public interest to promote the use of U.S.-registered aircraft in foreign air transportation. Also, the FAA believes this proposal will encourage the leasing of these aircraft and may provide an important stimulus to the economy of the U.S. aviation industry.

Therefore, the proposal establishes general provisions for issuance of the special purpose pilot authorization and would not include the existing final sentence, which refers to airplanes with more than 30 passenger seats or a maximum payload capacity of more than 7,500 pounds. The FAA believes this restriction is no longer necessary and frequently grants exemptions.

(3) Validates the foreign airman's certificate by having a FSDO issue special purpose pilot authorizations for 60 calendar months. The FAA believes the current process of issuing special purpose pilot certificates, in accordance with § 61.77, should be eliminated. The special purpose pilot authorization would be in a letter format and would be required to be in the possession of the airman while operating the aircraft.

(4) Revises the eligibility requirements of § 61.77 to read as follows:

- a. Hold a current foreign pilot certificate;
- b. Hold a foreign pilot certificate that shows the appropriate category, class, instrument rating, and type rating, if appropriate;
- c. Hold a medical certificate;
- d. Surrender a special purpose flight authorization before being issued another authorization;

e. Require the applicant to present a logbook or flight record showing that the applicant meets the part 61 recency of experience requirements; and

f. Clarify that the documentation used to show the applicant has not reached the age of 60 should be "a birth certificate or other official documentation"; and clarify that an authorization granted to an applicant who will reach the age of 60 years before the authorization's usual expiration date would expire the day before the applicant's 60th birthday.

g. Present documentation that shows the pilot is employed by the lessee and is qualified in the aircraft to be operated.

(5) Permits the use of the special purpose pilot authorization in lieu of a certificate;

(6) Establishes limitations for the use of a special purpose pilot authorization, which would:

a. Increase the current length of a special purpose pilot certificate from 24 months to special purpose pilot authorization to 60 calendar months;

b. Permit a pilot to only hold one special purpose pilot authorization;

c. Clarify that an authorization is for one flight or a series of flights for the time period stated on the authorization;

d. Require the carriage of the special purpose pilot authorization when exercising the privileges of the authorization; and

e. Align the "age 60" rule for pilots with the requirements of part 121 for all U.S. and foreign pilots, who are 60 years of age or older, and who are employed by a foreign air carriers that operate U.S.-registered civil aircraft for compensation or hire in scheduled international air services and non-scheduled international air transport operations.

(7) Establishes that a special purpose pilot authorization will expire:

a. With 60 calendar months after issuance, unless it is sooner superseded, revoked, or rescinded;

b. When the lease agreement for the aircraft expires or lessee terminates the employment of the person;

c. Whenever the person's pilot or medical certificate has been suspended, revoked, or is no longer valid; and

d. Whenever the pilot reaches the age of 60.

Subpart C—Student Pilots

The FAA proposes to establish separate subparts for student and recreational pilots. The title of subpart C would be revised from "Student and Recreational Pilots" to "Student Pilots."

Section 61.81 Applicability

This section is revised to delete the reference to recreational pilot certificates and ratings, which would be incorporated into proposed subpart D.

Section 61.83 Eligibility Requirements for Student Pilots

The significant proposed changes in this section are as follows:

- (1) Requires applicants to be able to write in the English language;
- (2) Rewords the medical requirements for applicants who desire a rating in a glider or balloon; and
- (3) Requires all applicants to meet the English language requirements, which would eliminate the current provision that permits applicants who cannot read, speak, and understand the English language to receive a certificate with an operating limitation as deemed necessary by the Administrator.

Section 61.85 Application

No significant modifications are proposed.

Section 61.87 Supervised PIC Requirements for Student Pilots

The title of § 61.87 would be changed from "Solo flight requirements for student pilots" to "Supervised PIC requirements for student pilots."

The significant proposed changes in this section are as follows:

- (1) Replaces the term "solo" with "supervised PIC." The purpose of proposing to replace the term "solo" with "supervised PIC" is to reflect the intention of the FAA to permit student pilots to log PIC time while under the supervision of an authorized flight instructor. The FAA has reconsidered its position on this matter, and has concluded that if a student pilot is the sole occupant of an aircraft and is operating the controls of the aircraft, then that student pilot should be allowed to log PIC time. Throughout the public hearings on this rulemaking review, the public voiced the belief that student pilots should be allowed to log PIC time when they are the sole occupant of an aircraft and operating the controls of the aircraft. This proposal, in effect, would permit student pilots to log PIC time for the furtherance of a pilot certificate or rating. As example, the existing rules for a commercial pilot certificate-airplane category and class rating requires 100 hours of PIC time. Under the provisions of this proposal, PIC time logged as a student pilot would count toward the total PIC time for a commercial pilot certificate-airplane category and class rating;

(2) Establishes student pilot training for the proposed powered-lift category rating;

(3) Establishes student pilot training for the proposed nonpowered and powered class ratings under the glider category;

(4) Replaces the term "written examination" with the term "test," when testing a student pilot on aeronautical knowledge areas prior to a student pilot being authorized to perform a supervised PIC flight. This would permit a school to perform the required test in a format other than on paper, e.g., computer response;

(5) Establishes standardization and clarification for student pilots being authorized to conduct supervised PIC flight at night; and

(6) Includes separate supervised PIC maneuvers and procedures for the—airplane category-single engine class rating, airplane category-multiengine class rating, rotorcraft category-helicopter class rating, rotorcraft category-gyroplane class rating, glider category-nonpowered class rating, glider category-powered class rating, lighter-than-air category-airship class rating, lighter-than-air category-balloon class rating, and powered-lift category rating.

Section 61.89 General Limitations

No modifications are proposed for this section.

Section 61.91 [Reserved]

The FAA proposes to delete "§ 61.91 Aircraft limitations: Pilot in command," which permits student pilots to act as the PIC in airships requiring more than one flight crewmember. This section duplicates the requirements in proposed § 61.87 which covers all aircraft.

Section 61.93 Supervised PIC Cross-Country Flight Requirements for Student Pilots

The FAA proposes to change the title of § 61.93 from "Cross-country flight requirements (for student and recreational pilots seeking private pilot certification)" to "Supervised PIC cross-country requirements for student pilots."

The significant proposed changes in this section are as follows:

(1) Changes the term "solo cross country flight" to read "supervised PIC country flight." (This matter of student pilots logging PIC time was previously discussed in proposed § 61.89, and the FAA proposes to revise this section to reflect the conclusion discussed in that section);

(2) Deletes the provision that a student pilot may land at an airport other than the airport of takeoff in an

emergency. This provision already exist in § 91.3, "Responsibility and authority of the pilot in command";

(3) Clarifies the language of the provision for performing supervised PIC flights to and from an airport within 25 nautical miles of the airport from which the flight originated;

(4) Clarifies the provision for performing repeated supervised PIC cross-country flights that are no more than 50 nautical miles;

(5) Clarifies existing requirements for endorsements on the student pilot's certificate and in the student pilot's logbook. The requirement for an endorsement on the student pilot certificate would not apply to a pilot with a pilot certificate who seeks privileges in another aircraft category, because a certificated pilot would not hold a student pilot certificate;

(6) Adds provisions for the use of radios for VFR navigation and two-way communications, procedures for diverting to alternate airports, and windshear avoidance; and

(7) Establishes separate supervised PIC cross country maneuvers and procedures for the—airplane category-single engine class rating, airplane category-multiengine class rating, rotorcraft category-helicopter class rating, rotorcraft category-gyroplane class rating, glider category-nonpowered class rating, glider category-powered class rating, lighter-than-air category-airship class rating, lighter-than-air category-balloon class rating, and powered-lift category rating.

Section 61.95 Operations in a Class B Airspace Area and at Airports Located Within a Class B Airspace Area

No substantive modifications are proposed. Minor editorial and standardization of terms are contained in this proposal.

Subpart D—Recreational Pilots

The FAA proposes to establish this as a separate subpart for recreational pilot certificates and ratings.

Section 61.96 Applicability

Proposed § 61.96 would describe provisions that are applicable for the recreational pilot certificates and ratings.

Section 61.96a Eligibility Requirements: General

The FAA proposes to add a new section entitled "Eligibility requirements: General." The proposed § 61.96a would:

- (1) Requires applicants to be able to write in the English language;
- (2) Requires all applicants to meet the English language requirements, which

would eliminate the current provision that applicants who cannot read, speak, and understand the English language may receive a certificate with the operating limitation deemed necessary by the Administrator;

(3) Deletes the requirement for recreational pilots to hold a medical certificate. Persons who apply for a recreational pilot certificate would be required to affix a signed and dated statement to their application certifying they do not have any known medical defects that makes them unable to pilot the aircraft for the aircraft category and class rating sought; and

(4) Establishes eligibility requirements for the recreational pilot certificate and ratings. The eligibility requirements would require an applicant to:

a. Receive an endorsement from the ground or flight instructor who gave the applicant training or reviewed the applicant's home study course, and that endorsement must state that the applicant is prepared for the knowledge test;

b. Receive an endorsement from the flight instructor who gave the applicant training, and that endorsement must state the applicant is prepared for the practical test; and

c. Meet the aeronautical experience requirements in § 61.99. (The applicant would be required to pass the required knowledge test and practical test.)

Section 61.97 Aeronautical Knowledge

Proposed § 61.97 addresses added aeronautical knowledge requirements, which include ground training on: (1) windshear avoidance; (2) aeronautical decisionmaking and judgment; and (3) preflight actions found in § 91.103.

Section 61.98 Flight Proficiency

This proposed section would establish the approved areas of operation for all aircraft that are permitted to be operated by recreational pilot applicants.

Section 61.99 Aeronautical Experience

The FAA proposes to change the current title, "Airplane rating: Aeronautical experience," to "Aeronautical experience." Proposed § 61.99 includes the aeronautical experience requirements for single engine airplanes, helicopters, and gyroplanes that are permitted to be operated by recreational pilot applicants. Proposed § 61.99 would revise the minimum aeronautical experience required for a person to be eligible for a recreational pilot certificate.

The FAA proposes that an applicant for a recreational pilot certificate must

accomplish and log at least 30 hours of flight time that includes at least 15 hours of flight training time from an authorized flight instructor and 3 hours of supervised PIC flight time, on the approved areas of operation in § 61.98. This proposal responds to comments made during the public hearings to allow the student and the flight instructor to tailor the required training to individual student needs.

For example, a student who has previous aviation experience and takes readily to the training may be able to complete training for a recreational pilot certificate with only the minimum 30 hours of flight time that includes at least 15 hours of flight training time from an authorized flight instructor and 15 hours of supervised PIC flight time on the approved areas of operation in § 61.98.

However, a student pilot who does not have previous aviation experience or who trains infrequently may need more time than the minimum 30 hours of flight time, 15 hours of flight training time from an authorized flight instructor, and 3 hours of supervised PIC flight time. The student pilot and flight instructor may need to tailor the training to require 27 hours of flight training time from an authorized flight instructor and 3 hours of supervised PIC flight time, on the approved areas of operation in § 61.98 of this part.

Section 61.100 Pilots Based on Small Islands

The FAA proposes to replace the current title of this section from, "Rotorcraft rating: Aeronautical experience," to read "Pilots based on small islands." The proposed aeronautical experience requirements for a rotorcraft category rating would be found in proposed § 61.99.

Proposed § 61.100 would contain the provisions for pilots based on small islands that are currently found in § 61.99.

Section 61.101 Recreational Pilot Privileges and Limitations

The proposed revisions for this section are as follows:

(1) Restructures and edits some of the current paragraphs of this section.

(2) Rewords some portions of this section for clarity purposes.

(3) Rewords and relocates existing § 61.101(f) to proposed paragraph (h). This proposal would basically maintain the same provisions that are now currently in existing § 61.101(f), but would contain some rewording and reformatting for clarity purposes.

(4) Deletes the current restriction that prevents recreational pilots from flying

more than 50 nautical miles from an airport where training was received. This proposal along with the proposal to delete the requirements for a medical certificate for recreational pilots, is intended to increase interest in the recreational pilot certificate. The FAA believes this proposal will not have an adverse effect on safety, considering that most of the aeronautical experience will be performed with an authorized flight instructor on board the aircraft.

This proposal would permit a recreational pilot to operate on a flight that exceeds 50 nautical miles from the departure airport, provided the pilot:

a. Has received ground and flight training from an authorized flight instructor on the cross country training requirements of subpart E of this part that apply to the aircraft rating held;

b. Has been found proficient in cross country flying, and has received a logbook endorsement from the authorized flight instructor, who gave the person the cross country training prescribed by subpart E of this part that apply to the aircraft rating held; and

c. Has received a logbook endorsement that certifies the person has received and been found proficient on the cross training requirements of subpart E of this part that apply to the aircraft rating held, which must be carried in their physical possession in the aircraft.

Subpart E—Private Pilots

The proposed establishment of separate subparts for student and recreational pilot certificates will require the regulations pertaining to private pilot certificates and ratings to be relocated from subpart D to subpart E.

Section 61.102 Applicability

No substantive changes are proposed for this section.

Section 61.103 Eligibility Requirements: General

The significant proposed changes in this section are as follows:

(1) Rewords the medical requirements for applicants who desire a rating in a glider or balloon.

(2) Requires all applicants to meet the English language requirements, including the ability to write, which would eliminate the current provision that applicants who cannot read, speak, and understand the English language may receive a certificate with the operating limitation, as deemed necessary by the Administrator.

(3) Requires an applicant to receive an endorsement from a ground or flight instructor who gave the applicant

training or reviewed the applicant's home study course, and that endorsement must state that the applicant is prepared for the knowledge test.

(4) Requires an applicant to receive an endorsement from a flight instructor who gave the applicant training, and that endorsement must state that the applicant is prepared for the practical test.

(5) Requires an applicant to meet the aeronautical experience requirements for the category and class rating sought, before applying for the practical test. The applicant would be required to pass the required knowledge test and practical test. The FAA believes this step-by-step listing of eligibility requirements would be beneficial to the applicant and the examiner.

Section 61.105 Aeronautical Knowledge

Proposed § 61.105 lists the revised aeronautical knowledge requirements for the private pilot certificate. The following aeronautical knowledge areas would be added as a requirement for the private pilot certification: (1) Windshear avoidance; (2) Aeronautical decision making and judgment; and (3) preflight actions found in § 91.103.

Section 61.107 Flight Proficiency

The proposed changes to this section are as follows: (1) Includes separate and revised areas of operation for the airplane category-single engine class rating, airplane category-multiengine class rating, rotorcraft category-helicopter class rating, rotorcraft category-gyroplane class rating, glider category-nonpowered class rating, glider category-powered class rating, lighter-than-air category-airship class rating, lighter-than-air category-balloon class rating, and powered-lift category rating.

(2) Replaces the term "flight proficiency requirements" with the term "approved areas of operation."

(3) Requires applicants for a glider category rating to receive training on the approved areas of operation, included in proposed § 61.107, on: Launches, approaches, and landings, if applying for a nonpowered class rating; or Takeoffs, landings, and go-arounds, if applying for a powered class rating.

Section 61.109 Aeronautical Experience

The proposed revisions to this section are as follows:

(1) Includes separate and revised aeronautical experience requirements

for the airplane category-single engine class rating; airplane category-multiengine class rating, rotorcraft category-helicopter class rating, rotorcraft category-gyroplane class rating, glider category-nonpowered class rating, glider category-powered class rating, lighter-than-air category-airship class rating, lighter-than-air category-balloon class rating, and powered-lift category rating.

(2) Revises the aeronautical experience requirements for a private pilot certificate with an airplane, rotorcraft, or powered-lift category rating by requiring applicants to have accomplished and logged at least 40 hours of flight time, which includes at least 20 hours of flight training time from an authorized flight instructor and 5 hours of supervised PIC flight time on the approved areas of operation in § 61.107. This proposal responds to comments made during the public hearings requesting that the student and the flight instructor be allowed to tailor the required training to the student needs.

For example, a student who has previous aviation experience and takes readily to the training may be able to complete training for a private pilot certificate with only the minimum 40 hours of flight time, which includes at least 20 hours of flight training time from an authorized flight instructor and 20 hours of supervised PIC flight time, on the approved areas of operation in § 61.107.

However, a student pilot who does not have previous aviation experience or who trains infrequently may need more time than the minimum 40 hours of flight time, 20 hours of flight training time from an authorized flight instructor, and 5 hours of supervised PIC flight time. The student pilot and flight instructor may need to tailor the training to require 35 hours of flight training time from an authorized flight instructor and 5 hours of supervised PIC flight time, on the approved areas of operation in § 61.107.

(3) Includes revised aeronautical experience for:

a. An airplane single engine rating,—
(i) Three hours of cross-country flight training in a single engine airplane;
(ii) Three hours of night flight training in a single engine airplane that includes—

A. A cross country flight of at least 100 nautical miles duration; and
B. Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in a single engine airplane;

(iv) Three hours of flight training in preparation for the practical test in a single engine airplane, which must have been performed within the 60-day period preceding the date of the test; and

(v) Supervised PIC flying in a single engine airplane, consisting of—

A. One supervised PIC cross-country flight of at least 100 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and

B. Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

b. An airplane multiengine rating,—

(i) Three hours of cross-country flight training in a multiengine airplane;

(ii) Three hours of night flight training in a multiengine airplane that includes—

A. One cross country flight of at least 100 nautical miles duration; and

B. Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in a multiengine airplane;

(iv) Three hours of flight training in preparation for the practical test in a multiengine airplane, and must have been performed within the 60-day period preceding the date of the test; and

(v) Supervised PIC flying in a multiengine airplane, consisting of—

A. One supervised PIC cross-country flight of at least 100 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and

B. Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

c. A rotorcraft-helicopter rating—

(i) Three hours of cross-country flight training in a helicopter;

(ii) Three hours of night flight training in a helicopter that includes—

A. One cross country flight of at least 50 nautical miles duration; and

B. Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of flight training in preparation for the practical test in a helicopter, and must have been performed within the 60-day period preceding the date of the test; and

(iv) Supervised PIC flying in a helicopter, consisting of—

A. One supervised PIC cross-country flight of at least 50 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 25 nautical miles between the takeoff and landing locations; and

B. Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

d. A rotorcraft-gyroplane rating—

(i) Three hours of cross-country flight training in a gyroplane;

(ii) Three hours of night flight training in a gyroplane that includes—

A. One cross country flight of at least 50 nautical miles duration; and

B. Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of flight training in preparation for the practical test in a gyroplane, which must have been performed within the 60-day period preceding the date of the test; and

(iv) Supervised PIC flying in a gyroplane, and consisting of—

A. One supervised PIC cross-country flight of at least 50 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 25 nautical miles between the takeoff and landing locations; and

B. Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

e. A powered-lift rating—

(i) Three hours of cross-country flight training in a powered-lift;

(ii) Three hours of night flight training in a powered-lift that includes—

A. One cross country flight of at least 100 nautical miles duration; and

B. Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in a powered-lift;

(iv) Three hours of flight training in preparation for the practical test in a powered-lift, which must have been performed within the 60-day period preceding the date of the test; and

(v) Supervised PIC flying in a powered-lift, consisting of—

A. One supervised PIC cross-country flight of at least 100 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and

B. Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

f. A glider rating—

(i) At least 10 hours of flight training and 20 flights, on the approved areas of operation listed in proposed § 61.107, that apply to the glider class rating sought; or at least 5 hours of flight training and 10 flights on the approved areas of operation listed in § 61.107 that apply to the glider class rating sought. If a person has logged 40 hours of flight time in heavier-than-air aircraft or holds a category and class rating in a glider;

(ii) At least two supervised PIC flights on the approved areas of operation listed in § 61.107 that apply to the glider class rating sought;

(iii) At least 3 flights of flight training in preparation for the practical test within the 60-day period preceding the test and in the class of glider for the rating sought; and

(iv) At least 5 training flight sessions and 2 supervised PIC flights in a nonpowered glider using a winch or auto tow on the appropriate approved areas of operation listed in proposed § 61.107(g). If a person who is applying for a glider category rating with a nonpowered class rating seeks privileges for ground launch procedures.

g. An airship rating, at least 25 hours of flight training in airships on the approved areas of operation listed in proposed § 61.107 (i), which consists of at least—

(i) Three hours of cross-country flight training in an airship;

(ii) Except as provided in proposed § 61.110, 3 hours of night flight training in an airship that includes—

A. One cross country flight of at least more than 25 nautical miles duration;

B. Five takeoffs and 5 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport;

C. Three hours of instrument flight training in an airship;

D. Three hours of flight training in an airship in preparation for the practical test within the 60-day period preceding the date of the test; and

E. Five hours of supervised PIC flight training in an airship and with an authorized flight instructor.

h. A balloon rating, at least 10 hours of flight training that includes at least 6

flight training sessions on the approved areas of operation listed in proposed § 61.107(j), that includes—

(i) If the training is being performed in a gas balloon, the training must include at least two flights of two hours each that consists of—

A. At least one flight that covers the approved areas of operation appropriate to a gas balloon within 60 days prior to application for the rating; and

B. At least one supervised PIC flight in a gas balloon.

(ii) If the training is being performed in a balloon with an airborne heater, the training must include at least—

A. Two flights of one hour each that covers the approved areas of operation appropriate to a balloon with an airborne heater within 60 days prior to application for the rating; and

B. One supervised PIC flight in a balloon with an airborne heater.

(4) Deletes the exception for applicants not seeking night flying privileges. However, some exceptions from the required night training would still remain and are listed proposed § 61.110.

(5) Adds night cross country training to the aeronautical experience requirements for the private pilot certificate for the airplane, rotorcraft, airship, and powered-lift category ratings. § 61.110 Night flying exceptions for the private pilot certification.

Proposed § 61.110 would establish the night flying exceptions for private pilot certification. The allowable exceptions for the night training requirement are the following:

(1) An applicant with a medical restriction from operating an aircraft at night would not be required to meet the night flight training requirements and would be issued a certificate with a limitation prohibiting night flying; and

(2) An applicant who accomplishes flight training in Alaska would have 12 months after the issuance of the applicant's temporary airman certificate to comply with the night flight training requirements. Alaska is unique in that 6 months out of the year there is no nighttime. However, an applicant who receives flight training in Alaska and is unable to accomplish the night flying training required by proposed § 61.109, would be—

a. Issued a temporary pilot certificate for only 12 calendar months, with a limitation "Night flying prohibited;" and

b. Required to comply with the requirements of proposed § 61.110(c) within the 12 calendar month period after issuance of the temporary private pilot certificate, or the certificate will be suspended until the person complies

with the requirements of proposed § 61.110(c).

(3) Explain that the night flying prohibited limitation may be removed when persons—

a. Accomplish the night flight training requirements of proposed § 61.109 in the class of aircraft for which night flying privileges are sought;

b. Present to an examiner, a logbook or training record endorsement from an authorized flight instructor that verifies accomplishment of the night flying requirements of proposed § 61.109 in the class of aircraft for which night flying privileges are sought; and

c. Accomplish the night operations portion of the practical test for the class of aircraft for which night flying is sought.

As previously stated, the FAA does not intend to have persons who have been issued a pilot certificate without meeting the night flying requirements of this proposal, prior to effective date of this rule, to comply with this proposal. Those persons would be allowed to continue to hold that pilot certificate with the night flying limitation. However, if the person seeks an additional rating or higher pilot certificate level, the person would be required to comply with night flying requirements that are appropriate to the pilot certificate level.

Section 61.111 Cross-Country Flights: Pilots Based on Small Islands

The proposed changes to § 61.111 are minor editorial changes only.

Section 61.113 Private Pilot Privileges and Limitations: Pilot in Command

Proposed § 61.113 will be a redesignation of existing § 61.118.

The FAA proposes to eliminate the existing § 61.113, "Rotorcraft rating: Aeronautical experience." The revised aeronautical experience requirements for a rotorcraft category rating will be incorporated in proposed § 61.109.

The proposed changes to this section are as follows:

(1) Permits private pilots to be reimbursed for their aircraft operating expenses for search and location operations that are sanctioned and under the direction and control of a local, State, or Federal law enforcement agency, or an organization involved in search and location operations.

(2) Permits a private pilot who acts as PIC when towing gliders to log the flight time.

(3) Specifies what are the flight operating expenses that a private pilot may share with passengers.

(4) Modifies the requirements for participation in an airlift sponsored by a charitable organization.

(5) Eliminates specific reference regarding a salesman who has logged at least 200 hours to demonstrate an aircraft in flight to a prospective buyer. Even though specific reference to this provision will be eliminated, the privilege will still be provided in proposed § 61.113(b)(1). A private pilot who is an aircraft salesperson will still be allowed to demonstrate aircraft to prospective buyers, but the requirement for the person to have logged at least 200 hours will be eliminated.

Throughout this regulatory review, the FAA has attempted to delete and revise obsolete, unnecessary rules without compromising safety. On this issue, the FAA has determined that eliminating the requirement for private pilots to have logged at least 200 hours prior to demonstrating aircraft to prospective buyers is unnecessary and no data could be found to justify continuance of the rule. In effect, the proposed elimination of this requirement will enable private pilots increased use of their private pilot certificates.

Section 61.115 Balloon Rating: Limitations

Proposed § 61.115 will be a redesignation of existing § 61.119.

The FAA proposes to eliminate the existing § 61.115 "Glider rating: Aeronautical experience." The revised aeronautical experience requirements for a glider category rating will be incorporated in proposed § 61.109.

The proposed changes to this section are as follows:

(1) Deletes references to the phrase "hot air balloon without airborne heaters," and classifies balloons as either "gas balloons" or "balloons with airborne heaters." The phrase "hot air balloon without an airborne heater" described a balloon that was in existence at one time, but is no longer available. A "hot air balloon without an airborne heater" is a balloon that involves heating the air inside the balloon's envelope from a ground-based fire. The balloon and its occupant then ascend until the balloon deflates, and the occupant exits the balloon by parachute.

(2) Incorporates the current operating limitations for private pilots who perform their practical test in a gas balloon as opposed to those who perform the test in a balloon with an airborne heater. The wording of the operating limitations specified in this section would clarify that persons requesting removal of the operating limitations off their certificate would be required to obtain the required aeronautical experience in that kind of balloon and receives a logbook

endorsement from an authorized instructor who attests to the person's accomplishment of the required aeronautical experience and ability to satisfactorily operate that balloon. However, accomplishment of an additional practical test would not be required provided the person is not seeking a higher level of pilot certificate (i.e., a private pilot seeking to obtain a commercial pilot certificate).

Section 61.117 Private Pilot Privileges and Limitations: Second in Command of Aircraft Requiring More Than One Pilot

Proposed § 61.117 will be a redesignation of existing § 61.120 and § 61.120 will be placed in reserve.

The existing § 61.118 "Private pilot privileges and limitations: Pilot in command" will be redesignated as § 61.113, and § 61.118 will be placed in reserve.

The existing § 61.119, "Free balloon rating: Limitations" will be redesignated as § 61.115 and be retitled as "Balloon rating: Limitations" and § 61.119 will be placed in reserve.

The existing § 61.120, "Private pilot privileges and limitations: Second in command of aircraft requiring more than one pilot" will be redesignated as § 61.117, and § 61.120 will be reserved.

Subpart F—Commercial Pilots

The proposal to establish separate subparts for student and recreational pilot certificates would require the regulations for commercial pilot certificates and ratings to be relocated from subpart E to subpart F.

Section 61.121 Applicability

No substantive changes are proposed for this section.

Section 61.123 Eligibility Requirements: General

The significant proposed changes in this section are:

(1) Requires applicants to be able to write in the English language.

(2) Rewords the medical requirements for applicants who desire a rating in a glider or balloon.

(3) Requires all applicants to meet the English language requirements, which would eliminate the current provision under which applicants who cannot read, speak, and understand the English language may receive a certificate with the operating limitation as deemed necessary by the Administrator.

(4) Permits applicants to only hold a third-class medical certificate at the time of the practical test. However as currently required, the commercial pilot would still be required to hold a second-class medical certificate for operations requiring a commercial pilot certificate.

(5) Requires an applicant to hold a private pilot certificate, before applying for a commercial pilot certificate.

(6) Revises the eligibility requirements for the commercial pilot certificate and ratings by specifying that an applicant would be required to:

a. Receive from the ground or flight instructor who gave the applicant training or reviewed the applicant's home study course, an endorsement that states the applicant is prepared for the knowledge test;

b. Receive an endorsement from the flight instructor who gave the applicant training that states the applicant is prepared for the practical test; and

c. Meet the aeronautical experience requirements for the category and class rating sought before applying for the practical test. This is in addition to the current requirements for the applicant to pass the required knowledge test and practical test. The FAA is of the opinion that this step-by-step listing of eligibility requirements would be beneficial to the applicant and the examiner.

Section 61.125 Aeronautical Knowledge

The significant proposed changes in this section will:

(1) Include separate and revised aeronautical knowledge areas for the airplane category-single engine class rating, airplane category-multiengine class rating, rotorcraft category-helicopter class rating, rotorcraft category-gyroplane class rating, glider category-nonpowered class rating, glider category-powered class rating, lighter-than-air category-airship class rating, lighter-than-air category-balloon class rating, and powered-lift category rating.

(2) Modify the aeronautical knowledge requirements to include windshear avoidance, aeronautical decision making and judgment.

(3) Delete the existing aeronautical knowledge requirement of instrument procedures and the requirement for instrument flight training for an airship rating. This proposed deletion is a result of the proposal for the instrument-airship rating and the proposed flight instructor-airship rating.

Section 61.127 Flight Proficiency

The significant proposed changes in this section will:

(1) Include separate and revised areas of operation for the airplane category-single engine class rating, airplane category-multiengine class rating, rotorcraft category-helicopter class rating, rotorcraft category-gyroplane class rating, glider category-nonpowered class rating, glider category-powered class rating, lighter-than-air category-

airship class rating, lighter-than-air category-balloon class rating, and powered-lift category rating.

(2) Replace flight proficiency requirements with approved areas of operation.

(3) Require an applicant for a glider category rating to receive training on:

a. Launches, approaches, and landings, if applying for a nonpowered class rating; or

b. Takeoffs, landings, and go-arounds if applying for a powered class rating.

Section 61.129 Aeronautical Experience

Proposed § 61.129 would be retitled, "Aeronautical experience." Proposed § 61.129 would be reformatted by class of aircraft, and would contain separate and revised aeronautical experience for each class of aircraft.

The significant proposed changes in this section are as follows:

(1) Includes revised and separate aeronautical experience requirements for the airplane category-single engine class rating, airplane category-multiengine class rating, rotorcraft category-helicopter class rating, rotorcraft category-gyroplane class rating, glider category-nonpowered class rating, glider category-powered class rating, lighter-than-air category-airship class rating, lighter-than-air category-balloon class rating, and powered-lift category rating.

(2) Revises the aeronautical experience requirements for the single engine airplane to:

a. Twenty hours of training on the approved areas of operation in proposed § 61.127(b), which includes at least:

(i) Five hours of instrument training in a single engine airplane;

(ii) Ten hours of training in a single engine airplane that has a retractable landing gear, flaps, and a controllable pitch propeller; or is turbine-powered;

(iii) One cross-country flight in a single engine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iv) One cross-country flight in a single engine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(v) Three hours in a single engine airplane, in preparation for the practical test within 60 days preceding the date of the test.

b. Ten hours of supervised PIC flying in a single engine airplane on the approved areas of operation in proposed § 61.127(b), which includes at least—

(i) One cross-country flight, if the training is being performed in the state of Hawaii, that cross-country flight must involve landings at a minimum of three points and one of the routes must have a straight-line distance of at least 150 nautical miles;

(ii) One cross-country flight, if the training is being performed in a State other than Hawaii, then that cross-country flight must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 250 nautical miles; and

(iii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower.

(3) Revises the aeronautical experience requirements for the multiengine airplane to:

a. Twenty hours of training on the approved areas of operation in proposed § 61.127(c), which includes at least—

(i) Five hours of instrument training in a multiengine airplane;

(ii) Ten hours of training in a multiengine airplane that has a retractable landing gear, flaps, and a controllable pitch propeller, or is turbine-powered;

(iii) One cross-country flight in a multiengine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iv) One cross-country flight in a multiengine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(v) Three hours in a multiengine airplane, in preparation for the practical test within 60 days preceding the date of the test.

b. Ten hours of supervised PIC flying in a multiengine airplane on the approved areas of operation in proposed § 61.127(c), which includes at least—

(i) One cross-country flight, if the training is being performed in the state of Hawaii, that cross-country flight must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 150 nautical miles;

(ii) One cross-country flight, if the training is being performed in a State other than Hawaii, that cross-country flight must involve landings at a minimum of three points and one of the routes must have a straight-line distance of at least 250 nautical miles; and

(iii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a

flight with a traffic pattern) at an airport with an operating control tower.

(4) Adds aeronautical experience requirements for the new powered-lift category rating to:

a. Twenty hours of training on the approved areas of operation in proposed § 61.127(f), which includes at least—

(i) Five hours of instrument training in a powered-lift;

(ii) One cross-country flight in a powered-lift of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iii) One cross-country flight in a powered-lift of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(iv) Three hours in a powered-lift, in preparation for the practical test within 60 days preceding the date of the test.

b. Ten hours of supervised PIC flying in a powered-lift on the approved areas of operation in proposed § 61.127(f), which includes at least—

(i) One cross-country flight, if the training is being performed in the state of Hawaii, that cross-country flight must involve landings at a minimum of three points and one of the routes must have a straight-line distance of at least 150 nautical miles;

(ii) One cross-country flight, if the training is being performed in a State other than Hawaii, that cross-country flight must involve landings at a minimum of three points and one of the routes must have a straight-line distance of at least 250 nautical miles; and

(iii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower.

(5) Revises the aeronautical experience requirements for the helicopter to:

a. Twenty hours of training on the approved areas of operation in proposed § 61.127(d), which includes at least—

(i) Five hours of instrument training in a helicopter;

(ii) One cross-country flight in a helicopter of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iii) One cross-country flight in a helicopter of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(iv) Three hours in a helicopter, in preparation for the practical test within 60 days preceding the date of the test.

b. Ten hours of supervised PIC flying in a helicopter on the approved areas of operation in proposed § 61.127(d), which includes at least—

(i) One cross-country flight with landings at a minimum of three points, and one of the routes having a straight-line distance of at least 50 nautical miles from the original point of departure; and

(ii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern).

(6) Revises the proposed aeronautical experience requirements for the gyroplane to:

a. Twenty hours of training on the approved areas of operation in proposed § 61.127(e), which includes at least—

(i) Five hours of instrument training in a gyroplane;

(ii) One cross-country flight in a gyroplane of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iii) One cross-country flight in a gyroplane of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(iv) Three hours in a gyroplane, in preparation for the practical test within 60 days preceding the date of the test.

b. Ten hours of supervised PIC flying in a gyroplane on the approved areas of operation in proposed § 61.127(e), which includes at least—

(i) One cross-country flight with landings at a minimum of three points, and one of the routes must have a straight-line distance of at least 50 nautical miles from the original point of departure; and

(ii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern).

(7) Revises the proposed aeronautical experience requirements for the airship to:

a. Twenty hours of training in airships on the approved areas of operation in proposed § 61.127(i), which includes at least—

(i) Three hours of flight training in an airship, in preparation for the practical test within the 60-day period preceding the date of the test;

(ii) Five hours of instrument training in airships;

(iii) One cross-country flight in an airship of at least 1 hour in duration, a

total straight-line distance of more than 25 nautical miles from the original point of departure, and occurring in day-VFR conditions; and

(iv) One cross-country flight in an airship of at least 1 hour in duration, a total straight-line distance of more than 25 nautical miles from the original point of departure, and occurring in night-VFR conditions.

b. Ten hours of supervised PIC flight training with an authorized flight instructor in airships, on the approved areas of operation in proposed § 61.127(i), which includes at least—

(i) One cross-country flight with landings at a minimum of three points, and one of the routes having a straight-line distance of at least 25 nautical miles from the original point of departure; and

(ii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern).

(8) Revises the proposed aeronautical experience requirements for the nonpowered glider to—

a. Five hours of flight training or 10 flights on the approved areas of operation of proposed § 61.127(g) that must include 3 flights in preparation for the practical test within 60-day period preceding the date of the test.

b. Five supervised PIC flights in a nonpowered glider on the approved areas of operation of proposed § 61.127(g).

c. If an applicant with a glider category rating and a nonpowered class rating seeks privileges for ground launch procedures, that person must accomplish and log at least five flights of flight training and two supervised PIC flights in a nonpowered glider using a winch or auto tow on the approved areas of operations in proposed § 61.127(g).

(9) Adds aeronautical experience requirements for the powered glider to:

a. Twenty-five hours and 100 flights in gliders as PIC, which includes at least 10 flights in a powered glider;

b. Two hundred hours in heavier-than-air aircraft, and 20 flights in gliders as PIC, which includes at least 10 flights in a powered glider; or

c. The flight time requirements in proposed § 61.129(f) (1) or (2) must consist of at least the following flight training in a powered glider—

(i) Five hours of flight training or 10 flights on the approved areas of operation of proposed § 61.127(h), which includes 3 flights in preparation for the practical test within the 60-day period preceding the date of the test; and

(ii) Five supervised PIC flights in a powered glider on the approved areas of operation of proposed § 61.127(h).

(10) Revises the aeronautical experience requirements for the balloon to:

a. Accomplish and log at least 35 hours of flight time as a pilot, which includes at least the following requirements—

(i) Twenty hours in balloons;

(ii) Ten flights in balloons; and

(iii) Two flights in balloons as the PIC.

b. Ten hours of flight training that includes 10 flights of flight training in balloons on the approved areas of operation of proposed § 61.127(j), which consist of at least—

(i) If the training is received in a gas balloon, the training must include at least—

A. Two flights of 1 hour each in a gas balloon;

B. One flight in a gas balloon involving a controlled ascent to 10,000 feet above the surface;

C. Two flights in a gas balloon, in preparation for the practical test within the 60-day period preceding the date of the test; and

D. Two supervised PIC flights in a gas balloon on the approved areas of operation in proposed § 61.127(j).

(ii) If the training is received in a balloon with an airborne heater, the training must include at least—

A. Two flights of 30 minutes each in a balloon with an airborne heater;

B. One flight involving a controlled ascent to 5,000 feet above the surface in a balloon with an airborne heater; and

C. Two flights in a balloon with an airborne heater, in preparation for the practical test within the 60-day period preceding the date of the test; and

D. Two supervised PIC flights in a balloon with an airborne heater on the approved areas of operation in proposed § 61.127(j).

(11) Permits the use of a turbine powered airplane in lieu of the current provision for receiving training in an airplane that has flaps, retractable landing gear, and controllable propellers.

(12) Replaces the terms “free balloon” and “hot air balloon” with “balloon” only.

(13) Deletes references to the phrase “hot air balloon without airborne heaters,” and classifies balloons as “gas balloons” and “balloons with airborne heaters.” The phrase “hot air balloon without an airborne heaters” describes a balloon that is no longer available. A “hot air balloon without an airborne heater” describes a balloon that involved heating the air inside the balloon’s envelope from a ground-based

fire, then the balloon and its occupant ascend until the balloon deflates, and then the occupant exits the balloon by parachute.

Section 61.131 Exceptions to the Night Flying Requirements for the Commercial Pilot Certificate

Proposed § 61.131 would be a new section and entitled, “Exceptions to the night flying requirements for the commercial pilot certificate.” This proposal would delete the exception for applicants not seeking night flying privileges; however, an applicant with a medical restriction from operating an aircraft at night would not be required to meet the night flight training requirements and would be issued a certificate with a limitation. In addition, an applicant who accomplishes flight training in Alaska would have 12 months after the issuance of the applicant’s temporary airman certificate to comply with the night flight training requirements.

The current provisions of § 61.131 “Rotorcraft ratings: Aeronautical experience” would be moved to proposed § 61.129.

Section 61.133 Commercial Pilot Privileges and Limitations: General

Proposed § 61.133 “Commercial pilot privileges and limitations: General” would be a redesignation of existing § 61.139. The current provisions of § 61.133 “Glider rating: Aeronautical experience” would be moved to proposed § 61.129.

The significant proposed changes in this section are as follows:

(1) Clarifies the privileges for persons who hold a commercial pilot certificate regarding the compensation or hire issue. This revision is in response to a petition for rulemaking from Beverly J. Cameron, who on June 20, 1992, petitioned the FAA to revise the rule. Ms. Cameron stated that the current wording of § 61.139 was misleading. The FAA agrees, and thus has proposed to revise § 61.139.

(2) Eliminates the privilege in existing § 61.139 for commercial pilots with a lighter-than-air category and associated class rating to give training in an airship or a free balloon, because of the proposed flight instructor certificate for the lighter-than-air category.

(3) Adds the limitation that is in existing § 61.129, which prohibits commercial pilots with an airplane category rating, but without an instrument-airplane rating, from carrying passengers for hire in airplanes on cross-country flights of more than 50 nautical miles or at night, would appear in this section. The same limitation is

proposed for commercial pilots with a lighter-than-air category and an airship class rating but without an instrument—airship rating, and commercial pilots with a powered-lift category rating but without an instrument—powered-lift rating.

(4) Revises “hot air balloon without airborne heaters,” in existing § 61.139, to “gas balloons” and “balloons with airborne heaters.” The purpose for this proposal is to align the phraseology in this section with the other references to balloons throughout this notice.

(5) Revises the wording for the operating limitations that restrict the pilot privileges for the kind of balloon in which the person accomplishes the practical test. The person may remove the limitation by completing the required aeronautical experience in a gas balloon or a balloon with an airborne heater, as appropriate, and receives a logbook endorsement from an authorized instructor who attests to the person’s accomplishment of the required aeronautical experience and ability to satisfactorily operate the specific kind of balloon.

Section 61.135 [Reserved]

The current provisions of § 61.135 “Airship rating: Aeronautical experience” would be moved to proposed § 61.129.

Section 61.137 [Reserved]

The current provisions of § 61.137 “Free balloon rating: Aeronautical experience” would be moved to proposed § 61.129.

Section 61.139 [Reserved]

The current provisions of § 61.139 “Commercial pilot privileges and limitations: General” would be moved to proposed § 61.133.

Section 61.141 [Reserved]

The current provisions of § 61.141 “Airship and free balloon ratings: Limitation” would be moved to proposed § 61.133.

Subpart G—Airline Transport Pilots

The proposal to establish separate subparts for student and recreational pilot certificates would require the regulations for ATP certificates to be relocated from subpart F to subpart G.

Section 61.151 Applicability

In order to align this subpart with the other subparts, the FAA proposes to establish an applicability section in subpart G.

Section 61.153 Eligibility Requirements: General

In order to accommodate proposed "§ 61.151 Applicability," existing "§ 61.151 Eligibility requirements: General" would be renumbered § 61.153.

The significant proposed changes in this section are as follows:

(1) Eliminates the existing requirement for an applicant to be able to "speak [the English language] without accent or impediment of speech that would interfere with two-way radio conversation." However, applicants would be required to read, speak, write, and understand the English language to be eligible to apply for the ATP certificate.

(2) Permits applicants to only hold a third-class medical certificate at the time of the practical test. However as currently required, an ATP would be required to hold a first class medical certificate for operations requiring an ATP certificate.

(3) Requires an applicant to hold a commercial pilot certificate and an instrument rating, before applying for the ATP certificate.

(4) Eliminates the requirement that an applicant be a "high school graduate or its equivalent in the Administrator's opinion, based on the applicant's general experience and aeronautical experience, knowledge, and skill."

(5) Includes a proposal to revise the eligibility requirements for all certificates and ratings by specifying that an applicant would be required to:

a. Meet the aeronautical experience requirements for the category and class rating sought before applying for the flight portion of the practical test;

b. Pass the required knowledge test; and

c. Pass the required practical test.

(6) Clarify that an applicant need not possess the aeronautical experience requirements for an ATP certificate before taking the knowledge test. Applicants for other certificates and ratings currently are not required to obtain aeronautical experience requirements before taking the appropriate knowledge test. However, current § 61.153 requires an applicant for an ATP certificate with an airplane rating to meet the experience requirements in § 61.155 before applying to take the ATP knowledge test. In keeping with procedures for other knowledge tests, proposed § 61.153 would permit applicants to take the ATP knowledge test before obtaining the hours necessary to become an ATP.

(7) Includes requirements found in existing § 61.155 for applicants who are

military pilots and applicants who hold a pilot license issued by a member State of ICAO.

Section 61.155 Aeronautical Knowledge

In order to accommodate proposed "§ 61.151 Applicability," existing "§ 61.153 Airplane rating: Aeronautical knowledge" would be renumbered § 61.155, and retitled to read "Aeronautical knowledge." Proposed § 61.155 would combine the aeronautical knowledge requirements for applicants of airplane, helicopter, and powered-lift ratings.

The proposed revisions to this section are as follows:

(1) Establishes all of the required aeronautical knowledge areas in this section. Currently, the aeronautical knowledge areas are located in separate sections of subpart F.

(2) Adds aeronautical knowledge requirements on windshear avoidance and aeronautical decision making and judgment.

(3) Clarifies that an applicant for a type rating would not be required to take an additional knowledge test, if the applicant already holds an ATP certificate with the appropriate category ratings.

Section 61.157 Flight Proficiency

The FAA proposes to change the title of existing § 61.155 "Airplane rating: Aeronautical experience" to read § 61.157 "Flight proficiency." The aeronautical experience requirements for an airplane rating would appear in proposed § 61.159. Proposed § 61.157 would combine the flight proficiency requirements for applicants of airplane, helicopter, and powered-lift ratings.

The significant proposed revisions in this section are as follows:

(1) Includes separate and revised areas of operation for the airplane category-single engine class rating, airplane category-multiengine class rating, rotorcraft category-helicopter class rating, and powered-lift category rating.

(2) Replaces the term, "flight proficiency requirements" with the term, "approved areas of operation," so the terminology in this section is the same as the other rules of part 61.

(3) Includes an administrative clarification that the type ratings on the superseded pilot certificate for the category and class of aircraft that the person satisfactorily accomplished the ATP practical test in will be elevated to the ATP certificate level.

Section 61.159 Aeronautical Experience: Airplane Category Rating

The FAA proposes to revise and redesignate § 61.157, "Airplane rating: Aeronautical skill," to read § 61.159 "Aeronautical experience: Airplane category rating."

Proposed § 61.159 would include the existing aeronautical experience requirements for an airplane category rating with no substantive changes.

Section 61.161 Aeronautical Experience: Rotorcraft Category and Helicopter Class Rating With a Type Rating

Existing "§ 61.159 Rotorcraft rating: Aeronautical knowledge" would be moved to proposed § 61.155. The FAA proposes to revise and redesignate § 61.161, "Rotorcraft rating: Aeronautical experience," to read § 61.161, "Aeronautical experience: Rotorcraft category and helicopter class rating with a type rating." Proposed § 61.161 will include the existing aeronautical experience requirements for a rotorcraft category rating with no substantive changes.

Section 61.163 Aeronautical Experience: Powered-Lift Category Rating

The FAA proposes to redesignate this section as § 61.163 "Aeronautical experience: Powered-lift category rating." Proposed § 61.163 will list the aeronautical experience requirements for an ATP certificate with a powered-lift category rating. Existing § 61.161, "Rotorcraft rating: Aeronautical skill," would be eliminated. The provisions of existing § 61.161 would be adequately covered by proposed §§ 61.43 and 61.153.

Section 61.165 Additional Aircraft Category Ratings

Proposed § 61.165 "Additional aircraft category ratings" would be a redesignation of existing § 61.165, "Additional category ratings."

The FAA proposes to add a powered-lift category rating to this section.

Section 61.167 General Privileges and Limitations

Proposed § 61.167 would be a redesignation of existing § 61.171. Proposed § 61.167 would contain the current limitation found in existing § 61.155(d). That limitation applies to applicants who credit SIC or flight engineer time in meeting the total time requirement for an ATP certificate. Existing § 61.167, "Tests," would be eliminated. The rules for the knowledge and practical test are found in proposed §§ 61.35 and 61.43.

Section 61.169 [Reserved]

The FAA proposes to eliminate this section and place it in reserve. The FAA has determined the provisions of § 61.169, "Instruction in air transportation service," are already addressed in §§ 121.411 and 135.337 of this chapter. Therefore, this section would no longer be necessary.

Section 61.171 [Reserved]

The provisions of existing § 61.171 would be moved to proposed § 61.167. This section would be placed in reserve.

Subpart H—Flight Instructors

The proposal to establish separate subparts for student and recreational pilot certificates would require moving the regulations for flight instructor certificates and ratings from subpart G to subpart H.

Section 61.181 Applicability

No substantive changes are proposed in this section.

Section 61.183 Eligibility Requirements

The significant proposed changes in this section are as follows:

(1) Requires applicants for a flight instructor certificate with an airplane rating or with a glider rating, to have demonstrated instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures prior to applying for the practical test.

(2) Permits applicants for a flight instructor certificate, who satisfactorily accomplish a flight instructor-instrument practical test in a multiengine airplane, and who also hold an airplane category and single-engine class rating on their flight instructor certificate will also be awarded a flight instructor instrument-airplane single engine rating.

(3) Requires applicants for flight instructor certificates to have logged at least 15 hours of PIC time in the category and class of aircraft that is appropriate to the flight instructor rating sought.

(4) Rewords the eligibility requirements for flight instructor certificates and ratings by specifying that an applicant would be required to:

- a. Receive from the ground or flight instructor who gave the applicant training or reviewed the applicant's home study course, an endorsement that states the applicant is prepared for the knowledge test; and

- b. Receive from the flight instructor who gave the applicant training, an endorsement that states the applicant is prepared for the practical test. These requirements are in addition to the

current requirements for the applicant to pass the required knowledge test and practical test.

(5) Expands the current requirement for an applicant for a flight instructor certificate with an airplane or instrument rating to hold an instrument rating that is appropriate to the airplane class. Proposed § 61.183 would require applicants for an airship, helicopter, or a powered-lift rating to also hold an instrument rating that is appropriate to those aircraft ratings.

Section 61.185 Aeronautical Knowledge

Proposed § 61.185 contains the required aeronautical knowledge areas for a flight instructor certificate. The proposed revisions to this section are as follows:

(1) Requires flight instructor applicants to receive and log ground training on the aeronautical knowledge areas in which ground training is required for a recreational pilot certificate. This is an addition to the current requirements which only require aeronautical knowledge areas for a private and commercial pilot certificate.

(2) Requires flight instructor applicants to receive and log ground training on the aeronautical knowledge areas in which ground training is required for an instrument rating, if that person is applying for a flight instructor—airplane category and single-engine class rating; flight instructor—airplane category with an multiengine class rating; flight instructor—lighter-than-air category with an airship class rating; flight instructor—powered-lift category rating; flight instructor instrument—with the appropriate aircraft category and class rating.

Section 61.187 Flight Proficiency

The significant revisions being proposed for this section are as follows:

(1) Moves the requirement for the minimum experience requirements for a flight instructor who can train first-time flight instructor candidates to proposed § 61.195.

(2) Establishes separate and revised areas of operation for the flight instructor: -airplane category-single engine class rating, -airplane category-multiengine class rating, -rotorcraft category-helicopter class rating, -rotorcraft category-gyroplane class rating, -glider category-nonpowered class rating, -glider category-powered class rating, -lighter-than-air category-airship class rating, -lighter-than-air category-balloon class rating, and -powered-lift category rating.

Section 61.189 Flight Instructor Records

The proposed revision to this section is the requirement for a flight instructor to retain a copy of each syllabus they use to train students.

Section 61.191 Additional Flight Instructor Ratings

No substantive changes to this section are proposed. The requirement in existing § 61.191(a) that a flight instructor applicant for additional rating must hold an effective pilot certificate with ratings appropriate to the flight instructor rating sought would be moved to proposed § 61.183. The requirement in existing § 61.191(b) that a flight instructor applicant for an additional rating must have at least 15 hours of PIC time in the category and class of aircraft that is appropriate to the flight instructor sought would be moved to proposed § 61.183.

Section 61.193 Flight Instructor Endorsements and Authorizations

The FAA proposes to revise the title of this section from "Flight instructor authorizations" to read "Flight instructor endorsements and authorizations."

The proposed revisions to this section are as follows:

(1) Deletes the detailed listing of instructor endorsements. The listing would be replaced by more general language.

(2) Eliminates the amendment to existing § 61.193 that replaces "terminal control area" with "Class B airspace area."

Section 61.195 Flight Instructor Limitations and Qualifications

The FAA proposes to revise the title from "Flight instructor limitations" to read "Flight instructor limitations and qualifications."

The significant changes in this section are as follows:

(1) Revises the minimum experience requirements for a flight instructor who can train first-time flight instructor candidates.

(2) Makes editorial restructuring and rewording this section.

(3) Includes a revision to the current limitation that a flight instructor may not conduct more than 8 hours of flight training in 24 hours. The FAA proposes to limit a flight instructor to a total of 8 hours of commercial flying in a 24-hour period, and flight training would be considered commercial flying.

(4) Clarifies the current requirement that to give training in an aircraft that requires a type rating, the flight instructor must hold a type rating in

that aircraft. The existing rule implies that the flight instructor is required to hold a type rating on the instructor's pilot and flight instructor certificates. The proposal would specify that flight instructors are required to hold a type rating on their pilot certificate and not their instructor certificate.

(5) Clarifies that a flight instructor, who gives instrument flight training for the issuance of an instrument rating or a type rating that is not limited to VFR, is required to hold the instrument rating, for the category and class of aircraft for which the instrument training is being given, on both the instructor's pilot certificate and flight instructor certificate.

(6) Revises the current flight instructor endorsements. The requirement for a flight instructor to endorse a student pilot's certificate and logbook for supervised PIC cross-country flight would be clarified. Under this proposal, the flight instructor would be required to determine that the flight could be performed within any limitations in the student's logbook that the instructor considers necessary for the safety of flight. The intent of the proposal is to ensure that the dispatching flight instructor is aware of any special limitations pertaining to an individual student.

(7) Clarifies that the flight instructor who endorses a pilot's logbook for a flight review or an instrument proficiency test must have conducted that flight review or instrument proficiency test.

(8) Requires a flight instructor to give all training from a control seat that meets the requirements of § 91.109. Section 91.109 requires, with the exception of a balloon, that the aircraft have fully functioning dual controls. The regulation provides for instrument flight training to be given in a single-engine airplane equipped with a single, functioning, throwover control wheel in place of fixed, dual elevator and aileron controls. Section 91.109 also requires a safety pilot to be in a control seat during simulated instrument flight conditions.

(9) Expands the current rule that requires a flight instructor to have at least 5 flight hours of operating experience as a PIC in the specific make and model of multiengine airplane or helicopter to include powered-lift aircraft. The complexity and flight characteristics of these aircraft require that a flight instructor be proficient in the aircraft and requires that the flight instructor requirements for the powered-lift parallel those requirements for the multiengine airplane and helicopter.

(10) Clarifies that the aircraft in which training is given should have at least two pilot seats and be of the same category and class for which the rating is sought. The proposal would require a flight instructor who trains a person who desires to fly a single-place aircraft to perform the pre-solo training in an aircraft that has 2 pilot seats, is of the same category and class as the single-place aircraft, and has similar flight characteristics to that of the single-place aircraft; and

(11) Clarifies that a flight instructor may not make any self-endorsement for the furtherance of a certificate, rating, proficiency test, flight review, authorization, operating privilege, practical test, or knowledge test. Although this has not been a problem in the past, periodically the FAA receives questions concerning this matter. Because of ambiguities in the rules, the current rules do not specifically prohibit flight instructors from self-endorsing their own logbook to meet the requirements for a flight review, instrument proficiency test, or taking a written or practical test.

(12) Revises the current amendment in this section, by changing the term "terminal control area" to read "Class B airspace area."

Section 61.197 Renewal of Flight Instructor Certificates

On April 13, 1994, the FAA issued Amendment Nos. 61.95 and 141-5 (59 FR 17646) that amends current § 61.197. That amendment deletes the 24 hour training that holders of flight instructor certificates are required to receive in an approved flight instructor refresher clinic. That amendment is contained in this Notice with minor word changes.

The proposed revision to this section are as follows:

(1) Permits applicants for renewal to hold at least a third-class medical certificate at the time of the renewal or meet the proposed medical requirements in the case of an applicant for a glider or balloon rating renewal; and

(2) Revises the requirements for a person to renew a flight instructor certificate. This revision for renewing a flight instructor certificate proposes to state that a person may renew their flight instructor certificate without accomplishing a practical test by presenting to an FAA FSDO:

a. A record of training students that shows during the preceding 24 calendar months, the person has endorsed at least 5 students for a practical test for a certificate or rating, and at least 80 percent of those students passed that test on the first attempt.

b. A satisfactory record that shows during the preceding 24 calendar months, the person has served as a company check pilot, chief flight instructor, company check airman or flight instructor in a part 121 or part 135 operation, or a comparable position involving the regular evaluation of pilots, and provided the FAA FSDO is acquainted with that person's duties and responsibilities and has determined the person has satisfactory knowledge of current pilot training, certification, and standards. An example of a person who would hold a comparable position involving the regular evaluation of pilots would be a designated pilot examiner, pilot proficiency examiner, FAA Flight Standards Inspector, or FAA Aviation Standards Specialist involved with developing pilot training and testing standards.

c. A graduation certificate showing the person satisfactorily accomplished an approved flight instructor refresher course, provided the course was satisfactorily accomplished before the expiration date on the person's flight instructor certificate.

(3) Permits a person who satisfactorily accomplishes the flight instructor renewal requirements within 90 days before the expiration date of their certificate, to be considered to have accomplished the requirements in the month due, and the certificate will be renewed for an additional 24 calendar months beyond the expiration date.

Section 61.199 Expired Flight Instructor Certificates and Ratings

No substantive modifications are proposed in this section.

Section 61.201 Conversion to the Current Flight Instructor Ratings

The FAA proposes to revise the existing § 61.201 and replace it with provisions for earning the following flight instructor certificates and rating that are being proposed: (1) glider category and powered class rating; (2) glider category and nonpowered class rating; (3) lighter-than-air category and airship class rating; (4) instrument-airship rating; (5) lighter-than-air category and balloon class rating; (6) instrument-airplane single-engine; and (7) instrument-airplane multiengine.

Subpart I—Ground Instructors

The FAA proposes to include ground instructor certificates in part 61. This subpart would incorporate the regulations that are currently in part 143, which would be deleted.

Section 61.211 Applicability

This section would describe the applicability of proposed subpart I.

Section 61.213 Eligibility Requirements

This proposed section would:

- (1) include ground instructor certificates and ratings in part 61;
- (2) revise ground instructor certificates and ratings;
- (3) require all applicants for a certificate or rating to read, write, speak, and understand the English language;
- (4) clarify that all applicants for a certificate or rating need to pass a knowledge test; and
- (5) require applicants for a ground instructor certificate or rating to pass a practical test.

The eligibility requirements would continue to waive the "fundamentals of instruction" portion of the knowledge test for certain applicants. (This provision is currently found in FAA Order 8700.1). The reference in existing § 143.11 for a ground instructor applicant to be of good moral character would be eliminated.

Under this section an applicant would not be eligible for a ground instructor certificate if the applicant holds a current flight instructor certificate for the same category and class of aircraft. A flight instructor is permitted to give ground training on the aircraft for which the person holds flight instructor ratings. Therefore, the FAA believes issuing a flight instructor certificate that has identical ground instructing privileges as a ground instructor certificate is unnecessary. A flight instructor would not receive any additional privileges by obtaining a ground instructor certificate in the same category and class.

Section 61.215 Aeronautical Knowledge

The requirements in existing § 143.11 would be clarified to include the minimum knowledge requirements on the fundamentals of instruction and the appropriate aeronautical knowledge areas for the aircraft category rating sought.

This section would require a person who trains a ground instructor applicant to meet minimum experience requirements.

Section 61.217 Ground Instructor Proficiency

This section would include the proposed proficiency requirements that an applicant would be required to meet to pass the proposed practical test.

Section 61.219 Ground Instructor Records

This proposed section would require a ground instructor to sign the records of students to whom ground training is given and retain a record of the training given.

Section 61.221 Additional Ground Instructor Ratings

This section proposes that the holder of a ground instructor certificate who applies for an additional rating on that certificate be required to pass a knowledge test on the subjects that pertain to the rating. Such a requirement (the requirement can be found in FAA Order 8700.1) is not expressed in existing part 143 but currently must be met when adding a rating on a ground instructor certificate.

Section 61.223 Ground Instructor Endorsements and Authorizations

This proposed section would list the endorsements and authorizations that a ground instructor could give. A similar section does not appear in part 143.

Section 61.225 Recency of Experience for a Holder of a Ground Instructor Certificate

This proposed section would establish the recency of experience requirements for a person who holds a ground instructor certificate. The proposal would establish recency of experience requirements that would require a ground instructor to:

1. Give a person training and has endorsed that person for a knowledge or practical test within the preceding 12 calendar months; or
2. Receive an endorsement from an authorized flight or ground instructor, which states that the person has demonstrated satisfactory competence in the knowledge and proficiency requirements listed in proposed §§ 61.215 and 61.217, that apply to the ground instructor ratings held.

Section 61.227 Conversion to the Current System of Ground Instructor Ratings

This proposed section would include the procedures for obtaining the proposed ground instructor ratings.

Appendix A to Part 61—Practical Test Requirements for Airplane Airline Transport Pilot Certificates and Associated Class and Type Ratings

The FAA proposes to delete appendix A from part 61. The proposal is a result of establishing areas of operation in part 61 to parallel the Practical Test Standards that cover the administering

of practical tests for the ATP certificate with the airplane class and type ratings.

Appendix B to Part 61—Practical Test Requirements for Rotorcraft Airline Transport Pilot Certificates With a Helicopter Class Rating and Associated Type Ratings

On August 11, 1992, the FAA proposed deleting appendix B from part 61 in the NPRM No. 92-10, "Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking at Training Centers" (57 FR 35888-35938). Therefore, appendix B of part 61 has not been reprinted in this rulemaking project.

F. Section by Section Discussion of Part 141—Pilot Schools**Subpart A—General***Section 141.1 Applicability*

This proposed section contains format revisions only.

Section 141.3 Certificate required

No modifications are proposed for this section.

Section 141.5 Requirements for a Pilot School Certificate

The proposed changes for this section are as follows:

- (1) Replaces the title "Pilot school certificate" with "Requirements for a pilot school certificate;"
- (2) Includes the proposed modification of a pilot school's quality of training requirements;
- (3) Revises the current requirements for a pilot school certificate by specifying that the application is to be completed in a manner prescribed by the Administrator;
- (4) Clarifies that an applicant for a pilot school certificate must hold a provisional pilot school certificate for at least 24 calendar months prior to applying for a pilot school certificate;
- (5) Revises the current provisions that require in order for an applicant to be issued a pilot school certificate, that applicant must have trained at least 10 students for a certificate or rating and at least 8 of the 10 most recent graduates tested, by an FAA Inspector or examiner, passed that test the first time. The revision in the proposed § 141.5, would require an applicant to have trained and recommended at least 10 students for:

a. A practical or knowledge test for a pilot, flight instructor, or ground instructor certificate or rating, and at least a 80 percent passed the test on the first attempt, and the tests must have been conducted by an FAA inspector or an examiner who is not an employee of the school; or

b. An end-of-course test for a training course in appendix K.

This proposed school certificate issuance requirement deletes the requirement for 8 out of every 10 most recent graduates to have passed the practical or knowledge test on the first attempt. Using this percentage before a school is issued a certificate will ensure more quality of training than the current requirements which pressure schools into ensuring that every 8 out of its most recent 10 graduates passed on the first attempt. During the public hearings, some schools stated that the current requirements place a school in a dilemma by forcing them to pass 8 out of every 10 graduates or lose their school certificate. Under the current requirement, it is conceivable for a provisional pilot school to have graduated over 100 applicants for a practical or knowledge, and have 97 of those applicants pass the required knowledge or practical tests without one failure and then have the next 3 applicants fail the test. Under this scenario, the school would not be qualified to have their certificate issued. Under this proposed revision, the FAA believes quality of training would be maintained, but the schools would not be forced to pass 8 of every 10 graduates in order for a school to be issued. For example, this issuance method would work as follows:

A provisional school graduates 100 students from its part 141-approved courses within the 24 calendar-month period prior to the date application is made for the issuance of a pilot school certificate. Out of those 100 graduates, there were 50 knowledge tests attempted and 100 practical tests attempted for a total of 150 attempts. Out of those 150 practical and knowledge tests attempted, the school would be required to have at least an 80 percent pass rate on the first attempt, or in this case, at least 120 students would have had to pass on the first attempt in order for a pilot school certificate to be issued.

Another example is a provisional school provides only part 141-approved ground school training for an instrument rating course. It graduates only 10 students from its part 141 approved instrument rating ground school course within a 24 calendar month period prior to the date application is made for issuance of a pilot school certificate. Out of those 10 graduates, there were 10 knowledge tests attempted for a total of 10 attempts. Out of those 10 attempts, that provisional school would be required to have at least an 80 percent pass rate on the first attempt, or in this case, at least

8 students would have had to pass on the first attempt in order for a school certificate to be issued.

Another example is a provisional school that has part 141 course approval for a Private Pilot Certification Course under appendix A and also a Test Pilot Course under appendix K. The provisional school graduates 5 students from its Private Pilot Certification Course and 5 from its Test Pilot Course within the 24-calendar month period prior to the date application is made for issuance of a pilot school certificate. Out of those 5 private pilot graduates, there were 5 knowledge tests attempted and 5 practical tests attempted for a total of 10 attempts. There were 5 end-of-course tests accomplished by students enrolled the school's Test Pilot Course. In order for a pilot school certificate to be issued, the provisional pilot school would have to show an 80 percent pass rate on the first attempt for its private pilot applicants. Therefore, 4 private pilot graduates would have to pass the knowledge test on the first attempt, and 4 private pilot graduates would have had to have passed the practical test on the first attempt. Otherwise, the students enrolled in the Test Pilot Course or the other courses of appendix K only count for the recent activity of training requirements.

Section 141.7 Provisional Pilot School Certificate

No substantive changes are proposed for this section.

Section 141.9 Examining Authority

No modifications are proposed for this section.

Section 141.11 Pilot School Ratings

The FAA proposes to revise this section by revising the aeronautical knowledge areas, reorganizing the current certificate courses and eliminating the test courses, and replacing the term, "flight proficiency requirement" with "approved areas of operations."

The proposed changes for this section would establish the following courses:

- (1) *Certification and rating courses:*
 - (i) Recreational pilot course.
 - (ii) Private pilot course.
 - (iii) Commercial pilot course.
 - (iv) Instrument rating course.
 - (v) Airline transport pilot course.
 - (vi) Flight instructor course.
 - (vii) Flight instructor instrument course.
 - (viii) Ground instructor course.
 - (ix) Additional aircraft category or class rating course.
 - (x) Aircraft type rating course.
- (2) *Special preparation courses:*

- (i) Pilot refresher course.
- (ii) Flight instructor refresher course.
- (iii) Ground instructor refresher course.
- (iv) Agricultural aircraft operations course.
- (v) Rotorcraft external-load operations course.
- (vi) Special operations course.
- (vii) Test pilot course.
- (3) *Pilot ground school courses.*

Section 141.13 Application for Issuance, Amendment, or Renewal

Proposed § 141.13 would revise the existing requirement that requires a pilot school to submit three copies of a training course outline for the issuance or amendment of a pilot school certificate or rating. Two copies of the training course outline are sufficient.

Section 141.15 Location of Facilities

No substantive changes are planned. However, the wording of proposed § 141.15 has been changed to a more permissive language to parallel the proposed changes in § 61.2.

Section 141.17 Duration of Certificates and Examining Authority

The FAA proposes to replace the title "Duration of certificates" to read "Duration of certificates and examining authority." The FAA also proposes to add the provision stating that a pilot school or provisional pilot school certificate expires whenever "the Administrator has determined a school has not acted in good faith with a student to whom it has a contractual agreement to provide training." The proposal is a result of past events where some unscrupulous school operators have made contractual agreements with students and then have failed to meet those agreements. As an example, in the 1980's a part 141 school continued to advertise its services when the school was not financially capable. Students were fraudulently required to make payments for the entire course prior to beginning the course. The school requested payment under false pretenses as covering the entire cost of training, room, and board. When the students arrived to begin their training, they were informed the school was bankrupt, and they could only get their training if they would agree to pay for the fuel for the aircraft and pay their own room and board. The FAA was unable to stop this school operator from continuing this unscrupulous practice, because the current rules do not prevent it. Further investigation of this school operator showed that this was not the only time this operator had done this to students. This particular operator would

close up business in one area of the United States after defrauding students, and then begin business in another location. Although the majority of part 141 school operators provide professional flight training and are honorable, unscrupulous operators should not be allowed to continue in business. The FAA believes this proposal will permit it to close down unscrupulous operators in a more expeditious manner.

Section 141.18 Carriage of Narcotic Drugs, Marihuana, and Depressant or Stimulant Drugs or Substances

No modifications are proposed for this section.

Section 141.19 Display of Certificate

Format revisions are proposed for this section.

Section 141.21 Inspections

Format revisions are proposed for this section.

Section 141.23 Advertising Limitations

This section would be revised by clarifying that courses are approved under part 141.

Section 141.25 Business Office and Operations Base

Format revisions are proposed for this section.

Section 141.27 Renewal of Certificates and Ratings

The proposed changes for this section are as follows:

(1) Modifies a pilot school's quality of training requirements. As a result of information obtained during the public hearings and comments received in the docket on this matter, the FAA proposes to revise the quality of training requirements from 8 out of 10 of the most recent graduates pass rate to an 80 percent requirement;

(2) Eliminates the current requirement that the renewal of a certificate must be obtained no less than 30 days prior to the expiration of the provisional pilot school certificate;

(3) Clarifies the requirements for a school that does not meet the proposed renewal requirements may apply for a provisional pilot school certificate; and

(4) Revises the requirements for renewing a pilot school requirement and rating. A pilot school would be required to have trained and recommended at least 10 students for a practical or knowledge test for a pilot, flight instructor, or ground instructor certificate or rating, and at least 80 percent of the students must have passed the test on the first attempt, and

the tests must have been conducted by an FAA inspector or an examiner who is not an employee of the school, or an end-of-course test for a training course in appendix K. As an example, see § 141.5.

Section 141.29 [Reserved]

This section would continue to be reserved.

Subpart B—Personnel, Aircraft, and Facilities Requirements

Section 141.31 Applicability

No substantive changes are proposed for this section.

Section 141.33 Personnel

The proposed changes for this section are as follows:

(1) Permits a pilot school to designate check instructors to conduct student stage checks, end-of-course tests, and instructor proficiency checks.

(2) Clarifies that the assistant chief instructor would be required to meet the requirements of proposed § 141.36.

Section 141.35 Chief Instructor Qualifications

Proposed § 141.35 would delete the current requirement for a person who applies as a chief ground instructor to have 1 year of experience as a ground instructor at a certificated pilot school.

Section 141.36 Assistant Chief Instructor Qualifications

Proposed § 141.36 would delete the current requirement for a person who applies as an assistant chief ground instructor to have 6 months of experience as a ground instructor at a certificated pilot school.

Section 141.37 Check Instructor Qualifications

The FAA proposes to redesignate current § 141.37, "Airports" to § 141.38. Proposed § 141.37, "Check instructor qualifications" would establish the proposed qualifications for a person to be designated as a check instructor.

Section 141.38 Airports

The FAA proposes to redesignate current § 141.37 to § 141.38. Proposed § 141.38 would permit pilot schools at seadromes to use adequate non-permanent lighting or shoreline lighting, approved by the Administrator, for night training flights in seaplanes. Few permanently lighted seadromes are in use. The FAA believes that the existing regulation for permanent lighting at all airports used by a pilot school for night training is not necessary at seadromes. Adequate non-permanent lighting or

shoreline lighting is available for night seaplane takeoff and landing operations.

Section 141.39 Aircraft

The proposed changes for this section are as follows:

(1) Requires aircraft used by a pilot school or a provisional pilot school certificate holder be maintained in accordance with subpart E of part 91.

(2) Requires the school's aircraft to be under an inspection program for each airframe, aircraft engine, propeller, appliance, and component part be maintained.

(3) Requires that the school's aircraft used for the demonstration of instrument skills to be equipped and maintained for IFR operations.

(4) Revises the existing provisions that requires aircraft used for "flight instruction and solo flights in a course of training for agricultural aircraft operations and similar aerial work operations" do not have to hold a standard airworthiness certificate. The revised language would be more general and would permit each aircraft to hold a standard airworthiness certificate unless the Administrator determines that, because of the nature of the approved course, an aircraft not having a standard airworthiness certificate may be used.

(5) Permit the use of aircraft with a primary airworthiness certificate to be used by schools. The purpose for this proposal is a result of an oversight that occurred during the issuance of the Primary Aircraft Final Rule (57 FR 41360; September 9, 1992).

In the "Supplementary Information" section (in the paragraphs entitled "Rental and Flight Instruction" and "Pilot Certification") of that final rule, the FAA stated that the use of primary aircraft are permitted to be used for rental, flight instruction, and pilot certification. However, the FAA did not provide for this in that final rule.

Section 141.41 Flight Training Devices and Training Aids

This proposal would replace the title of the existing § 141.41 "Ground trainers and training aids" with "Flight training devices and training aids." Otherwise, the section would include no substantive changes.

Section 141.43 Pilot Briefing Areas

Format modifications are proposed for this section.

Section 141.45 Ground Training Facilities

Format modifications are proposed for this section.

Subpart C—Training Course Outline and Curriculum*Section 141.51 Applicability*

No modifications are proposed for this section.

Section 141.53 Approval Procedures for a Training Course: General

The FAA proposes to replace the title "Training course outline: General" with "Approval procedures for a training course: General." The proposed section would require two copies of each training course outline to be submitted to the FAA. The existing rule requires an application for approval of an initial or amended training course outline to be in triplicate to the FAA. Two copies of the training course outline are sufficient and the FAA proposes that only two copies be submitted. Making three copies also causes more paper to be generated for any slight variance in a training course.

Commencing in 1 year after the effective date of this rule, proposed § 141.53 would require pilot schools or provisional pilot schools to only request approval for the new training courses.

Section 141.55 Training Course: Contents

The FAA proposed to replace the title "Training course outline: Contents" with "Training course: Contents." The proposal would permit pilot schools to seek approval of training courses that train to a performance standard and would modify a pilot school's quality of training requirements.

Section 141.57 Special Curricula

No substantive changes are proposed for this section.

Subpart D—Examining Authority*Section 141.61 Applicability*

Format modifications are proposed for this section.

Section 141.63 Examining Authority Qualification Requirements

The FAA proposes to replace the title "Application and qualification" with "Examining authority qualification and requirements."

The proposed changes for this section are as follows:

(1) Modifies the quality of training requirements for a pilot school to maintain examining authority.

(2) Deletes the requirement for a specific number of graduates to pass interim tests to retain examining authority. The FAA believes it is more important for students to receive quality training than to pressure schools into ensuring that every 9 out of its most

recent 10 graduates passed on the first attempt.

(3) Specifies that pilot schools would not receive examining authority for training courses that train to a performance standard.

Section 141.65 Privileges

Proposed § 141.65 would permit a pilot school with examining authority to recommend graduates for all pilot, flight instructor, and ground instructor certificates. This would eliminate the existing restriction on examiners from performing practical tests for the flight instructor certificate, ATP certificate, and turbojet type ratings. This issue was raised by Harrison Hamer, who submitted a comment to the FAA in response to the DOT's request for comments (57 FR 4744; February 7, 1992). In addition, the FAA has issued numerous exemptions to this rule without any degradation in safety.

Section 141.67 Limitations and Reports

The proposed changes for this section are as follows:

(1) Deletes the current provision that requires a student at a pilot school with examining authority to accomplish all of the training courses at that school.

(2) Expands the existing requirement for a pilot school with examining authority to submit the training record of each graduate who is recommended for a certificate or rating to a FAA FSDO.

Subpart E—Operating Rules*Section 141.71 Applicability*

No modifications are proposed for this section.

Section 141.73 Privileges

Proposed § 141.73 would be reformatted. Proposed § 141.73 would specify that pilot schools who hold examining authority would not be permitted to seek approval of training courses that train to a performance standard.

Section 141.75 Aircraft Requirements

(1) The FAA proposes to add the proposed test pilot and special operations courses to courses for which an aircraft certificated in the restricted category may be used.

(2) Permit the use of aircraft with a primary airworthiness certificate to be used by schools. The purpose for this proposal is a result of an oversight that occurred during the issuance of the Primary Aircraft Final Rule (57 FR 41360; September 9, 1992).

In the **SUPPLEMENTARY INFORMATION** section (in the paragraphs entitled

"Rental and Flight Instruction" and "Pilot Certification") of that final rule, the FAA stated that the use of primary aircraft are permitted to be used for rental, flight instruction, and pilot certification. However, the FAA did not provide for this in that final rule.

Section 141.77 Limitations

This section would be revised by dividing the current section into two paragraphs. The current reference to "flight check or written test, or both" would be replaced with a "proficiency test or knowledge test or both." The tests could include a flight check, a review of the student's aeronautical knowledge, or both.

Section 141.79 Flight Training

On April 13, 1994, the FAA issued Amendment Nos. 61.95 and 141-5 (59 FR 17646) that amends current § 61.197. That amendment deletes the 24 hour training that holders of flight instructor certificates are required to receive in an approved flight instructor refresher clinic. That amendment is contained in this Notice with minor word changes.

The proposed changes for this section are as follows:

(1) Replaces the term "designated chief instructor or his assistant" with "chief instructor," "assistant chief instructor," or "check instructor."

(2) Permits the assistant chief instructor or check instructor to administer proficiency checks to a school's instructors.

(3) Revises the flight and proficiency checks accomplished by flight instructors.

(4) Requires chief and assistant chief instructors to complete at least once every 12 calendar months an approved syllabus of training consisting of ground or flight training, or both, or an approved flight instructor refresher course.

Section 141.81 Ground Training

This section would be revised to replace "designated chief instructor or his assistant" with "chief instructor," "assistant chief instructor," or "check instructor."

Section 141.83 Quality of Training

The proposed revisions to this section are as follows:

(1) Reformats and rewords this section for clarity.

(2) Modifies the quality of training requirements. This proposal would require a school to provide training of such quality that at least 80 percent of their students for a practical or knowledge test were successful on the first attempt within the period of 24

calendar months prior to the date of application for the school certificate.

Section 141.85 Chief Instructor Responsibilities

The section would be revised by clarifying that the chief instructor serves a supervisory role at a pilot school. The current requirements for the chief instructor to "conduct" checks and tests would be revised for the chief instructor to "ensure" these checks and tests are accomplished. A new paragraph is proposed for this section that would permit the chief instructor to either conduct the check or delegate authority for conducting stage checks, end-of-course tests, and flight instructor proficiency checks to the assistant chief instructor or a check instructor.

Section 141.87 Change of Chief Instructor

Proposed § 141.87 would permit a pilot school or provisional pilot school to replace its chief instructor with an assistant chief instructor or a check instructor, and would permit the assistant chief instructor or check instructor to give stage and end-of-course tests for a maximum of 60 days until a new chief instructor is designated.

Section 141.89 Maintenance of Personnel, Facilities, and Equipment

Editorial modifications are proposed for this section.

Section 141.91 Satellite Bases

Editorial modifications are proposed for this section.

Section 141.93 Enrollment

The proposed revisions to this section would eliminate the requirement for a pilot school to send a copy of each enrollment certificate to its FAA FSDO. The school would be required to maintain a monthly listing of persons enrolled in each course at the school. This proposal would provide paperwork reduction.

Section 141.95 Graduation Certificate

Minor editorial modifications are proposed for this section.

Subpart F—Records

Section 141.101 Training Records

This section would be reformatted.

Appendix A—Recreational Pilot Certification Course

The FAA proposes to establish criteria for a new certification course for recreational pilot certificates. The course in existing appendix A, "Private Pilot Certificate Course (Airplanes),"

would be moved to proposed appendix B.

Appendix B—Private Pilot Certification Course

The FAA proposes to establish criteria for a certification course for a private pilot certificate in all categories of aircraft. The course in existing appendix B, "Private Test Course (Airplanes)," would be eliminated.

Appendix C—Instrument Rating Course

The FAA proposes to establish criteria for an instrument rating course. The course in existing appendix C, "Instrument Rating Course (Airplanes)," would be included in this proposed course.

Appendix D—Commercial Pilot Certification Course

The FAA proposes to establish criteria for a certification course for a commercial pilot certificate. The course in the existing appendix D, "Commercial Pilot Certificate Course (Airplanes)," is included in this proposed certification course.

Appendix E—Airline Transport Pilot Certificate Course

The FAA proposes to establish criteria for a certification course for an ATP certificate with an airplane, helicopter, or powered-lift rating. The course in existing appendix E, "Commercial Test Course (Airplanes)," would be eliminated.

Appendix F—Flight Instructor Certification Course

The FAA proposes to establish criteria for a course for a flight instructor certification course. The courses in existing appendix F, "Rotorcraft, Gliders, Lighter-Than-Air Aircraft and Aircraft Rating Courses," would be moved to proposed appendixes B, C, D, I, and J.

Appendix G—Flight Instructor Instrument (Aircraft Category and Class) Certification Course

The FAA proposes to establish criteria for a course for a flight instructor-instrument certification course. The course in existing appendix G, "Pilot Ground School Courses," would be moved to proposed appendix L.

Appendix H—Ground Instructor Certification Course

The FAA proposes to establish criteria for a course for a ground instructor certification. The courses found in existing appendix H, "Test Preparation Courses," would be moved to proposed appendixes C, E, F, and G.

Appendix I—Additional Aircraft Category or Class Rating Course

The FAA proposes to establish criteria for an additional aircraft category or class rating courses for a person who desires to add an additional category or an additional class rating on their pilot certificate.

Appendix J—Aircraft Type Rating Course, for Other Than Airline Transport Pilot

The FAA proposes to establish criteria for an aircraft type rating course, for other than ATP, for a person who desires to add a type rating on their pilot certificate.

Appendix K—Special Preparation Courses

The FAA proposes to establish criteria for special preparation courses, which would be similar to the current appendix H, "Test Preparation Courses."

Appendix L—Pilot Ground School Course

This proposed appendix would be similar to current appendix G, "Pilot Ground School Courses."

International Civil Aviation Organization and Joint Aviation Regulations

During this regulatory review of parts 1, 61, 141, and 143, the FAA conducted a study that compares Federal Aviation Regulations and International Civil Aviation Organization Regulations. A copy of that comparison study is located at the Federal Aviation Administration, Office of the Chief Counsel, Rules Docket, Room 915G, under Docket No. 25910, 800 Independence Avenue, SW., Washington, DC 20591. Throughout this regulatory review, the FAA has attempted to propose rules that are in harmony with the international community. Where differences will occur, the FAA will comply with FAA Order 2100.13A, The FAA Regulatory Handbook. This Order directs the FAA to identify differences between the International Civil Aviation Organization Regulations and the Federal Aviation Regulations.

The Joint Aviation Regulations (JAR) pilot licensing rulemaking action, which was issued over one year ago and withdrawn, is on hold. To date, no harmonization comparison has been made with the JAR rulemaking action. However, when that rulemaking action is reissued, the FAA intends to conduct a comparison study and will attempt to negotiate conformity for those rules where there are significant differences.

Regulatory Evaluation Summary

Cost-Benefit Analysis

The FAA has considered the impact of this rulemaking action under E.O. 12866 and the Department of Transportation's regulatory policies and procedures. This rulemaking document was reviewed under E.O. 12866, "Regulatory Planning and Review." This section has been determined to be "significant" under the Department of Transportation's regulatory policies and procedures. The FAA prepared a preliminary Economic Assessment for the NPRM. The FAA has evaluated the anticipated costs and benefits, which are summarized below. For more detailed economic information, see the full regulatory evaluation contained in the docket.

Costs

The FAA estimates that the present value of the costs of this proposed rule discounted 7 percent over the next 10 years is \$6.6 million. Proposed § 61.212 on increased recordkeeping requirements is the most costly provision at \$437,000 annually representing 46 percent of the total annual cost of almost \$950,000. Proposed § 61.217 on the practical test for instructor applicants is the second most costly provision at \$435,000 annually, representing 43.9 percent of the total annual cost.

Benefits

The FAA also estimates that the present value of the benefits of this proposed rule discounted 7 percent over the next 10 years is \$368.7 million. Proposed § 61.65 reducing the amount of flight time needed before applying for an instrument rating provides the greatest benefit in cost savings at \$18.7 million annually representing 36 percent of the total annual benefits (\$52.5 million annually). Various provisions that together provide numerous safety benefits result in annual benefits of \$21.1 million or 40 percent of the total.

Economic Conclusions

Based upon the low compliance cost coupled with the large cost savings and the safety benefits, the FAA concludes that the proposed rule is cost beneficial.

Initial Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by government regulations. The RFA requires agencies to review

rules that may have "a significant cost impact on a substantial number of small entities."

All of the major changes in the rules discussed in this NPRM affect pilots, flight instructors, and ground instructors, who are individuals rather than business or government entities. The revisions that impact pilot schools do not exceed the cost-threshold level, as found in the RFA. In fact, as this report shows, the proposed rule would result in net overall annual cost savings of about \$3,000 per pilot school. The FAA has determined that the proposed revisions would not have a significant economic impact on a substantial number of small entities.

International Trade Impact Analysis

The Office of Management and Budget (OMB) requires Federal agencies to determine whether any proposed rule or regulation would have an impact on international trade. The revisions discussed in this NPRM primarily affect the domestic operations of individual pilots, flight instructors and ground instructors, not of business entities. In the case of pilot schools or aircraft operators, it is not likely that the services produced by these entities would involve the international trade flows of aviation products or services and thus do not impact trade opportunities for U.S. firms doing business overseas and foreign firms doing business in the United States. Thus, the FAA believes the proposed changes would have no impact on trade opportunities for both U.S. firms doing business overseas and foreign firms doing business in the United States. The FAA welcomes any comments on this issue.

Federalism Implications

The regulations proposed in this notice would 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 amendment would not have federalism implications requiring the preparation of a Federalism Assessment.

Paperwork Reduction Act Approval

The reporting and recordkeeping requirements associated with this rule are being submitted to the Office of Management and Budget (OMB) for approval in accordance with 44 U.S.C. 35 under OMB No. ; Title: Pilot, Flight Instructor, Ground Instructor, and Pilot School Certification Rules; Form(s)

None; Average Burden Hours per Respondent:

For Further Information Contact: The Information Requirements Division, M-34, Office of the Secretary of Transportation, 400 Seventh Street, SW., Washington, DC 20590; (202) 366-4735.

Comments on these information collection requirements should be submitted to the Office of Information and Regulatory Affairs OMB, Washington, DC 20503, Attention: Desk Officer for FAA. Comments submitted to OMB should also be submitted to the FAA docket.

Specific Time and Hour Requirements

The FAA has proposed specific time and hour requirements in various sections of this NPRM. These specific time and hour requirements may be modified in light of the comments received to the docket, thus modifying the scope of the NPRM.

Conclusion

For the reasons discussed in the preamble, and based on the findings in the Initial Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this proposed regulation is a significant regulatory action under Executive Order 12866. In addition, it is certified that this proposal, if adopted, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This proposal is considered significant under Order DOT 2100.5, Policies and Procedures for Simplification, Analysis, and Review of Regulations. A draft regulatory evaluation of the proposal, including an initial Regulatory Flexibility Determination and International Trade Impact Analysis, has been placed in the docket. A copy may be obtained by contacting the person identified under **FOR FURTHER INFORMATION CONTACT**.

List of Subjects

14 CFR Part 1

General definitions, Abbreviations and symbols, Rules of construction.

14 CFR Part 61

Air safety, Aircraft, Aircraft pilots, Airmen, Airplanes, Aviation safety, Compensation, Education, Foreign persons, Helicopters, Pilots, Rotorcraft, Safety, Students, Teachers, Transportation.

14 CFR Part 141

Air safety, Air transportation, Aircraft pilots, Airmen, Airplanes, Aviation safety, Balloons, Education, Educational facilities, Helicopters, Pilots, Rotorcraft, Safety, Schools, Students, Teachers, Transportation.

14 CFR Part 143

Air safety, Air transportation, Airmen, Airplanes, Aviation safety, Education, Educational Facilities, Safety, Students, Teachers, Transportation.

The Proposed Amendments

In consideration of the foregoing, under the authority at 49 U.S.C. 40113, the Federal Aviation Administration proposes to amend parts 1, 61, 141, and 143 of the Federal Aviation Regulations (14 CFR Parts 1, 61, 141, and 143) as follows:

PART 1—DEFINITIONS AND ABBREVIATIONS

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

Authority: 49 U.S.C. 106(g); 49 U.S.C. 40101–40104, 40109, 40113, and 44701.

2. Section 1.1 is amended by revising the definitions of “balloon”, “flight time”, and “pilot in command” to read as follows:

§ 1.1 General Definitions.

* * * * *

Balloon is an aircraft that is not engine driven, but sustains flight with either gas buoyancy or with an airborne heater.

* * * * *

Flight time means:

(1) Pilot time that commences when an aircraft moves under its own power for the purpose of flight and ends when the aircraft comes to rest after landing; or

(2) For a nonpowered glider, that time when the glider commences being towed for the purpose of flight and ends when the glider comes to rest after landing.

* * * * *

Pilot in command means:

(1) A person who has final authority and responsibility for the operation and safety of the flight;

(2) A person who holds the appropriate category, class, and type rating, if appropriate;

(3) A person who has been designated as pilot in command before or during the flight; and

(4) Involves a flight that occurs in actual flight conditions in an aircraft.

* * * * *

Authority: 49 U.S.C. 106(g); 49 U.S.C. 40101–40104, 40109, 40113, 44701–44703,

44707, 44709–44711, 45102–45103, 45106, and 45301–45302.

3. Part 61 is revised to read as follows:

PART 61—CERTIFICATION: PILOTS, FLIGHT INSTRUCTORS, AND GROUND INSTRUCTORS**Subpart A—General**

Sec.

- 61.1 Applicability.
- 61.1a Clarification of terms.
- 61.2 Certification of foreign pilots, flight instructors, and ground instructors.
- 61.3 Requirement for certificates, ratings, and authorizations.
- 61.5 Certificates and ratings issued under this part.
- 61.7 Obsolete certificates and ratings.
- 61.9 Written syllabus for conducting training.
- 61.11 Expired pilot certificates and reissuance.
- 61.13 Awarding of airman certificates, ratings, and authorizations.
- 61.14 Refusal to submit to a drug test.
- 61.15 Offenses involving alcohol or drugs.
- 61.16 Refusal to submit to an alcohol test or to furnish test results.
- 61.17 Temporary certificate.
- 61.19 Duration of pilot and instructor certificates.
- 61.21 Duration of a Category II pilot authorization.
- 61.23 Duration and requirement for a medical certificate.
- 61.25 Change of name.
- 61.27 Voluntary surrender or exchange of certificate.
- 61.29 Replacement of a lost or destroyed airman or medical certificate or knowledge test report.
- 61.31 Type rating, additional training, and authorization requirements.
- 61.33 Tests: General procedure.
- 61.35 Knowledge test: Prerequisites and passing grades.
- 61.37 Knowledge tests: Cheating or other unauthorized conduct.
- 61.39 Prerequisites for practical tests.
- 61.41 Flight training received from flight instructors not certificated by the FAA.
- 61.43 Practical tests: General procedures.
- 61.45 Practical tests: Required aircraft and equipment.
- 61.47 Status of an examiner who is authorized by the Administrator to conduct practical tests.
- 61.49 Retesting after failure.
- 61.51 Pilot logbooks.
- 61.53 Operations during medical deficiency.
- 61.55 Second-in-command qualifications.
- 61.56 Flight review.
- 61.57 Recent flight experience: Pilot in command.
- 61.58 Pilot-in-command proficiency check: Operation of aircraft requiring more than one required pilot.
- 61.59 Falsification, reproduction, or alteration of applications, certificates, logbooks, reports, or records.
- 61.60 Change of address.

Subpart B—Aircraft Ratings and Special Certificates

- 61.61 Applicability.
- 61.63 Additional aircraft ratings (other than airline transport pilot).
- 61.65 Instrument rating requirements.
- 61.67 Category II pilot authorization requirements.
- 61.69 Glider towing: Experience and training requirements.
- 61.71 Graduates of an approved training program other than under this part: Special rules.
- 61.73 Military pilots or former military pilots: Special rules.
- 61.75 Private pilot certificate issued on basis of a foreign pilot license.
- 61.77 Special purpose pilot authorization: Operation of U.S.-registered civil aircraft leased by a person who is not a U.S. citizen.

Subpart C—Student Pilots

- 61.81 Applicability.
- 61.83 Eligibility requirements for student pilots.
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Subpart A—General**§ 61.1 Applicability.**

(a) This part prescribes the requirements for issuing pilot, flight instructor, and ground instructor certificates and ratings, the conditions under which those certificates and ratings are necessary, and the authorizations, privileges, and limitations of those certificates and ratings.

(b) This part prescribes the requirements for issuing pilot, flight instructor, and ground instructor certificates and ratings for persons who have taken courses approved by the Administrator under other parts of this chapter.

§ 61.1a Clarification of terms.

For the purposes of this part:

(a) *Aeronautical experience* means pilot time obtained in an aircraft, flight

simulator, or flight training device for meeting the appropriate training and flight time for an airman certificate, rating, flight review, or recency of flight experience, of this part.

(b) *Airman certificate* means all pilot certificates (other than a student pilot certificate), flight instructor certificates, and ground instructor certificates issued under this part.

(c) *Authorized ground instructor* means—

(1) A person who holds a current ground instructor certificate issued under this part with ratings that apply to the training being given, and that person is authorized by the Administrator to give the training; or

(2) Any other person authorized by the Administrator to give ground training under this part in accordance with privileges and limitations specified by the Administrator.

(d) *Authorized flight instructor* means—

(1) A person who holds a current flight instructor certificate issued under this chapter with ratings that apply to the training being given, and that person is authorized by the Administrator to give the training; or

(2) Any other person authorized by the Administrator to give flight training under this part in accordance with privileges and limitations specified by the Administrator.

(e) *Cross-country time* means that time obtained in actual flight and, except as provided in paragraph (f)(3) of this section, each flight must include a landing at a point other than the point of departure, and—

(1) The person must—

(i) Hold a private, commercial pilot, or airline transport certificate issued under this part; and

(ii) Have used dead reckoning, pilotage, electronic navigation aids, or radio aids to navigate to the landing point.

(2) For the purpose of meeting the cross-country time eligibility requirements for a private or commercial pilot certificate or an instrument rating, the person must have obtained the time in actual flight, and—

(i) The point of landing must be at least a straight-line distance of more than 50 nautical miles from the point of departure; and

(ii) Dead reckoning, pilotage, electronic navigation aids, or radio aids were used to navigate to the landing point.

(3) For a military pilot, who holds or is qualified for a private or commercial pilot certificate under § 61.73 of this part, cross-country time is that time obtained—

(i) In actual flight in a military aircraft; and

(ii) On a flight that is at least a straight-line distance of more than 50 nautical miles from the point of departure, and dead reckoning, pilotage, electronic navigation aids, or radio aids were used for navigation.

(f) *Examiner* means any person who is authorized by the Administrator to conduct a practical test for an airman certificate or rating issued under this part, or a person who is authorized to conduct a knowledge test under this part.

(g) *Flight training* means that training, other than ground training, received from an authorized flight instructor in actual flight in an aircraft.

(h) *Ground training* means that training, other than flight training, received from an authorized ground or flight instructor.

(i) *Instrument approach* means an approach procedure, defined in part 97 of this chapter, that is conducted to an established minimum descent altitude (MDA) or decision height (DH), or if necessary, to a higher altitude selected by the air traffic control (ATC) facility with jurisdiction over that airspace for safety reasons.

(j) *Instrument Training* means that time in which instrument training is received from an authorized flight instructor under actual or simulated instrument flight conditions.

(k) *Knowledge Test* means a test on the aeronautical knowledge areas required for an airman certificate or rating that can be administered in a written form or by computer.

(l) *Pilot Time* means that time in which a person operates as a required pilot, receives training from an authorized instructor, gives training as an authorized flight instructor in an aircraft, or gives training as an authorized flight or ground instructor in an approved flight simulator, or approved flight training device.

(m) *Practical test* means a test on the approved areas of operations for an airman certificate, a rating, or an authorization that is conducted by having the applicant respond to questions and demonstrate maneuvers in actual flight, an approved flight simulator, or approved flight training device.

(n) *Supervised PIC time* is flight time in an aircraft that applies to either a student pilot or pilot who is not rated in the aircraft flown, but is under the supervision and authorization of an authorized flight instructor to conduct the flight. Depending on the crew complement specifications set forth in the aircraft's flight manual, the flight

instructor may be onboard the aircraft in an assigned crewmember position. In those cases, the flight instructor shall act in the capacity of an assigned crew member and evaluate the person's ability to act as a pilot in command.

(o) *Training time* means training received in actual flight from an authorized flight instructor, on the ground from an authorized ground or flight instructor, or in a flight simulator or flight training device from an authorized ground or flight instructor.

§ 61.2 Certification of foreign pilots, flight instructors, and ground instructors.

(a) Except as provided for in paragraph (b) of this section, an airman certificate may not be issued to a person who is not a citizen of the United States or a resident alien of the United States unless that person satisfactorily accomplishes the appropriate knowledge or practical test within the United States.

(b) A person who is not a citizen of the United States or a resident alien of the United States may be issued an airman certificate, and the knowledge and practical test for that certificate may be administered outside the United States when:

(1) The Administrator determines the person needs a pilot certificate to operate as a required pilot crewmember of a civil aircraft of U.S. registry;

(2) The Administrator determines the person needs a flight instructor or ground instructor certificate to train persons who are citizens or resident aliens of the United States;

(3) The certificate is for an addition of a category, class, instrument, or type rating onto an existing U.S. pilot certificate, and provided the certificate is not one that was issued on the basis of a foreign pilot license;

(4) The certificate is for an addition, renewal, or reinstatement of a category, class, or instrument rating onto an existing U.S. flight instructor certificate; or

(5) The certificate is for an addition, renewal, or reinstatement of a category rating onto an existing U.S. ground instructor certificate.

§ 61.3 Requirement for certificates, ratings, and authorizations.

(a) *Pilot certificate.* Persons may not act as pilot in command or in any other capacity as a required pilot of a civil aircraft of U.S. registry, unless they have a valid airman certificate in their physical possession or readily accessible in the aircraft when exercising the privileges of their airman certificate.

(b) *Required pilot certificate for operating a foreign registered aircraft.*

Persons may not act as pilot in command or in any other capacity as a required pilot of a civil aircraft of foreign registry within the United States, unless their airman certificate:

(1) Is valid and in their physical possession, or readily accessible in the aircraft when exercising the privileges of their airman certificate; and

(2) Has been issued under this part or by the country in which the aircraft is registered.

(c) *Medical certificate.*

(1) Except as provided for in paragraph (c)(2) of this section, a person who is serving as a required crewmember under any part of this chapter must have a:

(i) Current and appropriate medical certificate that has been issued under part 67 of this chapter; and

(ii) Medical certificate in the person's physical possession or readily accessible in the aircraft when exercising the privileges of that airman certificate.

(2) A person is not required to meet the requirements of paragraph (c)(1) of this section, if that person:

(i) Is holding a pilot or flight instructor certificate with a balloon or a glider rating and is piloting or training in a balloon or a glider as appropriate;

(ii) Is a student pilot who is seeking a recreational pilot certificate, or who is seeking a pilot certificate with a glider category rating or balloon class rating;

(iii) Is exercising the privileges of a recreational pilot certificate;

(iv) Is exercising the privileges of a flight instructor certificate, provided the person is not serving as a required crewmember or as the pilot-in-command;

(v) Is exercising the privileges of a ground instructor certificate;

(vi) Is operating an aircraft within a foreign country with a pilot certificate issued by that country and is using that foreign-issued pilot license and medical certificate; or

(vii) Is operating an aircraft with a U.S. pilot certificate issued on the basis of a foreign pilot license, issued under § 61.75 of this part, and holds a current medical certificate issued by the foreign country that issued the foreign pilot license.

(d) *Flight instructor certificate.*

(1) Persons who hold a flight instructor certificate must have that certificate in their physical possession or readily accessible in the aircraft when exercising the privileges of that flight instructor certificate.

(2) Except as provided in paragraphs (d) (3) and (4) of this section, no person other than the holder of a flight instructor certificate with the

appropriate rating on that certificate or a person authorized by the Administrator may:

(i) Give training required to qualify a person for supervised PIC flight and supervised PIC cross-country flight;

(ii) Endorse on a pilot, flight instructor, or ground instructor certificate or rating issued under this part;

(iii) Endorse a pilot logbook to show training given; or

(iv) Endorse a student pilot certificate or logbook for supervised PIC operating privileges.

(3) A flight instructor certificate is not necessary if:

(i) The training is in accordance with a part 121 or part 135 air carrier approved training program;

(ii) The training is given by the holder of an airline transport pilot certificate under part 121 or 135 of this chapter; and

(iii) The person receiving the training and the person giving the training are employees of that air carrier.

(4) A flight instructor certificate is not necessary if the training is given by an instructor as prescribed in § 61.41 of this part.

(e) *Instrument rating.* Except as provided for in paragraph (k)(4) of this section, no person may act as pilot in command of a civil aircraft under IFR or in weather conditions less than the minimums prescribed for VFR flight unless that person holds:

(1) The appropriate aircraft category, class, type, if required, and instrument rating on that person's pilot certificate for the aircraft being flown;

(2) An airline transport pilot certificate with the appropriate aircraft category, class, and type rating, if required, for the aircraft being flown; or

(3) For a glider, the appropriate glider class rating on that person's pilot certificate and:

(i) An airplane single-engine class rating with an instrument-airplane single-engine rating; or

(ii) An airline transport pilot certificate with an airplane single-engine class rating.

(f) *Category II pilot authorization.*

Except as provided in paragraph (f)(3) of this section, no person may act as a required pilot flight crewmember of a civil aircraft in a Category II operation unless that person meets the following requirements of this paragraph:

(1) The pilot in command must hold a current Category II pilot authorization for that type aircraft, and—

(i) Hold a private pilot or commercial pilot certificate with an instrument rating or an airline transport pilot certificate, appropriate to the category

and class of aircraft to be flown, and hold a current Category II pilot authorization for that type aircraft; or

(ii) For a civil aircraft of foreign registry, be authorized by the country where the aircraft is registered to conduct Category II operations.

(2) The second in command must—

(i) Hold a private pilot or commercial pilot certificate with an instrument rating, or an airline transport pilot certificate, appropriate to the category and class of aircraft to be flown.

(ii) For a civil aircraft of foreign registry, be authorized by the country where the aircraft is registered to conduct Category II operations as a second in command.

(3) paragraphs (f)(1) and (f)(2) of this section do not apply to pilots conducting Category II operations under part 121 or part 135 of this chapter.

(g) *Category A aircraft authorization.* The Administrator may issue a certificate of authorization for a Category II operation to the pilot of a small aircraft that is a Category A aircraft, as identified in § 97.3(b)(1) of this chapter if:

(1) The Administrator determines the Category II operation can be performed safely by that pilot under the terms of the certificate of authorization; and

(2) The Category II operation does not involve the carriage of persons or property for compensation or hire.

(h) *Ground instructor certificate.*

(1) Each person who holds a ground instructor certificate must have that certificate in their physical possession and immediately accessible when exercising the privileges of that certificate.

(2) Except as provided in paragraph (d) of this section, no person other than the holder of a ground instructor certificate with the appropriate rating on that certificate or a person authorized by the Administrator may:

(i) Give ground training required to qualify a person for supervised PIC flight and supervised PIC cross-country flight;

(ii) Give an endorsement on a pilot, flight instructor, or ground instructor certificate or rating, issued under this part; or

(iii) Endorse a pilot logbook to show training given.

(i) *Age limitation.* A person who is 60 years of age or older and who holds an airmen certificate, issued in accordance with this part, may not act as a required pilot crewmember while engaging in any scheduled international air services, non-scheduled international air transportation, or common carriage operation for compensation or hire in a civil aircraft having a:

(1) Passenger seating configuration of more than 30 seats, excluding any required crewmember seat; or

(2) Payload capacity of more than 7500 pounds (3400 kg).

(j) *Special purpose pilot authorization.* Persons that are required to hold a special purpose pilot authorization, issued in accordance with § 61.77 of this part, must have that authorization and their foreign pilot license in their physical possession or have it readily accessible in the aircraft, when exercising the privileges of that authorization.

(k) Until [insert date 2 years after the effective date of the final rule], a person with a commercial pilot certificate with a lighter-than-air category rating, which was issued prior to [insert effective date of the final rule], may:

(1) Give training in an airship or a balloon for the issuance of a certificate or rating;

(2) Give an endorsement on a pilot, flight instructor, or ground instructor certificate for an airship or balloon;

(3) Endorse a student pilot certificate or logbook for supervised PIC operating privileges in an airship or balloon; and

(4) Act as pilot in command of an airship under IFR or in weather conditions less than the minimum prescribed for VFR flight, if the person holds an airship class rating.

(l) *Inspection of certificate.* Each person who holds an airman certificate, medical certificate, authorization, or license required by this part must present it for inspection upon a request from:

(1) The Administrator;

(2) An authorized representative of the National Transportation Safety Board; or

(3) Any Federal, State, or local law enforcement officer.

§ 61.5 Certificates and ratings issued under this part.

(a) The following certificates are issued under this part to an applicant who satisfactorily accomplishes the training and certification requirements for the certificate sought:

(1) Pilot certificates—

(i) Student pilot.

(ii) Recreational pilot.

(iii) Private pilot.

(iv) Commercial pilot.

(v) Airline transport pilot.

(2) Flight instructor certificates.

(3) Ground instructor certificates.

(b) The following ratings are placed on a pilot certificate (other than student pilot) when an applicant satisfactorily accomplishes the training and certification requirements for the rating sought:

(1) Aircraft category ratings—

(i) Airplane.

(ii) Rotorcraft.

(iii) Glider.

(iv) Lighter-than-air.

(v) Powered lift.

(2) Airplane class ratings—

(i) Single-engine land.

(ii) Multiengine land.

(iii) Single-engine sea.

(iv) Multiengine sea.

(3) Rotorcraft class ratings—

(i) Helicopter.

(ii) Gyroplane.

(4) Glider class ratings—

(i) Powered.

(ii) Nonpowered.

(5) Lighter-than-air class ratings—

(i) Airship.

(ii) Balloon.

(6) Aircraft type ratings include the following—

(i) Large aircraft other than lighter-than-air.

(ii) Turbojet-powered airplanes.

(iii) Other aircraft type ratings specified by the Administrator through the aircraft type certification procedures.

(7) Instrument ratings (on private and commercial pilot certificates only) include the following—

(i) Instrument—airplane single-engine.

(ii) Instrument—airplane multiengine.

(iii) Instrument—helicopter.

(iv) Instrument—airship.

(v) Instrument—powered-lift.

(c) The following ratings are placed on a flight instructor certificate when an applicant satisfactorily accomplishes the training and certification requirements for the rating sought:

(1) Aircraft category ratings—

(i) Airplane.

(ii) Rotorcraft.

(iii) Glider.

(iv) Lighter-than-air.

(v) Powered-lift.

(2) Airplane class ratings—

(i) Single-engine.

(ii) Multiengine.

(3) Rotorcraft class ratings—

(i) Helicopter.

(ii) Gyroplane.

(4) Glider class ratings—

(i) Powered.

(ii) Nonpowered.

(5) Lighter-than-air class ratings—

(i) Airship.

(ii) Balloon.

(6) Instrument ratings—

(i) Instrument—airplane single-engine.

(ii) Instrument—airplane multiengine.

(iii) Instrument—helicopter.

(iv) Instrument—airship.

(v) Instrument—powered lift.

(d) The following ratings are placed on a ground instructor certificate when

an applicant satisfactorily accomplishes the training and certification requirements for the rating sought:

- (1) Aircraft category ratings—
 - (i) Airplane.
 - (ii) Rotorcraft.
 - (iii) Glider.
 - (iv) Lighter-than-air.
 - (v) Powered lift.
- (2) Instrument rating.
- (e) Until [insert date 2 years from effective date of the final rule]:
 - (1) A person who holds a pilot certificate that does not bear the current ratings found in paragraphs (b)(4), (b)(7)(i), (b)(7)(ii), or (b)(7)(iv) of this section, may exchange that pilot certificate for a certificate with the new rating added by meeting the requirements of this paragraph.
 - (2) A person who holds a commercial pilot certificate with a lighter-than-air category and an airship class rating may exchange that certificate for a certificate with an instrument—airship rating, provided that person has—
 - (i) Received an endorsement from an authorized flight instructor who holds an instrument—airship rating on the flight instructor certificate, and that flight instructor has observed that person perform 10 hours of pilot-in-command time in an airship under IFR; or
 - (ii) Passed an instrument proficiency test in an airship given by an examiner and required by § 61.57(e) of this part.
 - (f) Until [insert date 2 years from effective date of the final rule], a person who holds a private or commercial pilot certificate with an airplane category rating and an instrument rating that does not bear the airplane instrument ratings of paragraph (b)(7)(i) or (b)(7)(ii) of this section may exchange that certificate for a private or commercial pilot certificate, as appropriate, with an:
 - (1) Instrument-airplane single engine rating, provided that person has an airplane single-engine class rating and has satisfactorily accomplished the practical test for an instrument rating in a single-engine or multiengine airplane; and
 - (2) Instrument-airplane multiengine rating, provided that person has an airplane multiengine class rating and has satisfactorily accomplished the practical test for an instrument rating in a—
 - (i) Multiengine airplane; or
 - (ii) Single-engine airplane and also demonstrated instrument proficiency during the practical test for the multiengine class rating such that the person's certificate does not bear the limitation "Airplane Multiengine VFR Only."
 - (g) A person who holds a commercial or private pilot certificate with a glider

category rating may exchange that certificate for one with the current nonpowered glider class rating and without a further showing of proficiency, provided that person:

- (1) Holds a glider category rating; and
- (2) Has passed a practical test in a nonpowered glider.

(h) A person who holds a commercial or private pilot certificate may exchange that certificate for one with the current powered glider class rating and without a further showing of proficiency, provided that person:

- (1) Holds a glider category rating; and
- (2) Has passed a practical test in a powered glider.

§ 61.7 Obsolete certificates and ratings.

- (a) The holder of a free balloon pilot certificate issued before November 1, 1973, may not exercise the privileges of that certificate.
- (b) The holder of a pilot certificate that bears any of the following category ratings without an associated class rating, may not exercise the privileges of that category rating:
 - (1) Rotorcraft.
 - (2) Lighter-than-air.
 - (3) Helicopter.
 - (4) Autogiro.
- (c) After [insert date 2 years from effective date of the final rule], the holder of the following certificates or ratings may not exercise the privileges of those certificates and ratings:
 - (1) Airplane—instrument rating.
 - (2) Glider category without a class rating.
 - (3) Basic ground instructor.
 - (4) Advanced ground instructor.
 - (5) Instrument ground instructor.

§ 61.9 Written syllabus for conducting training.

An authorized ground or flight instructor, as appropriate, who provides training for an airman certificate or rating issued under this part must:

- (a) Use a written syllabus for conducting that training, and that syllabus must contain the following information—
 - (1) A summary of the total training time in the syllabus;
 - (2) A planned training time schedule for each lesson;
 - (3) A detailed description of the training to be covered in each lesson; and
 - (4) The aeronautical knowledge areas and approved areas of operation that are appropriate to the airman certificate and rating sought and required by this part.
- (b) Ensure that the written syllabus contains all of the aeronautical knowledge areas and approved areas of operation that apply to the airman

certificate and rating sought and required by this part;

- (c) Furnish a copy of the written syllabus to the student before that student commences the training program;
- (d) Ensure that the student has accomplished all lessons of the written syllabus before endorsing that student for the appropriate knowledge or practical test for a certificate or rating;
- (e) Maintain a copy of the written syllabus and make it available for inspection by the Administrator upon request; and
- (f) Provide the student with an itemized written record of the training accomplished when that student accomplishes the training syllabus or decides to terminate training.

§ 61.11 Expired pilot certificates and reissuance.

- (a) No person who holds an expired pilot certificate or rating may act as a pilot and/or exercise the privileges of that pilot certificate and rating.
- (b) The following pilot certificates and ratings have expired and may not be reissued:
 - (1) An airline transport pilot certificate issued before May 1, 1949, or an airline transport pilot certificate that contains a horsepower limitation;
 - (2) A private or commercial pilot certificate issued before July 1, 1945; or
 - (3) A pilot certificate with a lighter-than-air or free balloon rating issued before July 1, 1945.
- (c) A pilot certificate, issued on the basis of a foreign pilot license will expire on the date the foreign license expires.
- (d) An airline transport pilot certificate issued after April 30, 1949, that bears an expiration date but does not contain a horsepower limitation may be reissued without an expiration date.
- (e) A private or commercial pilot certificate issued after June 30, 1945, that bears an expiration date may be reissued without an expiration date.
- (f) A pilot certificate with a lighter-than-air or free balloon rating issued after June 30, 1945, that bears an expiration date may be reissued without an expiration date.
- (g) A U.S. pilot certificate, issued on the basis of a foreign pilot license that does not have an expiration date, may be issued without an expiration date.

§ 61.13 Awarding of airman certificates, ratings, and authorizations.

- (a) An applicant for an airman certificate or rating under this part must make that application on a form and in a manner acceptable to the Administrator.

(b) An applicant who is neither a United States citizen nor a resident alien of the United States:

(1) Must show evidence that the appropriate fee prescribed by part 187 of this chapter has been paid when that person applies for a—

(i) Student pilot certificate that is issued outside the United States; or

(ii) Knowledge or practical test for a U.S. airman certificate or rating issued under this part, if the test is administered outside the United States.

(2) May be refused issuance of any U.S. airman certificate and rating by the Administrator.

(c) Except for the provisions listed in paragraph (b) of this section, an applicant who satisfactorily accomplishes the training and certification requirements for the certificate and rating sought is entitled to receive that airman certificate and rating.

(d) *Limitations.*

(1) An applicant who cannot comply with certain approved areas of operation required on the practical test because of physical limitations may be issued an airman certificate and rating with the appropriate limitation placed on the applicant's airman certificate provided the:

(i) Applicant is able to meet all the other certification requirements for the airman certificate or rating sought;

(ii) Physical limitation has been recorded with the Federal Aviation Administration on the applicant's medical records; and

(iii) Administrator determines the applicant's inability to perform the particular area of operation will not adversely affect safety.

(2) A limitation placed on a person's airman certificate may be removed, provided that person demonstrates satisfactory proficiency:

(i) In the area of operation appropriate to the airman certificate level and rating sought; and

(ii) To an examiner.

(e) *Category II pilot authorization.*

(1) A Category II pilot authorization is:

(i) Issued as a part of a pilot's instrument rating or airline transport pilot certificate; and

(ii) Issued originally with a limitation of 1600 feet runway visual readout and a 150-foot decision height.

(2) The limitation in paragraph (e)(1)(ii) of this section may be removed when the person has, within the previous 6 calendar months from the month Category II pilot authorization is issued, performed and logged 3 Category II approaches to a landing under actual or simulated instrument conditions with a 150-foot decision height.

(f) Unless otherwise authorized by the Administrator, a person whose airman certificate has been suspended may not apply for any airman certificate or rating during the period of suspension.

(g) Unless otherwise authorized by the Administrator, a person whose pilot, flight instructor, or ground instructor certificate has been revoked may not apply for any airman certificate or rating for 1 year after the date of revocation.

§ 61.14 Refusal to submit to a drug test.

(a) This section applies to:

(1) An employee who performs a function listed in appendix I to part 121 of this chapter for a part 119 certificate holder operating under part 121 or part 135; and

(2) An employee who performs a function listed in appendix I to part 121 of this chapter for an operator as defined in § 135.1(c) of this chapter. An employee of a person conducting operations of foreign civil aircraft navigated within the United States pursuant to part 375 or emergency mail service operations pursuant to section 405(h) of the Federal Aviation Act of 1958 is excluded from the requirements of this section.

(b) Refusal by the holder of a certificate issued under this part to take a test for a drug specified in appendix I of part 121 of this chapter, when requested by an employer as defined in that appendix or an operator as defined in § 135.1(c) of this chapter, and under the circumstances specified in that appendix is grounds for:

(1) Denial of an application for any certificate or rating issued under this part for a period of up to 1 year after the date of that refusal; and

(2) Suspension or revocation of any certificate or rating issued under this part.

§ 61.15 Offenses involving alcohol or drugs.

(a) A conviction for the violation of any Federal or state statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances is grounds for:

(1) Denial of an application for any certificate or rating issued under this part for up to 1 year after the date of final conviction; or

(2) Suspension or revocation of any certificate or rating issued under this part.

(b) Committing an act prohibited by § 91.17(a) or § 91.19(a) of this chapter is grounds for:

(1) Denial of an application for a certificate or rating issued under this

part for up to 1 year after the date of that act; or

(2) Suspension or revocation of any certificate or rating issued under this part.

(c) For the purposes of paragraphs (d) and (e) of this section, a motor vehicle action means:

(1) A conviction after November 29, 1990, for the violation of any Federal or state statute relating to the operation of a motor vehicle while intoxicated by alcohol or a drug, while impaired by alcohol or a drug, or while under the influence of alcohol or a drug;

(2) The cancellation, suspension, or revocation of a license to operate a motor vehicle by a state after November 29, 1990, for a cause related to the operation of a motor vehicle while intoxicated by alcohol or a drug, while impaired by alcohol or a drug, or while under the influence of alcohol or a drug; or

(3) The denial after November 29, 1990, of an application for a license to operate a motor vehicle by a state for a cause related to the operation of a motor vehicle while intoxicated by alcohol or a drug, while impaired by alcohol or a drug, or while under the influence of alcohol or a drug.

(d) Except for a motor vehicle action that results from the same incident or arises out of the same factual circumstances, a motor vehicle action occurring within 3 years of a previous motor vehicle action is grounds for:

(1) Denial of an application for any certificate or rating issued under this part for up to 1 year after the date of the last motor vehicle action; or

(2) Suspension or revocation of any certificate or rating issued under this part.

(e) Each person holding a certificate issued under this part shall provide a written report of each motor vehicle action to the FAA, Civil Aviation Security Division (AAC-700), P.O. Box 25810, Oklahoma City, OK 73125, not later than 60 days after the motor vehicle action. The report must include:

(1) The person's name, address, date of birth, and airman certificate number;

(2) The type of violation that resulted in the conviction or the administrative action;

(3) The date of the conviction or administrative action;

(4) The state that holds the record of conviction or administrative action; and

(5) A statement of whether the motor vehicle action resulted from the same incident or arose out of the same factual circumstances related to a previously reported motor vehicle action.

(f) Failure to comply with paragraph (e) of this section is grounds for:

(1) Denial of an application for any certificate or rating issued under this part for up to 1 year after the date of the motor vehicle action; or

(2) Suspension of revocation of any certificate or rating issued under this part.

§ 61.16 Refusal to submit to an alcohol test or to furnish test results.

A refusal to submit to a test to indicate the percentage by weight of alcohol in the blood, when requested by a law enforcement officer in accordance with § 91.17(c) of this chapter, or a refusal to furnish or authorize the release of the test results requested by the Administrator in accordance with § 91.17(c) or (d) of this chapter, is grounds for:

(a) Denial of an application for any certificate or rating issued under this part for up to 1 year after the date of that refusal; or

(b) Suspension or revocation of any certificate or rating issued under this part.

§ 61.17 Temporary certificate.

(a) A temporary pilot or flight instructor certificate, or rating, is issued for up to 120 days, at which time a permanent certificate will be issued to a person whom the Administrator finds qualified under this part.

(b) A temporary pilot or flight instructor certificate, or rating, expires:

(1) On the expiration date shown on the certificate;

(2) Upon receipt of the permanent certificate; or

(3) Upon receipt of a notice that the certificate or rating sought is denied or revoked.

§ 61.19 Duration of pilot and instructor certificates.

(a) *General.* The holder of a certificate with an expiration date may not, after that date, exercise the privileges of that certificate.

(b) *Student pilot certificate.* A student pilot certificate expires 24-calendar months from the month in which it is issued.

(c) *Other pilot certificates.* A pilot certificate (other than a student pilot certificate), issued under this part, is issued without a specific expiration date. The holder of a pilot certificate (issued on the basis of a foreign pilot license) may exercise the privileges of that certificate only while that person's foreign pilot license is effective.

(d) *Flight instructor certificate.* A flight instructor certificate:

(1) Is effective only while the holder has a current pilot certificate; and

(2) Expires 24-calendar months from the month in which it was issued or renewed.

(e) *Ground instructor certificate.* A ground instructor certificate, issued under this part, is issued without a specific expiration date.

(f) *Surrender, suspension, or revocation.* Any certificate issued under this part ceases to be effective if it is surrendered, suspended, revoked, or otherwise terminated.

(g) *Return of certificates.* The holder of any certificate, issued under this part, that has been suspended, revoked, or otherwise terminated must return that certificate to the FAA when requested to do so by the Administrator.

§ 61.21 Duration of a Category II pilot authorization.

(a) A Category II pilot authorization expires 6-calendar months from the month in which it was issued or renewed.

(b) Upon passing a practical test for a Category II pilot authorization, the authorization may be renewed for each type aircraft for the authorization held.

(c) A Category II pilot authorization for a specific type aircraft for which an authorization is held will not be renewed beyond 12-calendar months from the month the practical test was accomplished in that type aircraft.

(d) If the holder of a Category II pilot authorization satisfactorily accomplishes the practical test for a renewal in the month before the authorization expires, the holder is considered to have accomplished it during the month the authorization expired.

§ 61.23 Duration and requirement for a medical certificate.

(a) *Duration of a medical certificate.*

(1) A first-class medical certificate expires at the end of the last day of the 6th calendar month from the month of issuance shown on the medical certificate.

(2) A second-class medical certificate expires at the end of the last day of the 12th calendar month from the month of issuance shown on the medical certificate.

(3) A third-class medical certificate expires on the last day of the 24th calendar month from the month of issuance shown on the medical certificate.

(b) *Requirement for a medical certificate.* Except as provided in paragraph (b)(4) of this section, a person:

(1) Must hold at least a first-class medical certificate for flight operations requiring an airline transport pilot certificate;

(2) Must hold at least a second-class medical certificate for flight operations requiring a commercial pilot certificate;

(3) Must hold at least a third-class medical certificate—

(i) For flight operations requiring a private pilot certificate or a person who holds a student pilot certificate who is seeking a private pilot certificate or rating;

(ii) To be eligible for a student pilot certificate and that person is seeking a private pilot certificate, or a person who holds a private pilot certificate issued under this part; or

(iii) When exercising the privileges of a flight instructor certificate and the person is serving as a required crewmember or as the pilot-in-command.

(4) Does not need to hold a medical certificate—

(i) For a student pilot who is seeking a recreational pilot certificate, or who is seeking a pilot certificate with glider category rating or balloon class rating, but the person may not exercise the privileges of that student pilot certificate if the person has any known medical condition or deficiency that makes the person unable to pilot the aircraft;

(ii) When exercising the privileges of a recreational pilot certificate, but the person may not exercise the privileges of that pilot certificate if the person has any known medical condition or deficiency that makes the person unable to pilot the aircraft;

(iii) When exercising the privileges of a pilot certificate or flight instructor certificate with a glider category rating or balloon class rating, but the person may not exercise the privileges of that pilot certificate if the person has any known medical condition or deficiency that makes the person unable to pilot the aircraft;

(iv) When exercising the privileges of a flight instructor certificate, provided the person is not serving as a required crewmember or as the pilot-in-command; or

(v) When exercising the privileges of a ground instructor certificate.

§ 61.25 Change of name.

(a) An application to change the name on a certificate issued under this part must be accompanied by the applicant's:

(1) Current pilot certificate; and
(2) Copy of the marriage license, court order, or other document verifying the name change.

(b) The documents in paragraph (a) of this section will be returned to the applicant after inspection.

§ 61.27 Voluntary surrender or exchange of certificate.

(a) The holder of a certificate issued under this part may voluntarily surrender it for:

- (1) Cancellation;
- (2) Issuance of a lower grade certificate; or
- (3) Another certificate with specific ratings deleted.

(b) Any request made under paragraph (a) of this section must include the following signed statement or its equivalent:

This request is made for my own reasons, with full knowledge that my (insert name of certificate or rating, as appropriate) may not be reissued to me unless I again pass the tests prescribed for its issuance.

§ 61.29 Replacement of a lost or destroyed airman or medical certificate or knowledge test report.

(a) A request for the replacement of a lost or destroyed airman certificate issued under this part shall be made by letter to the Department of Transportation, Federal Aviation Administration, Airman Certification Branch, P.O. Box 25082, Oklahoma City, OK 73125, and shall be accompanied by a check or money order for the appropriate fee and payable to the Federal Aviation Administration.

(b) A request for the replacement of a lost or destroyed medical certificate shall be made by letter to the Department of Transportation, Federal Aviation Administration, Aeromedical Certification Branch, P.O. Box 25082, Oklahoma City, OK 73125, and shall be accompanied by a check or money order for the appropriate fee and payable to the Federal Aviation Administration.

(c) A request for the replacement of a lost or destroyed knowledge test report shall be made by letter to the Department of Transportation, Federal Aviation Administration, Airman Certification Branch, P.O. Box 25082, Oklahoma City, OK 73125, and shall be accompanied by a check or money order for the appropriate fee and payable to the Federal Aviation Administration.

(d) The letter requesting replacement of a lost or destroyed airman certificate, medical certificate, or knowledge test report must state the:

- (1) Name of the person;
- (2) Permanent mailing address (including zip code);
- (3) Social security number;
- (4) Date and place of birth of the certificate holder;
- (5) State any available information regarding the—
 - (i) Grade, number, date of issuance of the certificate, and the ratings;
 - (ii) Date of the medical examination;

(iii) Date the knowledge test was taken.

(e) A person who has lost an airman certificate, medical certificate, or knowledge test report may obtain a facsimile from the FAA confirming that it was issued, and the:

(1) Facsimile may be carried as an airman certificate, medical certificate, or knowledge test report, as appropriate, for up to 60 days pending the person's receipt of a duplicate under paragraph (a), (b), or (c) of this section, unless the person has been notified that the certificate has been suspended or revoked.

(2) Request for such a facsimile must include the date on which a duplicate certificate or knowledge test report was previously requested, and a check or money order payable to the Federal Aviation Administration, for the cost of the duplicate.

§ 61.31 Type rating requirements, additional training, and authorization requirements.

(a) *Type ratings required.* A person who acts as a pilot in command of any of the following aircraft must hold a type rating for that aircraft:

- (1) Large aircraft (except lighter-than-air).
- (2) Turbojet-powered airplanes.
- (3) Other aircraft specified by the Administrator through aircraft type certificate procedures.

(b) *Authorization in lieu of a type rating.* A person may be authorized to operate an aircraft requiring a type rating without a type rating for up to 60 days, provided:

- (1) The Administrator has authorized the flight or series of flights;
- (2) The Administrator has determined that an equivalent level of safety can be achieved through the operating limitations on the authorization;
- (3) The person shows that compliance with paragraph (a) of this section is impracticable for the flight or series of flights; and
- (4) The flight—
 - (i) Involves only a ferry flight, training flight, test flight, or practical test for a pilot certificate or rating;
 - (ii) Is within the United States;
 - (iii) Does not involve operations for compensation or hire unless the compensation or hire involves payment for the use of the aircraft for training or taking a practical test; and
 - (iv) Involves only the carriage of flight crewmembers considered essential for the flight.

(5) If the flight or series of flights cannot be accomplished within the time limit of the authorization, the Administrator may authorize an

additional period of up to 60 days to accomplish the flight or series of flights.

(c) *Aircraft category, class, and type ratings: Limitations on the carriage of persons or operating for compensation or hire.* Unless a person holds a category, class rating, and type rating (if a class and type rating is required) that applies to the aircraft, that person may not act as pilot in command of an aircraft that is:

- (1) Carrying another person; or
- (2) Being operated for compensation or hire.

(d) *Aircraft category, class, and type ratings: Limitations on operating an aircraft as the pilot in command.* To serve as the pilot in command of an aircraft a person must hold the appropriate category, class, and type rating (if a class rating and type rating is required) for the aircraft to be flown, or that person must:

- (1) Be enrolled in a course of training for the purpose of obtaining an additional pilot certificate and rating that are appropriate to that aircraft, and is under the supervision of an authorized flight instructor;
- (2) Have received the required training of this part that are appropriate to the aircraft category, class, and type rating (if a class or type rating is required) for the aircraft to be flown; and
- (3) Have received the required endorsement from an authorized flight instructor for supervised PIC flight in that aircraft.

(e) *Exceptions.*

- (1) This section does not require a class rating for a powered-lift aircraft.
- (2) This section does not require a category and class rating for aircraft not type certificated as airplanes, rotorcraft, gliders, powered-lift, or lighter-than-air aircraft.

(3) The rating limitations of this section do not apply to an applicant when taking a practical test given by an examiner; or

(4) The rating limitations of this section do not apply to the holder of a:

- (i) Student pilot certificate;
- (ii) Pilot certificate under the supervision of an authorized flight instructor when operating an aircraft for the purpose of obtaining an additional certificate or rating;
- (iii) Pilot certificate when operating an aircraft under the authority of an experimental or provisional aircraft type certificate;
- (iv) Pilot certificate with a lighter-than-air category rating when operating a balloon.

(f) *Additional training required for operating complex airplanes.* Except as provided in paragraph (f)(2) of this

section, no person may act as pilot in command of a complex airplane (an airplane that has a retractable landing gear, flaps, and controllable propeller), unless the person has met the requirements of this paragraph.

(1) The person must have—

(i) Received and logged ground and flight training from an authorized flight instructor in a complex airplane, or in a flight simulator or flight training device that is representative of a complex airplane, and has been found proficient on the operation and systems of the airplane; and

(ii) Received a one-time endorsement in the pilot's logbook from an authorized flight instructor who certifies the person is proficient to operate a complex airplane.

(2) The training and endorsement required by paragraph (f)(1) of this section is not required if the person has logged flight time as pilot in command of a complex airplane, or in a flight simulator or flight training device that is representative of a complex airplane prior to [insert effective date of the final rule].

(g) *Additional training required for operating high performance airplanes.* Except as provided in paragraph (g)(2) of this section, no person may act as pilot in command of a high performance airplane (an airplane with an engine of 200 horsepower or more), unless the person has met the requirements of this paragraph.

(1) The person must have—

(i) Received and logged ground and flight training from an authorized flight instructor in an high performance airplane, or in a flight simulator or flight training device that is representative of a high performance airplane, and has been found proficient on the operation and systems of the airplane; and

(ii) Received a one-time endorsement in the pilot's logbook from an authorized flight instructor who certifies the person is proficient to operate a high performance airplane.

(2) The training and endorsement required by paragraph (g)(1) of this section is not required if the person has logged flight time as pilot in command of a high performance airplane, or a flight simulator or flight training device that is representative of a high performance airplane prior to [insert effective date of the final rule].

(h) *Additional training required for operating pressurized aircraft capable of operating at high altitudes.*

(1) Except as provided in paragraph (h)(3) of this section, no person may act as pilot in command of a pressurized aircraft (an aircraft that has a service ceiling or maximum operating altitude,

whichever is lower, above 25,000 feet MSL), unless that person has received and logged ground training from an authorized flight or ground instructor in at least the following subjects:

(i) High altitude aerodynamics and meteorology;

(ii) Respiration, effects, symptoms, and causes of hypoxia and any other high altitude sickness;

(iii) Duration of consciousness without supplemental oxygen;

(iv) Effects of prolonged usage of supplemental oxygen;

(v) Causes and effects of gas expansion and gas bubble formation;

(vi) Preventive measures for eliminating gas expansion, gas bubble formation, and high altitude sickness; and

(vii) Physical phenomena and incidents of decompression;

(2) Except as provided in paragraph (h)(3) of this section, no person may act as pilot in command of a pressurized aircraft (an aircraft that has a service ceiling or maximum operating altitude, whichever is lower, above 25,000 feet MSL), unless that person has received:

(i) Training in a pressurized aircraft, or in a flight simulator or flight training device that is representative of a pressurized aircraft, and the training must include flight at normal cruise while operating above 25,000 feet MSL, proper emergency procedures for simulated emergency rapid decompression and descent procedures; and

(ii) An endorsement in the person's logbook or training record from the instructor who gave the training and found the person proficient in a pressurized aircraft.

(3) The training and endorsement required by this paragraph is not required if a person can document satisfactory accomplishment of any of the following in a pressurized aircraft, or in a flight simulator or a flight training device that is representative of a pressurized aircraft:

(i) Serving as pilot in command before April 15, 1991;

(ii) Completing a practical test or rating before April 15, 1991;

(iii) Completing an official pilot-in-command check conducted by the military services of the United States; or

(iv) Completing a pilot-in-command proficiency check under parts 121, 125, or 135 of this chapter conducted by the Administrator or by an approved check pilot.

(i) *Additional training required by the aircraft's type certificate.* No person may serve as pilot in command of an aircraft that the Administrator has determined requires aircraft type specific training unless that person has received:

(1) Type specific training in the aircraft, or in a flight simulator or a flight training device that is representative of that type of aircraft, and has been found proficient on the operation and systems of the aircraft; and

(2) A logbook endorsement from an authorized flight instructor or ground instructor, as appropriate, who gave that person the training.

(j) *Additional training required for operating tailwheel airplanes.* Except as provided in paragraph (j)(4), no person may act as pilot in command of a tailwheel airplane unless that person has:

(1) Received and logged flight training from an authorized flight instructor in a tailwheel airplane on the maneuvers and procedures listed in this paragraph.

(2) Received an endorsement in the person's logbook from an authorized flight instructor who gave the training and found the person proficient in a tailwheel airplane.

(3) Received an endorsement in the person's logbook from an authorized flight instructor who gave the training and found the person proficient in at least normal and crosswind takeoffs and landings, wheel landings (unless the manufacturer has recommended against such landings), and go-arounds.

(4) The training and endorsement required by this paragraph is not required if the person logged pilot in command time of a tailwheel airplane before April 15, 1991.

§ 61.33 Tests: General procedure.

The Administrator shall designate the time, location, and examiner for conducting the tests prescribed by and under this part.

§ 61.35 Knowledge test: Prerequisites and passing grades.

(a) An applicant for a knowledge test must have:

(1) Received an endorsement from an authorized flight or ground instructor certifying that the applicant accomplished a ground training or a home study course required by this part for the certificate or rating sought and is prepared for the knowledge test; and

(2) Proper identification at the time of application that contains the applicant's—

(i) Photograph;

(ii) Signature;

(iii) Date of birth, which shows the applicant meets or will meet the age requirements of this part for the certificate sought before the expiration date of the airman knowledge test report; and

(iv) Actual residential address, if different from the applicant's mailing address.

(b) The Administrator shall specify the minimum passing grade for the knowledge test.

§ 61.37 Knowledge tests: Cheating or other unauthorized conduct.

(a) An applicant for a knowledge test may not:

(1) Copy or intentionally remove any knowledge test;

(2) Give to another applicant or receive from another applicant any part or copy of a knowledge test;

(3) Give assistance on, or receive assistance on, a knowledge test during the period that test is being given;

(4) Be represented by, or represent, another person for a knowledge test;

(5) Use any material or aid during the period that test is being given, unless specifically authorized to do so by the Administrator; and

(6) Intentionally cause, assist, or participate in any act prohibited by this paragraph.

(b) An applicant who the Administrator finds has committed an act prohibited by paragraph (a) of this section is prohibited, for 1 year after the date of committing that prohibited act, from:

(1) Applying for any certificate or rating under this chapter; and

(2) Applying for and taking any test under this chapter.

(c) Any certificate or rating held by an applicant who the Administrator finds has committed an act prohibited by paragraph (a) of this section may be suspended or revoked.

§ 61.39 Prerequisites for practical tests.

(a) Except as provided in paragraphs (b) and (c) of this section, to be eligible for a practical test for a certificate or rating issued under this part, an applicant must:

(1) Have satisfactorily accomplished the required knowledge test within the 24-calendar month period preceding the month the applicant accomplishes the practical test, if a knowledge test is required;

(2) Present the knowledge test report at the time of application for the practical test, if a knowledge test is required;

(3) Have satisfactorily accomplished the required training and attained the aeronautical experience prescribed by this part for the certificate or rating sought;

(4) Hold at least a current third-class medical certificate, if a medical certificate is required;

(5) Meet the prescribed age requirement of this part for the issuance of the certificate or rating sought;

(6) Except as provided in paragraph (c) of this section, an applicant must have an endorsement in the applicant's logbook or training record that has been signed by the applicant's authorized flight instructor who certifies that the applicant—

(i) Has received and logged training time within 60 days preceding the date of application in preparation for the practical test;

(ii) Is prepared for the required practical test; and

(iii) Has demonstrated satisfactory knowledge of the subject areas in which the applicant was deficient on the airman knowledge test.

(7) Have a completed and signed application form.

(b) Notwithstanding the provisions of paragraphs (a) (1) and (2) of this section, an applicant for an airline transport pilot certificate or an additional rating to an airline transport certificate may take the practical test for that certificate or rating with an expired knowledge test report, provided that applicant:

(1) Is employed as a flight crewmember by a U.S. air carrier or commercial operator under parts 121, 125, or 135 of this chapter and is employed by such a certificate holder at the time of the practical test and has satisfactorily accomplished that operator's approved—

(i) pilot-in-command aircraft qualification training program that is appropriate to the certificate and rating sought; and

(ii) requalification training requirements that is appropriate to the certificate and rating sought.

(2) Is employed as a flight crewmember by a U.S. scheduled military air transportation service operator at the time of the practical test, and has accomplished that operator's pilot-in-command aircraft qualification training program that is appropriate to the certificate and rating sought.

(c) An applicant for an airline transport pilot certificate or an additional rating to an airline transport pilot certificate in an aircraft that does not involve an aircraft type rating practical test need not comply with the provisions of paragraph (a)(6) of this section.

§ 61.41 Flight training received from flight instructors not certificated by the FAA.

(a) A person may credit flight training toward the requirements of a pilot certificate or rating issued under this part, if that person received the training from:

(1) A flight instructor of an Armed Force of either—

(i) The United States; or

(ii) A foreign member State to the International Civil Aviation Organization in a program for training military pilots.

(2) A flight instructor who is authorized to give such training by the licensing authority of a member State of International Civil Aviation Organization, and the flight training is given outside the United States.

(b) A flight instructor described in paragraph (a) of this section is not authorized to give any of the endorsements required by this part.

§ 61.43 Practical tests: General procedures.

(a) Except as provided in paragraph (b) of this section, the ability of an applicant for a certificate or rating to perform the required tasks on the practical test is based on that applicant's ability to safely:

(1) Perform the approved areas of operation for the certificate or rating sought within the approved standards;

(2) Demonstrate mastery of the aircraft with the successful outcome of each task performed never seriously in doubt;

(3) Demonstrate satisfactory proficiency and competency within the approved standards;

(4) Demonstrate sound judgment; and

(5) Demonstrate single-pilot competence if the aircraft is type certificated for single-pilot operations.

(b) If an applicant does not demonstrate single pilot proficiency, as required in paragraph (a)(5) of this section, the following limitation will apply:

(1) A limitation of "Second in Command Required" will be placed on the applicant's airman certificate.

(2) The limitation may be removed if the applicant satisfactorily accomplishes the appropriate practical test by demonstrating single-pilot competence in the aircraft in which single-pilot privileges are sought.

(c) If an applicant fails any of the approved areas of operation, that applicant fails the practical test.

(d) An applicant is not eligible for a certificate or rating sought until all the approved areas of operation are satisfactorily accomplished.

(e) The examiner or the applicant may discontinue a practical test at any time:

(1) When the applicant fails one or more of the approved areas of operation; or

(2) Due to inclement weather conditions, aircraft airworthiness, or any other safety of flight concern.

(f) If a practical test is discontinued, the applicant is entitled to credit those

approved areas of operation that were satisfactorily accomplished, but only if the applicant:

- (1) Satisfactorily accomplishes the remainder of the practical test within the 60-day period after the date the practical test was discontinued;
- (2) Presents to the examiner for the retest the original notice of disapproval form or the letter of discontinuance form, as appropriate;
- (3) Satisfactorily accomplishes any additional training needed and obtains the appropriate instructor endorsements, if additional training is required; and
- (4) Presents to the examiner for the retest a properly completed and signed application.

§ 61.45 Practical tests: Required aircraft and equipment.

(a) *General.* An applicant for a certificate or rating under this part must furnish:

- (1) An aircraft for the practical test that is of U.S. registry with a current standard, limited, or primary airworthiness certificate;
- (2) An aircraft of U.S. registry with a current airworthiness certificate, other than standard, limited, or primary, provided the examiner conducting the test agrees;
- (3) An aircraft of foreign registry that is properly certificated by the country of registry, provided the examiner conducting the test agrees; or
- (4) A military aircraft that is in a safe operational status and is approved for use on the practical test by the appropriate military authority, provided the examiner conducting the test agrees.

(b) *Required equipment (other than controls).* Except for a practical test in a balloon and, as provided in paragraph (e) of this section, an aircraft used for a practical test must have:

- (1) The equipment for each area of operation required for the practical test;
- (2) No prescribed operating limitations that prohibit its use in any of the approved areas of operation required for the practical test;
- (3) At least two pilot seats with adequate visibility for each person to operate the aircraft safely; and
- (4) Cockpit and outside visibility adequate to evaluate the performance of the applicant, where an additional jump seat is provided for the examiner.

(c) *Required controls.* An aircraft used for a practical test:

- (1) Must have engine power controls and flight controls that are easily reached and operable in a normal manner by both pilots, unless the examiner determines that the practical test can be conducted safely without them.

(2) May be used even if the engine power controls and flight controls are not easily reached and operable in a normal manner by both pilots, provided the examiner determines the flight can be conducted safely.

(3) Must have flight controls that are easily reached and operable in a normal manner by both pilots, for a rating in lighter-than-air aircraft, unless the examiner determines that the practical test can be conducted safely without them.

(d) *Simulated instrument flight equipment.* An applicant for a practical test that involves maneuvering an aircraft solely by reference to instruments must furnish:

- (1) Equipment aboard the aircraft that permits the applicant to accomplish the approved areas of operation that apply to the rating sought; and
- (2) A device that prevents the applicant from having visual reference outside the aircraft, but does not prevent the examiner from having visual reference outside the aircraft.

(e) *Aircraft with single controls.* A practical test may be conducted in an aircraft having a single set of controls, provided the:

- (1) Examiner agrees to conduct the test;
- (2) Test does not involve a demonstration of instrument skills; and
- (3) Proficiency of the applicant can be observed by an examiner, who is in a position to observe the applicant.

§ 61.47 Status of an examiner who is authorized by the Administrator to conduct practical tests.

(a) An examiner represents the Administrator for the purpose of conducting practical tests for certificates and ratings issued under this part and to observe an applicant's ability to perform the approved areas of operation on the practical test.

(b) The student is the pilot in command of the aircraft during the practical test unless the examiner or another person has been so designated before the flight.

(c) Notwithstanding the type of aircraft used during the practical test, the applicant and the examiner (and any other occupants authorized to be on board by the examiner) are not subject to the requirements or limitations on the carriage of passengers that are specified in this chapter.

§ 61.49 Retesting after failure.

(a) An applicant for a knowledge or practical test who fails that test may only reapply for the test after the applicant has received:

- (1) The necessary training from an authorized flight or ground instructor,

as appropriate, who has determined that the applicant is now proficient to pass the test; and

(2) An endorsement from an authorized flight or ground instructor, as appropriate, who gave the applicant the additional training.

(b) An applicant for a flight instructor certificate with an airplane category rating, or for a flight instructor certificate with a glider category rating, who has failed the practical test due to deficiencies in instructional proficiency on stall awareness, spin entry, spins, and spin recovery must:

(1) Comply with the requirements of paragraph (a) of this section before being retested;

(2) Bring an aircraft to the retest that is of the appropriate aircraft category for the rating sought and is certificated for spins; and

(3) Demonstrate satisfactory instructional proficiency on stall awareness, spin entry, spins, and spin recovery to an examiner during the retest.

§ 61.51 Pilot logbooks.

(a) *Training time and aeronautical experience.* Each person must document and record the following time in a manner acceptable to the Administrator:

(1) Training and aeronautical experience used to meet the requirements for a certificate, rating, or flight review of this part.

(2) The aeronautical experience required for meeting the recency of flight experience requirements of this part.

(b) *Logbook entries.* For the purposes of meeting the requirements of paragraph (a) of this section, each person must enter the following information for each flight or lesson logged:

- (1) General:
 - (i) Date.
 - (ii) Total time of flight.
 - (iii) Locations where the aircraft departed and arrived.
 - (iv) Type and identification of aircraft.
 - (v) The name and certificate number of a safety pilot, if required by § 91.109(b) of this chapter.

(2) Type of pilot experience or training:

- (i) Pilot in command.
- (ii) Second in command.
- (iii) Flight and ground training received from an authorized flight instructor.

(iv) Training received in an approved flight training device or flight simulator from authorized flight or ground instructor.

- (3) Conditions of flight:
 - (i) Day or night.

- (ii) Actual instrument.
- (iii) Simulated instrument.
- (c) *Logging of pilot time.* The pilot time described in this section may be used to:
 - (1) Apply for a certificate or rating issued under this part; or
 - (2) Satisfy the recent flight experience requirements of this part.
- (d) *Logging of pilot-in-command flight time.* Except as provided in paragraph (e) of this section, only one person may log pilot-in-command flight time, provided the:
 - (1) Person has final authority and responsibility for the operation and safety of the flight;
 - (2) Person holds the appropriate category, class, and type rating, if appropriate;
 - (3) Person has been designated as pilot in command before or during the flight; and
 - (4) Flight time occurs in actual flight conditions in an aircraft.
- (e) *Two people logging pilot-in-command flight time.* If a certificated pilot and an authorized flight instructor are on board an aircraft at the same time, and each holds the appropriate category, class, and type rating (if a type rating is required) for that aircraft, then both the pilot and the flight instructor may log pilot-in-command time provided:
 - (1) The flight instructor—
 - (i) Is authorized by this chapter to conduct the training and is conducting training during the flight;
 - (ii) Holds at least a third-class medical certificate issued under part 67 of this chapter; and
 - (iii) Occupies a pilot station in the aircraft that has functioning flight controls.
 - (2) The pilot—
 - (i) Is receiving training from the flight instructor in a course of training for the issuance of a certificate or rating or to obtain the recency of experience requirements of this part;
 - (ii) Is qualified to conduct the flight in accordance with the operating rule under which the flight is being conducted; and
 - (iii) Is manipulating the controls of the aircraft.
 - (3) The aircraft has dual functioning flight controls and the engine controls can be reached from either pilot station.
- (f) *Student pilots logging pilot-in-command flight time.* The holder of a student pilot certificate may log pilot in command time when the student pilot:
 - (1) Is the sole occupant of the aircraft;
 - (2) Has a current pilot-in-command flight endorsement as required under § 61.87 of this part; and
 - (3) Is undergoing a course of training for a pilot certificate or rating or is

logging pilot-in-command flight time to obtain the pilot-in-command flight experience requirements for a pilot certificate or aircraft rating.

(g) *Logging second-in-command flight time.* A person may log second-in-command flight time, provided the person:

(1) Is qualified in accordance with the second-in-command requirements of § 61.55 of this part, and occupies a crewmember seat in an aircraft that requires more than one pilot by the aircraft's type certificate; or

(2) The person holds the appropriate category, class, and instrument rating (if an instrument rating is required for the flight) for the aircraft being flown, and the regulations under which the flight is being conducted requires a second-in-command pilot.

(h) *Logging instrument flight time.*

(1) A person may log instrument flight time when the person operates the aircraft solely by reference to instruments under actual or simulated instrument flight conditions.

(2) A person may log instrument flight time when the person is appropriately qualified for and is serving as an instrument flight instructor under actual instrument flight conditions.

(3) For the purposes of logging instrument flight time, to meet the instrument currency requirements of § 61.57(e) of this part, the following information must be recorded in the person's logbook—

(i) The location, number, and kind of instrument approaches accomplished; and

(ii) The name and pilot certificate number of the safety pilot, if required.

(i) *Logging training time.*

(1) A person may log training time when the person receives training from an authorized flight instructor in an aircraft, flight simulator, or flight training device for the purpose of obtaining a certificate, rating, or recency of experience requirements of this part.

(2) A person may log training time when the person receives training from an authorized ground instructor in a flight simulator or flight training device for the purpose of obtaining a certificate, rating, or recency of experience requirements, of this part.

(3) The training time must be logged in a logbook or training record, and must:

(i) Be certified in a legible manner by the authorized flight or ground instructor, as appropriate; and

(ii) Include a description of the training given, the length of the training lesson, and the instructor's signature, certificate number, and certificate expiration date.

(j) *Presentation of logbook.*

(1) Persons must present their pilot certificate, medical certificate, logbook, or any other record required by this part for inspection upon a request by:

(i) The Administrator;

(ii) An authorized representative from the National Transportation Safety Board; or

(iii) Any Federal, State, or local law enforcement officer.

(2) Student pilots must carry the following items in the aircraft when exercising the privileges of their student pilot certificate:

(i) Pilot logbook; and

(ii) Student pilot certificate.

(3) Recreational pilots must carry their logbook with the required instructor endorsements on all flights when serving as pilot-in-command or as a required flight crewmember for flights:

(i) Of more than 50 nautical miles from an airport where training was received;

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

(iii) Between sunset and sunrise; and

(iv) In an aircraft for which the pilot is not rated.

§ 61.53 Operations during medical deficiency.

(a) Operations that require a medical certificate. Except as provided for in paragraph (b) of this section, a person who holds a current medical certificate issued under part 67 of this chapter shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person:

(1) Knows or has reason to know of any medical condition that would make the person unable to meet the requirements for the medical certificate held; or

(2) Is taking medication or receiving other treatment for a medical condition that results in the person being unable to meet the requirements for the medical certificate held.

(b) Operations that do not require a medical certificate. For operations provided for in § 61.23(b)(4) of this part without a medical certificate, a person shall not act as pilot in command while that person:

(1) Knows or has reason to know of any medical condition that would make them unable to operate the aircraft in a safe manner; or

(2) Is taking medication or receiving other treatment for a medical condition that would make them unable to operate the aircraft in a safe manner.

§ 61.55 Second-in-command qualifications.

(a) Except as provided in paragraph (d) of this section, no person may serve as a second in command of an aircraft type certificated for more than one required pilot flight crewmember or in operations requiring a second in command unless that person holds:

(1) At least a current private pilot certificate with the appropriate category and class rating; and

(2) An instrument rating that applies to the aircraft being flown if the flight is under IFR.

(b) No person may serve as a second in command of an aircraft type certificated for more than one required pilot flight crewmember or in operations requiring a second in command unless that person has within the previous 12 calendar months:

(1) Reviewed on the specific type aircraft, for which second-in-command privileges are requested, and that review must include becoming familiar with the aircraft's—

(i) Operational procedures on the powerplant, equipment, and systems;

(ii) Performance specifications and limitations;

(iii) Normal, abnormal, and emergency operating procedures;

(iv) Flight manual; and

(v) Placards and markings.

(2) Performed and logged practice in the type aircraft or in an approved flight simulator or approved flight training device that represents the type of aircraft for which second-in-command privileges are requested, and the practice must include at least—

(i) Three takeoffs and landings to a full stop as the sole manipulator of the flight controls;

(ii) Engine-out procedures and maneuvering with an engine out while executing the duties of a pilot in command; and

(iii) Flight deck resource management training.

(c) If a person complies with the requirements in paragraph (b) of this section in the calendar month before or the calendar month after the month in which compliance with this section is required, then that person is considered to have accomplished the training and practice requirements of paragraph (b) of this section in the month it is due.

(d) This section does not apply to a person who is:

(1) Designated and qualified as a pilot in command, under part 121, 125, or 135 of this chapter in that specific type of aircraft;

(2) Designated as the second in command, under part 121, 125, or 135 of this chapter in that specific type of aircraft; or

(3) Designated as the second in command in that specific type of aircraft for the purpose of receiving flight training required by this section and no passengers or cargo are carried on the aircraft.

(e) A person who holds a commercial or airline transport pilot certificate with the appropriate category and class rating need not meet the requirements of paragraph (b)(2) of this section, provided that pilot:

(1) Is conducting ferry flights, aircraft flight tests, or evaluation flights of an aircraft's equipment; and

(2) Does not carry any person or cargo aboard the aircraft, unless the person or cargo is considered necessary for the flight.

(f) To meet the requirements of paragraph (b)(2) of this section, a person may serve as a second in command in that specific type of aircraft, if:

(1) The flight occurs under day VFR or day IFR; and

(2) No person or cargo are carried aboard the aircraft, unless the person or cargo is considered necessary for the flight.

§ 61.56 Flight review.

(a) A flight review consists of a minimum of 1 hour of flight instruction and 1 hour of ground instruction. The review must include—

(1) A review of the current general operating and flight rules of part 91 of this chapter; and

(2) A review of those maneuvers and procedures which, at 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) Glider pilots may substitute a minimum of three instructional flights in a glider, each of which includes a 360 degree turn, in lieu of the 1 hour of flight instruction required in paragraph (a).

(c) Except as provided in paragraphs (d) and (e) of this section, no person may act as pilot in command of an aircraft unless, since the beginning of the 24th calendar month before the month in which that pilot acts as pilot in command, 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 person has satisfactorily completed the review.

(d) A person who has, within the period specified in paragraph (c) 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.

(e) A person who has, within the period specified in paragraph (c) of this section, satisfactorily completed one or more phases of an FAA-sponsored pilot proficiency award program need not accomplish the flight review required by this section.

(f) A person who holds a current flight instructor certificate who has, within the period specified in paragraph (c) of this section, satisfactorily completed a renewal of a flight instructor certificate under the provisions on 61.197(c), need not accomplish the 1 hour of ground instruction specified in subparagraph (a)(1) of this section.

(g) 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.

§ 61.57 Recent flight experience: Pilot-in-command.

(a) *General experience.*

(1) Except as provided by paragraph (e) of this section, no person may act as a pilot in command of an aircraft carrying passengers or as required pilot aboard an aircraft that requires more than one pilot crewmember unless that person has made at least three takeoffs and three landings to a full stop within the preceding 90 days, and:

(i) The person acted as sole manipulator of the flight controls;

(ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if a type rating is required), and if the aircraft to be flown is an airplane with a tailwheel landing gear, the takeoffs and landings must have been in a tailwheel airplane; and

(iii) Each required takeoff and landing involved a flight in the traffic pattern at the recommended traffic pattern altitude for the airport.

(2) A person may act as a pilot in command or as required pilot and sole manipulator of the controls for an aircraft that requires more than one pilot under day VFR or day IFR, provided no persons or property, other than that necessary for compliance with paragraph (a) of this section, are carried.

(b) *Night experience.* Except as provided by paragraph (e) of this section, no person may act as pilot in command of an aircraft carrying passengers at night, nor as a required pilot aboard an aircraft requiring more

than one pilot crewmember at night, unless that person has complied with the requirements of paragraph (a) of this section at night.

(c) *Recent instrument experience.*

Except as provided in paragraph (e) of this section, no person may act as pilot in command under IFR or in weather conditions less than the minimums prescribed for VFR, unless that person has met the following requirements within the preceding 6 calendar months:

(1) To obtain instrument experience in an aircraft (other than a glider), that person has performed and logged—

- (i) At least six instrument approaches;
- (ii) Holding procedures;
- (iii) Intercepting and tracking VOR radials and NDB bearings;
- (iv) Recovery from unusual flight altitudes; and
- (v) Flight by reference to instruments.

(2) The instrument experience requirements of paragraph (d)(1) of this section must have been logged in an aircraft that is not a glider, and performed in—

- (i) Actual flight, appropriate to the category of aircraft for the instrument privileges sought; or
- (ii) An approved flight simulator or flight training device that is representative of the aircraft category for the instrument privileges sought.

(3) If the person does not carry passengers and if the instrument recency experience is in a glider, that person must have performed and logged at least—

- (i) Three hours of instrument time in actual flight of which 1.5 hours may be acquired in a single-engine airplane or a glider; or
- (ii) Three hours of instrument time must have been in a glider.

(d) *Instrument proficiency check.*

Except as provided by paragraph (e) of this section, a person who does not meet the recent instrument requirements of paragraph (d) of this section within the prescribed time or within 6 calendar months after the prescribed time, may not serve as pilot in command under IFR or in weather conditions less than the minimums prescribed for VFR until that person satisfactorily accomplishes an instrument proficiency check:

(1) Consisting of a representative number of tasks required by the instrument rating practical test, and the check must be—

- (i) In an aircraft that is appropriate to the aircraft category and instrument privileges sought;
- (ii) In an approved flight simulator or flight training device that is representative of the aircraft category (other than a glider) for which instrument privileges sought; or

(iii) For a glider, in a single-engine airplane or a glider.

(2) Given by one of the following persons—

- (i) An examiner;
- (ii) A person authorized by the U.S. Armed Forces to conduct instrument flight tests, provided the person being tested is a member of the U.S. Armed Forces;

(iii) A company check pilot who is authorized to conduct instrument flight tests under part 121, 125, or 135 of this chapter, and provided that both the check pilot and the pilot being tested are employees of that operator;

(iv) An instrument flight instructor who holds the appropriate instrument instructor rating for the class of aircraft in which the check is being conducted; or

(v) A person approved by the Administrator to conduct instrument practical tests.

(e) *Exceptions.*

(1) Paragraphs (a) and (b) of this section do not apply to a pilot in command that is employed by a part 125 operator and is engaged in a flight operation for that certificate holder.

(2) This section does not apply to a pilot in command that is employed by a part 121 or part 135 operator and is engaged in a flight operation for that certificate holder.

§ 61.58 Pilot-in-command proficiency check: Operation of aircraft requiring more than one required pilot.

(a) Except as provided in paragraph (e) of this section, no person may act as pilot in command of an aircraft that is type certificated for more than one required pilot crewmember unless the proficiency checks prescribed in paragraphs (b) and (c) of this section are satisfactorily accomplished.

(b) Within 12-calendar months preceding the month the person acts as pilot in command of an aircraft that is type certificated for more than one required pilot crewmember that person must have accomplished one of the following:

(1) For an airplane, a proficiency check—

- (i) In that airplane type, or in a flight simulator or flight training device that is representative of that type of airplane;
- (ii) Given to that person by an examiner; and

(iii) Consisting of those areas of operations that are appropriate to the standards required of an airline transport pilot certificate for that airplane class rating.

(2) For other aircraft, a proficiency check—

(i) In that aircraft type, or in a flight simulator or flight training device that is representative of that type of aircraft;

(ii) Given to that person by an examiner; and

(iii) Consisting of those areas of operations that are appropriate to the standards required of an airline transport pilot certificate for that aircraft category and class rating.

(3) A pilot in command proficiency check given to that person in accordance with part 121, 123, 125, or 135 of this chapter.

(4) A practical test required for an aircraft type rating.

(5) An initial or periodic proficiency check for the issuance of an examiner or check airman designation.

(6) A military proficiency check required for pilot in command and instrument privileges in an aircraft which the military requires to be operated by more than one pilot.

(c) Except as provided in paragraph (d) of this section, within 24-calendar months preceding the month the person acts as pilot in command of an aircraft that is type certificated for more than one required pilot crewmember, that person must have accomplished one of the following proficiency checks in the particular type of aircraft in which the person is to serve as pilot in command:

(1) A proficiency check—

(i) In that aircraft type, or in a flight simulator or flight training device that is representative of that type of aircraft;

(ii) Given to that person by an examiner; and

(iii) Consisting of those areas of operations that are appropriate to the standards required of an airline transport pilot certificate for that aircraft category and class rating.

(2) A pilot in command proficiency check given to that person in accordance with part 121, 123, 125, or 135 of this chapter;

(3) A practical test required for an aircraft type rating;

(4) An initial or periodic proficiency check for the issuance of a pilot examiner or check airman designation; or

(5) A military proficiency check required for pilot in command and instrument privileges in an aircraft which the military requires to be operated by more than one pilot.

(d) For airplanes, the maneuvers and procedures required for the checks and test prescribed in paragraphs (c) (1), (2), (4), and (5) of this section, and paragraph (c)(3) of this section for type ratings obtained in conjunction with part 121 of this chapter, training programs may be performed in a flight simulator or flight training device if the:

(1) Maneuver or procedure can be performed in a flight simulator or flight training device as set forth in appendix F to part 121 of this chapter; and

(2) Flight simulator or flight training device is one that is approved for the particular maneuver or procedure.

(e) This section does not apply to persons conducting operations subject to parts 121, 123, 125, 133, 135, and 137 of this chapter.

(f) For the purpose of meeting the proficiency check requirements of paragraphs (b) and (c) of this section, a person may act as pilot in command of a flight under day VFR or day IFR if no persons or property, other than as necessary for compliance thereunder, are carried.

(g) If a person takes the proficiency check required by paragraph (a) of this section in the calendar month before, or the calendar month after the month in which it is due, that person is considered to have taken it in the month it is due.

§ 61.59 Falsification, reproduction, or alteration of applications, certificates, logbooks, reports, or records.

(a) No person may make or cause to be made:

(1) Any fraudulent or intentionally false statement on any application for a certificate, rating, or duplicate thereof, issued under this part;

(2) Any fraudulent or intentionally false entry in any logbook, record, or report that is required to be kept, made, or used, to show compliance with any requirement for the issuance, or exercise of the privileges of any certificate or rating under this part;

(3) Any reproduction, for fraudulent purpose, of any certificate or rating under this part; or

(4) Any alteration of any certificate or rating under this part.

(b) The commission of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking any airman or ground instructor certificate or rating held by that person.

§ 61.60 Change of address.

Persons who hold an airman certificate, and who have a change in their permanent mailing address, may not exercise the privileges of their certificate unless they notify the Federal Aviation Administration, Airman Certification Branch, Box 25082, Oklahoma City, Oklahoma 73125, in writing of the new address within 30 days from the date the person moved.

Subpart B—Aircraft Ratings and Special Certificates

§ 61.61 Applicability.

This subpart prescribes the requirements for the issuance of additional aircraft ratings after a pilot certificate is issued, and the requirements and limitations for special purpose pilot authorizations issued by the Administrator.

§ 61.63 Additional aircraft ratings (other than airline transport pilot).

(a) *Additional category rating.* Persons who apply for an additional aircraft category rating to be added to their current pilot certificate:

(1) Must have received the required training and aeronautical experience time prescribed by this part that applies to the pilot certificate for the aircraft category and class rating sought;

(2) Must have an endorsement in their logbook or training record from an authorized flight instructor or ground instructor, and that endorsement must attest that they have been found competent on the aeronautical knowledge areas that are appropriate to the pilot certificate for the aircraft category or class rating sought;

(3) Must have an endorsement in their logbook or training record from an authorized flight instructor, and that endorsement must attest that they have been found proficient on the areas of operation that are appropriate to the pilot certificate for the aircraft category or class rating sought;

(4) Must have satisfactorily accomplished the required practical test that is appropriate to the pilot certificate for the aircraft category or class rating sought;

(5) Need not accomplish the supervised pilot in command time prescribed by this part that applies to the pilot certificate for the aircraft category or class rating sought; and

(6) Need not accomplish another knowledge test, provided they hold an airplane, rotorcraft, powered-lift, or airship rating at that pilot certificate level.

(b) *Additional class rating.* Persons who apply for an additional class rating to be added on their pilot certificate:

(1) Must have an endorsement in their logbook or training record from an authorized flight instructor, and that endorsement must attest they have been found competent on the aeronautical knowledge areas that are appropriate to the pilot certificate for the aircraft class rating sought;

(2) Must have an endorsement in their logbook or training record from an authorized flight instructor, and that

endorsement must attest they have been found proficient on the areas of operation that are appropriate to the pilot certificate for the aircraft class rating sought;

(3) Must have satisfactorily accomplished the required practical test that is appropriate to the pilot certificate for the aircraft class rating sought;

(4) Need not meet the specified training time and aeronautical experience time prescribed by this part that applies to the pilot certificate for the aircraft class rating sought; and

(5) Need not accomplish another knowledge test, provided they hold an airplane, rotorcraft, powered-lift, or airship rating at that pilot certificate level.

(c) *Additional type rating or an addition of an aircraft type rating that is accomplished concurrently with an additional aircraft category or class rating.* Persons who apply for an additional aircraft type rating to be added on their pilot certificate, or an addition of aircraft type rating that is accomplished concurrently with an additional aircraft category or class rating:

(1) Must hold or concurrently obtain an instrument rating that is appropriate to the aircraft's category, class, or type rating sought;

(2) Must have an endorsement in their logbook or training record from an authorized flight instructor, and that endorsement must attest that they have been found competent on the aeronautical knowledge areas that are appropriate to the pilot certificate for the aircraft category, class, or type rating sought;

(3) Must have an endorsement in their logbook or training record from an authorized flight instructor, and that endorsement must attest that they have been found proficient on the areas of operation that are appropriate to the standards of an airline transport pilot certificate for the aircraft category, class, or type rating sought;

(4) Must have satisfactorily accomplished the required practical test that is appropriate to the airline transport pilot certificate for the aircraft category, class, or type rating sought;

(5) Need not meet the specified training time and aeronautical experience time prescribed by this part that applies to the pilot certificate for the aircraft category or class rating sought;

(6) Must perform the practical test under instrument flight rules, unless the practical test cannot be accomplished under instrument flight rules because the aircraft's type certificate makes the

aircraft incapable of operating under instrument flight rules, then—

(i) The person may obtain a type rating limited to "VFR only;" and
 (ii) The "VFR only" limitation may be removed for that aircraft type when the person satisfactorily accomplishes the practical test under instrument flight rules.

(7) When an instrument rating is issued to persons who hold one or more type ratings, the type ratings on the amended pilot certificate shall bear the "VFR only" limitation for each aircraft type rating for which they have not shown the instrument competency; and

(8) Need not accomplish another knowledge test, provided they hold an airplane, rotorcraft, powered-lift, or airship rating on their pilot certificate.

§ 61.65 Instrument rating requirements.

(a) *General.* A person who applies for an instrument rating must:

(1) Hold at least a private pilot certificate with an aircraft category and class rating that applies to the instrument rating sought;

(2) Be able to read, speak, write, and understand the English language;

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

(4) Present documentation of having—

(i) Received and logged ground training from an authorized instructor, or accomplished a home study course of training on the approved aeronautical knowledge areas of paragraph (b) of this section that apply to the instrument rating sought;

(ii) Received a logbook or training record endorsement from the authorized instructor, who gave that person training or reviewed that person's home study course, certifying that the person is prepared to satisfactorily accomplish the required knowledge test;

(iii) Received and logged training from an authorized flight instructor in the aircraft, or from an authorized instructor in a flight simulator or training device that represents that class of aircraft for the instrument rating sought on the approved areas of operation of paragraph (c) of this section; and

(iv) Received a logbook or training record endorsement from the authorized instructor who gave that person the training and certified that the person is prepared to satisfactorily accomplish the required practical test.

(5) Satisfactorily accomplish the required knowledge test on the approved aeronautical knowledge areas of paragraph (b) of this section;

(6) Satisfactorily accomplish the required practical test on the approved

areas of operation of paragraph (c) of this section;

(7) Satisfactorily accomplish an instrument rating practical test in a multiengine airplane, and who holds an airplane category and single-engine class rating on the person's pilot certificate will also have met the requirements for issuance of an instrument rating-airplane single engine;

(8) Is not required to accomplish another knowledge test, when that person already holds an instrument rating on the person's pilot certificate; and

(9) Comply with the applicable requirements of this section.

(b) *Aeronautical knowledge.* A person who applies for an instrument rating must have received and logged ground training from authorized instructor, or accomplished a home study course on the following aeronautical knowledge areas that apply to the instrument rating sought:

(1) The Federal Aviation Regulations of this chapter that apply to flight operations under IFR;

(2) The appropriate information that apply to flight operations under IFR in the "Airman's Information Manual;"

(3) The air traffic control system and procedures for instrument flight operations;

(4) IFR navigation and approaches by use of radio aids;

(5) The use of IFR enroute and instrument approach procedure charts;

(6) The procurement and use of aviation weather reports and forecasts and the elements of forecasting weather trends based on that information and personal observation of weather conditions;

(7) The safe and efficient operation of aircraft under IFR and conditions that apply to the instrument rating sought;

(8) The recognition of critical weather situations and windshear avoidance;

(9) Aeronautical decision making and judgment; and

(10) Flight deck resource management, including crew communications and coordination.

(c) *Areas of operation.* A person who applies for an instrument rating must receive and log training from an authorized flight instructor in an aircraft, or from an authorized instructor in an approved flight simulator or training device (or any combination thereof) that includes the following approved areas of operation:

(1) Preflight preparation;

(2) Preflight procedures;

(3) Air traffic control clearances and procedures;

(4) Flight by reference to instruments;

(5) Navigation aids;

(6) Instrument approach procedures;

(7) Emergency operations; and

(8) Postflight procedures.

(d) *Aeronautical experience.* A person who applies for an instrument rating must have received and logged the following training:

(1) At least 40 hours of instrument training from an authorized flight instructor-instrument or ground instructor-instrument on the approved areas of operation of this section;

(2) Not more than 20 hours of the instrument training prescribed in paragraph (d)(1) of this section may be met by training received from an authorized flight instructor-instrument or ground instructor-instrument in a flight simulator or flight training device;

(3) At least 5 hours of instrument flight training from an authorized instrument flight instructor in the category and class aircraft for the instrument rating sought;

(4) At least 3 hours of instrument training that is appropriate to the instrument-aircraft class rating sought and from an authorized instructor in preparation for the practical test within the 60-days preceding the date of the test;

(5) For an instrument-airplane rating, instrument training specific to airplanes on cross-country flight procedures that includes at least one cross-country flight in the class airplane for the instrument rating sought, is performed under IFR, and consists of—

(i) A distance of at least 250 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 100 nautical miles between airports;

(ii) An instrument approach at each airport; and

(iii) Three different kinds of approaches with the use of navigation aids.

(6) For an instrument-helicopter rating, instrument training specific to helicopters on cross-country flight procedures that includes at least one cross-country flight in a helicopter, is performed under IFR, and consists of—

(i) A distance of at least 100 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 50 nautical miles between airports;

(ii) An instrument approach at each airport; and

(iii) Three different kinds of approaches with the use of navigation aids.

(7) For an instrument-airship rating, instrument training specific to airships on cross-country flight procedures that includes at least one cross-country flight

in an airship, is performed under IFR, and consists of—

(i) A distance of at least 50 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 25 nautical miles between airports;

(ii) An instrument approach at each airport; and

(iii) Three different kinds of approaches with the use of navigation aids.

(8) For an instrument-powered-lift rating, instrument training specific to powered-lift on cross-country flight procedures that includes at least one cross-country flight in a powered-lift, is performed under IFR, and consists of—

(i) A distance of at least 250 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 100 nautical miles between airports;

(ii) An instrument approach at each airport; and

(iii) Three different kinds of approaches with the use of navigation aids.

§ 61.67 Category II pilot authorization requirements.

(a) *General.* A person who applies for a Category II pilot authorization must hold:

(1) At least a private or commercial pilot certificate with an instrument rating or an airline transport pilot certificate; and

(2) A type rating for the aircraft type if the authorization is requested for a large aircraft or a small turbojet aircraft.

(b) *Experience requirements.* Except for a person who holds an airline transport pilot certificate, a person who applies for a Category II authorization must have at least:

(1) Fifty hours of night flight time under VFR conditions as pilot in command.

(2) Seventy-five hours of instrument time under actual or simulated conditions that may include 25 hours in an approved flight simulator or training device.

(3) Two hundred-fifty hours of cross-country flight time as pilot in command.

(4) The night flight and instrument flight time used to meet the requirements of paragraphs (b) (1) and (2) of this section may also be used to meet the requirements of paragraph (b)(3) of this section.

(c) *Practical test requirements.*

(1) A practical test must be satisfactorily accomplished by a person who applies for:

(i) Issuance or renewal of an authorization; and

(ii) The addition of another type aircraft to the applicant's Category II authorization.

(2) To be eligible for the practical test for an authorization under this section, the person must meet the requirements of paragraph (a) of this section and, if the practical test has not been accomplished during the 12-calendar months preceding the month of the test, then that person must meet the following recent experience requirements:

(i) The requirements of § 61.57(e);

(ii) At least six ILS approaches during the 6-calendar months preceding the month of the test of which at least three of the approaches must have been conducted without the use of an approach coupler, and these approaches—

(A) Must be under actual or simulated instrument flight conditions to the decision height of the approach, and in the type aircraft in which the practical test is to be performed; and

(B) Need not be conducted down to the decision heights authorized for Category II operations.

(iii) The flight time acquired in meeting the requirements of paragraph (c)(2)(ii) of this section may be used to meet the requirements of paragraph (c)(2)(i) of this section.

(d) *Practical test procedures.* The practical test consists of two phases:

(1) *Phase I-knowledge test.* The person must demonstrate knowledge of the following—

(i) Required landing distance;

(ii) Recognition of the decision height;

(iii) Missed approach procedures and techniques utilizing computed or fixed attitude guidance displays;

(iv) RVR, its use and limitations;

(v) Use of visual clues, their availability or limitations, and altitude at which they are normally discernible at reduced RVR readings;

(vi) Procedures and techniques related to transition from nonvisual to visual flight during a final approach under reduced RVR;

(vii) Effects of vertical and horizontal windshear;

(viii) Characteristics and limitations of the ILS and runway lighting system;

(ix) Characteristics and limitations of the flight director system, auto approach coupler (including split axis type if equipped), auto throttle system (if equipped), and other required Category II equipment;

(x) Assigned duties of the second in command during Category II approaches; and

(xi) Instrument and equipment failure warning systems.

(2) *Phase II-proficiency test.* The test must—

(i) Be taken in an aircraft that meets the requirements of part 91 of this chapter for Category II operations;

(ii) Consist of at least two ILS approaches to 100 feet including at least one landing and one missed approach;

(iii) Be performed with all approaches made with the use of an approved flight control guidance system;

(iv) Include at least one manual approach if an approved automatic approach coupler is installed;

(v) Include a missed approach that is executed with one engine set in idle or zero thrust position before reaching the middle marker for a multiengine aircraft that has performance capability to execute a missed approach with an engine out; and

(vi) Include flight maneuvers performed solely by reference to instruments and in coordination with a second in command who holds a class rating and, in the case of a large aircraft or a small turbojet aircraft, a type rating for that aircraft.

§ 61.69 Glider towing: Experience and training requirements.

(a) No person may act as pilot in command for towing a glider unless that person:

(1) Holds at least a private pilot certificate with an airplane category and a single engine class rating;

(2) Has logged at least 100 hours of pilot-in-command time in single engine airplanes;

(3) Has a logbook endorsement from an authorized glider flight instructor who certifies that the person has received ground and flight training in gliders and is proficient in—

(i) The techniques and procedures essential to the safe towing of gliders, including airspeed limitations;

(ii) Emergency procedures;

(iii) Signals used; and

(iv) Maximum angles of bank.

(4) Has made at least three flights as the sole manipulator of the controls of an aircraft towing a glider while accompanied by a pilot who meets the requirements of this section; and

(5) Has received a logbook endorsement from the pilot described in paragraph (a)(4) of this section, and that endorsement must certify that the person has accomplished at least 3 flights in a single engine airplane while towing a glider.

(b) The pilot, described in paragraph (a)(4) of this section, who accompanies and endorses the logbook of persons seeking glider towing privileges:

(1) Must have met the requirements of this section prior to accompanying or endorsing the logbook of persons seeking glider towing privileges;

(2) Must have logged at least 10 flights as pilot in command of a single engine airplane while towing a glider; and

(3) Holds only a private pilot certificate, then that pilot—

(i) Must also have logged at least 100 hours of pilot-in-command time in airplanes, or 200 hours of pilot-in-command time in a combination of powered and other than powered aircraft; and

(ii) Must have performed and logged at least three flights within the 12-calendar months preceding the month that pilot accompanies or endorses the logbook of persons seeking glider towing privileges—

(A) In a single-engine airplane while towing a glider and be accompanied by another pilot who meets the requirements of this section; or

(B) As pilot in command of a glider being towed by a single-engine airplane.

§ 61.71 Graduates of an approved training program, other than under this part: Special rules.

(a) A person who graduates from an approved training program under parts 141 or 142 of this chapter, is considered to have met the applicable aeronautical experience, aeronautical knowledge, and approved areas of operation requirements of this part, if that person presents the graduation certificate and satisfactorily accomplishes the required practical test within the 60-day period after the date of graduation.

(b) A person may apply for an airline transport pilot certificate, type rating, or both under this part, and will be considered to have met the applicable requirements of § 61.157 of this part for that certificate and rating, if that person has—

(1) Satisfactorily accomplished an approved training program and the pilot-in-command proficiency check for that airplane type, in accordance with the pilot in command requirements of subparts N and O of part 121 of this chapter; and

(2) Made application for that airline transport pilot certificate, type rating, or both within the 60-day period from the date the person satisfactorily accomplished the approved training program and pilot-in-command proficiency check for that airplane type.

§ 61.73 Military pilots or former military pilots: Special rules.

(a) *General.* Military pilots or former military pilots who have graduated from a U.S. military pilot training course, have received official military aeronautical orders, and meet the applicable requirements of this section may apply, on the basis of their military training, for:

(1) A commercial pilot certificate.

(2) An aircraft rating in the category and class of aircraft for which that military pilot is qualified.

(3) An instrument rating with the appropriate aircraft rating for which that military pilot is qualified.

(4) A type rating, if appropriate.

(5) This section does not apply to a military pilot or a former military pilot who has been removed from flying status for lack of proficiency or because of disciplinary action.

(b) *Military pilots on active flying status within the past 12 months.* A rated military pilot or former rated military pilot who has been on active flying status within the 12 months before applying must:

(1) Satisfactorily accomplishes a knowledge test on the appropriate parts of this chapter that apply to pilot privileges and limitations, air traffic and general operating rules, and accident reporting rules;

(2) Present documents showing that the requirements of paragraph (d) of this section are met for at least one aircraft rating; and

(3) Present documents showing that the military pilot, is or was, at any time during the 12-calendar months before the month of application—

(i) A rated military pilot on active flying status in an armed force of the United States; or

(ii) A rated military pilot of an armed force of a member State to the International Civil Aviation Organization, assigned to pilot duties (other than flight training) with an armed force of the United States who holds, at the time of application, a current civil pilot license issued by that member State authorizing at least the privileges of the pilot certificate sought.

(c) *Military pilots not on active flying status during the 12 calendar months before the month of application.* A rated military pilot or former military pilot who has not been on active flying status during the 12 calendar months before the month of application must:

(1) Satisfactorily accomplishes the appropriate knowledge and practical tests prescribed in this part for the certificate or rating sought;

(2) Hold at least a third class medical certificate issued under part 67 of this chapter; and

(3) Present documents showing that the applicant, was or is, during the 12 calendar months before the month of application, a rated military pilot as prescribed by paragraph (b)(3) of this section.

(d) *Aircraft category, class, and type ratings.* A military pilot who applies for additional aircraft category, class, or

type rating is issued that rating at the commercial pilot certificate level if the pilot presents documentary evidence that shows satisfactory accomplishment of:

(1) An official U.S. military checkout and instrument proficiency checkout in the aircraft as pilot in command during the 12 calendar months before the month of application;

(2) At least 10 hours of pilot in command time in the aircraft during the 12 calendar months before the month of application;

(3) An FAA practical test in that aircraft after first—

(i) Meeting the requirements of paragraph (b)(1) and (2) of this section; and

(ii) Having received an endorsement from an authorized flight instructor who certifies that the pilot is proficient to accomplish the required practical test, and that endorsement is dated within the 60-day period preceding the date of the practical test.

(e) *Instrument rating.* Military pilots who apply for an airplane instrument rating, a helicopter instrument rating, or a powered-lift instrument rating to be added on their commercial pilot certificate, are entitled to that instrument rating if the pilots have, within the 12 calendar months preceding the month of application:

(1) Satisfactorily accomplished an instrument proficiency checkout of a U.S. Armed Force in the aircraft category and class for the instrument rating sought; and

(2) Is authorized by the U.S. Armed Force to conduct IFR flights on Federal airways in that aircraft category and class for the instrument rating sought.

(f) *Aircraft type rating.* An aircraft type rating is issued only for aircraft types that the Administrator has certificated for civil operations.

(g) *Aircraft type rating placed on an airline transport pilot certificate.* A military pilot who holds an airline transport pilot certificate and who requests an aircraft type rating to be placed on their airline transport pilot certificate may be issued that aircraft type rating at the airline transport pilot certificate level, provided that person—

(1) Holds a category and class rating for that type of aircraft at the airline transport pilot certificate level; and

(2) Satisfactorily accomplishes an official U.S. military checkout and instrument proficiency checkout in that type of aircraft as pilot in command during the 12 calendar months before the month of application.

(h) *Evidentiary documents.* The following documents are satisfactory

evidence for meeting the requirements of this section to show:

(1) Membership of the armed forces, an official identification card issued to the pilot by an armed force may be used.

(2) The military pilot's discharge or release from an armed force or former membership of an armed force, an original or a copy of a certificate of discharge or release may be used.

(3) Current or previous status as a rated military pilot with a U.S. Armed Force, for which one of the following may be used, as appropriate:

(i) An official U.S. Armed Force order to flight duty as a military pilot;

(ii) An official U.S. Armed Force form or logbook showing military pilot status; or

(iii) An official order showing that the military pilot graduated from a U.S. military pilot school and is rated as a military pilot.

(4) Flight time in military aircraft as a member of a U.S. Armed Force, an appropriate official U.S. Armed Force form or summary, or a certified U.S. Armed Force logbook may be used.

(5) Pilot-in-command status, an official U.S. armed force record of a military checkout as pilot in command may be used.

(6) Instrument pilot qualification, a current instrument grade slip that is issued by a U.S. Armed Force, or an official record of satisfactorily accomplishment of an instrument proficiency check during the 12 calendar months preceding the month of the application may be used.

§ 61.75 Private pilot certificate issued on basis of a foreign pilot license.

(a) *General.* A person who holds a current foreign pilot license, issued by a member State to the International Civil Aviation Organization (ICAO), may apply for and may be issued only a private pilot certificate with the appropriate ratings when the application is based on the foreign pilot license and meets the requirements of this section.

(b) *Certificate issued.* A U.S. private pilot certificate that is issued under this section shall specify the person's foreign license number and country of issuance. A person who holds a current pilot license, issued by a member State to ICAO, may be issued a private pilot certificate based on the foreign pilot license without any further showing of proficiency, and provided that person:

(1) Meets the requirements of this section;

(2) Holds a foreign pilot license that—
(i) Is not under an order of revocation or suspension by the foreign country that issued the foreign pilot license; and

(ii) Does not contain an endorsement stating that the person has not met all of the standards of ICAO;

(3) Does not currently hold a U.S. pilot certificate;

(4) Holds a current medical certificate issued under part 67 of this chapter or a current medical certificate issued by the country that issued the person's foreign pilot license; and

(5) Is able to read, speak, write, and understand the English language.

(c) *Aircraft ratings issued.* Aircraft ratings listed on a person's foreign pilot license, in addition to any issued after testing under the provisions of this part, may be placed on that person's U.S. pilot certificate.

(d) *Instrument ratings issued.* A person who holds an instrument rating on the foreign pilot license, issued by a member State to ICAO, may be issued an instrument rating on the U.S. private pilot certificate provided:

(1) The person's foreign pilot license authorizes instrument privileges;

(2) Upon application for the instrument rating privileges, the person satisfactorily accomplishes the appropriate knowledge test; and

(3) The person is able to read, speak, write, and understand the English language.

(e) *Operating privileges and limitations.* A person who receives a U.S. private pilot certificate that has been issued under the provisions of this section:

(1) May act as a pilot of a civil aircraft of U.S. registry in accordance with the private pilot privileges authorized by this part;

(2) Is limited to the privileges placed on the certificate by the Administrator;

(3) Is subject to the limitations and restrictions on the person's U.S. certificate and foreign pilot certificate when exercising the privileges of that U.S. pilot certificate in an aircraft of U.S. registry operating within or outside the United States; and

(4) Shall not exercise the privileges of that U.S. private pilot certificate when the person's foreign pilot license has been revoked or suspended.

(f) *Limitation on licenses used as basis for U.S. certificate.* Only one foreign pilot license may be used as a basis for issuing a U.S. private pilot certificate. The foreign pilot license and medical certificate used as a basis for issuing a U.S. private pilot certificate under this section must be in the English language or accompanied by an English language transcription that has been signed by an official or representative of the foreign aviation authority that issued the foreign pilot license.

(g) *Limitation placed on U.S. private pilot certificate.* The U.S. private pilot certificate issued under this section is valid only when that person has their foreign pilot license in their personal possession or readily accessible in the aircraft.

§ 61.77 Special purpose pilot authorization: Operation of U.S.-registered civil aircraft leased by a person who is not a U.S. citizen.

(a) *General.* After meeting the requirements of this section, a holder of a foreign pilot certificate or license issued by a member State of the International Civil Aviation Organization (ICAO) may be issued a special purpose pilot authorization by the Administrator for the purpose of performing pilot duties:

(1) On a civil aircraft of U.S. registry that is leased to a person who is not a citizen of the United States; and

(2) For carrying persons or property for compensation or hire on that aircraft.

(b) *Eligibility.* To be eligible for the issuance or renewal of a special purpose pilot authorization, a person must meet the following eligibility prerequisites:

(1) Hold a current foreign pilot certificate that has been issued by the aeronautical authority of a member State to ICAO from where the person holds citizenship or resident status;

(2) The person's foreign pilot certificate must contain the appropriate aircraft category, class, instrument rating, and type rating, if appropriate, for the aircraft to be flown;

(3) Hold a medical certificate from the aeronautical authority of a member State to ICAO from where the person holds citizenship or resident status;

(4) Must not already hold a special purpose pilot authorization, but if the person already holds a special purpose pilot authorization, then that special purpose pilot authorization must either be surrendered to the FAA Flight Standards District Office that issued it, or to the FAA Flight Standards District Office processing the application for the authorization prior to being issued another special purpose pilot authorization;

(5) Meet the currency requirements of this part and must present a logbook/flight record showing compliance with the currency requirements of this part;

(6) Show that the person will not reach the age of 60 years prior to the expiration date of the special purpose pilot authorization a birth certificate or some other official documentation; and

(7) Present a copy of the person's foreign pilot certificate and a letter to an FAA Flight Standards District Office from the lessee of the aircraft that—

(i) Acknowledges the person is employed by the lessee;

(ii) Specifies the aircraft type in which the person will be performing pilot duties; and

(iii) States that the person is currently qualified to exercise the privileges listed on that person's pilot certificate or license for the aircraft to be flown and that the person has satisfactorily accomplished the applicable ground and flight training in the aircraft type in which the person will be performing pilot duties.

(c) *Privileges.* A person who meets the general and eligibility requirements of, and is issued a special purpose pilot authorization under, this section:

(1) May exercise the privileges prescribed on the special purpose pilot authorization; and

(2) Must comply with the limitations specified in this section and any additional limitations specified on the special purpose pilot authorization.

(d) *Limitations.* Anytime persons are exercising the privileges of a special purpose pilot authorization those persons are subject to the following limitations:

(1) May apply for 60-calendar months extension of their authorization, provided they—

(i) Continue to meet the eligibility prerequisites and other requirements of this section; and

(ii) Surrender the expired special purpose pilot authorization upon receipt of the new authorization.

(2) May only hold one special purpose pilot authorization;

(3) May only conduct a flight or series of flights between foreign countries in foreign air commerce within the time period allotted on the authorization;

(4) Must carry their foreign pilot license, medical certificate, and special purpose pilot authorization in their physical possession or immediately available in the aircraft, while exercising the privileges of that special purpose pilot authorization; and

(5) Persons, who are 60 years of age or older, may not request nor may they be issued a special purpose pilot authorization, when the purpose of that authorization is for those persons to serve as a required pilot crewmember for a foreign air carrier in—

(i) Scheduled international air services in a U.S.-registered civil aircraft with more than 30 passenger seats, excluding any required crewmember seat, or 7500 pounds payload capacity; or

(ii) Non-scheduled international air transport operations in a U.S.-registered civil aircraft with more than 30 passenger seats, excluding any required

crewmember seat, or 7500 pounds payload capacity.

(e) *Expiration date.* Each special purpose pilot authorization, issued under this section, expires—

(1) Sixty-calendar months from the month it was issued, unless sooner suspended or revoked;

(2) When the lease agreement for the aircraft expires or the lessee terminates the employment of the person who holds the special purpose pilot authorization;

(3) Whenever the person's pilot or medical certificate has been suspended, revoked, or is no longer valid; or

(4) Whenever the person reaches the age of 60.

Subpart C—Student Pilots

§ 61.81 Applicability.

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

§ 61.83 Eligibility requirements for student pilots.

To be eligible for a student pilot certificate, an applicant must:

(a) Be at least 16 years of age for other than a rating in a glider or balloon.

(b) Be at least 14 years of age for a rating in a glider or balloon.

(c) Be able to read, speak, write, and understand the English language.

(d) Hold at least a current third-class medical certificate issued under part 67 of this chapter for other than a rating in glider or balloon, or a student pilot who is seeking a recreational pilot certificate.

(e) Affix a signed and dated statement to the application certifying that no known medical defect exists that would make the applicant unable to pilot the aircraft for training for a rating in a glider or balloon, or a student pilot who is seeking a recreational pilot certificate.

§ 61.85 Application.

An application for a student pilot certificate is made on a form and in a manner provided by the Administrator and is submitted to:

(a) A designated aviation medical examiner when applying for an FAA medical certificate in the United States; or

(b) An examiner, accompanied by a current FAA medical certificate, or in the case of an application for a pilot certificate with a glider or balloon rating, it may be accompanied by the applicant's certification that no known medical defect makes the applicant unable to pilot a glider or balloon.

§ 61.87 Supervised pilot-in-command requirements for student pilots.

(a) *General.* A student pilot may not operate an aircraft in supervised pilot-in-command (PIC) flight unless that student has met the requirements of this section.

(b) *Aeronautical knowledge.* A student pilot must demonstrate satisfactory aeronautical knowledge on a test that meets the requirements of this paragraph:

(1) The test must address the student pilot's knowledge of—

(i) Applicable sections of parts 61 and 91 of this chapter;

(ii) Airspace rules and procedures for the airport where the supervised PIC flight will be performed; and

(iii) Flight characteristics and operational limitations for the make and model of aircraft to be flown.

(2) The student's flight instructor must—

(i) Administer the test; and

(ii) At the conclusion of the test, review all incorrect answers with the student before authorizing that student to conduct a supervised PIC flight.

(c) *Supervised PIC flight training.* In order to perform supervised PIC flight training, a student pilot must have:

(1) Received and logged flight training on the maneuvers and procedures of this section that are appropriate to the make and model of aircraft to be flown; and

(2) Demonstrated satisfactory proficiency and safety, as judged by an authorized flight instructor, on the maneuvers and procedures required by this section in the make and model of aircraft to be flown.

(d) *Maneuvers and procedures for supervised PIC flight training in a single engine airplane.* A student pilot who is receiving training in a single engine airplane rating must receive and log supervised PIC flight training on the following maneuvers and procedures:

(1) Proper flight preparation procedures, including preflight planning and preparation, 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 and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns including entry and departure procedures;

(7) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

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

(9) Flight at various airspeeds from cruise to slow flight;

(10) Emergency procedures and equipment malfunctions;

(11) Ground reference maneuvers;

(12) Approaches to a landing area with simulated engine malfunctions;

(13) Slips to a landing; and

(14) Go-arounds.

(e) *Maneuvers and procedures for supervised PIC flight training in a multiengine airplane.* A student pilot who is receiving training in a multiengine airplane, must receive and log supervised PIC flight training on the following maneuvers and procedures:

(1) Proper flight preparation procedures including preflight planning and preparation, 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 and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns including entry and departure procedures;

(7) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

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

(9) Flight at various airspeeds from cruise to slow flight;

(10) Emergency procedures and equipment malfunctions;

(11) Ground reference maneuvers;

(12) Approaches to a landing area with simulated engine malfunctions; and

(13) Go-arounds.

(f) *Maneuvers and procedures for supervised PIC flight training in a helicopter.* A student pilot who is receiving training in a helicopter must receive and log supervised PIC flight training on the following maneuvers and procedures:

(1) Proper flight preparation procedures including preflight planning and preparation, 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 and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns including entry and departure procedures;

(7) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

(8) Descents with and without turns;

(9) Flight at various airspeeds;

(10) Emergency procedures and equipment malfunctions;

(11) Ground reference maneuvers;

(12) Approaches to the landing area;

(13) Hovering and hovering turns;

(14) Go-arounds;

(15) Simulated emergency procedures, including autorotational descents with a power recovery and power recovery to a hover;

(16) Rapid decelerations; and

(17) Simulated one engine inoperative approaches and landings for multiengine helicopters.

(g) *Maneuvers and procedures for supervised PIC flight training in a gyroplane.* A student pilot who is receiving training in a gyroplane must receive and log supervised PIC flight training on the following maneuvers and procedures:

(1) Proper flight preparation procedures including preflight planning and preparation, 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 and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns including entry and departure procedures;

(7) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

(8) Descents with and without turns;

(9) Flight at various airspeeds;

(10) Emergency procedures and equipment malfunctions;

(11) Ground reference maneuvers;

(12) Approaches to the landing area;

(13) High rates of descents with power on and with simulated power-off and recovery from those flight configurations;

(14) Go-arounds; and

(15) Simulated emergency procedures, including simulated power-off landings and simulated power failure during departures.

(h) *Maneuvers and procedures for supervised PIC flight training in a powered-lift.* A student pilot who is receiving training in a powered-lift must receive and log supervised PIC flight training on the following maneuvers and procedures:

(1) Proper flight preparation procedures, including preflight planning and preparation, 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 and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns including entry and departure procedures;

(7) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

(8) Descents with and without turns;

(9) Flight at various airspeeds from cruise to slow flight;

(10) Emergency procedures and equipment malfunctions;

(11) Ground reference maneuvers;

(12) Approaches to a landing with simulated engine malfunctions;

(13) Go-arounds;

(14) Approaches to the landing area;

(15) Hovering and hovering turns; and

(16) For multiengine powered-lifts, simulated one engine inoperative approaches and landings.

(i) *Maneuvers and procedures for supervised PIC flight training in a nonpowered glider.* A student pilot who is receiving training in a nonpowered glider must receive and log supervised PIC flight training on the following maneuvers and procedures:

(1) Proper flight preparation procedures, including preflight planning, preparation, and aircraft systems;

(2) Launches, including normal and crosswind;

(3) Straight and level flight and turns in both directions;

(4) Airport traffic patterns including entry procedures;

(5) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

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

(7) Flight at various airspeeds;

(8) Emergency procedures and equipment malfunctions;

(9) Ground reference maneuvers;

(10) Inspection of towline rigging and the review of signals and release procedures;

(11) Aerotows or ground tows;

(12) Procedures for disassembly and assembly of the glider;

(13) Stall entry, stall, and stall recovery;

(14) Straight glides, turns, and spirals;

(15) Landings, including normal and crosswind;

(16) Slips to a landing;

(17) Procedures and techniques for thermalling; and

(18) Emergency operations including towline break procedures.

(j) *Maneuvers and procedures for supervised PIC flight training in a powered glider.* A student pilot who is receiving training in a powered glider must receive and log supervised PIC flight training on the following maneuvers and procedures:

(1) Proper flight preparation procedures including preflight planning and preparation, 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 and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns including entry and departure procedures;

(7) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

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

(9) Flight at various airspeeds;

(10) Emergency procedures and equipment malfunctions;

(11) Ground reference maneuvers;

(12) Inspection of towline rigging and the review of signals and release procedures;

(13) Aerotows or ground tows;

(14) Procedures for disassembly and assembly of the glider;

(15) Stall entry, stall, and stall recovery;

(16) Straight glides, turns, and spirals;

(17) Slips to a landing;

(18) Procedures and techniques for thermalling; and

(19) Emergency operations including towline break procedures.

(k) *Maneuvers and procedures for supervised PIC flight training in an airship.* A student pilot who is receiving training in an airship must receive and log supervised PIC flight training on the following maneuvers and procedures:

(1) Proper flight preparation procedures including preflight planning and preparation, 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 and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns including entry and departure procedures;

(7) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

(8) Descents with and without turns;

(9) Flight at various airspeeds from cruise to slow flight;

(10) Emergency procedures and equipment malfunctions;

(11) Ground reference maneuvers;

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

(13) Landings with positive and with negative static trim.

(l) *Maneuvers and procedures for supervised PIC flight training in a balloon.* A student pilot who is receiving training in a balloon, must

receive and log supervised PIC flight training on the following maneuvers and procedures:

(1) Layout and assembly procedures;

(2) Proper flight preparation procedures including preflight planning and preparation and aircraft systems;

(3) Ascents and descents;

(4) Landing and recovery procedures;

(5) Emergency procedures and equipment malfunctions;

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

(7) Use of rip panel for simulating an emergency;

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

(9) Obstruction detection and avoidance techniques.

(m) *Limitations on student pilots operating an aircraft in supervised PIC flight at night.* A student pilot may not operate an aircraft in supervised PIC flight at night unless that student pilot has received:

(1) Flight training at night on night flying procedures that includes takeoffs, approaches, landings, and go-arounds at night at the airport where the supervised PIC flight will be conducted;

(2) Navigation training at night in the vicinity of the airport where the supervised PIC flight will be conducted;

(3) An endorsement in the student's logbook for the specific make and model aircraft to be flown for night supervised PIC flight, by the flight instructor who gave the training; and

(4) An endorsement in the student's logbook, for the specific make and model aircraft to be flown for night supervised PIC flight, by the flight instructor who gave the training within the 90-day period preceding the date of the flight.

(n) *Limitations on student pilots operating an aircraft in supervised PIC flight.* Student pilots may not operate an aircraft in supervised PIC flight unless they have:

(1) Had their student pilot certificate endorsed, for the specific make and model aircraft to be flown, by the flight instructor who gave the training; and

(2) Received a logbook endorsement, for the specific make and model aircraft to be flown, by the flight instructor who gave the training within the 90 days preceding the date of the flight had.

(o) *Limitations on flight instructors authorizing supervised PIC flight.*

(1) No flight instructor may authorize a student pilot to perform a supervised PIC flight unless that flight instructor has:

(i) Given that student pilot training in the aircraft in which the supervised PIC flight is to be flown;

(ii) Determined the student pilot is proficient on the maneuvers and procedures prescribed in this section;

(iii) Determined the student pilot is proficient in the make and model of aircraft to be flown;

(iv) Endorsed the student pilot's certificate for the specific make and model aircraft to be flown; and

(v) Endorsed the student pilot's logbook for the specific make and model aircraft to be flown, and that endorsement remains current for supervised PIC flight privileges, provided the flight instructor updates the student's logbook every 90 days thereafter.

(2) The flight training required by this section must be given by an authorized flight instructor who is appropriately rated and current.

§ 61.89 General limitations.

(a) A student pilot may not act as pilot in command of an aircraft:

(1) That is carrying a passenger;

(2) That is carrying property for compensation or hire;

(3) For compensation or hire;

(4) In furtherance of a business;

(5) On an international flight, except a student pilot may make supervised PIC training flights from Haines, Gustavus, or Juneau, Alaska to White Horse, Yukon, Canada and return, over the province of British Columbia;

(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; and

(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 training from an authorized flight instructor on board an airship and no person other than a required flight crewmember is carried on the aircraft.

(c) 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 training from an authorized flight instructor on board an airship and no person other than a required flight crewmember is carried on the aircraft.

§ 61.91 [Reserved.]

§ 61.93 Supervised pilot in command cross-country flight requirements.

(a) *General.*

(1) Except as provided in paragraph (b) of this section, a student pilot must meet the requirements of this section before:

(i) Conducting a supervised PIC cross-country flight, or any flight, greater than 25 nautical miles from the airport from where the flight originated.

(ii) Making a supervised PIC flight and landing at any location other than the airport of origination.

(2) Except as provided in paragraph (b) of this section, a student pilot who seeks supervised PIC cross-country flight privileges must:

(i) Have received flight training from an authorized flight instructor on the maneuvers and procedures of this section that are appropriate to the make and model aircraft for which supervised PIC cross-country privileges are sought;

(ii) Have demonstrated cross country proficiency on the appropriate maneuvers and procedures of this section and to an authorized flight instructor;

(iii) Have satisfactorily accomplished the supervised PIC flight maneuvers and procedures, required by § 61.87 of this part, in the make and model aircraft for which supervised PIC cross-country privileges are sought; and

(iv) Comply with any limitations included in the flight instructor's endorsement that is required by paragraph (c) of this section.

(3) A student pilot who seeks supervised PIC cross-country flight privileges must have received ground training from an authorized ground or flight instructor and flight training from an authorized flight instructor on the cross-country maneuvers and procedures listed in this section that are appropriate to the aircraft to be flown.

(4) A student pilot who seeks supervised PIC cross-country flight privileges must have demonstrated the cross-country maneuvers and procedures of this section to an acceptable level of proficiency to an authorized flight instructor.

(b) *Authorization to perform certain supervised PIC flights and cross-country flights.* A student pilot may receive an endorsement from an authorized flight instructor to make supervised PIC flights from the airport where the student pilot normally receives training to another location, if that student pilot complies with this paragraph.

(1) Supervised PIC flights may be made to another airport that is within 25 nautical miles from the airport where the student pilot normally receives training, provided—

(i) An authorized flight instructor has given the student pilot flight training at the other airport, and that training includes flight in both directions over the route, entering and exiting the traffic pattern, and takeoffs and landings at the other airport;

(ii) The flight instructor endorses that student pilot's logbook authorizing the flight;

(iii) The student pilot has a current supervised PIC flight endorsement in accordance with § 61.87 of this part;

(iv) The flight instructor has determined that the student pilot is proficient to make the flight; and

(v) The purpose of the flight is to practice takeoffs and landings at that other airport.

(2) Repeated specific supervised PIC cross-country flights may be made to another airport that is within 50 nautical miles of the airport from which the flight originated, provided—

(i) The flight instructor has given the student flight training in both directions over the route, including entry and exiting the traffic patterns, takeoffs, and landings at the airports to be used;

(ii) The flight instructor who gave the training has endorsed the student's logbook certifying that the student is proficient to make such flights;

(iii) The student has a current supervised PIC endorsement in accordance with § 61.87 of this part; and

(iv) The student has a current supervised PIC cross country flight endorsement in accordance with § 61.93 of this part.

(c) *Endorsements for supervised PIC cross country flights.* A student pilot must have the endorsements prescribed in this paragraph for each cross-country flight:

(1) *Student pilot certificate endorsement.* A student pilot must have a supervised PIC cross-country endorsement from the flight instructor who conducted the training, and that endorsement must be placed on that person's student pilot certificate for the specific make and model of aircraft to be flown.

(2) *Logbook endorsement.*

(i) A student pilot must have a supervised PIC cross-country endorsement from the flight instructor, who conducted the training, and that endorsement must be placed in that person's logbook for the specific make and model of aircraft to be flown.

(ii) A certificated pilot who is receiving training for an additional aircraft category and class rating must have an endorsement from the flight instructor who conducted the training, and that endorsement must be placed in that person's logbook for the specific make and model of aircraft to be flown.

(iii) For each cross-country flight, the flight instructor who reviews the cross-country planning must make an endorsement in the person's logbook after reviewing that person's cross-country planning. The endorsement must—

(A) Specify the make and model of aircraft to be flown;

(B) State that the student's preflight planning and preparation is correct and that the student is prepared to make the flight safely under the known circumstances; and

(C) State that any limitations required by the student's instructor are met.

(d) *Maneuvers and procedures for supervised PIC cross-country flight training in a single engine airplane.* A student pilot, who is receiving training for supervised PIC cross country flight training in a single engine airplane, must receive and log supervised PIC cross country flight training on the following maneuvers and procedures:

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

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and windshear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications;

(10) Takeoff, approach, and landing procedures, including short field, soft field, and crosswind takeoffs, approaches, and landings;

(11) Climbs at best angle and best rate; and

(12) Control and maneuvering solely by reference to flight instruments, including straight and level flight, turns, descents, climbs, use of radio aids, and ATC directives.

(e) *Maneuvers and procedures for supervised PIC cross-country flight training in a multiengine airplane.* A student pilot who is receiving training for supervised PIC cross country flight training in a multiengine airplane must receive and log supervised PIC cross country flight training on the following maneuvers and procedures:

(1) Use of aeronautical charts for VFR navigation using pilotage and dead

reckoning with the aid of a magnetic compass;

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and windshear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications;

(10) Takeoff, approach, and landing procedures, including short field, soft field, and crosswind takeoffs, approaches, and landings;

(11) Climbs at best angle and best rate; and

(12) Control and maneuvering solely by reference to flight instruments, including straight and level flight, turns, descents, climbs, use of radio aids, and ATC directives.

(f) *Maneuvers and procedures for supervised PIC cross-country flight training in a helicopter.* A student pilot who is receiving training for supervised PIC cross country flight training in a helicopter must receive and log supervised PIC cross country flight training on the following maneuvers and procedures:

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

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and windshear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous

terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications; and

(10) Takeoff, approach, and landing procedures.

(g) *Maneuvers and procedures for supervised PIC cross-country flight training in a gyroplane.* A student pilot who is receiving training for supervised PIC cross country flight training in a gyroplane must receive and log supervised PIC cross country flight training on the following maneuvers and procedures:

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

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and windshear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications; and

(10) Takeoff, approach, and landing procedures, including short field and soft field takeoffs, approaches, and landings.

(h) *Maneuvers and procedures for supervised PIC cross-country flight training in a powered-lift.* A student pilot who is receiving training for supervised PIC cross country flight training in a powered-lift must receive and log supervised PIC cross country flight training on the following maneuvers and procedures:

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

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and windshear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications;

(10) Takeoff, approach, and landing procedures that include high altitude, steep, and shallow takeoffs, high altitude, steep, and shallow approaches and landings; and

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

(i) *Maneuvers and procedures for supervised PIC cross-country flight training in a nonpowered glider.* A student pilot who is receiving training for supervised PIC cross country flight training in a nonpowered glider must receive and log supervised PIC cross country flight training on the following maneuvers and procedures:

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

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency situations procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and windshear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

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

(10) Recognition of weather and upper air conditions favorable for cross-country soaring, ascending and descending flight, and altitude control.

(j) *Maneuvers and procedures for supervised PIC cross-country flight training in a powered glider.* A student pilot who is receiving training for supervised PIC cross country flight training in a powered glider must receive and log supervised PIC cross country flight training on the following maneuvers and procedures:

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

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and windshear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

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

(10) Recognition of weather and upper air conditions favorable for cross-country soaring, ascending and descending flight, and altitude control.

(k) *Maneuvers and procedures for supervised PIC cross-country flight training in an airship.* A student pilot who is receiving training for supervised PIC cross country flight training in an airship must receive and log supervised PIC cross country flight training on the following maneuvers and procedures:

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

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and windshear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications;

(10) Control of air pressure with regard to ascending and descending flight and altitude control;

(11) Control of airship solely by reference to flight instruments; and

(12) Recognition of weather and upper air conditions conducive for the direction of cross-country flight.

(l) *Maneuvers and procedures for supervised PIC cross-country flight training in a balloon.* A student pilot who is receiving training for supervised PIC-cross country flight training in a balloon must receive and log supervised PIC cross-country flight training on the following maneuvers and procedures:

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

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(6) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(7) Control of gas pressure or burner, as appropriate, in relation to ascending and descending flight and altitude control; and

(8) Recognition of weather and upper air conditions conducive for the direction of cross-country flight.

(m) *Limitations on flight instructors authorizing supervised PIC cross-country flights.* A flight instructor may not authorize a student pilot to conduct a supervised PIC cross-country flight unless that instructor has:

(1) Determined that the student's cross country planning is correct for the flight;

(2) Reviewed the current and forecast weather conditions and has determined that the flight can be completed under VFR;

(3) Determined that the student is proficient to conduct the flight safely;

(4) Determined that the student has the appropriate supervised PIC cross-country endorsement for the make and model of aircraft to be flown; and

(5) Determined that the student's supervised PIC flight endorsement is current for the make and model aircraft to be flown.

§ 61.95 Operations in Class B airspace and at airports located within Class B airspace.

(a) A student pilot may not operate an aircraft on a supervised PIC flight in Class B airspace unless the:

(1) Student pilot has received both ground and flight training from an authorized instructor on that Class B airspace area and the flight training was received in the specific Class B airspace area for which supervised PIC flight is authorized;

(2) Logbook of that student pilot has been endorsed by the flight instructor who gave the student pilot flight training, and the endorsement must be dated within the 90-day period preceding the date of the flight in that Class B airspace area; and

(3) Logbook endorsement specifies that the student pilot has received the required ground and flight training and has been found proficient to conduct supervised PIC flight in that specific Class B airspace area.

(b) A student pilot may not operate an aircraft on a supervised PIC flight to, from, or at an airport located within Class B airspace listed in § 91.131(b) of this chapter unless the:

(1) Student pilot has received both ground and flight training from an authorized instructor to operate at that airport and the flight and ground training has been received at the specific airport for which the supervised PIC flight is authorized;

(2) Logbook of that student pilot has been endorsed by the flight instructor who gave the student pilot flight training, and the endorsement must be dated within the 90-day period

preceding the date of the flight at that airport; and

(3) Logbook endorsement specifies that the student pilot has received the required ground and flight training and has been found proficient to conduct supervised PIC flight operations at that specific airport.

Subpart D—Recreational Pilots

§ 61.96 Applicability.

This subpart prescribes the requirement for the issuance of recreational pilot certificates and ratings, the conditions under which those certificates and ratings are necessary, and the general operating rules for persons who hold those certificates and ratings.

§ 61.96a Eligibility requirements: General.

To be eligible for a recreational pilot certificate, a person who applies for that certificate must:

- (a) Be at least 17 years of age;
- (b) Be able to read, speak, write, and understand the English language;
- (c) Affix a signed and dated statement to the application certifying the person does not have any known medical limitations that prevents the person from operating the aircraft, for the aircraft category and class rating sought;
- (d) Receive a logbook endorsement from an authorized flight or ground instructor who—
 - (1) Conducted the training or reviewed the applicant's home study on the aeronautical knowledge areas listed in § 61.97(b) of this part that apply to the aircraft category and class rating sought; and
 - (2) Certified that the applicant is prepared for the required knowledge test.
- (e) Satisfactorily accomplish the required knowledge test on the aeronautical knowledge areas listed in § 61.97(b) of this part;
- (f) Receive flight training and a logbook endorsement from the authorized flight instructor who—
 - (1) Conducted the training on the approved areas of operation listed in § 61.98(b) of this part that apply to the aircraft category and class rating sought; and
 - (2) Certified that the applicant is prepared for the required practical test.
- (g) Meet the aeronautical experience requirements of § 61.99 of this part that apply to the aircraft category and class rating sought;
- (h) Satisfactorily accomplish the required practical test on the approved areas of operation listed in § 61.98(b) of this part that apply to the aircraft category and class rating sought; and

(i) Comply with the sections of this part that apply to the aircraft category and class rating sought.

§ 61.97 Aeronautical knowledge.

(a) *General.* A person who applies for a recreational pilot certificate must receive and log ground training from an authorized flight or ground instructor, or complete a home study course on the aeronautical knowledge areas of paragraph (b) of this section that apply to the aircraft category and class rating sought.

(b) *Aeronautical knowledge areas.*

- (1) The applicable Federal Aviation Regulations for recreational pilot privileges, limitations, and flight operations that apply to the aircraft rating sought;
- (2) Accident reporting requirements of the National Transportation Safety Board;
- (3) Use of the applicable portions of the "Airman's Information Manual" and FAA advisory circulars;
- (4) The use of aeronautical charts for VFR navigation using pilotage with the aid of a magnetic compass;
- (5) The recognition of critical weather situations from the ground and in flight, windshear avoidance, and the procurement and use of aeronautical weather reports and forecasts;
- (6) The safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence;
- (7) The effects of density altitude on takeoff and climb performance;
- (8) Weight and balance computations;
- (9) Principles of aerodynamics, powerplants, and aircraft systems;
- (10) Stall awareness, spin entry, spins, and spin recovery techniques, if applying for an airplane-single engine rating;
- (11) Aeronautical decision making and judgment; and
- (12) Preflight action that includes:
 - (i) How to obtain information on runway lengths at airports of intended use, data on takeoff and landing distances, weather reports and forecasts, and fuel requirements;
 - (ii) How to plan for alternatives if the planned flight cannot be completed; and
 - (iii) Proper planning procedures for possible traffic delays.

§ 61.98 Flight proficiency.

(a) *General.* A person who applies for a recreational pilot certificate must have received and logged ground training from authorized ground or flight instructor, and flight training from an authorized flight instructor on the approved areas of operation of this section that apply to the aircraft class rating sought.

(b) *For an single engine airplane rating.* Areas of operation for an airplane category rating with a single engine class rating are the following:

- (1) Preflight preparation;
- (2) Preflight procedures;
- (3) Airport operations;
- (4) Takeoffs, landings, and go-arounds;
- (5) Performance maneuvers;
- (6) Ground reference maneuvers;
- (7) Navigation;
- (8) Stalls and slow flight;
- (9) Emergency operations; and
- (10) Postflight procedures.

(c) *For a helicopter rating.* Areas of operation for a rotorcraft category rating with a helicopter class rating are the following:

- (1) Preflight preparation;
- (2) Preflight procedures;
- (3) Airport and heliport operations;
- (4) Hovering maneuvers;
- (5) Takeoffs, landings, and go-arounds;
- (6) Performance maneuvers;
- (7) Ground reference maneuvers;
- (8) Navigation;
- (9) Emergency operations; and
- (10) Postflight procedures.

(d) *For a gyroplane rating.* Areas of operation for a rotorcraft category rating with a gyroplane class rating are the following:

- (1) Preflight preparation;
- (2) Preflight procedures;
- (3) Airport operations;
- (4) Takeoffs, landings, and go-arounds;
- (5) Performance maneuvers;
- (6) Ground reference maneuvers;
- (7) Navigation;
- (8) Flight at slow airspeeds;
- (9) Emergency operations; and
- (10) Postflight procedures.

§ 61.99 Aeronautical experience.

A person who applies for a recreational pilot certificate must accomplish and log at least 30 hours of flight training time that includes at least:

(a) Fifteen hours of flight training from an authorized flight instructor on the approved areas of operation listed in § 61.98 of this part that consists of at least—

(1) Except as provided in § 61.100 of this part, 2 hours of flight training to and at an airport that is located more than 25 nautical miles from the airport where the applicant normally trains, which includes at least 3 takeoffs and 3 landings; and

(2) Three hours of flight training in the aircraft for the rating sought in preparation for the practical test within the 60 days preceding the date of the practical test.

(b) Three hours of supervised PIC flying in the aircraft for the rating sought, on the approved areas of operation listed in § 61.98 of this part that apply to the aircraft category and class rating sought.

§ 61.100 Pilots based on small islands.

A person who applies for a recreational pilot certificate, is based and receives training on a small island that has only one airport, and who cannot comply with the distance requirements of § 61.99(a)(1) of this part without flying over water for more than 10 nautical miles from the nearest shoreline is subject to the following limitations and conditions:

(a) The applicant's pilot certificate will be issued with the limitation, "Passenger carrying prohibited in flights more than 10 nautical miles from the (appropriate island)."

(b) Upon meeting the distance requirements of § 61.99(a)(1) of this part, the applicant may have the limitation in paragraph (a) of this section removed.

§ 61.101 Recreational pilot privileges and limitations.

(a) A person who holds a recreational pilot certificate may:

(1) Carry no more than one passenger; and

(2) Share equally the operating expenses of a flight with a passenger, provided the expenses involve only fuel, oil, and airport expenses.

(b) A person who holds a recreational pilot certificate may act as pilot in command of an aircraft on a flight that is within 50 nautical miles from the departure airport, provided that person:

(1) Received ground and flight training on takeoff, departure, arrival, and landing procedures at the departure airport;

(2) Received ground and flight training on the area, terrain, and aids to navigation that are in the vicinity of the departure airport;

(3) Has been found proficient to operate the airplane at the departure airport and the area within 50 nautical miles from that airport, and has received a logbook endorsement from the authorized flight instructor who gave the person the training prescribed by this paragraph; and

(4) Received a logbook endorsement that authorizes flight, which is carried in the person's possession in the aircraft.

(c) A person who holds a recreational pilot certificate may act as pilot in command of an aircraft on a flight that exceeds 50 nautical miles from the departure airport, provided that person:

(1) Has received ground and flight training from an authorized flight

instructor on the cross country training requirements of subpart E of this part that apply to the aircraft rating held;

(2) Has been found proficient in cross country flying, and has received a logbook endorsement from the authorized flight instructor, who gave the person the cross country training prescribed by subpart E of this part that apply to the aircraft rating held; and

(3) Received a logbook endorsement, which is carried in the person's possession in the aircraft, that certifies the person has received and been found proficient on the cross training requirements of subpart E of this part that apply to the aircraft rating held.

(d) Except as provided in paragraph (h) of this section, a recreational pilot may not act as pilot in command of an aircraft:

(1) That is certificated for more than four occupants, with more than one powerplant, with a powerplant of more than 180 horsepower, or with retractable landing gear.

(2) That is classified as a multiengine airplane, powered-lift, 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;

(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.

(e) 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:

(1) Receiving flight training from an authorized flight instructor on board an airship; or

(2) The other person on the aircraft is a required flight crewmember.

(f) A person who holds a recreational pilot certificate and has logged fewer than 400 flight hours and has not logged pilot-in-command time in an aircraft within the 180 days preceding the flight

shall not act as pilot in command of an aircraft:

(1) Until the pilot received flight training and a logbook endorsement from an authorized flight instructor who gave that person the flight training, and the instructor certified that the person is proficient to act as pilot in command of the aircraft; or

(2) Unless the pilot has satisfactorily accomplished a combination of the requirements of §§ 61.56 and 61.57 of this part, which meet the requirements of this paragraph.

(g) The recreational pilot certificate issued under this part will carry the notation on the person's pilot certificate, "Holder does not meet ICAO requirements."

(h) A recreational pilot may operate an aircraft as the sole occupant in the conditions and in an aircraft described in paragraph (d) of this section, provided the pilot:

(1) Is under the supervision of an authorized flight instructor for the purpose of obtaining an additional certificate or rating;

(2) Has received, within the 90-day period preceding the date of the flight, a logbook endorsement from an authorized flight instructor and that endorsement must certify the pilot has met the appropriate aeronautical knowledge and flight training requirements listed in § 61.87 of this part for the aircraft to be flown;

(3) Received within the 90 days preceding the date of the flight a logbook endorsement from an authorized flight instructor and that endorsement must certify the pilot is proficient to operate in that airspace, for operating an aircraft in airspace that requires communication with air traffic control;

(4) Received within the 90 days preceding the date of the flight, a logbook endorsement from an authorized flight instructor and that endorsement must certify the pilot is proficient to operate the aircraft in those flight conditions, for an operating an aircraft between sunset and sunrise, and provided the flight or surface visibility conditions are at least 5 statute miles; and

(5) Received a logbook endorsement described in this paragraph and carried in the pilot's physical possession in the aircraft.

Subpart E—Private Pilots

§ 61.102 Applicability.

This subpart prescribes the requirements for the issuance of private pilot certificates and ratings, the conditions under which those

certificates and ratings are necessary, and the general operating rules for persons who hold those certificates and ratings.

§ 61.103 Eligibility requirements: General.

To be eligible for a private pilot certificate, a person must:

(a) Be at least 17 years of age, or for a rating in a glider or balloon be at least 16 years of age.

(b) Be able to read, speak, write, and understand the English language.

(c) Hold at least a current third-class medical certificate issued under part 67 of this chapter, or for a rating in a glider or balloon affix a signed and dated statement to the application certifying that no known medical defect exists that would make the person unable to pilot a glider or balloon, as appropriate.

(d) Receive a logbook endorsement from an authorized instructor who—

(1) Conducted the training or reviewed the person's home study on the aeronautical knowledge areas listed in § 61.105(b) of this part that apply to the aircraft rating sought; and

(2) Certified that the person is prepared for the required knowledge test.

(e) Satisfactorily accomplish the required knowledge test on the aeronautical knowledge areas listed in § 61.105(b) of this part.

(f) Receive flight training and a logbook endorsement from the authorized instructor who—

(1) Conducted the training on the approved areas of operation listed in § 61.107 of this part that apply to the aircraft rating sought; and

(2) Certified that the person is prepared for the required practical test.

(g) Meet the aeronautical experience requirements of this part that apply to the aircraft rating sought before applying for the practical test.

(h) Satisfactorily accomplishes a practical test on the approved areas of operation listed in § 61.107 of this part that apply to the aircraft rating sought.

(i) Comply with the appropriate sections of this part that apply to the aircraft rating sought.

§ 61.105 Aeronautical knowledge.

(a) *General.* A person who is applying for a private pilot certificate must receive and log ground training from an authorized flight or ground instructor, or complete a home study course on the aeronautical knowledge areas of paragraph (b) of this section that apply to the aircraft rating sought.

(b) *Aeronautical knowledge areas.*

(1) The applicable Federal Aviation Regulations for private pilot privileges, limitations, and flight operations;

(2) Accident reporting requirements of the National Transportation Safety Board;

(3) Use of the applicable portions of the "Airman's Information Manual" and FAA advisory circulars;

(4) The use of aeronautical charts for VFR navigation using pilotage, dead reckoning, and radio aids;

(5) Radio communication procedures;

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

(7) The safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence;

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

(9) Weight and balance computations;

(10) Principles of aerodynamics, powerplants, and aircraft systems;

(11) Stall awareness, spin entry, spins, and spin recovery techniques for the airplane and glider category and class ratings;

(12) Aeronautical decision making and judgment; and

(13) Preflight action that includes:
(i) How to obtain information on runway lengths at airports of intended use, data on takeoff and landing distances, weather reports and forecasts, and fuel requirements;

(ii) How to plan for alternatives if the planned flight cannot be completed; and

(iii) How to plan procedures for possible traffic delays.

§ 61.107 Flight proficiency.

(a) *General.* A person who applies for a private pilot certificate must receive and log ground training from an authorized ground or flight instructor and flight training from an authorized flight instructor on the approved areas of operation of this section that apply to the aircraft rating sought.

(b) *Areas of operation for an airplane category rating with a single engine class rating.* Areas of operation for an airplane category rating with a single engine class rating are the following:

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and seaplane base operations;

(4) Takeoffs, landings, and go-arounds;

(5) Performance maneuvers;

(6) Ground reference maneuvers;

(7) Navigation;

(8) Stalls and slow flight;

(9) Basic instrument maneuvers;

(10) Emergency operations;

(11) Night operations, except as provided in § 61.110 of this part; and

(12) Postflight procedures.

(c) *Areas of operation for an airplane category rating with a multiengine class rating.* Areas of operation for an airplane category rating with a multiengine class rating are the following:

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and seaplane base operations;

(4) Takeoffs, landings, and go-arounds;

(5) Performance maneuvers;

(6) Ground reference maneuvers;

(7) Navigation;

(8) Stalls and slow flight;

(9) Basic instrument maneuvers;

(10) Emergency operations;

(11) Multiengine operations;

(12) Night operations, except as provided in § 61.110 of this part; and

(13) Postflight procedures.

(d) *Areas of operation for a rotorcraft category rating with a helicopter class rating.* Areas of operation for a rotorcraft category rating with a helicopter class rating are the following:

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and heliport operations;

(4) Hovering maneuvers;

(5) Takeoffs, landings, and go-arounds;

(6) Performance maneuvers;

(7) Navigation;

(8) Emergency operations;

(9) Night operations, except as provided in § 61.110 of this part; and

(10) Postflight procedures.

(e) *Areas of operation for a rotorcraft category rating with a gyroplane class rating.* Areas of operation for a rotorcraft category rating with a gyroplane class rating are the following:

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport operations;

(4) Takeoffs, landings, and go-arounds;

(5) Performance maneuvers;

(6) Ground reference maneuvers;

(7) Navigation;

(8) Flight at slow airspeeds;

(9) Emergency operations;

(10) Night operations, except as provided in § 61.110 of this part; and

(11) Postflight procedures.

(f) *Areas of operation for a powered-lift category rating.* Areas of operation for a powered-lift category rating are the following:

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and heliport operations;

(4) Hovering maneuvers;

(5) Takeoffs, landings, and go-arounds;

(6) Performance maneuvers;

- (7) Ground reference maneuvers;
- (8) Navigation;
- (9) Stalls and slow flight;
- (10) Basic instrument maneuvers;
- (11) Emergency operations;
- (12) Night operations, except as provided in § 61.110 of this part; and
- (13) Postflight procedures.

(g) *Areas of operation for a glider category rating with a non-powered class rating.* Areas of operation for a glider category rating with a non-powered class rating are the following:

- (1) Preflight preparation;
- (2) Preflight procedures;
- (3) Airport and gliderport operations;
- (4) Launches and landings;
- (5) Performance speeds;
- (6) Soaring techniques;
- (7) Performance maneuvers;
- (8) Navigation;
- (9) Stalls and slow flight;
- (10) Emergency operations; and
- (11) Postflight procedures.

(h) *Areas of operation for a glider category rating with a powered class rating.* Areas of operation for a glider category rating with a powered class rating are the following:

- (1) Preflight preparation;
- (2) Preflight procedures;
- (3) Airport and gliderport operations;
- (4) Takeoffs, landings, and go-arounds;
- (5) Performance speeds;
- (6) Soaring techniques;
- (7) Performance maneuvers;
- (8) Navigation;
- (9) Stalls and slow flight;
- (10) Emergency operations; and
- (11) Postflight procedures.

(i) *Areas of operation for a lighter-than-air category rating with an airship class rating.* Areas of operation for a lighter-than-air category rating with an airship class rating are the following:

- (1) Preflight preparation;
- (2) Preflight procedures;
- (3) Airport operations;
- (4) Takeoffs, landings, and go-arounds;
- (5) Performance maneuvers;
- (6) Ground reference maneuvers;
- (7) Navigation;
- (8) Emergency operations; and
- (9) Postflight procedures.

(j) *Areas of operation for a lighter-than-air category rating with a balloon class rating.* Areas of operation for a lighter-than-air category rating with a balloon class rating are the following:

- (1) Preflight preparation;
- (2) Preflight procedures;
- (3) Balloonport operations;
- (4) Lift-offs and landings;
- (5) Performance maneuvers;
- (6) Navigation;
- (7) Emergency operations; and
- (8) Postflight procedures.

§ 61.109 Aeronautical experience.

(a) A person who applies for a private pilot certificate with an airplane, rotorcraft, or powered-lift category rating must accomplish and log at least 40 hours of flight time that includes at least 20 hours of flight training time from an authorized flight instructor and 5 hours of supervised PIC flight time, on the approved areas of operation listed in § 61.107 of this part, and the training must include at least:

(1) *For an airplane single engine rating.*

(i) Three hours of cross-country flight training in a single engine airplane;

(ii) Except as provided in § 61.110 of this part, 3 hours of night flight training in a single engine airplane that includes—

(A) One cross country flight of over 100 nautical miles duration; and

(B) Ten takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in a single engine airplane;

(iv) Three hours of flight training in preparation for the practical test in a single engine airplane, and must have been performed within 60 days preceding the date of the test; and

(v) Supervised PIC flying in a single engine airplane, consisting of at least—

(A) One supervised PIC cross-country flight of over 100 nautical miles, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and

(B) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(2) *For an airplane multiengine rating.*

(i) Three hours of cross-country flight training in a multiengine airplane;

(ii) Except as provided in § 61.110 of this part, 3 hours of night flight training in a multiengine airplane that includes—

(A) One cross country flight of over 100 nautical miles duration; and

(B) Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in a multiengine airplane;

(iv) Three hours of flight training in preparation for the practical test in a multiengine airplane, and must have been performed within the 60-day period preceding the date of the test; and

(v) Supervised PIC flying in a multiengine airplane, consisting of at least—

(A) One supervised PIC cross-country flight of over 100 nautical miles, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and

(B) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(3) *For a rotorcraft-helicopter rating.*
(i) Three hours of cross-country flight training in a helicopter;

(ii) Except as provided in § 61.110 of this part, 3 hours of night flight training in a helicopter that includes—

(A) One cross country flight of over 50 nautical miles duration; and

(B) Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of flight training in preparation for the practical test in a helicopter, and must have been performed within 60 days preceding the date of the test; and

(iv) Supervised PIC flying in a helicopter, consisting of at least—

(A) One supervised PIC cross-country flight of over 50 nautical miles, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 25 nautical miles between the takeoff and landing locations; and

(B) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(4) *For a rotorcraft-gyroplane rating.*

(i) Three hours of cross-country flight training in a gyroplane;

(ii) Except as provided in § 61.110 of this part, 3 hours of night flight training in a gyroplane that includes—

(A) One cross country flight of over 50 nautical miles duration; and

(B) Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of flight training in preparation for the practical test in a gyroplane, and must have been performed within the 60-day period preceding the date of the test; and

(iv) Supervised PIC flying in a gyroplane, and consisting of at least—

(A) One supervised PIC cross-country flight of over 50 nautical miles, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 25 nautical miles between the takeoff and landing locations; and

(B) Three takeoffs and three landings to a full stop (with each landing

involving a flight in the traffic pattern) at an airport with an operating control tower.

(5) *For a powered-lift rating.*

(i) Three hours of cross-country flight training in a powered-lift;

(ii) Except as provided in § 61.110 of this part, 3 hours of night flight training in a powered-lift that includes—

(A) One cross country flight of over 100 nautical miles duration; and

(B) Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in a powered-lift;

(iv) Three hours of flight training in preparation for the practical test in a powered-lift, and must have been performed within the 60-day period preceding the date of the test; and

(v) Supervised PIC flying in a powered-lift, consisting of at least—

(A) One supervised PIC cross-country flight of over 100 nautical miles, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and

(B) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(b) *For a glider rating.* A person who applies for a private pilot certificate with a glider category and class rating must accomplish and log the following flight time and training requirements:

(1) At least 10 hours of flight training and 20 flights on the approved areas of operation listed in § 61.107 of this part that apply to the glider class rating sought; or

(2) A person who has logged at least 40 hours of flight time in heavier-than-air aircraft or who already holds a category and class rating in a glider, must perform at least 5 hours of flight training and 10 flights, on the approved areas of operation listed in § 61.107 of this part that apply to the glider class rating sought.

(3) At least two supervised PIC flights on the approved areas of operation listed in § 61.107 that apply to the glider class rating sought.

(4) The flight training requirements in paragraphs (c) (1) or (2) of this section must include at least 3 flights of flight training in preparation for the practical test within the 60-day period preceding the test and in the class of glider for the rating sought.

(5) A person applying for a glider category rating with a nonpowered class rating seeks privileges for ground launch procedures, in addition to

complying with the requirements of paragraphs (c) (1) through (4), as appropriate, must log and receive at least 5 flights of flight training and 2 supervised PIC flights in a nonpowered glider using a winch or auto tow on the appropriate approved areas of operation listed in § 61.107(g) of this part.

(c) *For an airship rating.* A person who applies for a private pilot certificate with a lighter-than-air category and airship class rating must receive and log at least 25 hours of flight training in airships on the approved areas of operation listed in § 61.107(i) of this part, which consists of at least:

(1) Three hours of cross-country flight training in an airship;

(2) Except as provided in § 61.110 of this part, 3 hours of night flight training in an airship that includes—

(i) A cross country flight of over 25 nautical miles; and

(ii) Five takeoffs and 5 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(3) Three hours of instrument flight training in an airship;

(4) Three hours of flight training in an airship in preparation for the practical test within the 60 days preceding the date of the test; and

(5) Five hours of supervised PIC flight training in an airship and with an authorized flight instructor.

(d) *For a balloon rating.* A person who applies for a private pilot certificate with a lighter-than-air category and balloon class rating must receive and log at least 10 hours of flight training that includes at least 6 training flights, on the approved areas of operation listed in § 61.107(j) of this part, that includes:

(1) *Gas balloon.* If the training is being performed in a gas balloon, the training must include at least two flights of 2 hours each that consists of—

(i) At least one training flight that covers the approved areas of operation appropriate to a gas balloon within 60 days prior to application for the rating; and

(ii) At least one supervised PIC flight in a gas balloon.

(2) *Balloon with an airborne heater.* If the training is being performed in a balloon with an airborne heater, the training must include at least—

(i) Two training flights of one hour each that covers the approved areas of operation appropriate to a balloon with an airborne heater within 60 days prior to application for the rating; and

(ii) One supervised PIC flight in a balloon with an airborne heater.

§ 61.110 Night flying exceptions for private pilot certification.

A person is not required to comply with the night flying requirements of this subpart:

(a) If that person has a medical restriction from operating an aircraft at night, then that person may—

(1) Be issued a permanent private pilot certificate with the limitation "Night flying prohibited;" and

(2) Have that limitation removed if the condition which was the basis for the medical restriction is corrected, and the person accomplishes the appropriate night flying requirements of this subpart.

(b) If that person receives flight training in the State of Alaska and is not able to accomplish the training, then that person—

(1) May be issued a temporary pilot certificate for only 12 calendar months, with a limitation "Night flying prohibited;"

(2) Must comply with the appropriate night flying requirements of this subpart within the 12-calendar month period following issuance of the temporary private pilot certificate, or the certificate will be suspended until the person complies with the appropriate night flying requirements of this subpart; and

(3) May have the "Night flying prohibited" limitation of this section removed if the person—

(i) Accomplishes the appropriate night flight training requirements of this subpart in the category and class of aircraft for which night flying privileges are sought;

(ii) Presents to an examiner, a logbook or training record endorsement from an authorized flight instructor that verifies accomplishment of the night flying requirements of this subpart that are appropriate to the category and class aircraft for which night flying privileges are sought; and

(iii) Satisfactorily accomplishes the night operations portion of the practical test that are appropriate to the category and class of aircraft for which night flying privileges are sought.

§ 61.111 Cross-country flights: Pilots based on small islands.

A person who applies for a private pilot certificate and who cannot comply with the cross-country distance requirements of this subpart without flying over water for more than 10 nautical miles from the nearest shoreline, is not required to comply with the cross-country distance requirements of this subpart for cross-country flight. The person is subject to the following limitations and conditions:

(a) The person's pilot certificate will be issued with the limitation noted, "Passenger carrying prohibited in flights more than 10 nautical miles from the (appropriate island)."

(b) Upon meeting the cross-country distance requirements in this subpart, the person may have the limitation in paragraph (a) of this section removed.

§ 61.113 Private pilot privileges and limitations: Pilot in command.

(a) Except as provided in paragraphs (b) through (f) of this section, no person who holds a private pilot certificate may act as pilot in command of an aircraft that is carrying passengers or property for compensation or hire; nor may that person, for compensation or hire, act as pilot in command of an aircraft.

(b) A private pilot may, for compensation or hire, act as pilot in command of an aircraft in connection with any business or employment if:

(1) The flight is only incidental to that business or employment; and

(2) The aircraft does not carry passengers or property for compensation or hire.

(c) A private pilot may share equally the operating expenses of a flight with passengers, provided the expenses involve only fuel, oil, and airport expenditures.

(d) No person who holds a private pilot certificate may act as pilot in command of an aircraft for a passenger-carrying airlift that is sponsored by a charitable organization described in paragraph (d)(7) of this section, for which the passengers are only making a donation to the organization, unless the following requirements are met:

(1) The sponsor of the airlift notifies the FAA Flight Standards District Office with jurisdiction over the area concerned at least 7 days before the event and furnishes—

(i) A signed letter from the sponsor that shows the name of the sponsor, the purpose of the charitable event, the date and time of the event, and the location of the event; and

(ii) A photocopy of each pilot in command's pilot certificate, medical certificate, and logbook entries that show the pilot is current in accordance with §§ 61.56 and 61.57 of this part and has logged at least 200 hours of flight time.

(2) The charitable event takes place at a public airport that is adequate for the aircraft to be used or at an airport that has been approved by the FAA for the operation.

(3) No acrobatic or formation flights are conducted.

(4) Each aircraft used for the charitable event holds a standard airworthiness certificate.

(5) Each aircraft used for the charitable event is airworthy, in accordance with the applicable sections of subpart E of part 91 of this chapter.

(6) Each flight for the charitable event is made during day-VFR conditions.

(7) The charitable organization is an organization identified as such by the U.S. Department of Treasury regulations.

(e) A private pilot may be reimbursed for aircraft operating expenses that are directly related to and for search and location operations, provided the operation is sanctioned and under the direction and control of:

(1) A local, state, or Federal law enforcement agency; or

(2) An organization that conducts search and location operations.

(f) A private pilot who meets the requirements of § 61.69 of this part may act as pilot in command of an aircraft towing a glider.

§ 61.115 Balloon rating: Limitations.

(a) If a person who applies for private pilot certificate with a balloon rating takes a practical test in a balloon with an airborne heater:

(1) The pilot certificate will contain a limitation restricting the exercise of the privilege of that certificate to a balloon with an airborne heater; and

(2) The limitation may be removed when the person obtains the required aeronautical experience in a gas balloon and receives a logbook endorsement from an authorized instructor who attests to the person's accomplishment of the required aeronautical experience and ability to satisfactorily operate a gas balloon.

(b) If a person who applies for a private pilot certificate with a balloon rating takes a practical test in a gas balloon:

(1) The pilot certificate will contain a limitation restricting the exercise of the privilege of that certificate to a gas balloon; and

(2) The limitation may be removed when the person obtains the required aeronautical experience in a balloon with an airborne heater and receives a logbook endorsement from an authorized instructor who attests to the person's accomplishment of the required aeronautical experience and ability to satisfactorily operate a balloon with an airborne heater.

§ 61.117 Private pilot privileges and limitations: Second in command of aircraft requiring more than one pilot.

Except as provided in § 61.113 of this part, no private pilot may, for compensation or hire, act as second in command of an aircraft that is type

certificated for more than one pilot, nor may that pilot act as second in command of such an aircraft that is carrying passengers or property for compensation or hire.

§§ 61.118 through 61.120 [Reserved]

Subpart F—Commercial Pilots

§ 61.121 Applicability.

This subpart prescribes the requirements for the issuance of commercial pilot certificates and ratings, the conditions under which those certificates and ratings are necessary, and the general operating rules for persons who hold those certificates and ratings.

§ 61.123 Eligibility requirements: General.

To be eligible for a commercial pilot certificate, a person must:

(a) Be at least 18 years of age;

(b) Be able to read, speak, write, and understand the English language;

(c) Hold at least a current third-class medical certificate issued under part 67 of this chapter, or for a rating in a glider or balloon affix a signed and dated statement to the application certifying that no known medical defect exists that would make the person unable to pilot a glider or balloon, as appropriate;

(d) Receive a logbook endorsement from an authorized instructor who—

(1) Conducted the required ground training or reviewed the person's home study on the aeronautical knowledge areas listed in § 61.125 of this part that apply to the aircraft category and class rating sought; and

(2) Certified that the person is prepared for the required knowledge test that apply to the aircraft category and class rating sought.

(e) Satisfactorily accomplish the required knowledge test on the aeronautical knowledge areas listed in § 61.125 of this part;

(f) Received the required training and a logbook endorsement from the authorized instructor who—

(1) Conducted the training on the approved areas of operation listed in § 61.127 of this part that apply to the aircraft category and class rating sought; and

(2) Certified that the person is prepared for the required practical test.

(g) Meet the aeronautical experience requirements of this subpart that apply to the aircraft category and class rating sought before applying for the practical test;

(h) Satisfactorily accomplish the required practical test on the approved areas of operation listed in § 61.127 of this part that apply to the aircraft category and class rating sought; and

(i) Hold at least a private pilot certificate.

§ 61.125 Aeronautical knowledge.

(a) *General.* A person who applies for a commercial pilot certificate must receive and log ground training, or accomplish a home study course, on the aeronautical knowledge areas of this section that apply to the aircraft category and class rating sought.

(b) *Aeronautical knowledge areas.*

(1) The Federal Aviation Regulations that apply to commercial pilot privileges, limitations, and flight operations;

(2) Accident reporting requirements of the National Transportation Safety Board;

(3) Basic aerodynamics and the principles of flight;

(4) Meteorology to include recognition of critical weather situations, windshear recognition and avoidance, and the use of aeronautical weather reports and forecasts;

(5) The safe and efficient operation of aircraft;

(6) Weight and balance computations;

(7) Use of performance charts;

(8) Significance and effects of exceeding aircraft performance limitations;

(9) Use of aeronautical charts and magnetic compass for pilotage and dead reckoning;

(10) Use of air navigation facilities;

(11) Aeronautical decision making and judgment;

(12) Principles and functions of aircraft systems;

(13) Maneuvers, procedures, and emergency operations appropriate to the aircraft;

(14) Night and high altitude operations; and

(15) Descriptions of and procedures for operating within the National Airspace System.

§ 61.127 Flight proficiency.

(a) *General.* A person who applies for a commercial pilot certificate must receive and log ground and flight training on the approved areas of operation of this section that apply to the aircraft category and class rating sought.

(b) *Areas of operation for an airplane category rating with a single engine class rating.*

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and seaplane base operations;

(4) Takeoffs, landings, and go-arounds;

(5) Performance maneuvers;

(6) Ground reference maneuvers;

(7) Navigation;

(8) Stalls and slow flight;

(9) Emergency operations;

(10) High altitude operations; and

(11) Postflight procedures.

(c) *Areas of operation for an airplane category rating with a multiengine class rating.*

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and seaplane base operations;

(4) Takeoffs, landings, and go-arounds;

(5) Performance maneuvers;

(6) Navigation;

(7) Stalls and slow flight;

(8) Emergency operations;

(9) Multiengine operations;

(10) High altitude operations; and

(11) Postflight procedures.

(d) *Areas of operation for a rotorcraft category rating with a helicopter class rating.*

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and heliport operations;

(4) Hovering maneuvers;

(5) Takeoffs, landings, and go-arounds;

(6) Performance maneuvers;

(7) Navigation;

(8) Emergency operations;

(9) Special operations; and

(10) Postflight procedures.

(e) *Areas of operation for a rotorcraft category rating with a gyroplane class rating.*

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport operations;

(4) Takeoffs, landings, and go-arounds;

(5) Performance maneuvers;

(6) Ground reference maneuvers;

(7) Navigation;

(8) Flight at slow airspeeds;

(9) Emergency operations; and

(10) Postflight procedures.

(f) *Areas of operation for a powered-lift category rating.*

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and heliport operations;

(4) Hovering maneuvers;

(5) Takeoffs, landings, and go-arounds;

(6) Performance maneuvers;

(7) Ground reference maneuvers;

(8) Navigation;

(9) Stalls and slow flight;

(10) Emergency operations;

(11) High altitude operations;

(12) Special operations; and

(13) Postflight procedures.

(g) *Areas of operation for a glider category rating with a non-powered class rating.*

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and gliderport operations;

(4) Launches and landings;

(5) Performance speeds;

(6) Soaring techniques;

(7) Performance maneuvers;

(8) Navigation;

(9) Stalls and slow flight;

(10) Emergency operations; and

(11) Postflight procedures.

(h) *Areas of operation for a glider category rating with a powered class rating.*

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport and gliderport operations;

(4) Takeoffs, landings, and go-arounds;

(5) Performance speeds;

(6) Soaring techniques;

(7) Performance maneuvers;

(8) Navigation;

(9) Stalls and slow flight;

(10) Emergency operations; and

(11) Postflight procedures.

(i) *Areas of operation for a lighter-than-air category rating with an airship class rating.*

(1) Preflight preparation;

(2) Preflight procedures;

(3) Airport operations;

(4) Takeoffs, landings, and go-arounds;

(5) Performance maneuvers;

(6) Ground reference maneuvers;

(7) Navigation;

(8) Emergency operations; and

(9) Postflight procedures.

(j) *Areas of operation for a lighter-than-air category rating with a balloon class rating.*

(1) Preflight preparation;

(2) Preflight procedures;

(3) Balloonport operations;

(4) Lift-offs and landings;

(5) Performance maneuvers;

(6) Navigation;

(7) Emergency operations; and

(8) Postflight procedures.

§ 61.129 Aeronautical experience.

(a) *For an airplane single engine rating.* A person who applies for a commercial pilot certificate with an airplane category and single engine class rating must accomplish and log at least 250 hours of flight time as a pilot (of which 50 hours may have been accomplished in an approved flight simulator or flight training device that is representative of a single engine airplane) that consists of at least:

(1) One hundred hours in powered aircraft, of which 50 hours must be in airplanes;

(2) One hundred hours of pilot-in-command flight time, which includes at least—

(i) Fifty hours in airplanes; and

(ii) Fifty hours in cross-country flight in airplanes.

(3) Twenty hours of training on the approved areas of operation listed in § 61.127(b) of this part that includes at least—

(i) Five hours of instrument training in a single engine airplane;

(ii) Ten hours of training in a single engine airplane that has a retractable landing gear, flaps, and a controllable pitch propeller, or is turbine-powered;

(iii) One cross-country flight in a single engine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iv) One cross-country flight in a single engine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(v) Three hours in a single engine airplane in preparation for the practical test within the 60-day period preceding the date of the test.

(4) Ten hours of supervised PIC flying in a single engine airplane on the approved areas of operation listed in § 61.127(b) of this part, which includes at least—

(i) One cross-country flight, if the training is being performed in the state of Hawaii, then that cross-country flight must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 150 nautical miles;

(ii) One cross-country flight, if the training is being performed in a State other than Hawaii, then that cross-country flight must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 250 nautical miles; and

(iii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower.

(b) *For an airplane multiengine rating.* A person who applies for a commercial pilot certificate with an airplane category and multiengine class rating must accomplish and log at least 250 hours of flight time as a pilot (of which 50 hours may have been accomplished in an approved flight simulator or flight training device that is representative of a multiengine airplane) that consists of at least:

(1) One hundred hours in powered aircraft, of which 50 hours must be in airplanes;

(2) One hundred hours of pilot-in-command flight time, which includes at least—

(i) Fifty hours in airplanes; and

(ii) Fifty hours in cross-country flight in airplanes.

(3) Twenty hours of training on the approved areas of operation listed in § 61.127(c) of this part that includes at least—

(i) Five hours of instrument training in a multiengine airplane;

(ii) Ten hours of training in a multiengine airplane that has a retractable landing gear, flaps, and a controllable pitch propeller, or is turbine-powered;

(iii) One cross-country flight in a multiengine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iv) One cross-country flight in a multiengine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(v) Three hours in a multiengine airplane in preparation for the practical test within the 60-day period preceding the date of the test.

(4) Ten hours of supervised PIC flying in a multiengine airplane on the approved areas of operation listed in § 61.127(c) of this part, which includes at least—

(i) One cross-country flight, if the training is being performed in the state of Hawaii, then that cross-country flight must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 150 nautical miles;

(ii) One cross-country flight, if the training is being performed in a State other than Hawaii, then that cross-country flight must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 250 nautical miles; and

(iii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower.

(c) *For a helicopter rating.* A person who applies for a commercial pilot certificate with a rotorcraft category and helicopter class rating must accomplish and log at least 150 hours of flight time as a pilot (of which 25 hours may have been accomplished in an approved flight simulator or flight training device that is representative of a helicopter) that consists of at least:

(1) One hundred hours in powered aircraft, of which 50 hours must be in helicopters;

(2) One hundred hours of pilot-in-command flight time, which includes at least—

(i) Thirty-five hours in helicopters; and

(ii) Ten hours in cross-country flight in helicopters.

(3) Twenty hours of training on the approved areas of operation listed in § 61.127(d) of this part that includes at least—

(i) Five hours of instrument training in a helicopter;

(ii) One cross-country flight in a helicopter of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iii) One cross-country flight in a helicopter of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(iv) Three hours in a helicopter in preparation for the practical test within the 60-day period preceding the date of the test.

(4) Ten hours of supervised PIC flying in a helicopter on the approved areas of operation listed in § 61.127(d) of this part, which includes at least—

(i) One cross-country flight with landings at a minimum of three points, and one of the routes having a straight-line distance of at least 50 nautical miles from the original point of departure; and

(ii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern).

(d) *For a gyroplane rating.* A person who applies for a commercial pilot certificate with a rotorcraft category and gyroplane class rating must accomplish and log at least 150 hours of flight time as a pilot (of which 5 hours may have been accomplished in an approved flight simulator or flight training device that is representative of a gyroplane) that consists of at least:

(1) One hundred hours in powered aircraft, of which 25 hours must be in gyroplanes;

(2) One hundred hours of pilot-in-command flight time, which includes at least—

(i) Ten hours in gyroplanes; and

(ii) Three hours in cross-country flight in gyroplanes.

(3) Twenty hours of training on the approved areas of operation listed in § 61.127(d) of this part that includes at least—

(i) Five hours of instrument training in a gyroplane;

(ii) One cross-country flight in a gyroplane of at least 2 hours in duration,

a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iii) One cross-country flight in a gyroplane of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(iv) Three hours in a gyroplane in preparation for the practical test within the 60-day period preceding the date of the test.

(4) Ten hours of supervised PIC flying in a gyroplane on the approved areas of operation listed in § 61.127(e) of this part, which includes at least—

(i) One cross-country flight with landings at a minimum of three points, and one of the routes having a straight-line distance of at least 50 nautical miles from the original point of departure; and

(ii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern).

(e) *For a powered-lift rating.* A person who applies for a commercial pilot certificate with a powered-lift category rating must accomplish and log at least 250 hours of flight time as a pilot (of which 50 hours may have been accomplished in an approved flight simulator or flight training device that is representative of a powered-lift) that consists of at least:

(1) One hundred hours in powered aircraft, of which 50 hours must be in a powered-lift;

(2) Two hundred hours of pilot-in-command flight time, which includes at least—

(i) Fifty hours in a powered-lift; and
(ii) Fifty hours in cross-country flight in a powered-lift.

(3) Twenty hours of training on the approved areas of operation listed in § 61.127(e) of this part that includes at least—

(i) Five hours of instrument training in a powered-lift;

(ii) One cross-country flight in a powered-lift of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iv) One cross-country flight in a powered-lift of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(v) Three hours in a powered-lift in preparation for the practical test within the 60-day period preceding the date of the test.

(4) Ten hours of supervised PIC flying in a powered-lift on the approved areas of operation listed in § 61.127(e) of this part, which includes at least—

(i) One cross-country flight, if the training is being performed in the state of Hawaii, then that cross-country flight must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 150 nautical miles;

(ii) One cross-country flight, if the training is being performed in a State other than Hawaii, then that cross-country flight must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 250 nautical miles; and

(iii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower.

(f) *For a glider-nonpowered rating.* A person who applies for a commercial certificate with a glider category and nonpowered class rating must accomplish and log at least:

(1) Twenty-five hours and 100 flights in gliders as pilot in command, which includes at least 10 flights in a nonpowered glider; or

(2) Two hundred hours in heavier-than-air aircraft, and 20 flights in gliders as pilot in command, which includes at least 10 flights in a nonpowered glider.

(3) The flight time requirements in paragraph (f) (1) or (2) of this section must consist of at least the following flight training in a nonpowered glider—

(i) Five hours of flight training or 10 training flights on the approved areas of operation listed in § 61.127(g) of this part; and

(ii) Three flights in preparation for the practical test within the 60-day period preceding the date of the test.

(4) Five supervised PIC flights in a nonpowered glider on the approved areas of operation listed in § 61.127(g) of this part.

(5) If an applicant with a glider category rating and a nonpowered class rating seeks privileges for ground launch procedures, that person must accomplish and log at least five training flights and two supervised PIC flights in a nonpowered glider using a winch or auto tow on the applicable areas of operation listed in § 61.127(g) of this part.

(g) *For a glider-powered rating.* A person who applies for a commercial certificate with a glider category and powered class rating must accomplish and log at least:

(1) Twenty-five hours and 100 flights in gliders as pilot in command, which

includes at least 10 flights in a powered glider; or

(2) Two hundred hours in heavier-than-air aircraft, and 20 flights in gliders as pilot in command, which includes at least 10 flights in a powered glider.

(3) The flight time requirements in paragraph (f)(1) or (2) of this section must consist of at least the following flight training in a powered glider—

(i) Five hours of flight training or 10 training flights on the approved areas of operation listed in § 61.127(h) of this part; and

(ii) Three flights in preparation for the practical test within the 60-day period preceding the date of the test.

(4) Five supervised PIC flights in a powered glider on the approved areas of operation listed in § 61.127(h) of this part.

(h) *For an airship rating.* A person who applies for a commercial pilot certificate with a lighter-than-air category and airship class rating must accomplish and log at least 200 hours of flight time as a pilot, which includes at least the following hours:

(1) Fifty hours in airships;

(2) Thirty hours of pilot in command time in airships, which consists of at least—

(i) Ten hours of cross-country flight time in airships; and

(ii) Ten hours of night flight time in airships.

(3) Twenty hours of training in airships on the approved areas of operation listed in § 61.127(i) of this part, which includes at least—

(i) Three hours in an airship in preparation for the practical test within the 60-day period preceding the date of the test;

(ii) Five hours of instrument training in airships;

(iii) One cross-country flight in an airship of at least 1 hour in duration, a total straight-line distance of more than 25 nautical miles from the original point of departure, and occurring in day-VFR conditions; and

(iv) One cross-country flight in an airship of at least 1 hour in duration, a total straight-line distance of more than 25 nautical miles from the original point of departure, and occurring in night-VFR conditions.

(4) Ten hours of pilot in command flight training with an authorized flight instructor in airships, on the approved areas of operation listed in § 61.127(i) of this part, which includes at least—

(i) One cross-country flight with landings at a minimum of three points, and one of the routes having a straight-line distance of at least 25 nautical miles from the original point of departure; and

(ii) Five hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern).

(i) *For a balloon rating.* A person who applies for a commercial pilot certificate with a lighter-than-air category and a balloon class rating must accomplish and log at least 35 hours of flight time as a pilot, which includes at least the following requirements:

(1) Twenty hours in balloons;
 (2) Ten flights in balloons;
 (3) Two flights in balloons as the pilot in command; and

(4) Ten hours of flight training that includes at least 10 training flights in balloons on the approved areas of operation listed in § 61.127(j) of this part, which consist of at least—

(i) If the training is received in a gas balloon, the training must include at least—

(A) Two training flights of 2 hours each in a gas balloon that covers the approved areas of operation appropriate to a gas balloon within 60 days prior to application for the rating; and

(B) Two supervised PIC flights in a gas balloon on the approved areas of operation.

(ii) If the training is received in a balloon with an airborne heater, the training must include at least—

(A) Two training flights of 1 hour each in a balloon with an airborne heater that covers the approved areas of operation appropriate to a balloon with an airborne heater within 60 days prior to application for the rating; and

(B) Two supervised PIC flights in a balloon with an airborne heater on the approved areas of operation.

§ 61.131 Exceptions to the night flying requirements for the commercial pilot certificate.

A person is not required to comply with the night flying requirements of this subpart:

(a) If that person has a medical restriction from operating an aircraft at night, then that person may—

(1) Be issued a permanent commercial pilot certificate with the limitation “Night flying prohibited;” and

(2) Have that limitation removed if the condition which was the basis for the medical restriction is corrected, and the person accomplishes the appropriate night flying requirements of this subpart.

(b) If that person receives flight training in the State of Alaska and is not able to accomplish the training, then that person—

(1) May be issued a temporary pilot certificate for only 12 calendar months, with a limitation “Night flying prohibited;” and

(2) Must comply with the appropriate night flying requirements of this subpart within 12 calendar months following issuance of the temporary commercial pilot certificate, or the certificate will be suspended until the person complies with the appropriate night flying requirements of this subpart.

(3) May have the “Night flying prohibited” limitation of this section removed if the person—

(i) Accomplishes the appropriate night flight training requirements of this subpart in the category and class of aircraft for which night flying privileges are sought;

(ii) Presents to an examiner, a logbook or training record endorsement from an authorized flight instructor that verifies accomplishment of the night flying requirements of this subpart that are appropriate to the category and class aircraft for which night flying privileges are sought; and

(iii) Accomplishes the night operations portion of the practical test that are appropriate to the category and class of aircraft for which night flying privileges are sought.

§ 61.133 Commercial pilot privileges and limitations. General.

(a) *Privileges.* A person who holds a commercial pilot certificate may act as pilot in command of an aircraft for:

(1) Carrying persons or property for compensation or hire, provided the person is qualified in accordance with this part and with the applicable other parts of this chapter that apply to the operation; and

(2) Compensation or hire, provided the person is qualified in accordance with this part and with the applicable other parts of this chapter, that apply to the operation.

(b) *Limitations.*

(1) A person who applies for a commercial pilot certificate with an airplane category, airship class, or powered-lift category rating, and does not hold an instrument rating in the same category and class will be issued a commercial pilot certificate that contains the limitation, “The carriage of passengers for hire in (airplanes) (airships) (powered lifts) on cross-country flights in excess of 50 nautical miles or at night is prohibited.” The limitation may be removed when the person satisfactorily accomplishes the requirements listed in § 61.65 of this part for an instrument rating in the same category and class of aircraft listed on the person’s commercial pilot certificate.

(2) If a person who applies for commercial pilot certificate with a

balloon rating takes a practical test in a balloon with an airborne heater:

(i) The pilot certificate will contain a limitation restricting the exercise of the privilege of that certificate to a balloon with an airborne heater; and

(ii) The limitation may be removed when the person obtains the required aeronautical experience in a gas balloon and receives a logbook endorsement from an authorized instructor who attests to the person’s accomplishment of the required aeronautical experience and ability to satisfactorily operate a gas balloon.

(3) If a person who applies for a commercial pilot certificate with a balloon rating takes a practical test in a gas balloon:

(i) The pilot certificate will contain a limitation restricting the exercise of the privilege of that certificate to a gas balloon; and

(ii) The limitation may be removed when the person obtains the required aeronautical experience in a balloon with an airborne heater and receives a logbook endorsement from an authorized instructor who attests to the person’s accomplishment of the required aeronautical experience and ability to satisfactorily operate a balloon with an airborne heater.

§ 61.135 through 61.141 [Reserved]

Subpart G—Airline Transport Pilots

§ 61.151 Applicability.

This subpart prescribes the requirements for the issuance of airline transport pilot certificates and ratings, the conditions under which those certificates and ratings are necessary, and the general operating rules for persons who hold those certificates and ratings.

§ 61.153 Eligibility requirements: General.

To be eligible for an airline transport pilot certificate, a person must:

(a) Be at least 23 years of age;
 (b) Be able to read, speak, write, and understand the English language;
 (c) Be of good moral character;
 (d) Hold at least a current third-class medical certificate issued under part 67 of this chapter;

(e) Meet at least one of the following requirements—

(1) Hold at least a commercial pilot certificate and an instrument rating;

(2) Meet the requirements of § 61.73 of this part to qualify for a commercial pilot certificate and an instrument rating if the person is a rated pilot in the U.S. military; or

(3) Hold either a foreign airline transport pilot or foreign commercial pilot license and an instrument rating if

the person holds a pilot license issued by a member State to the International Civil Aviation Organization.

(f) Meet the aeronautical experience requirements of this subpart that apply to the aircraft category and class rating sought before applying for the practical test;

(g) Satisfactorily accomplish the knowledge test on the aeronautical knowledge areas of § 61.155(c) of this part that apply to the aircraft category and class rating sought;

(h) Satisfactorily accomplish the practical test on the applicable approved areas of operation listed in § 61.157(d) of this part that apply to the aircraft category and class rating sought; and

(i) Comply with the sections of this part that apply to the aircraft category and class rating sought.

§ 61.155 Aeronautical knowledge.

(a) *General.* The knowledge test for an airline transport pilot certificate is based on the aeronautical knowledge areas listed in paragraph (c) of this section.

(b) *Aircraft type rating.* A person who is applying for an additional aircraft type rating to be added to their airline transport certificate is not required to accomplish a knowledge test if that person's airline transport pilot certificate lists the aircraft category and class rating that is appropriate to the type rating sought.

(c) *Aeronautical knowledge areas.*

(1) The applicable Federal Aviation Regulations of this chapter that relate to airline transport pilot privileges, limitations, and flight operations appropriate to the aircraft category and class rating sought;

(2) Meteorology including knowledge of and effects of fronts, frontal characteristics, cloud formations, icing, and upper air data;

(3) The general system of weather and NOTAM collection, dissemination, interpretation, and use;

(4) Interpretation of weather charts, maps, forecasts, sequences, abbreviations, symbols, and use;

(5) The National Weather Service function as it pertains to operation in the National Airspace System;

(6) Windshear and microburst awareness, identification, and avoidance;

(7) Principles of air navigation under instrument meteorological conditions in the National Airspace System;

(8) Air traffic control procedures and pilot responsibilities as they relate to en route operations, terminal area and radar operations, and instrument departure and approach procedures;

(9) Aircraft loading, weight and balance, use of charts, graphs, tables,

formulas, and computations, and the effects on aircraft performance that apply to the aircraft category and class rating sought;

(10) Aircraft aerodynamics relating to the aircraft's flight characteristics, performance, and normal and abnormal flight regimes and characteristics that apply to the aircraft category and class rating sought;

(11) Flight crewmember physiological factors;

(12) Aeronautical decision making and judgment; and

(13) Flight deck resource management to include crew communications and coordination.

§ 61.157 Flight proficiency.

(a) *General.*

(1) The practical test for an airline transport pilot certificate is given for:

(i) An airplane category and single-engine class rating with an airplane type rating if a type rating is required;

(ii) An airplane category and multiengine class rating with an airplane type rating if a type rating is required;

(iii) A rotorcraft category and helicopter class rating with a type rating if a type rating is required;

(iv) A powered-lift category rating with a type rating, if a type rating is required; and

(v) An aircraft type rating.

(2) A person who is applying for an airline transport pilot practical test must meet—

(i) The eligibility requirements of § 61.153 of this part; and

(ii) The aeronautical knowledge and aeronautical experience requirements of this subpart that apply to the aircraft category and class rating sought.

(b) *Aircraft type rating.* Except as provided in paragraph (c) of this section, a person who is applying for an aircraft type rating to be added to an airline transport pilot or an aircraft type rating associated with an airline transport pilot certificate:

(1) Must receive and log ground training from an authorized ground or flight instructor and flight training from an authorized flight instructor on the approved areas of operation in this section that apply to the aircraft type rating sought; and

(2) Must receive a logbook endorsement from the instructor who conducted the training, certifying the applicant completed the training on the appropriate approved areas of operation listed in paragraph (e) of this section that apply to the aircraft type rating sought.

(c) A person who is applying for an aircraft type rating to be added to an

airline transport pilot certificate or an aircraft type rating concurrently with an airline transport pilot certificate, and who is an employee of a part 119 certificate holder operating under part 121 or part 135, may present a training record that shows satisfactory completion of that certificate holder's approved pilot-in-command training program for the aircraft type rating sought, instead of complying with the requirements of paragraph (b) of this section.

(d) A person who successfully completes an airline transport pilot practical test, the type rating(s), if appropriate, on the superseded pilot certificate shall be brought forward to the airline transport pilot certificate level provided the practical test was accomplished in that category and class of aircraft. If the type rating(s) for that category and class of aircraft on the superseded pilot certificate is limited to VFR, that limitation shall be carried forward to the person's airline transport pilot certificate level.

(e) *Areas of operation.*

(1) The areas of operation for an airplane category-single engine class rating with a type rating, if a type rating is required, are as follows:

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;

(vii) Normal and abnormal procedures;

(viii) Emergency procedures; and

(ix) Postflight procedures.

(2) The areas of operation for an airplane category-multiengine class rating with a type rating, if a type rating is required, are as follows:

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;

(vii) Normal and abnormal procedures;

(viii) Emergency procedures; and

(ix) Postflight procedures.

(3) The areas of operation for a powered-lift category rating with a type rating, if a type rating is required, are as follows:

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;

- (vii) Normal and abnormal procedures;
 - (viii) Emergency procedures; and
 - (ix) Postflight procedures.
- (4) The areas of operation for a rotorcraft category-helicopter class rating with a type rating, if a type rating is required, are as follows:
- (i) Preflight preparation;
 - (ii) Preflight procedures;
 - (iii) Takeoff and departure phase;
 - (iv) Inflight maneuvers;
 - (v) Instrument procedures;
 - (vi) Landings and approaches to landings;
 - (vii) Normal and abnormal procedures;
 - (viii) Emergency procedures; and
 - (ix) Postflight procedures.

§ 61.159 Aeronautical experience: Airplane category rating.

(a) Except as provided in paragraph (d) of this section, a person who is applying for an airline transport pilot certificate with an airplane category and class rating must have at least 1,500 hours of total time as a pilot that includes at least:

- (1) 500 hours of cross-country flight time;
- (2) 100 hours of night flight time;
- (3) 75 hours of instrument time in actual or simulated instrument meteorological conditions, of which at least 50 hours are obtained in actual flight; and
- (4) 250 hours of flight time in an airplane as a pilot in command or as a second in command performing the duties and functions of a pilot in command under the supervision of a pilot in command, or any combination thereof, which includes at least—

- (i) 100 hours of cross-country flight time; and
- (ii) 25 hours of night flight time.

(b) A person who has performed at least 20 night takeoffs and landings to a full stop may substitute each additional night takeoff and landing to a full stop in excess of the minimum 20 accomplished takeoffs for 1 hour of night flight time to satisfy the requirements of paragraph (a)(2) of this section for a total credited time of no more than 25 hours.

(c) A commercial pilot may credit the following second-in-command and flight engineer flight time (or a combination of either crewmember position flight time) toward the 1,500 hours of total time as a pilot required by paragraph (a) of this section:

- (1) Second-in-command time acquired in an airplane required to have more than one pilot by the airplane's flight manual or type certificate;
- (2) Second-in-command time acquired in an airplane for a part 119 certificate

holder operating under part 121 or part 135 for which a second in command is required; and

(3) Flight engineer time, provided the time—

- (i) Is acquired while operating under part 121 of this chapter;
- (ii) Is acquired in an airplane that is required to have a flight engineer by the airplane's flight manual or type certificate;

(iii) Is acquired while the person is participating in a pilot training program approved under part 121 of this chapter; and

(iv) Does not exceed more than 1 hour of flight time to be credited for each 3 hours of flight engineer time for a total credited time of no more than 500 hours.

(d) A person who does not meet the aeronautical experience requirements of this section may be issued an airline transport pilot certificate with the limitation "Holder does not meet the pilot-in-command aeronautical experience requirements of ICAO" as prescribed by Article 39 of the Convention on International Civil Aviation, as provided in § 61.167(b) of this part.

§ 61.161 Aeronautical experience: Rotorcraft category and helicopter class rating.

A person who is applying for an airline transport pilot certificate with a rotorcraft category and helicopter class rating, must have at least 1,200 hours of total time as a pilot that includes at least:

- (a) 500 hours of cross-country flight time;
- (b) 100 hours of night flight time, of which 15 hours are in helicopters;
- (c) 200 hours of flight time in helicopters, which includes at least 75 hours as a pilot in command or as second in command performing the duties and functions of a pilot in command under the supervision of a pilot in command, or any combination of either crewmember position flight time; and

(d) 75 hours of instrument time in actual or simulated instrument meteorological conditions, of which at least 50 hours are obtained in actual flight with at least 25 hours in helicopters as a pilot in command or as second in command performing the duties and functions of a pilot in command under the supervision of a pilot in command, or any combination of either crewmember position flight time.

§ 61.163 Aeronautical experience: Powered-lift category rating.

A person who is applying for an airline transport pilot certificate with a powered-lift category rating must have at least 1,500 hours of total time as a pilot that includes at least:

- (a) 500 hours of cross-country flight time;
 - (b) 100 hours of night flight time;
 - (c) 75 hours of instrument time in actual or simulated instrument meteorological conditions, of which at least 50 hours are obtained in actual flight; and
 - (d) 250 hours in a powered-lift as a pilot in command or as a second in command performing the duties and functions of a pilot in command under the supervision of a pilot in command, or any combination thereof, which includes at least—
- (1) 100 hours of cross-country flight time; and
 - (2) 25 hours of night flight time.

§ 61.165 Additional aircraft category and class ratings.

(a) *Rotorcraft category and helicopter class rating.* A person who is applying for an airline transport certificate with a rotorcraft category and helicopter class rating who holds an airline transport certificate with another aircraft category rating must:

- (1) Meet the eligibility requirements of § 61.153 of this part;
- (2) Satisfactorily accomplish the knowledge test on the aeronautical knowledge areas of § 61.155 of this part that apply to the rotorcraft category and helicopter class rating sought;
- (3) Comply with the requirements in § 61.157(b) of this part, if appropriate;
- (4) Meet the applicable aeronautical experience requirements of § 61.161 of this part that apply to helicopter total time; and
- (5) Satisfactorily accomplish the practical test on the approved areas of operations of § 61.157(e)(4) of this part that apply to the rotorcraft category and helicopter class rating sought.

(b) *Airplane category rating with a single-engine class rating.* A person who is applying for an airline transport certificate with an airplane category and single engine class rating and holds an airline transport certificate with another aircraft category or class rating must:

- (1) Meet the eligibility requirements of § 61.153 of this part;
- (2) Accomplish the knowledge test on the aeronautical knowledge areas of § 61.155 of this part that apply to the airplane category and single-engine class rating sought;
- (3) Comply with the requirements in § 61.157(b) of this part, if appropriate;

(4) Meet the applicable aeronautical experience requirements of § 61.159 of this part that apply to airplane total time; and

(5) Accomplish the practical test on the approved areas of operations of § 61.157(e)(1) of this part that apply to the airplane category and single-engine class rating sought.

(c) *Airplane category rating with a multiengine class rating.* A person who is applying for an airline transport certificate with an airplane category and multiengine class rating and holds an airline transport certificate with another aircraft category or class rating must:

(1) Meet the eligibility requirements of § 61.153 of this part;

(2) Accomplish the knowledge test on the aeronautical knowledge areas of § 61.155 of this part that apply to the airplane category and multiengine class rating sought;

(3) Comply with the requirements in § 61.157(b) of this part, if appropriate;

(4) Meet the applicable aeronautical experience requirements of § 61.159 of this part that apply to airplane total time; and

(5) Accomplish the practical test on the approved areas of operations of § 61.157(e)(2) of this part that apply to the airplane category and multiengine class rating sought.

(d) *Powered-lift category.* A person who is applying for an airline transport certificate with a powered-lift category rating, and holds an airline transport certificate with another aircraft category rating must:

(1) Meet the eligibility requirements of § 61.153 of this part;

(2) Accomplish the required knowledge test on the aeronautical knowledge areas of § 61.155 of this part that apply to the powered-lift category rating sought;

(3) Comply with the requirements in § 61.157(b) of this part, if appropriate;

(4) Meet the applicable aeronautical experience requirements of § 61.163 of this part that apply to powered-lift total time; and

(5) Accomplish the required practical test on the approved areas of operations of § 61.157(e)(3) of this part that apply to the powered-lift category rating sought.

§ 61.167 General privileges and limitations.

(a) *Privileges.* A person who holds an airline transport pilot certificate is entitled to the same privileges as those afforded a person who holds a commercial pilot certificate with an instrument rating.

(b) *Limitations.* A person who applies for an airline transport pilot will be

issued an airline transport certificate with the limitation, "Holder does not meet the pilot-in-command aeronautical experience requirements of ICAO," for the following circumstances:

(1) The person—

(i) Credits second-in-command or flight engineer time under § 61.159(c) of this part toward the minimum 1,500 hours of total flight time as a pilot that is required by § 61.159(a) of this part; and

(ii) Lacks at least 1,200 hours of total flight time as a pilot, but otherwise meets the other aeronautical experience requirements of this subpart, appropriate to the aircraft rating sought.

(2) The person does not have at least 150 hours of pilot-in-command time in an aircraft that is appropriate to the aircraft rating sought, but otherwise meets the aeronautical experience requirements of this subpart.

(c) *Removal of limitations.* The limitation required by paragraph (b) of this section may be removed when the person:

(1) Meets the aeronautical experience requirements for the aircraft rating sought; and

(2) Presents evidence within a logbook of having accomplished the required appropriate aeronautical experience.

§ 61.169 [Reserved]

§ 61.171 [Reserved]

Subpart H—Flight Instructors

§ 61.181 Applicability.

This subpart prescribes the requirements for the issuance of flight instructor certificates and ratings, the conditions under which those certificates and ratings are necessary, and the limitations on those certificates and ratings.

§ 61.183 Eligibility requirements.

To be eligible for a flight instructor certificate or rating a person must:

(a) Be at least 18 years of age;

(b) Be able to read, speak, write, and understand the English language;

(c) Hold either a commercial pilot or airline transport pilot certificate—

(1) With an aircraft category and class rating that is appropriate to the flight instructor rating sought;

(2) With an instrument rating, if the person holds a commercial pilot certificate, that is appropriate to the flight instructor rating sought, if applying for—

(i) A flight instructor certificate with an airplane category and single-engine class rating;

(ii) A flight instructor certificate with an airplane category and multiengine class rating;

(iii) A flight instructor certificate with a rotorcraft category and helicopter class rating;

(iv) A flight instructor certificate with an airship rating;

(v) A flight instructor certificate with a powered-lift rating; or

(vi) A flight instructor certificate-instrument rating (aircraft category and class).

(d) Receive a logbook endorsement from an authorized instructor who gave the ground training on the aeronautical knowledge areas listed in § 61.185 of this part appropriate to the required knowledge test.

(e) Accomplish a knowledge test on the aeronautical knowledge areas listed in § 61.185(a) of this part;

(f) Accomplish a knowledge test on the aeronautical knowledge areas listed in § 61.185(b) of this part that are appropriate to the flight instructor rating sought;

(g) Receive a logbook endorsement from an authorized flight instructor who gave the flight training on the approved areas of operation listed in § 61.187 of this part, appropriate to the flight instructor rating sought and prior to applying for the practical test;

(h) Accomplish the required practical test that is appropriate to the flight instructor rating sought;

(i) Accomplish the following for a flight instructor certificate with an airplane rating or with a glider rating—

(1) Must have received a one time logbook endorsement from an authorized flight instructor on ground and flight training on instructional procedures for stall awareness, spin entry, spins, and spin recovery procedures in an airplane or glider that is certificated for spins;

(2) Must have demonstrated instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures; and

(3) May present the person's spin training endorsement to an examiner, and that examiner may accept that endorsement as satisfactory accomplishment of the required knowledge and skill of stall awareness, spin entry, spins, or spin recovery instructional procedures for the practical test, provided that the practical test is not a retest as a result of the person failing the previous test for deficiencies in the knowledge or skill of stall awareness, spin entry, spins, or spin recovery instructional procedures. If the retest is a result of deficiencies in the knowledge or skill of stall awareness, spin entry, spins, or spin

recovery instructional procedures, the examiner must test the person on stall awareness, spin entry, spins, and spin recovery instructional procedures in an airplane or glider that is certificated for spins.

(j) Log at least 15 hours as pilot in command in the category and class of aircraft that is appropriate to the flight instructor rating sought; and

(k) Comply with the appropriate sections of this part that apply to the flight instructor rating sought.

§ 61.185 Aeronautical knowledge.

A person who is applying for a flight instructor certificate must receive and log ground training from an authorized ground or flight instructor on the aeronautical knowledge areas of this section:

(a) *Aeronautical knowledge areas.*

(1) The learning process;

(2) Elements of effective teaching;

(3) Student evaluation, quizzing, and testing;

(4) Course development;

(5) Lesson planning; and

(6) Classroom training techniques.

(b) A person who is applying for a flight instructor certificate must receive and log ground training on the aeronautical knowledge areas in which ground training is required for—

(1) A recreational, private, and commercial pilot certificate that is appropriate to the flight instructor rating sought; and

(2) An instrument rating, if that person is applying for—

(i) A flight instructor certificate—airplane category and single-engine class rating;

(ii) A flight instructor certificate—airplane category with a multiengine class rating;

(iii) A flight instructor certificate—rotorcraft category with a helicopter class rating;

(iv) A flight instructor certificate—lighter-than-air category with an airship class rating;

(v) A flight instructor certificate—powered-lift category rating; or

(vi) A flight instructor certificate—instrument (with the appropriate aircraft category and class rating).

§ 61.187 Flight proficiency.

(a) *General.* A person who is applying for a flight instructor certificate must receive ground training from an authorized ground or flight instructor, and flight training from an authorized flight instructor on the approved areas of operation listed in this section that apply to the flight instructor rating sought, and the person's logbook must contain an endorsement from an

authorized flight instructor certifying that the person is proficient to pass a practical test on those areas of operation.

(b) *Areas of operation for an airplane category rating with a single engine class rating:*

(1) Fundamentals of instructing;

(2) Technical subject areas;

(3) Preflight preparation;

(4) Preflight lesson on a maneuver to be performed in flight;

(5) Preflight procedures;

(6) Airport and seaplane base operations;

(7) Takeoffs, landings, and go-arounds;

(8) Fundamentals of flight;

(9) Performance maneuvers;

(10) Ground reference maneuvers;

(11) Stalls, spins, and slow flight;

(12) Basic instrument maneuvers;

(13) Emergency operations; and

(14) Postflight procedures.

(c) *Areas of operation for an airplane category rating with a multiengine class rating:*

(1) Fundamentals of instructing;

(2) Technical subject areas;

(3) Preflight preparation;

(4) Preflight lesson on a maneuver to be performed in flight;

(5) Preflight procedures;

(6) Airport and seaplane base operations;

(7) Takeoffs, landings, and go-arounds;

(8) Fundamentals of flight;

(9) Performance maneuvers;

(10) Ground reference maneuvers;

(11) Stalls and slow flight;

(12) Basic instrument maneuvers;

(13) Emergency operations;

(14) Multiengine operations; and

(15) Postflight procedures.

(d) *Areas of operation for a rotorcraft category rating with a helicopter class rating:*

(1) Fundamentals of instructing;

(2) Technical subject areas;

(3) Preflight preparation;

(4) Preflight lesson on a maneuver to be performed in flight;

(5) Preflight procedures;

(6) Airport and heliport operations;

(7) Hovering maneuvers;

(8) Takeoffs, landings, and go-arounds;

(9) Fundamentals of flight;

(10) Performance maneuvers;

(11) Emergency operations;

(12) Special operations; and

(13) Postflight procedures.

(e) *Areas of operation for a rotorcraft category rating with a gyroplane class rating:*

(1) Fundamentals of instructing;

(2) Technical subject areas;

(3) Preflight preparation;

(4) Preflight lesson on a maneuver to be performed in flight;

(5) Preflight procedures;

(6) Airport operations;

(7) Takeoffs, landings, and go-arounds;

(8) Fundamentals of flight;

(9) Performance maneuvers;

(10) Flight at slow airspeeds;

(11) Ground reference maneuvers;

(12) Emergency operations; and

(13) Postflight procedures.

(f) *Areas of operation for a powered-lift category rating:*

(1) Fundamentals of instructing;

(2) Technical subject areas;

(3) Preflight preparation;

(4) Preflight lesson on a maneuver to be performed in flight;

(5) Preflight procedures;

(6) Airport and heliport operations;

(7) Hovering maneuvers;

(8) Takeoffs, landings, and go-arounds;

(9) Fundamentals of flight;

(10) Performance maneuvers;

(11) Ground reference maneuvers;

(12) Stalls and slow flight;

(13) Basic instrument maneuvers;

(14) Emergency operations;

(15) Special operations; and

(16) Postflight procedures.

(g) *Areas of operation for a glider category rating with a nonpowered class rating:*

(1) Fundamentals of instructing;

(2) Technical subject areas;

(3) Preflight preparation;

(4) Preflight lesson on a maneuver to be performed in flight;

(5) Preflight procedures;

(6) Airport and gliderport operations;

(7) Launches and landings;

(8) Fundamentals of flight;

(9) Performance speeds;

(10) Soaring techniques;

(11) Performance maneuvers;

(12) Stalls, spins, and slow flight;

(13) Emergency operations; and

(14) Postflight procedures.

(h) *Areas of operation for a glider category rating with a powered class rating:*

(1) Fundamentals of instructing;

(2) Technical subject areas;

(3) Preflight preparation;

(4) Preflight lesson on a maneuver to be performed in flight;

(5) Preflight procedures;

(6) Airport and gliderport operations;

(7) Launches, landings, and go-arounds;

(8) Fundamentals of flight;

(9) Performance speeds;

(10) Soaring techniques;

(11) Performance maneuvers;

(12) Stalls, spins, and slow flight;

(13) Emergency operations; and

(14) Postflight procedures.

(i) *Areas of operation for a lighter-than-air category rating with an airship class rating:*

- (1) Fundamentals of instructing;
- (2) Technical subject areas;
- (3) Preflight preparation;
- (4) Preflight lesson on a maneuver to be performed in flight;
- (5) Preflight procedures;
- (6) Airport operations;
- (7) Takeoffs, landings, and go-arounds;
- (8) Fundamentals of flight;
- (9) Performance maneuvers;
- (10) Ground reference maneuvers;
- (11) Basic instrument maneuvers;
- (12) Emergency operations; and
- (13) Postflight procedures.

(j) *Areas of operation for a lighter-than-air category rating with a balloon class rating:*

- (1) Fundamentals of instructing;
- (2) Technical subject areas;
- (3) Preflight preparation;
- (4) Preflight lesson on a maneuver to be performed in flight;
- (5) Preflight procedures;
- (6) Balloonport operations;
- (7) Lift-offs and landings;
- (8) Fundamentals of flight;
- (9) Performance maneuvers;
- (10) Emergency operations; and
- (11) Postflight procedures.

(k) *Areas of operation for an instrument rating with the appropriate aircraft category and class rating:*

- (1) Fundamentals of instructing;
- (2) Technical subject areas;
- (3) Preflight preparation;
- (4) Preflight lesson on a maneuver to be performed in flight;
- (5) Air traffic control clearances and procedures;
- (6) Flight by reference to instruments;
- (7) Navigation aids;
- (8) Instrument approach procedures;
- (9) Emergency operations; and
- (10) Postflight procedures.

§ 61.189 Flight instructor records.

(a) A flight instructor must sign the logbook of each person to whom that flight instructor has given flight and ground training.

(b) A flight instructor must maintain a record (in a logbook or a separate document) that contains the following:

- (1) The name of each person whose logbook or student pilot certificate that instructor has endorsed for supervised PIC flight privileges and the date of the endorsement;
- (2) The name of each person that instructor has endorsed for a knowledge or practical test, and the record shall also indicate the kind of test, the date, and the results; and
- (3) A copy of each training syllabus that instructor uses to conduct training.

(c) Each flight instructor must retain the records required by this section in a separate record or in a logbook for at least 3 years.

§ 61.191 Additional flight instructor ratings.

(a) A person who applies for an additional flight instructor rating on a flight instructor certificate must meet the eligibility requirements listed in § 61.183 of this part that apply to the flight instructor rating sought.

(b) A person who applies for an additional rating on a flight instructor certificate is not required to pass the knowledge test in § 61.185(a) of this part.

§ 61.193 Flight instructor endorsements and authorizations.

A person who holds a flight instructor certificate is authorized within the limitations of the person's flight instructor certificate and ratings and pilot certificate and ratings to give training and endorsements that are required for, and relate to:

- (a) A student pilot certificate;
- (b) A recreational pilot certificate;
- (c) A private pilot certificate;
- (d) A commercial pilot certificate;
- (e) An airline transport pilot certificate;
- (f) A flight instructor certificate;
- (g) A ground instructor certificate;
- (h) An additional aircraft rating;
- (i) An instrument rating;
- (j) A flight review, operating privilege, or recency of experience requirement of this part;
- (k) An authorization for a practical test; and
- (l) An authorization for a knowledge test.

§ 61.195 Flight instructor limitations and qualifications.

A person who holds a flight instructor certificate is subject to the following limitations:

(a) *Hours of training.* In any 24-consecutive-hour period, a flight instructor may not conduct more than 8 hours of flight training or any combination of commercial flying and flight training.

(b) *Aircraft ratings.* Flight instructors may not conduct flight training in any aircraft for which they do not hold—

- (1) The category and class rating on their flight instructor certificate and pilot certificate; and
 - (2) If appropriate, a type rating on their pilot certificate.
- (c) *Instrument rating.* Flight instructors who give instrument flight training for the issuance of an instrument rating or a type rating not limited to VFR must hold an instrument

rating on their flight instructor certificate and their pilot certificate that is appropriate to the category and class of aircraft in which instrument training is being given.

(d) *Limitations on endorsements.* A flight instructor may not endorse a:

(1) Student pilot's certificate or logbook for supervised PIC flight privileges, unless that flight instructor has—

- (i) Given that student the flight training required for supervised PIC flight privileges by this part; and
- (ii) Determined that the student is prepared to conduct the flight safely under known circumstances, and subject to any limitations listed in the student's logbook, that the instructor considers necessary for safety of flight.

(2) Student pilot's certificate and logbook for a supervised PIC cross-country flight, unless that flight instructor has determined the student's flight preparation, planning, equipment, and proposed procedures are adequate for the proposed flight under the existing conditions and within any limitations listed in the logbook that the instructor considers necessary for safety of flight;

(3) Student pilot's certificate and logbook for supervised PIC flight in Class B airspace area or at an airport within Class B airspace unless that flight instructor has—

- (i) Given that student ground and flight training in that Class B airspace and airport; and
- (ii) Determined that the student is proficient to operate the aircraft safely.

(4) Logbook of a recreational pilot, unless that flight instructor has—

- (i) Given that pilot the required ground and flight training of this part; and

(ii) Determined that the pilot is proficient to operate the aircraft safely.

(5) Logbook of a pilot for a flight review, unless that instructor has conducted a review of that pilot in accordance with the requirements of § 61.56(a) of this part; or

(6) Logbook of a pilot for an instrument proficiency test, unless that instructor has tested that pilot in accordance with the requirements of § 61.57(e) of this part.

(e) *Training in an aircraft that requires a type rating.* Flight instructors may not give flight training in an aircraft that requires the pilot in command to hold a type rating unless they hold a type rating for that aircraft on their pilot certificate.

(f) *Training received in a multiengine airplane, helicopter, or a powered-lift.* A flight instructor may not give training required for the issuance of a certificate

or rating in a multiengine airplane, helicopter, or a powered-lift, unless that flight instructor has at least 5 flight hours of operating experience as a pilot in command in the specific make and model of multiengine airplane, helicopter, or powered-lift, as appropriate.

(g) *Position in aircraft and required pilot seats for providing flight training.*

(1) A flight instructor must perform all training from a control seat in an aircraft that meets the requirements of and is in accordance with § 91.109 of this chapter.

(2) A flight instructor who provides flight training for an airman certificate or rating issued under this part must provide that flight training in an aircraft that meets the following requirements—

(i) The aircraft must have at least two pilot seats and be of the same category, class, and type, if appropriate, that apply to the flight instructor rating sought.

(ii) For single-place aircraft, the pre-supervised PIC flight training must have been received in an aircraft that has two pilot seats and is of the same category, class, and type, if appropriate, and has similar flight characteristics to that of the single-place aircraft.

(h) *Qualifications of the instructor for training first-time flight instructor applicants.*

(1) The ground training required by a person who is applying for a flight instructor certificate for the first time, must be given by a ground or flight instructor who—

(i) Holds a current ground or flight instructor certificate with the appropriate rating, has held that certificate for at least 24 months, and has given at least 40 hours of ground training; or

(ii) Holds a current ground or flight instructor certificate with the appropriate rating, and have given at least 100 hours of ground training, if the training is given in an FAA-approved course.

(2) Except as provided for in paragraph (h)(3) of this section, the flight training required by a person who is seeking a flight instructor certificate for the first time, must be given by flight instructors who meet the eligibility requirements prescribed in § 61.183 of this part, hold the appropriate rating on their flight instructor certificate, and has held a flight instructor certificate for at least 24 months and—

(i) For training in an airplane, rotorcraft, or powered-lift rating, must have given at least 200 hours of flight training as a flight instructor;

(ii) For training in a glider rating, must have given at least 80 hours of flight training as a flight instructor; and

(iii) For training in a lighter-than-air rating, must have given at least 20 hours of flight training as a flight instructor.

(3) A flight instructor who serves as a flight instructor in an FAA-approved course must hold a current flight instructor certificate with the appropriate rating, and have satisfactorily accomplished the required initial and recurrent flight instructor proficiency tests, in accordance with the part the FAA-approved course is conducted under, and must—

(i) Meet the requirements of paragraph (h)(2) of this section; or

(ii) Meet the following requirements—

(A) Trained and endorsed at least 5 applicants for a practical test for a pilot certificate, flight instructor certificate, ground instructor certificate, or an additional rating, and at least 80 percent of those applicants passed that test on their first attempt;

(B) Given at least 400 hours of flight training as a certificated flight instructor for training in an airplane, a rotorcraft, or for a powered-lift rating;

(C) Given at least 100 hours of flight training as a flight instructor, for training in a glider rating; and

(D) Given at least 40 hours of flight training as a flight instructor, for training in a lighter-than-air rating.

(i) *Prohibition against self endorsements.* A flight instructor shall not make any self-endorsement for the furtherance of a certificate, rating, flight proficiency, flight review, authorization, operating privilege, practical test, or knowledge test that is required by this part.

§ 61.197 Renewal of flight instructor certificates.

(a) Persons who hold a flight instructor certificate that have not expired may renew their certificates for an additional 24-calendar months if they, except as provided for in paragraph (b) of this section, satisfactorily accomplish a practical test for:

(1) Renewal of their flight instructor certificate; or

(2) An additional flight instructor rating.

(b) Persons may renew their flight instructor certificate without accomplishing a practical test, by presenting to an FAA Flight Standards District Office:

(1) A record of training students that shows during the preceding 24 calendar months, they have endorsed at least 5 students for a practical test for a certificate or rating, and at least 80

percent of those students passed that test on the first attempt;

(2) A record that shows during the preceding 24-calendar months, persons have served as a company check pilot, chief flight instructor, company check airman or flight instructor in a part 121 or 135 operation, or a comparable position involving the regular evaluation of pilots, and provided the FAA Flight Standards District Office is acquainted with their duties and responsibilities and has determined they have satisfactory knowledge of current pilot training, certification, and standards; or

(3) A graduation certificate showing they have accomplished an approved flight instructor refresher course, consisting of ground or flight instruction, or both, and provided the course was satisfactorily accomplished before the expiration date on the person's flight instructor certificate.

(c) If persons accomplish the requirements of this section within the 90 days preceding the expiration date of their flight instructor certificate, they are considered to have accomplished the requirements of this section in the month due, and the certificate will be renewed for an additional 24-calendar months from the expiration date.

§ 61.199 Expired flight instructor certificates and ratings.

(a) *Flight instructor certificates.* The holder of an expired flight instructor certificate may exchange that certificate for a new certificate by satisfactorily accomplishing a practical test prescribed in § 61.187 of this part.

(b) *Flight instructor ratings.*

(1) A flight instructor rating or a limited flight instructor rating on a pilot certificate is no longer valid and may not be exchanged for a similar rating or a flight instructor certificate.

(2) The holder of a flight instructor rating or a limited flight instructor rating on a pilot certificate may be issued a flight instructor certificate with the current ratings, but only if the person satisfactorily accomplishes the required knowledge and practical test prescribed in this subpart for the issuance of that flight instructor certificate and rating.

§ 61.201 Conversion to the current flight instructor ratings.

(a) *General.*

(1) A person who holds a commercial pilot certificate for lighter-than-air category and an airship or a balloon class rating, or a flight instructor certificate that does not bear the current glider or instrument-airplane flight instructor ratings listed in § 61.5(c) of

this part, may not give training in an airship, a balloon, or a glider, or for an instrument rating in an airplane, respectively, after [insert date 2 years after the effective date of the final rule].

(2) Before [insert date 2 years after the effective date of the final rule], a person who meets the appropriate qualification requirements of this section may receive a flight instructor certificate with the current ratings.

(b) *Glider category with a powered class rating.* A flight instructor certificate with a glider category and powered class rating may be issued to a person who holds a flight instructor certificate with glider category rating, provided that person has:

(1) Received the required training in a powered glider and the flight instructor endorsements of this subpart for the issuance of the powered class rating, and has satisfactorily accomplished the required practical test; or

(2) Before [insert effective date of the final rule]—

(i) Given at least 20 hours of flight training in a powered glider as an authorized flight instructor; and

(ii) Recommended at least one student for a practical test for the issuance of glider category rating and the recommended student passed the practical test.

(c) *Glider category with a nonpowered class rating.* A flight instructor certificate with a glider category and nonpowered class rating may be issued to a person who holds a flight instructor certificate with glider category rating, provided the person has:

(1) Received the required training in a nonpowered glider and the flight instructor endorsements of this subpart for the issuance of the nonpowered class rating and has satisfactorily accomplished the required practical test; or

(2) Before [insert effective date of the final rule]—

(i) Given at least 20 hours of flight training in a nonpowered glider as an authorized flight instructor; and

(ii) Recommended at least one student for a practical test for the issuance of glider category rating and the recommended student passed the practical test.

(d) *Lighter-than air category with an airship class rating.* A flight instructor certificate with a lighter-than-air category and airship class rating may be issued to a person who holds a commercial pilot certificate with a lighter-than-air category and airship class rating, provided the person has:

(1) Received the required training in an airship and the flight instructor

endorsements of this subpart for the issuance of the airship class rating and has satisfactorily accomplished the required practical test; or

(2) Before [insert effective date of the final rule]—

(i) Given at least 20 hours of flight training in an airship as a holder of a commercial pilot certificate with a lighter-than-air category and an airship class rating; and

(ii) Recommended at least one student for a practical test for the issuance of airship rating and the recommended student passed practical test.

(e) *Lighter-than-air category with an airship-instrument rating.* A flight instructor certificate with a lighter-than-air category and airship-instrument rating may be issued to a person who holds a commercial pilot certificate with a lighter-than-air category and airship class rating, provided the person has:

(1) Received the required ground training and flight training for the airship-instrument rating and the flight instructor endorsements of this subpart for the issuance of the airship-instrument rating and has satisfactorily accomplished the required practical test; or

(2) Before [insert effective date of the final rule]—

(i) Given at least 20 hours of flight training in an airship as a holder of a commercial pilot certificate with a lighter-than-air category and an airship class rating; and

(ii) Recommended at least one student for a practical test for the issuance of an airship rating and the recommended student passed the practical test.

(f) *Lighter-than air category with a balloon class rating.* A flight instructor certificate with a lighter-than-air category and balloon class rating may be issued to a person who holds a commercial pilot certificate with a lighter-than-air category and balloon class rating, provided the person has:

(1) Received the required training in a balloon and instructor endorsements of this subpart for the issuance of the balloon class rating and has satisfactorily accomplished the required practical test; or

(2) Before [insert effective date of the final rule]—

(i) Given at least 20 hours of flight training in a balloon as a holder of a commercial pilot certificate with a lighter-than-air category and a balloon class rating; and

(ii) Recommended at least one student for a practical test for the issuance of a balloon class rating and the recommended student passed the practical test.

(g) *Instrument-single-engine airplane rating.* A flight instructor certificate with an instrument-single-engine airplane rating may be issued to a person who holds a flight instructor certificate with an instrument-airplane rating, provided the person has:

(1) Received the required training and instructor endorsement of this subpart for the issuance of the instrument-single-engine airplane rating and has satisfactorily accomplished the required practical test; or

(2) Before [insert effective date of the final rule]—

(i) Given at least 20 hours of flight training in a single-engine airplane for the issuance of an airplane-instrument rating as an authorized flight instructor; and

(ii) Recommended at least one student for a practical test for the issuance of an airplane-instrument rating and the recommended student passed the practical test.

(h) *Instrument-multiengine airplane rating.* A flight instructor certificate with an instrument-multiengine airplane rating may be issued to a person who holds a flight instructor certificate with an instrument-airplane rating, provided the person has:

(1) Received the required training and instructor endorsement of this subpart for the issuance of the instrument-multiengine airplane rating and has satisfactorily accomplished the required practical test; or

(2) Before [insert effective date of the final rule]—

(i) Given at least 20 hours of flight training in a multiengine airplane for the issuance of an instrument-airplane rating as an authorized flight instructor; and

(ii) Recommended at least one student for a practical test for the issuance of an instrument-airplane rating and the recommended student passed the practical test.

(i) *Instrument-helicopter rating.* A flight instructor certificate with an instrument-helicopter rating may be issued to a person who holds a flight instructor certificate with an instrument-helicopter rating, provided the person has:

(1) Received the required training and instructor endorsement of this subpart for the issuance of the instrument-helicopter rating and has satisfactorily accomplished the required practical test; or

(2) Before [insert effective date of the final rule]—

(i) Given at least 20 hours of flight training in a helicopter for the issuance of an instrument-helicopter rating as an authorized flight instructor; and

(ii) Recommended at least one student for a practical test for the issuance of an instrument-helicopter rating and the recommended student passed the practical test.

Subpart I—Ground Instructors

§ 61.211 Applicability.

This subpart prescribes the requirements for the issuance of ground instructor certificates and ratings, the conditions under which those certificates and ratings are necessary, and the limitations upon those certificates and ratings.

§ 61.213 Eligibility requirements.

(a) To be eligible for a ground instructor certificate or rating a person must:

- (1) Be at least 18 years of age;
- (2) Be able to read, write, speak, and understand the English language;
- (3) Satisfactorily accomplish a knowledge test on the fundamentals of instructing described in § 61.215(a)(1) of this part, except as provided in paragraph (b) of this section;

(4) Satisfactorily accomplish a knowledge test on the aeronautical knowledge areas of § 61.215(a)(2) of this part that apply to the aircraft rating sought;

(5) Satisfactorily accomplish a knowledge test on the aeronautical knowledge areas of § 61.215(a)(3) of this part for an instrument rating; and

(6) Satisfactorily accomplish a practical test on the requirements listed in § 61.217(a) of this part that apply to the ground instructor rating sought.

(b) The knowledge test required by paragraph (a)(3) of this section is not required if the person:

(1) Holds a ground or flight instructor certificate issued under this part;

(2) Holds a current teacher's certificate issued by a state, county, or city municipality, and that person is authorized to teach at an educational level of at least the 7th grade or higher; or

(3) Is regularly employed as an instructor in an accredited college or university.

(c) After [insert effective date of the final rule], the holder of a current flight instructor certificate is not eligible to apply for a ground instructor certificate that bears the same aircraft category ratings.

(d) After [insert effective date of the final rule], the holder of a flight instructor certificate bearing an instrument rating is not eligible to apply for a ground instructor certificate that bears an instrument rating.

§ 61.215 Aeronautical knowledge.

(a) A person who applies for a ground instructor certificate must present documentation of having completed a course of ground training or home study, and received an endorsement from an authorized flight instructor or ground instructor who meets the requirements of paragraph (b) of this section that the person satisfactorily accomplished the course of ground training or home study on the following knowledge areas:

- (1) Fundamentals of instructing areas:
 - (i) The learning process;
 - (ii) Elements of effective teaching;
 - (iii) Student evaluation, quizzing, and testing;

- (iv) Course development;
- (v) Lesson planning; and
- (vi) Classroom training technique.

(2) The aeronautical knowledge areas listed in §§ 61.97, 61.105, and 61.125 of this part that apply to the aircraft category rating sought; and

(3) The aeronautical knowledge areas listed in § 61.65 of this part, if applying for an instrument rating.

(b) The ground training required by paragraph (a) of this section must be given by a person who meets the requirements prescribed in § 61.183 or § 61.213 of this part and the requirements of this paragraph.

(1) The person must:

(i) Hold a current ground or flight instructor certificate and have held this certificate for at least 24 months; and

(ii) Have given, as an authorized ground or flight instructor, at least 40 hours of ground or flight training.

(2) If the training is given in an FAA-approved course, the person must—

(i) Meet the requirements of paragraph (b)(1) of this section; or

(ii) Have given, as an authorized ground or flight instructor, at least 100 hours of ground or flight training.

§ 61.217 Ground instructor proficiency.

(a) A person who applies for a ground instructor certificate must receive ground training and satisfactorily accomplish a practical test on the following approved areas of operation:

(1) Preparation and conduct of lesson plans for students with varying backgrounds and levels of experience and ability;

(2) Evaluation of student knowledge;

(3) Ground instructor responsibilities; and

(4) Effective analysis and correction of common student errors.

(b) Except for a person who holds a flight instructor certificate, a person must present a ground school lesson on a pilot aeronautical knowledge area topic that is appropriate to the rating sought as part of the practical test;

(c) The ground training required by paragraph (a) of this section must be given by a flight instructor or ground instructor who meets the requirements of § 61.183 or § 61.213 of this part; and

(d) The practical test for a ground instructor certificate and rating must be administered by an examiner.

§ 61.219 Ground instructor records.

(a) A ground instructor must record the following information in a person's logbook or training record to whom that instructor gives ground training, and must sign that logbook or training record entry:

- (1) The amount of time of the lesson;
- (2) The date the training was given; and

(3) The topics of training given.

(b) A ground instructor must maintain a record containing the following information:

(1) The name of each person whose logbook or training record that ground instructor has endorsed for satisfactory completion of a course;

(2) The name of each person whom that ground instructor has endorsed for a knowledge test and the results of that knowledge test;

(3) The name of each person that ground instructor has endorsed or recommended for a practical test, and the date of the endorsement or recommendation; and

(4) A copy of the training syllabus for each person that instructor trained.

(c) A ground instructor must retain the records required by this section for at least 3 years after the date of the endorsement.

§ 61.221 Additional ground instructor ratings.

(a) Persons who apply for an additional aircraft category rating on their ground instructor certificate, must satisfactorily accomplish a knowledge test on the aeronautical knowledge areas listed in § 61.215(a)(2) of this part, that apply to the aircraft category rating sought.

(b) Persons who apply for an instrument rating on their ground instructor certificate must satisfactorily accomplish a knowledge test on the aeronautical knowledge areas listed in § 61.215(a)(3) of this part.

§ 61.223 Ground instructor endorsements and authorizations.

Persons who hold a ground instructor certificate, are authorized, within the ratings on their ground instructor certificate, to give ground training on the aeronautical knowledge areas and the endorsements for the training, required for the following pilot, flight

instructor, and ground instructor certificates and ratings that are issued under this part:

- (a) Student pilot certificate;
- (b) Recreational pilot certificate;
- (c) Private pilot certificate;
- (d) Commercial pilot certificate;
- (e) Airline transport pilot certificate;
- (f) Flight instructor certificate;
- (g) Ground instructor certificate;
- (h) Additional aircraft rating;
- (i) Instrument rating;
- (j) Flight review requirement of this part; and
- (k) Recommendation for knowledge tests.

§ 61.225 Recency of experience for a holder of a ground instructor certificate.

A person's ground instructor certificate remains current for providing ground training for airman certification purposes, provided that person has:

- (a) Given another person ground training and has endorsed that person for a knowledge or practical test within the preceding 12 calendar months; or
- (b) Received an endorsement from an authorized flight or ground instructor, which states that the person has demonstrated satisfactory competence in the knowledge and proficiency requirements listed in §§ 61.215 and 61.217, that apply to the ground instructor ratings held.

§ 61.227 Conversion to current ground instructor ratings.

(a) *General.* A person who holds a ground instructor certificate that does not bear the new ground instructor ratings listed in § 61.5(d) of this part:

- (1) May not exercise the privileges of that certificate after [insert date 2 years after the effective date of the final rule]; and
- (2) Prior to [insert date 2 years after the effective date of the final rule], that person may convert an old ground instructor certificate and ratings in accordance with the provisions authorized in paragraphs (b) through (e) of this section, as appropriate.

(b) The holder of a ground instructor certificate with a basic rating may exchange that ground instructor certificate for a ground instructor certificate with an airplane category rating.

(c) The holder of a ground instructor certificate with an advanced rating may exchange that ground instructor certificate for a ground instructor certificate with an airplane category rating.

(d) The holder of a ground instructor certificate with an advanced and instrument rating may exchange that ground instructor certificate for a

ground instructor certificate with an airplane category rating and instrument rating.

(e) The holder of a ground instructor certificate who also holds a flight instructor certificate may exchange that ground instructor certificate for a ground instructor certificate with the aircraft categories or instrument rating held on the flight instructor certificate.

PART 141—PILOT SCHOOLS

4. Part 141 is revised to read as follows:

Subpart A—General

Sec.

- 141.1 Applicability.
- 141.3 Certificate required.
- 141.5 Requirements for a pilot school certificate.
- 141.7 Provisional pilot school certificate.
- 141.9 Examining authority.
- 141.11 Pilot school ratings.
- 141.13 Application for issuance, amendment, or renewal.
- 141.15 Location of facilities.
- 141.17 Duration of certificates and examining authority.
- 141.18 Carriage of narcotic drugs, marihuana, and depressant or stimulant drugs or substances.
- 141.19 Display of certificate.
- 141.21 Inspections.
- 141.23 Advertising limitations.
- 141.25 Business office and operations base.
- 141.27 Renewal of certificates and ratings.
- 141.29 [Reserved.]

Subpart B—Personnel, Aircraft, and Facilities Requirements

- 141.31 Applicability.
- 141.33 Personnel.
- 141.35 Chief instructor qualifications.
- 141.36 Assistant chief instructor qualifications.
- 141.37 Check instructor qualifications.
- 141.38 Airports.
- 141.39 Aircraft.
- 141.41 Flight training devices and training aids.
- 141.43 Pilot briefing areas.
- 141.45 Ground training facilities.

Subpart C—Training Course Outline and Curriculum

- 141.51 Applicability.
- 141.53 Approval procedures for a training course: General.
- 141.55 Training course: Contents.
- 141.57 Special curricula.

Subpart D—Examining Authority

- 141.61 Applicability.
- 141.63 Examining authority qualification requirements.
- 141.65 Privileges.
- 141.67 Limitations and reports.

Subpart E—Operating Rules

- 141.71 Applicability.
- 141.73 Privileges.
- 141.75 Aircraft requirements.
- 141.77 Limitations.
- 141.79 Flight training.

- 141.81 Ground training.
- 141.83 Quality of training.
- 141.85 Chief instructor responsibilities.
- 141.87 Change of chief instructor.
- 141.89 Maintenance of personnel, facilities, and equipment.
- 141.91 Satellite bases.
- 141.93 Enrollment.
- 141.95 Graduation certificate.

Subpart F—Records

- 141.101 Training records.
- Appendix A—Recreational Pilot Certification Course
- Appendix B—Private Pilot Certification Course
- Appendix C—Instrument Rating Course
- Appendix D—Commercial Pilot Certification Course
- Appendix E—Airline Transport Pilot Certification Course
- Appendix F—Flight Instructor Certification Course
- Appendix G—Flight Instructor Instrument (Aircraft Category and Class) Certification Course
- Appendix H—Ground Instructor Certification Course
- Appendix I—Additional Aircraft Category or Class Rating Course
- Appendix J—Aircraft Type Rating Course, for other than an airline transport pilot certificate
- Appendix K—Special Preparation Courses
- Appendix L—Pilot Ground School Courses

Authority: 49 U.S.C. 106(g), 40101–40104, 40109, 40113, 44701–44703, 44707, 44709, 44711, 45102–45103, 45106, and 45301–45302.

Subpart A—General

§ 141.1 Applicability.

This part prescribes:

- (a) The requirements for issuing pilot school certificates, provisional pilot school certificates, and associated ratings; and
- (b) The general operating rules applicable to a holder of a certificate or rating specified in paragraph (a) of this section.

§ 141.3 Certificate required.

No person may operate as a certificated pilot school without, or in violation of, a pilot school certificate or provisional pilot school certificate issued under this part.

§ 141.5 Requirements for a pilot school certificate.

An applicant that meets the requirements of this section may be issued a pilot school certificate with associated ratings if:

- (a) The applicant completes the application for a pilot school certificate on a form and in a manner as prescribed by the Administrator.
- (b) The applicant holds a provisional pilot school certificate, issued under this part, for at least 24 calendar months

preceding the month in which the application for a pilot school certificate is made.

(c) The applicant meets the applicable requirements of subparts A through C of this part for the school ratings sought.

(d) The applicant trained and recommended for pilot certification and rating tests, within 24 calendar months preceding the month the application is made for the pilot school certificate, at least 10 students for:

(1) A knowledge or practical test for a pilot certificate, flight instructor certificate, ground instructor certificate, or an additional rating, with such quality of training that at least 80 percent of those applicants were successful on the first attempt on a test that was conducted by an FAA inspector, or an examiner who is not an employee of the school; or

(2) An end-of-course test for a training course specified in appendix K of this part.

§ 141.7 Provisional pilot school certificate.

An applicant that meets the applicable requirements of subparts A, B, and C of this part, but does not meet the recent training activity requirements of § 141.5(d) of this part, may be issued a provisional pilot school certificate with ratings.

§ 141.9 Examining authority.

An applicant is issued an examining authority for its pilot school certificate if the applicant meets the requirements of subpart D of this part.

§ 141.11 Pilot school ratings.

(a) The ratings listed in paragraph (b) of this section may be issued to an applicant for a:

(1) Pilot school certificate, provided the applicant meets the requirements of § 141.5 of this part; or

(2) Provisional pilot school certificate, provided the applicant meets the requirements of § 141.7 of this part.

(b) The following are courses the school is authorized to conduct:

(1) *Certification and rating courses.*

(i) Recreational pilot course.

(ii) Private pilot course.

(iii) Commercial pilot course.

(iv) Instrument rating course.

(v) Airline transport pilot course.

(vi) Flight instructor course.

(vii) Flight instructor instrument course.

(viii) Ground instructor course.

(ix) Additional aircraft category or class rating course.

(x) Aircraft type rating course.

(2) *Special preparation courses.*

(i) Pilot refresher course.

(ii) Flight instructor refresher course.

(iii) Ground instructor refresher course.

(iv) Agricultural aircraft operations course.

(v) Rotorcraft external-load operations course.

(vi) Special operations course.

(vii) Test pilot course.

(3) *Pilot ground school courses.*

§ 141.13 Application for issuance, amendment, or renewal.

(a) Application for an original certificate and rating, for an additional rating, or for the renewal of a certificate under this part is made on a form and in a manner prescribed by the Administrator.

(b) Application for the issuance or amendment of a certificate or rating must be accompanied by two copies of each proposed training course curriculum for which approval is sought.

§ 141.15 Location of facilities.

The holder of a pilot school certificate or a provisional pilot school certificate may have a base or other facilities located outside the United States, provided the Administrator determines the location of the base and facilities at that place are needed for the training of students who are citizens of the United States.

§ 141.17 Duration of certificate and examining authority.

(a) Unless surrendered, suspended, revoked, or otherwise terminated, a pilot school's or a provisional pilot school's certificate expires:

(1) On the last day of the 24th calendar month from the month the certificate was issued;

(2) Except as provided in paragraph (b) of this section, on the date that any change in ownership of the school;

(3) On the date of any change in the facilities upon which the school's certificate is based;

(4) Upon notice by the Administrator that the school has failed for more than 60 days to maintain the facilities, aircraft, or personnel required for any one of the school's approved training courses; or

(5) Whenever the Administrator determines a school has not acted in good faith with a student with whom the school has a contractual agreement to provide training.

(b) A change in the ownership of a pilot school or provisional pilot school does not terminate that school's certificate, if within 30 days after the date that any change in ownership of the school occurs:

(1) Application is made for an appropriate amendment to the certificate; and

(2) No change in the facilities, personnel, or approved training courses is involved.

(c) An examining authority issued to the holder of a pilot school certificate expires on the date that the pilot school certificate expires, or is surrendered, suspended, revoked, or otherwise terminated.

§ 141.18 Carriage of narcotic drugs, marijuana, and depressant or stimulant drugs or substances.

If the holder of a certificate issued under this part permits any aircraft owned or leased by that holder to be engaged in any operation that the certificate holder has knowledge of being in violation of § 91.19(a) of this chapter, that operation is a basis for suspending or revoking the certificate.

§ 141.19 Display of certificate.

(a) Each holder of a pilot school certificate or a provisional pilot school certificate must display that certificate in a place in the school that is normally accessible to the public and is not obscured.

(b) A certificate must be made available for inspection upon request by:

(1) The Administrator;

(2) An authorized representative of the National Transportation Safety Board; or

(3) A Federal, state, or local law enforcement officer.

§ 141.21 Inspections.

Each holder of a certificate issued under this part must allow the Administrator to inspect its personnel, facilities, equipment, and records to determine the certificate holder's:

(a) Eligibility to hold its certificate;

(b) Compliance with the Federal Aviation Act of 1958, as amended; and

(c) Compliance with the Federal Aviation Regulations.

§ 141.23 Advertising limitations.

(a) The holder of a pilot school certificate or a provisional pilot school certificate may not make any statement relating to its certification and ratings which is false or designed to mislead any person contemplating enrollment in that school.

(b) The holder of a pilot school certificate or a provisional pilot school certificate may not advertise that the school is certificated unless it clearly differentiates between courses that have been approved under part 141 of this chapter and those that have not been approved under part 141 of this chapter.

(c) The holder of a pilot school certificate or a provisional pilot school certificate must promptly remove:

(1) From vacated premises all signs indicating that the school was certificated by the Administrator when relocated; or

(2) All indications (including signs), wherever located, that the school is certificated by the Administrator when its certificate has expired or has been surrendered, suspended, or revoked, or otherwise terminated.

§ 141.25 Business office and operations base.

(a) Each holder of a pilot school or a provisional pilot school certificate must maintain a principal business office with a mailing address in the name shown on its certificate.

(1) The facilities and equipment at the principal business office must be adequate to maintain the files and records required to operate the business of the school.

(2) The principal business office may not be shared with, or used by, another pilot school.

(b) Before changing the location of the principal business office or the operations base, each certificate holder must notify the FAA Flight Standards District Office having jurisdiction over the area of the new location, and the notice must be:

(1) Submitted in writing at least 30 days before the change of location; and

(2) Accompanied by any amendments needed for the certificate holder's approved training course outline.

(c) A certificate holder may conduct training at an operations base other than the one specified in its certificate, if the:

(1) Administrator has inspected and approved the base for use by the certificate holder; and

(2) Course of training and any needed amendments thereto have been approved for use at that base.

§ 141.27 Renewal of certificates and ratings.

(a) *Pilot school.*

(1) A pilot school may apply for renewal of its school certificate and ratings within 30 days preceding the month the pilot school certificate expires, provided the school meets the requirements prescribed in paragraph (a)(2) of this section for renewal of its certificate and ratings.

(2) A pilot school may have its school certificate and ratings renewed for an additional 24-calendar months, if the Administrator determines that school meets the following requirements:

(i) The personnel meet the requirements of this part;

(ii) The aircraft meet the requirements of this part;

(iii) The facility and airport meet the requirements of this part;

(iv) The approved training courses meet the requirements of this part;

(v) The training records meet the requirements of this part; and

(vi) The recent training activity and training quality requirements of § 141.5(d) of this part.

(3) A pilot school that does not meet the renewal requirements in paragraph (a)(2) of this section, may apply for a provisional pilot school certificate if the school meets the requirements of § 141.7 of this part.

(b) *Provisional pilot school.*

(1) Except as provided in paragraph (b)(3) of this section, a provisional pilot school may not have its provisional pilot school certificate or the ratings on that certificate renewed.

(2) A provisional pilot school may apply for a pilot school certificate and associated ratings provided that school meets the requirements of § 141.5 of this part.

(3) A former provisional pilot school may apply for another provisional pilot school certificate provided 180 days have elapsed since its last provisional pilot school certificate expired.

§ 141.29 [Reserved]

Subpart B—Personnel, Aircraft, and Facilities Requirements

§ 141.31 Applicability.

(a) This subpart prescribes:

(1) The personnel and aircraft requirements for a pilot school certificate or a provisional pilot school certificate; and

(2) The facilities and airport required by a pilot school or provisional pilot school on a continuous use basis.

(b) As used in the subpart, to have continuous use of a facility including an airport, the school must have:

(1) Ownership of the facility and airport for at least 6-calendar months at the time of application for initial certification and also on the date of renewal of the school's certificate; or

(2) A written lease agreement of the facility and airport for at least 6-calendar months at the time of application for initial certification and also on the date of renewal of the school's certificate.

§ 141.33 Personnel.

(a) An applicant for a pilot school or for a provisional pilot school certificate must meet the following personnel requirements:

(1) Each applicant must have adequate personnel, authorized

instructors, and a chief instructor for each approved training course, who are qualified and competent to perform the duties to which they are assigned.

(2) Each applicant must have dispatchers, aircraft handlers, line and service personnel, and instructors, who are instructed in the procedures and responsibilities of that person's employment.

(3) Each applicant must have instructors who hold the ground or flight instructor certificates, as applicable, in the category and class of aircraft for the approved training course and aircraft.

(b) An applicant for a pilot school certificate or for a provisional pilot school certificate must designate a chief instructor for each of the school's approved training courses, who must meet the requirements of § 141.35 of this part.

(c) When necessary, an applicant for a pilot school certificate or for a provisional pilot school certificate may designate a person to be an assistant chief instructor for an approved training course, provided that person meets the requirements of § 141.36 of this part.

(d) A pilot school and a provisional pilot school may designate a person to be a check instructor for conducting student stage checks, end-of-course tests, and instructor proficiency checks, provided:

(1) That person meets the requirements of § 141.37 of this part; and

(2) That school has a student enrollment of at least 50 students at the time designation is sought.

(e) A person, as listed in this section, may serve in more than one position for a school, provided that person is qualified for each position.

§ 141.35 Chief instructor qualifications.

(a) To be eligible for a designation as a chief instructor for a course of training, a person must meet the following requirements:

(1) Hold a commercial pilot or an airline transport pilot certificate and a flight instructor certificate, and those certificates must contain the appropriate aircraft category, class, and instrument rating for the category and class of aircraft used in the course;

(2) Meet the pilot-in-command recent flight experience requirements of § 61.57 of this chapter;

(3) Satisfactorily accomplish a knowledge test on teaching methods, applicable provisions of the Airman's Information Manual, parts 61, 91, and 141 of this chapter, and the objectives and approved course completion

standards of the course for which the person seeks to obtain designation;

(4) Satisfactorily accomplish a proficiency test on instructional skills and ability to train students on the flight procedures and maneuvers appropriate to the course;

(5) Except for a course of training for gliders, balloons, or airships, the chief instructor must meet the applicable requirements in paragraphs (b), (c), and (d) of this section;

(6) A chief instructor for a course of training for gliders or balloons is only required to have 40 percent of the hours required in paragraphs (b) and (d) of this section; and

(7) A chief instructor for a course of training for airships is only required to have 40 percent of the hours required in paragraphs (b), (c), and (d) of this section.

(b) In addition, for a course of training leading to the issuance of a private pilot certificate or rating, a chief instructor must have:

(1) At least 1,000 hours as pilot in command; and

(2) Primary flight training experience, acquired as either an authorized flight instructor or an instructor in a military pilot primary flight training program, or a combination thereof, consisting of at least:

(i) Two years and a total of 500 flight hours; or

(ii) 1,000 flight hours.

(c) For a course of training leading to the issuance of an instrument rating or a rating with instrument privileges, a chief instructor must have:

(1) At least 100 hours of flight time under actual or simulated instrument conditions;

(2) At least 1,000 hours as pilot in command; and

(3) Instrument flight instructor experience, acquired as either an authorized flight instructor-instrument or an instructor in a military pilot basic or instrument flight training program, or a combination thereof, consisting of at least—

(i) Two years and a total of 250 flight hours; or

(ii) 400 flight hours.

(d) For a course of training other than those that lead to the issuance of a private pilot certificate or rating, or an instrument rating or a rating with instrument privileges, a chief instructor must have:

(1) At least 2,000 hours as pilot in command; and

(2) Flight training experience, acquired as either an authorized flight instructor or an instructor in a military pilot primary or basic flight training program or a combination thereof, consisting of at least—

(i) Three years and a total of 1,000 flight hours; or

(ii) 1,500 flight hours.

§ 141.36 Assistant chief instructor qualifications.

(a) To be eligible for a designation as an assistant chief instructor for a course of training, a person must meet the following requirements:

(1) Hold a commercial pilot or an airline transport pilot certificate and a flight instructor certificate, and those certificates must contain the appropriate aircraft category, class, and instrument rating for the category and class of aircraft used in the course;

(2) Meet the pilot-in-command recent flight experience requirements of § 61.57 of this chapter;

(3) Satisfactorily accomplish a knowledge test on teaching methods, applicable provisions of the Airman's Information Manual, parts 61, 91, and 141 of this chapter, and the objectives and approved course completion standards of the course for which the person seeks to obtain designation;

(4) Satisfactorily accomplish a proficiency test on the flight procedures and maneuvers appropriate to that course; and

(5) Meet the applicable requirements in paragraphs (b), (c), and (d) of this section. However, an assistant chief instructor for a course of training for gliders, free balloons or airships is only required to have 40 percent of the hours required in paragraphs (b) and (c) of this section.

(b) For a course of training leading to the issuance of a private pilot certificate or rating, an assistant chief instructor must have:

(1) At least 500 hours as pilot in command; and

(2) Primary flight training experience, acquired as either an authorized flight instructor or an instructor in a military pilot primary flight training program, or a combination thereof, consisting of at least—

(i) One year and a total of 250 flight hours; or

(ii) 500 flight hours.

(c) For a course of training leading to the issuance of an instrument rating or a rating with instrument privileges, an assistant chief flight instructor must have:

(1) At least 50 hours of flight time under actual or simulated instrument conditions;

(2) At least 500 hours as pilot in command; and

(3) Instrument flight instructor experience, acquired as either an authorized flight instructor-instrument or an instructor in a military pilot basic

or instrument flight training program, or a combination thereof, consisting of at least—

(i) One year and a total of 125 flight hours; or

(ii) 200 flight hours.

(d) For a course of training other than those that lead to the issuance of a private pilot certificate or rating, or an instrument rating or a rating with instrument privileges, an assistant chief instructor must have:

(1) At least 1,000 hours as pilot in command; and

(2) Flight training experience, acquired as either an authorized flight instructor or an instructor in a military pilot primary or basic flight training program or a combination thereof, consisting of at least—

(i) One and one half years and a total of 500 flight hours; or

(ii) 750 flight hours.

§ 141.37 Check instructor qualifications.

(a) To be designated as a check instructor for conducting student stage checks and end-of-course tests and instructor proficiency checks under this part, a person must meet the eligibility requirements of this section:

(1) For checks and tests that relate to either flight or ground training, the person must satisfactorily accomplish a test, given by the chief instructor, on—

(i) Teaching methods;

(ii) Applicable provisions of the "Airman's Information Manual," parts 61, 91, and 141 of this chapter; and

(iii) The objectives and course completion standards of the approved training course for the designation sought.

(2) For checks and tests that relate to a flight training course, the person must—

(i) Meet the requirements in paragraph (a)(1) of this section;

(ii) Hold a commercial pilot or an airline transport pilot certificate and a flight instructor certificate, and those certificates must contain the appropriate aircraft category, class, and instrument rating for the category and class of aircraft used in the course;

(iii) If the flight training course is for a rating in other than a glider or free balloon, hold at least a current second-class medical certificate issued in accordance with part 67 of this chapter;

(iv) If the flight training course is for a rating in a glider or free balloon, present a signed and dated statement by the person certifying that the person has no known medical defects that makes the person unable to pilot a glider or free balloon;

(v) Meet the pilot-in-command recent flight experience requirements of § 61.57 of this chapter; and

(vi) Satisfactorily accomplish a proficiency test, given by the chief instructor, on the flight procedures and maneuvers of the approved training course for the designation sought.

(3) For checks and tests that relate to ground training, the person must—

(i) Meet the requirements in paragraph (a)(1) of this section; and
(ii) Hold a current flight instructor certificate or ground instructor certificate with ratings appropriate to the category and class of aircraft used in the course.

(b) A person who meets the eligibility requirements in paragraph (a) of this section must:

(1) Be designated, in writing, by the chief instructor to conduct student stage checks and end-of-course tests and instructor proficiency checks; and

(2) Be approved by the FAA Flight Standards District Office having jurisdiction over the school.

(c) A check instructor may not conduct a stage check or an end-of-course test of any student:

(1) For whom the check instructor has served as the principal instructor; or

(2) Whom the check instructor has recommended for a stage check or end-of-course test.

§ 141.38 Airports.

(a) An applicant for a pilot school certificate or a provisional pilot school certificate must show that it has continuous use of each airport at which training flights originate.

(b) Each airport used for airplanes and gliders must have at least one runway or takeoff area that allows training aircraft to make a normal takeoff or landing under the following conditions at the aircraft's maximum certificated takeoff gross weight:

(1) Under calm wind conditions of not more than five miles per hour;

(2) At temperatures equal to the mean high temperature for the hottest month of the year in the operating area;

(3) If applicable, with the powerplant operation and landing gear and flap operation recommended by the manufacturer; and

(4) In the case of a takeoff—

(i) With smooth transition from liftoff to the best rate of climb speed without exceptional piloting skills or techniques; and

(ii) Clearing all obstacles in the takeoff flight path by at least 50 feet.

(c) Each airport must have a wind direction indicator that is visible from the ends of each runway at ground level;

(d) Each airport must have a traffic direction indicator when:

(1) The airport does not have an operating control tower; and

(2) UNICOM advisories are not available.

(e) Except as provided in paragraph (f) of this section, each airport used for night training flights must have permanent runway lights; and

(f) An airport used for night training flights in seaplanes is permitted to use adequate non-permanent lighting or shoreline lighting, if approved by the Administrator.

§ 141.39 Aircraft.

(a) An applicant for a pilot school or provisional pilot school certificate, and each pilot school or provisional pilot school, must show that each aircraft used by that school for flight training and supervised PIC flights meet the following requirements:

(1) Each aircraft must be registered as a civil aircraft of the United States;

(2) Each aircraft must be certificated with a standard airworthiness certificate or a primary airworthiness certificate, unless the Administrator determines that due to the nature of the approved course, an aircraft not having a standard airworthiness certificate or primary airworthiness certificate may be used;

(3) Each aircraft must be maintained and inspected in accordance with—

(i) The requirements of subpart E, part 91 of this chapter that apply to aircraft operated for hire; and

(ii) An inspection program for each airframe, aircraft engine, propeller, appliance, and component part.

(4) Each aircraft used in flight training must be at least a two-place aircraft with engine power controls and flight controls that can be easily reached and operated in a normal manner from both pilot stations; and

(5) Each aircraft used in a course for instrument flight training, or a training course requiring the demonstration of instrument skills, must be equipped and maintained for IFR operations.

(b) The inspection program required in paragraph (a)(3) of this section must be:

(1) A current inspection program recommended by the manufacturer;

(2) An inspection program that is currently in use by the holder of a certificate issued under part 121 or part 135 of this chapter; or

(3) An inspection program established by the applicant and approved by the Administrator.

(c) An inspection program under paragraph (b)(3) of this section must meet the following requirements:

(1) The program is approved by the FAA Flight Standards District Office having jurisdiction over the area in which the applicant is based; and

(2) That program is submitted in writing and consists of at least—

(i) The instructions and procedures for the conduct of inspections for the particular make and model aircraft, including necessary checks and tests;

(ii) The instructions and procedures for inspecting the parts and areas of each airframe, aircraft engine, propeller, appliance, and component part, including survival and emergency equipment required to be inspected; and

(iii) A schedule for performing the inspections that must be performed under the program expressed in terms of the time in service, calendar time, number of system operations, or any combination of these.

§ 141.41 Flight training devices and training aids.

An applicant for a pilot school or a provisional pilot school certificate must show that its flight training devices and training aids and equipment meet the following requirements:

(a) *Flight training devices.*

(1) Each flight training device used to obtain the maximum flight training credit allowed for flight training devices in an approved pilot training course curriculum must have:

(i) An enclosed pilot's station or cockpit that accommodates one or more flight crewmembers;

(ii) Controls to stimulate the rotation of the flight training device about three axes;

(iii) The minimum instrumentation and equipment required for powered aircraft in § 91.205 of this chapter for the type of flight operations simulated;

(iv) For VFR instruction, a means of simulating visual flight conditions, including motion of the flight training device, or projections, or models operated by the flight controls; and

(v) For IFR instruction, a means to record the flight path simulated by the flight training device.

(2) Flight training devices other than those covered under paragraph (a)(1) of this section must have:

(i) An enclosed pilot's station or cockpit that accommodates one or more flight crewmembers;

(ii) Controls to simulate the rotation of the flight training device about three axes; and

(iii) The minimum instrumentation and equipment required for powered aircraft in § 91.205 of this chapter for the type of flight operations simulated.

(b) *Training aids and equipment.* Each training aid, including any audiovisual, mockup, chart, or aircraft component listed in the approved training course outline, must be accurate and appropriate to the course for which it is used.

§ 141.43 Pilot briefing areas.

(a) An applicant for a pilot school or provisional pilot school certificate must show that the applicant has the continuous use of a briefing area located at each airport at which training flights originate, that is:

(1) Adequate to shelter students waiting to engage in their training flights;

(2) Arranged and equipped for the conduct of pilot briefings; and

(3) Except as provided in paragraph (c) of this section, a school with an instrument rating or commercial pilot course must be equipped with private landline or telephone communication to the nearest FAA Flight Service Station.

(b) A briefing area required by paragraph (a) of this section may not be used by the applicant if it is available for use by any other pilot school during the period it is required for use by the applicant.

(c) The communication equipment required by paragraph (a)(3) of this section is not required if the briefing area and the flight service station are located on the same airport and are readily accessible to each other.

§ 141.45 Ground training facilities.

An applicant for a pilot school or provisional pilot school certificate must show that:

(a) Each room, training booth, or other space used for instructional purposes is heated, lighted, and ventilated to conform to local building, sanitation, and health codes; and

(b) The training facility is so located that the students in that facility are not distracted by the training conducted in other rooms, or by flight and maintenance operations on the airport.

Subpart C—Training Course Outline and Curriculum**§ 141.51 Applicability.**

This subpart prescribes the curriculum and course outline requirements for the issuance of a pilot school or provisional pilot school certificate and ratings.

§ 141.53 Approval procedures for a training course: General.

(a) *General.* An applicant for a pilot school or provisional pilot school certificate must obtain the Administrator's approval of the outline of each training course for which certification and rating is sought.

(b) Application.

(1) An application for the approval of an initial or amended training course must be submitted in duplicate to the FAA Flight Standards District Office

having jurisdiction over the area where the school is based.

(2) An application for the approval of an initial or amended training course must be submitted at least 30 days before any training under that course, or any amendment thereto, is scheduled to begin.

(3) An application for amending a training course must be accompanied by two copies of the amendment.

(c) Effective date.

(1) Until [insert date one year after effective date of the final rule] an applicant for a pilot school or provisional pilot school certificate may request approval of the training courses listed in either paragraph (c)(1) (i) or (ii) of this section.

(i) Pilot school rating courses:

(A) Private pilot.

(B) Private test course.

(C) Instrument rating.

(D) Commercial pilot.

(E) Commercial test course.

(F) Additional aircraft rating.

(G) Pilot ground school.

(H) Flight instructor certification.

(I) Additional flight instructor rating.

(J) Additional instrument rating.

(K) Airline transport pilot certification.

(L) Pilot refresher course.

(M) Agricultural aircraft operations course.

(N) Rotorcraft external-load operations course.

(ii) Pilot school rating courses, [insert effective date]:

(A) Recreational pilot courses.

(B) Private pilot courses.

(C) Commercial pilot courses.

(D) Instrument rating courses.

(E) Airline transport pilot courses.

(F) Flight instructor courses.

(G) Flight instructor instrument

courses.

(H) Ground instructor courses.

(I) Additional aircraft category or class rating courses.

(J) Aircraft type rating courses.

(K) Pilot refresher courses.

(L) Flight instructor refresher courses.

(M) Ground instructor refresher courses.

(N) Agricultural aircraft operations course.

(O) Rotorcraft external-load operations course.

(P) Special operations course.

(Q) Test pilot course.

(R) Pilot ground school courses.

(2) After [insert date one year after effective date of the final rule] an applicant for a pilot school or provisional pilot school certificate may only request approval of the training courses listed in paragraph (c)(1)(ii) of this section.

§ 141.55 Training course: Contents.

(a) Each training course for which approval is requested must meet the minimum curriculum requirements in accordance with the appropriate appendix of this part.

(b) Except as provided in paragraphs (d) and (e) of this section, each training course for which approval is requested must meet the minimum ground and flight training time requirements in accordance with the appropriate appendix of this part.

(c) Each training course for which approval is requested must contain:

(1) A description of each room used for ground training, including the room's size and the maximum number of students that may be trained in the room at one time;

(2) A description of each type of audio-visual aid, projector, tape recorder, mockup, aircraft component, and other special training aids used for ground training;

(3) A description of each flight training device used for training;

(4) A listing of the airports at which training flights originate and a description of the facilities, including pilot briefing areas that are available for use by the school's students and personnel at each of those airports;

(5) A description of the type of aircraft including any special equipment used for each phase of training;

(6) The minimum qualifications and ratings for each instructor assigned to ground or flight training; and

(7) A training syllabus that includes the following information:

(i) The prerequisites for enrolling in the ground and flight portion of the course that include the pilot certificate and rating (if required by this part), medical certificate (if required by this part), training, pilot experience, and pilot knowledge;

(ii) A detailed description of each lesson, including the lesson's objectives, standards, and planned time for completion;

(iii) A description of what the course is expected to accomplish with regard to student learning;

(iv) The expected accomplishments and the standards for each stage of training; and

(v) A description of the checks and tests to be used to measure a student's accomplishments for each stage of training.

(d) A pilot school may request and receive initial approval for any of the training courses of this part without specifying the minimum ground and flight training time requirements of this part, provided the following provisions are met:

(1) The school holds a pilot school certificate under this part and has held that certificate for a period of at least 24 consecutive calendar months preceding the month of the request;

(2) The school requests initial approval for no longer than 24-calendar months;

(3) In addition to the information required by paragraph (c) of this section, the training course specifies planned ground and flight training time requirements for the course;

(4) The school does not request the training course to be approved for examining authority; and

(5) The practical or knowledge test for the course is to be given by—

(i) An FAA inspector; or

(ii) An examiner who is not an employee of the school.

(e) A certificated pilot school may request and receive final approval for any of the training courses of this part without specifying the minimum ground and flight training time requirements of this part, provided the following conditions are met:

(1) The school has held initial approval for that training course for at least 24-calendar months.

(2) The school has—

(i) Trained at least 10 students in that training course within the preceding 24-calendar months and recommended those students for a pilot, flight instructor, or ground instructor certificate or rating; and

(ii) At least 80 percent of those students passed the practical or knowledge test on the first attempt, and that test was given by—

(A) An FAA inspector; or

(B) An examiner who is not an employee of the school.

(3) In addition to the information required by paragraph (c) of this section, the training course specifies planned ground and flight training time requirements for the course.

(4) The school does not request that the training course be approved for examining authority.

(f) The airman certificate of a person who does not meet the pilot flight time qualifications in ICAO Annex I will be issued with one or both of the limitations listed in paragraph (f)(1) of this section, which may be removed as prescribed in paragraph (f)(2) of this section.

(1) The airman certificate will be issued with the limitation "Holder does not meet the pilot flight experience requirements of ICAO," or "Holder does not meet the pilot-in-command flight experience requirements of ICAO," or both, if appropriate.

(2) The limitations, "Holder does not meet the pilot flight experience

requirements of ICAO," or "Holder does not meet the pilot-in-command flight experience requirements of ICAO," of paragraph (f)(1) of this section, may be removed when the holder presents to the FAA satisfactory evidence of having accumulated the appropriate pilot flight time that meets the requirements of part 61 of this chapter.

§ 141.57 Special curricula.

An applicant for a pilot school or provisional pilot school certificate may apply for approval to conduct a special course of airman training for which a curriculum is not prescribed in the appendixes of this part, if the applicant shows that the training course contains features that could achieve a level of pilot proficiency equivalent to that achieved by a training course prescribed in the appendixes of this part or the requirements of part 61 of this chapter.

Subpart D—Examining Authority

§ 141.61 Applicability.

This subpart prescribes:

(a) The requirements for the issuance of an examining authority to the holder of a pilot school certificate; and

(b) The privileges and limitations of that examining authority.

§ 141.63 Examining authority qualification requirements.

(a) A pilot school must meet the following prerequisites to receive initial approval for examining authority:

(1) The school completes the application for examining authority on a form and in a manner prescribed by the Administrator;

(2) The school holds a pilot school certificate and the rating in which examining authority is sought for at least 24 consecutive calendar months preceding the month of application for examining authority;

(3) The training course for which examining authority is requested may not be a course that is approved without meeting the minimum ground and flight training time requirements of this part; and

(4) Within 24 calendar months after the date of application for examining authority, that school must meet the following requirements—

(i) The school must have trained at least 10 students in the training course for which examining authority is sought and recommended those students for a pilot, flight instructor, or ground instructor certificate or rating; and

(ii) At least 90 percent of the applicant's students passed the required practical or knowledge test for the pilot, flight instructor, or ground instructor

certificate or rating on the first attempt, and that test was given by—

(A) An FAA inspector; or

(B) An examiner who is not an employee of the school.

(b) A pilot school must meet the following requirements to retain approval of its examining authority:

(1) The school completes the application for renewal of its examining authority on a form and in a manner prescribed by the Administrator;

(2) The school holds a pilot school certificate and the rating for which examining authority is sought for at least 24 calendar months preceding the month of application for renewal of its examining authority; and

(3) The training course for which examining authority is requested may not be a course that is approved without meeting the minimum ground and flight training time requirements of this part.

§ 141.65 Privileges.

A pilot school that holds examining authority may recommend a person who graduated from its course for the appropriate pilot, flight instructor, or ground instructor certificate or rating without taking the FAA knowledge or practical tests, or both, provided:

(a) The school holds examining authority for the training course from which the person graduated; and

(b) The person satisfactorily completed the training course in accordance with the school's approved training course and the provisions of this part.

§ 141.67 Limitations and reports.

A pilot school that holds examining authority may only recommend the issuance of a pilot, flight instructor, or ground instructor certificate and rating to a person who does not take an FAA knowledge or practical test, if the issuance of that certificate or rating is in accordance with the following requirements:

(a) The person graduated from a training course for which the pilot school holds examining authority.

(b) Except as provided in this paragraph of this section, the person satisfactorily completed all the curriculum requirements of that pilot school's approved training course. A person who transfers from one part 141 approved pilot school to another part 141 approved pilot school may receive credit for that previous training, provided the following requirements are met:

(1) The maximum credited training time does not exceed one-half of the receiving school's curriculum requirements;

(2) The person completes a knowledge and proficiency test conducted by the receiving school for the purpose of determining the amount of pilot experience and knowledge to be credited;

(3) The receiving school determines (based on the person's performance on the knowledge and proficiency test required by paragraph (b)(2) of this section) on the amount of credit to be awarded and records that credit in the person's training record;

(4) The person who requests credit for previous pilot experience and knowledge obtained the experience and knowledge from another part 141 approved pilot school and training course; and

(5) The receiving school retains a copy of the person's training record from the other school.

(c) The test given by a pilot school that holds examining authority must be approved by the Administrator and be at least equal in scope, depth, and difficulty to the comparable knowledge and practical test prescribed by the Administrator under part 61 of this chapter;

(d) A pilot school that holds examining authority may not use its practical or knowledge tests if the school:

(1) Knows, or has reason to believe, the knowledge test has been compromised; or

(2) Is notified by a FAA Flight Standards District Office, that there is reason to believe or it is known, the knowledge test has been compromised.

(e) A pilot school that holds examining authority must maintain a record of all temporary airman certificates it issues, which consists of the following information:

(1) A chronological listing that includes—

(i) The date the temporary airman certificate was issued;

(ii) The student to whom the temporary airman certificate was issued, and that student's permanent mailing address and telephone number;

(iii) The training course from which the student graduated;

(iv) The name of the person who conducted the practical or knowledge test;

(v) The type of temporary airman certificate or rating issued to the student; and

(vi) The date the student's airman application file was sent to the FAA for processing for a permanent airman certificate.

(2) A copy of the record containing each student's graduation certificate, airman application, temporary airman

certificate, superseded airman certificate (if applicable), and knowledge or practical test results; and

(3) The records required by paragraph (e) of this section must be made available to the Administrator upon request and must be surrendered to the Administrator when the pilot school ceases to have examining authority; and

(f) Within 7 days after a student satisfactorily accomplishes the practical or knowledge test, the pilot school that holds examining authority must submit that student's airman application file to the FAA for processing for the issuance of a permanent airman certificate.

Subpart E—Operating Rules

§ 141.71 Applicability.

This subpart prescribes the operating rules applicable to a pilot school or provisional pilot school certificated under the provisions of this part.

§ 141.73 Privileges.

(a) The holder of a pilot school or a provisional pilot school certificate may advertise and conduct approved pilot training courses in accordance with the certificate and ratings that it holds.

(b) A pilot school that holds examining authority for an approved training course may recommend a graduate of that course for the issuance of an appropriate pilot, flight instructor, or ground instructor certificate and rating, without taking an FAA knowledge or practical test, provided the training course has been approved and meets the minimum ground and flight training time requirements of this part.

§ 141.75 Aircraft requirements.

(a) The following items must be carried on each aircraft used for flight training and supervised PIC flights:

(1) A pre-takeoff and pre-landing checklist; and

(2) The operator's handbook for the aircraft, if one is furnished by the manufacturer, or copies of the handbook if furnished to each student using the aircraft

(b) Each aircraft used in the certification and rating courses listed in § 141.11 of this part must have a standard airworthiness certificate or a primary airworthiness certificate; and

(c) Each aircraft used in the agricultural aircraft operations, external-load operation, test pilot, and special operations courses listed in § 141.11 of this part may have a restricted airworthiness certificate, if its use for training is not prohibited by the aircraft's operating limitations.

§ 141.77 Limitations.

(a) The holder of a pilot school or a provisional pilot school certificate may neither issue a graduation certificate to a student, nor recommend a student for a pilot certificate or rating, unless the student has:

(1) Completed the training specified in the pilot school's course of training; and

(2) Satisfactorily accomplished the required final tests.

(b) Except as provided in paragraph (c) of this section, the holder of a pilot school or a provisional pilot school certificate may not graduate a student from a course of training unless the student has completed all of the curriculum requirements of that course;

(c) A student may be given credit towards the curriculum requirements of a course for previous pilot experience and knowledge, provided:

(1) The credit given a student for previous pilot experience and knowledge does not exceed more than one-half of the curriculum requirements and must be based upon a proficiency test or knowledge test given by the receiving pilot school;

(2) The course credits are a result of training received from one part 141 approved school to another; and

(3) The receiving school determines the amount of course credit to be transferred, based on a proficiency test or knowledge test, or both, of the student; and

(4) Credit for training received from the other school may be given if—

(i) That other school holds a certificate issued under this part and certifies to the kind and amount of training and to the result of each stage check and end-of-course test given to that student;

(ii) The training was conducted by that other school in accordance with that school's approved training course; and

(iii) The student was enrolled in that other school's approved training course for the training being used for creditation.

§ 141.79 Flight training.

(a) No person other than an authorized flight instructor who has the ratings and the minimum qualifications specified in the approved training course outline may give a student flight training under an approved course of training;

(b) No student pilot may be authorized to start a supervised PIC practice flight from an airport until the flight has been approved by an authorized flight instructor who is present at that airport;

(c) Each chief instructor and assistant chief instructor, assigned to a training course, must complete at least once every 12 calendar months, an approved syllabus of training consisting of ground or flight training, or both, or an approved flight instructor refresher course;

(d) Each flight instructor, who is assigned to a flight training course, must satisfactorily complete the following requirements:

(1) Prior to receiving authorization to train students in a flight training course, the instructor must accomplish—

(i) A review of and receive a briefing on the objectives and standards of that training course; and

(ii) An initial proficiency check in each make and model of aircraft used in that training course in which that flight instructor gives training; and

(2) Every 12-calendar months after the month in which the flight instructor last complied with paragraph (d)(1)(ii) of this section, that instructor must accomplish a recurrent proficiency check in one of the aircraft the flight instructor trains students.

(e) Each flight instructor, who is assigned to a flight training course, must satisfactorily comply with the requirements of paragraph (d) of this section with the school's chief instructor, assistant chief instructor, or check instructor.

§ 141.81 Ground training.

(a) Except as provided in paragraph (b) of this section, each instructor, who is assigned to a ground training course, must hold a flight or ground instructor certificate with the appropriate rating for that course of training;

(b) A person who does not meet the requirements of paragraph (a) of this section may be assigned ground training duties in a ground training course, if:

(1) The chief instructor who is assigned to that ground training course finds the person qualified to give that training; and

(2) The training is given while under the supervision of the chief instructor or the assistant chief instructor who is present at the facility when the training is given; and

(c) An instructor may not be used in a ground training course until the instructor has been briefed in regard to the objectives and standards of that course by the chief instructor, assistant chief instructor, or check instructor.

§ 141.83 Quality of training.

(a) Each pilot school or provisional pilot school must meet the following requirements:

(1) Comply with its approved training course; and

(2) Provide training of such quality that meets the training quality requirements of § 141.5(d) of this part.

(b) The failure of a pilot school or provisional pilot school to maintain the quality of instruction specified in paragraph (a) of this section may be the basis for suspending or revoking that school's certificate.

(c) When requested by the Administrator, a pilot school or provisional pilot school must allow the FAA to perform any knowledge, practical, stage, or end-of-course test of its students;

(d) When a stage or end-of-course test is conducted by the FAA under the provisions of paragraph (c) of this section and the student has not completed the training course, then that test will be based on the standards prescribed in the school's approved training course; and

(e) If the practical or knowledge test, administered by the FAA under the provisions of paragraph (c) of this section that is given to a student who has completed the school's training course will be based upon the areas of operation approved by the Administrator.

§ 141.85 Chief instructor responsibilities.

(a) Each person designated as a chief instructor for a pilot school or provisional pilot school shall be responsible for:

(1) Certifying each student's training record, graduation certificate, stage check and end-of-course test reports, recommendation for course completion, and application for certification;

(2) Ensuring that each instructor satisfactorily accomplishes an initial proficiency check prior to that instructor being assigned instructing duties in the school's approved training courses and thereafter passes a recurrent proficiency check every 12-calendar months after the month in which the initial test was accomplished;

(3) Ensuring each student accomplishes the required stage check and end-of-course tests in accordance with the school's approved training course; and

(4) Maintaining training techniques, procedures, and standards for the school that are acceptable to the Administrator.

(b) The chief instructor or an assistant chief instructor must be available at the pilot school or, if away from the pilot school, be available by telephone, radio, or other electronic means, during the time that training is given for an approved training course.

(c) The chief instructor may delegate authority for conducting stage checks, end-of-course tests, and flight instructor

proficiency checks to the assistant chief instructor or a check instructor.

§ 141.87 Change of chief instructor.

Whenever a pilot school or provisional pilot school makes a change of designation of its chief instructor, that school:

(a) Must immediately provide the FAA FSDO, that has jurisdiction over the area in which the school is located, with written notification of the change;

(b) May conduct training without a chief instructor for that training course for a period not to exceed 60 days while awaiting the designation and approval of another chief instructor;

(c) May, for a period not to exceed 60 days, have the stage and end-of-course tests given by—

(1) The training course's assistant chief instructor, if one has been designated;

(2) The training course's check instructor, if one has been designated;

(3) An FAA inspector; or

(4) An examiner.

(d) Must, after 60 days without a chief instructor, cease operations and surrender its school certificate to the Administrator; and

(e) The school may have its certificate reinstated, upon:

(1) Designating and approving another chief instructor;

(2) Showing it meets the requirements of § 141.27(a)(2) of this part; and

(3) Applying for reinstatement on a form and in a manner prescribed by the Administrator.

§ 141.89 Maintenance of personnel, facilities, and equipment.

The holder of a pilot school or provisional pilot school certificate may not give training to a student who is enrolled in an approved course of training unless:

(a) Each airport, aircraft, and facility necessary for that training meets the standards specified in the holder's approved training course outline and the appropriate requirements of this part; and

(b) Except as provided in § 141.87 of this part, each chief instructor, assistant chief instructor, check instructor, or instructor meets the qualifications specified in the holder's approved course of training and the appropriate requirements of this part.

§ 141.91 Satellite bases.

The holder of a pilot school or provisional pilot school certificate may conduct ground or flight training in an approved course of training at a base other than its main operations base if:

(a) An assistant chief instructor is designated for each satellite base, and

that assistant chief instructor must be available at the satellite pilot school or, if away from the premises, by telephone, radio, or other electronic means during the time that training is given for an approved training course;

(b) The airport, facilities, and personnel used at the satellite base meet the appropriate requirements of subpart B of this part and its approved training course outline;

(c) The instructors are under the direct supervision of the chief instructor or assistant chief instructor for the appropriate training course who is readily available for consultation in accordance with § 141.85(b) of this part; and

(d) The FAA Flight Standards District Office having jurisdiction over the area in which the school is located is notified in writing if training or instruction is conducted there for more than 7 consecutive days.

§ 141.93 Enrollment.

(a) The holder of a pilot school or a provisional pilot school certificate must, at the time a student is enrolled in an approved training course, furnish that student with the following:

(1) A certificate of enrollment containing—

(i) The name of the course in which the student is enrolled; and

(ii) The date of that enrollment.

(2) A copy of the training syllabus.

(b) The holder of a pilot school or provisional pilot school certificate must maintain a monthly listing of persons enrolled in each training course offered by the school.

§ 141.95 Graduation certificate.

(a) The holder of a pilot school or provisional pilot school certificate shall issue a graduation certificate to each student who completes its approved course of training.

(b) The graduation certificate must be issued to the student upon completion of the course of training and contain at least the following information:

(1) The name of the school and the number of the school certificate;

(2) The name of the graduate to whom it was issued;

(3) The course of training for which it was issued;

(4) The date of graduation;

(5) A statement that the student has satisfactorily completed each required stage of the approved course of training including the tests for those stages;

(6) The information contained on the graduation certificate must be certified by the chief instructor for that course of training; and

(7) A statement showing the cross-country training the student received in the course of training.

Subpart F—Records

§ 141.101 Training records.

(a) Each holder of a pilot school or provisional pilot school certificate must establish and maintain a current and accurate record of the participation and accomplishment of each student enrolled in an approved course of training conducted by the school, that includes the following:

(1) The record kept in a student's logbook will not suffice for the record required by this paragraph of this section; and

(2) The record must include the following information:

(i) The date the student was enrolled in the approved course;

(ii) A chronological log of the student's course attendance, subjects and flight operations covered in the student's training, and the names and grades of any tests taken by the student; and

(iii) The date the student graduated, terminated training, or transferred to another school.

(b) Whenever a student graduates, terminates training, or transfers to another school, the student's record must be certified to that effect by the chief instructor;

(c) The holder of a certificate for a pilot school or a provisional pilot school must retain each student record required by this section for at least 1 year from the date that the student:

(1) Graduates from the course to which the record pertains;

(2) Terminates enrollment in the course to which the record pertains; or

(3) Transfers to another school; and

(d) The holder of a certificate for a pilot school or a provisional pilot school must, upon request of a student, make a copy of the student's record available to the student.

Appendix A—Recreational Pilot Certification Course

1. *Applicability.* This appendix prescribes the minimum curriculum required for a recreational pilot certification course under this part, for:

(a) An airplane category with a single-engine class rating.

(b) A rotorcraft category with a helicopter class rating.

(c) A rotorcraft category with a gyroplane class rating.

2. *Eligibility for enrollment.* A person must have the following to enroll in the flight portion of the recreational pilot certification course:

(a) A student pilot certificate; and
(b) A signed and dated statement affixed to the application certifying that no known medical defect exists that would make the person unable to pilot an aircraft for the aircraft category and class rating sought.

3. *Aeronautical knowledge training.* Each approved course must include at least 20 hours of training on the following aeronautical knowledge areas, appropriate to the aircraft category and class for which the course applies:

(a) The applicable Federal Aviation Regulations for recreational pilot privileges, limitations, and flight operations, appropriate to the aircraft category and class rating for which the course applies;

(b) Accident reporting requirements of the National Transportation Safety Board;

(c) The applicable subjects in the "Airman's Information Manual" and the appropriate FAA advisory circulars;

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

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

(f) The safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence and windshear conditions;

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

(h) Weight and balance computations;

(i) Principles of aerodynamics, powerplants, and aircraft systems;

(j) Stall awareness, spin entry, spins, and spin recovery techniques, if applying for an airplane single engine rating; and

(k) Aeronautical decision making and judgment;

(l) Preflight action that includes—

(1) How to obtain information on runway lengths at airports of intended use, data on takeoff and landing distances, weather reports and forecasts, and fuel requirements;

(2) How to plan for alternatives if the planned flight cannot be completed; and

(3) Proper planning procedures for possible traffic delays.

4. *Flight training.* (a) Each approved course must include at least 30 hours of flight training (of which 15 hours must be with an authorized flight instructor and 3 hours must be supervised PIC training), on the areas of operation listed in section 4.(c) of this appendix, that are appropriate to the aircraft category and class rating for which the course applies, and must include:

(1) Except as provided in § 61.100 of this chapter, 2 hours of flight training to

and at an airport that is located more than 25 nautical miles from the airport where the applicant normally trains, which includes at least 3 takeoffs and 3 landings; and

(2) Three hours of flight training in the aircraft, that is appropriate to the aircraft category and class for which the course applies, in preparation for the practical test within 60 days preceding the date of the practical test.

(b) Each training flight must include a preflight briefing and a postflight critique of the student by the flight instructor assigned to that flight.

(c) *Areas of operation.* Flight training must include the following approved areas of operation appropriate to the aircraft category and class rating for which the course applies:

(1) *For an airplane-single engine course:*

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport operations;
- (iv) Takeoffs, landings, and go-arounds;
- (v) Performance maneuvers;
- (vi) Ground reference maneuvers;
- (vii) Navigation;
- (viii) Stalls and slow flight;
- (ix) Emergency operations; and
- (x) Postflight procedures.

(2) *For a rotorcraft-helicopter course:*

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport and heliport operations;
- (iv) Hovering maneuvers;
- (v) Takeoffs, landings, and go-arounds;
- (vi) Performance maneuvers;
- (vii) Navigation;
- (viii) Emergency operations; and
- (ix) Postflight procedures.

(3) *For a rotorcraft-gyroplane course:*

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport operations;
- (iv) Takeoffs, landings, and go-arounds;
- (v) Performance maneuvers;
- (vi) Ground reference maneuvers;
- (vii) Navigation;
- (viii) Flight at slow airspeeds;
- (ix) Emergency operations; and
- (x) Postflight procedures.

5. *Supervised pilot-in-command practice.* Each approved course must include at least 3 hours of supervised pilot-in-command practice on the areas of operation listed in section 4.(c) of this appendix, that is appropriate to the aircraft category and class rating for which the course applies.

6. *Stage checks and end-of-course tests.*

(a) Each student enrolled in a recreational pilot course must satisfactorily accomplish the stage

checks and end-of-course tests, in accordance with the school's approved training course, and must consist of the approved areas of operation of section 4 of this appendix for the aircraft category and class rating for which the course applies.

(b) Each student must demonstrate satisfactory proficiency prior to being endorsed to operate an aircraft in supervised PIC flight.

Appendix B—Private Pilot Certification Course

1. *Applicability.* This appendix prescribes the minimum curriculum for a private pilot certification course required under this part, for:

- (a) An airplane category—single-engine class.
- (b) An airplane category—multiengine class.
- (c) A rotorcraft category—helicopter class.
- (d) A rotorcraft category—gyroplane class.
- (e) A powered-lift category.
- (f) A glider category—nonpowered class.
- (g) A glider category—powered class.
- (h) A lighter-than-air category—airship class.
- (i) A lighter-than-air category—balloon class.

2. *Eligibility for enrollment.* A person must have the following to enroll in the flight portion of the private pilot certification course:

- (a) A student pilot certificate;
- (b) Except for course of training for a rating in a glider or balloon, hold at least a valid third-class medical certificate issued under part 67 of this chapter.
- (c) For a rating in a glider or a balloon, a signed and dated statement by the person certifying that the person has no known medical defect that makes the person unable to pilot a glider or balloon.

3. *Aeronautical knowledge training.* (a) Each approved course must include at least the aeronautical knowledge areas listed in section 3.(b) of this appendix, appropriate to the aircraft category and class rating, and must include at least:

- (1) 35 hours of training, if the course is for an airplane, rotorcraft, or powered lift category rating.
- (2) 15 hours of training, if the course is for a glider category rating.
- (3) 10 hours of training, if the course is for a lighter-than-air category with a balloon class rating.
- (4) 35 hours of training, if the course is for a lighter-than-air category with an airship class rating.

(b) *Aeronautical knowledge areas.*

- (1) The applicable Federal Aviation Regulations for private pilot privileges, limitations, and flight operations;
- (2) Accident reporting requirements of the National Transportation Safety Board;
- (3) The applicable subjects of the "Airman's Information Manual" and the appropriate FAA advisory circulars;
- (4) Aeronautical charts for VFR navigation using pilotage, dead reckoning, and radio aids;

(5) Radio communication procedures;

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

(7) The safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence and windshear conditions;

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

(9) Weight and balance computations;

(10) Principles of aerodynamics, powerplants, and aircraft systems;

(11) If the course of training is for an airplane category or glider category rating, stall awareness, spin entry, spins, and spin recovery techniques;

(12) Aeronautical decision making and judgment; and

(13) Preflight action that includes—

- (i) How to obtain information on runway lengths at airports of intended use, data on takeoff and landing distances, weather reports and forecasts, and fuel requirements;
- (ii) How to plan for alternatives if the planned flight cannot be completed; and
- (iii) Proper planning procedures for possible traffic delays.

4. *Flight training.* (a) Each approved course must include the following flight training on the areas of operation listed in section 4.(c) of this appendix, appropriate to the aircraft category and class rating for which the course applies, and must include:

(1) *For an airplane-single engine course.* At least 35 hours of flight training (of which 20 hours must be with an authorized flight instructor and 5 hours must be supervised PIC training), on the approved areas of operation in section 4.(c)(1) of this appendix, and the training must include at least—

(i) Except as provided in § 61.111 of this chapter, 3 hours of cross-country flight training in a single engine airplane;

(ii) Except as provided in § 61.110 of this chapter, 3 hours of night flight training in a single engine airplane that includes—

(A) One cross country flight over 100 nautical miles duration; and

(B) Ten takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in a single engine airplane; and

(iv) Three hours of flight training in preparation for the practical test in a single engine airplane, and must have been performed within 60 days preceding the date of the test.

(2) *For an airplane-multiengine course.* At least 35 hours of flight training (of which 20 hours must be with an authorized flight instructor and 5 hours must be supervised PIC training), on the approved areas of operation in section 4.(c)(2) of this appendix, and the training must include at least—

(i) Except as provided in § 61.111 of this chapter, 3 hours of cross-country flight training in a multiengine airplane;

(ii) Except as provided in § 61.110 of this chapter, 3 hours of night flight training in a multiengine airplane that includes—

(A) One cross country flight over 100 nautical miles duration; and

(B) Ten takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in a multiengine airplane; and

(iv) Three hours of flight training in preparation for the practical test in a multiengine airplane, and must have been performed within 60 days preceding the date of the test.

(3) *For a rotorcraft-helicopter course.* At least 35 hours of flight training (of which 20 hours must be with an authorized flight instructor and 5 hours must be supervised PIC training), on the approved areas of operation in section 4.(c)(3) of this appendix, and the training must include at least—

(i) Except as provided in § 61.111 of this chapter, 3 hours of cross-country flight training in a helicopter;

(ii) Except as provided in § 61.110 of this chapter, 3 hours of night flight training in a helicopter that includes—

(A) One cross country flight over 50 nautical miles duration; and

(B) Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of flight training in preparation for the practical test in a helicopter, and must have been performed within 60 days preceding the date of the test.

(4) *For a rotorcraft-gyroplane course.* At least 35 hours of flight training (of which 20 hours must be with an authorized flight instructor and 5 hours must be supervised PIC training), on the approved areas of operation in section 4.(c)(4) of this appendix, and the training must include at least—

(i) Except as provided in § 61.111 of this chapter, 3 hours of cross-country flight training in a gyroplane;

(ii) Except as provided in § 61.110 of this chapter, 3 hours of night flight training in a gyroplane that includes—

(A) One cross country flight over 50 nautical miles duration; and

(B) Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of flight training in preparation for the practical test in a gyroplane, and must have been performed within 60 days preceding the date of the test.

(5) *For a powered-lift course.* At least 35 hours of flight training (of which 20 hours must be with an authorized flight instructor and 5 hours must be supervised PIC training), on the approved areas of operation in section 4.(c)(5) of this appendix, and the training must include at least—

(i) Except as provided in § 61.111 of this chapter, 3 hours of cross-country flight training in a powered-lift;

(ii) Except as provided in § 61.110 of this chapter, 3 hours of night flight training in a powered-lift that includes—

(A) One cross country flight over 100 nautical miles duration; and

(B) Ten takeoffs and ten landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in a powered-lift; and

(iv) Three hours of flight training in preparation for the practical test in a

powered-lift, and must have been performed within 60 days preceding the date of the test.

(6) *For a glider-nonpowered course.* At least 5 hours and 10 flights of flight training time from an authorized flight instructor, on the approved areas of operation in section 4.(c)(6) of this appendix, and the training must include—

(i) At least 3 flights of flight training in a nonpowered glider, in preparation for the practical test within 60 days preceding the test; and

(ii) In addition, if the course covers winch or auto tow procedures, the flight training must include at least 5 flights of flight training and 2 supervised PIC flight in a nonpowered glider on the appropriate approved areas of operation listed in section 4.(c)(6) of this appendix.

(7) *For a glider-powered course.* At least 5 hours of flight training time from an authorized flight instructor, on the approved areas of operation in section 4.(c)(7) of this appendix, and the training must include at least 3 flights of flight training in a powered glider, in preparation for the practical test within 60 days preceding the date of the test.

(8) *For a lighter than air-airship course.* At least 20 hours of flight training from an authorized flight instructor, on the approved areas of operation in section 4.(c)(8) of this appendix, and the training must include at least—

(i) Except as provided in § 61.111 of this chapter, 3 hours of cross-country flight training in an airship;

(ii) Except as provided in § 61.110 of this chapter, 3 hours of night flight training in an airship that includes—

(A) One cross country flight over 25 nautical miles duration; and

(B) Five takeoffs and five landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(iii) Three hours of instrument flight training in an airship; and

(iv) Three hours of flight training in preparation for the practical test in an airship, and must have been performed within 60 days preceding the date of the test.

(9) *For a lighter than air-balloon course.* At least 8 hours of flight training that includes at least 5 flights of flight training from an authorized flight instructor, on the approved areas of operation in section 4.(c)(9) of this appendix, and includes—

(i) If the training is being performed in a gas balloon, the training must include at least—

(A) Two flights of 1 hour each;

(B) One flight involving a controlled ascent to 5,000 feet above the surface; and

(C) Two flights in preparation for the practical test within 60 days preceding the test.

(ii) If the training is being performed in a balloon with an airborne heater, the training must include at least—

(A) Two flights of 30 minutes each;

(B) One flight involving a controlled ascent to 3,000 feet above the surface; and

(C) Two flights in preparation for the practical test within 60 days preceding the test.

(b) *Use of flight training devices.*

(1) The course may include training in a flight training device, provided they are

representative of the aircraft for which the course is approved for, meet requirements of this paragraph, and the training is given by an authorized ground or flight instructor.

(2) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part and a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or by this section, whichever is less. However, training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements.

(c) *Areas of operation.* Each approved course must include the flight training on the areas of operation listed in this paragraph, that are appropriate to the aircraft category and class rating for which the course applies:

(1) *Areas of operation for a single engine airplane course:* Areas of operation for an airplane-single engine course are the following—

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and seaplane base operations;

(iv) Takeoffs, landings, and go-arounds;

(v) Performance maneuvers;

(vi) Ground reference maneuvers;

(vii) Navigation;

(viii) Stalls and slow flight;

(ix) Basic instrument maneuvers;

(x) Emergency operations;

(xi) Night operations, except as provided in § 61.110 of this chapter; and

(xii) Postflight procedures.

(2) *Areas of operations for a multiengine airplane course:* Areas of operation for an airplane-multiengine course are the following—

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and seaplane base operations;

(iv) Takeoffs, landings, and go-arounds;

(v) Performance maneuvers;

(vi) Ground reference maneuvers;

(vii) Navigation;

(viii) Stalls and slow flight;

(ix) Basic instrument maneuvers;

(x) Emergency operations;

(xi) Multiengine operations;

(xii) Night operations, except as provided in § 61.110 of this chapter; and

(xiii) Postflight procedures.

(3) *Areas of operation for a rotorcraft-helicopter course:* Areas of operation for a rotorcraft-helicopter course are the following—

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and heliport operations;

(iv) Hovering maneuvers;

- (v) Takeoffs, landings, and go-arounds;
- (vi) Performance maneuvers;
- (vii) Navigation;
- (viii) Emergency operations;
- (ix) Night operations, except as provided in § 61.110 of this chapter; and
- (x) Postflight procedures.

(4) *Areas of operation for a rotorcraft-gyroplane course:* Areas of operation for a rotorcraft-gyroplane course are the following—

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport operations;
- (iv) Takeoffs, landings, and go-arounds;
- (v) Performance maneuvers;
- (vi) Ground reference maneuvers;
- (vii) Navigation;
- (viii) Flight at slow airspeeds;
- (ix) Emergency operations;
- (x) Night operations, except as provided in § 61.110 of this chapter; and
- (xi) Postflight procedures.

(5) *Areas of operation for a powered-lift course:*

Areas of operation for a powered-lift course are the following—

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport and heliport operations;
- (iv) Hovering maneuvers;
- (v) Takeoffs, landings, and go-arounds;
- (vi) Performance maneuvers;
- (vii) Ground reference maneuvers;
- (viii) Navigation;
- (ix) Stalls and slow flight;
- (x) Basic instrument maneuvers;
- (xi) Emergency operations;
- (xii) Night operations, except as provided in § 61.110 of this chapter; and
- (xiii) Postflight procedures.

(6) *Areas of operations for a glider-nonpowered course:* Areas of operation for a glider-nonpowered course are the following—

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport and gliderport operations;
- (iv) Launches and landings;
- (v) Performance speeds;
- (vi) Soaring techniques;
- (vii) Performance maneuvers;
- (viii) Navigation;
- (ix) Stalls and slow flight;
- (x) Emergency operations; and
- (xi) Postflight procedures.

(7) *Areas of operation for a glider-powered course:* Areas of operation for a glider-powered course are the following—

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport and gliderport operations;
- (iv) Takeoffs, landings, and go-arounds;
- (v) Performance speeds;
- (vi) Soaring techniques;
- (vii) Performance maneuvers;
- (viii) Navigation;
- (ix) Stalls and slow flight;
- (x) Emergency operations; and
- (xi) Postflight procedures.

(8) *Areas of operation for a lighter than air-airship course:* Areas of operation for a lighter than air-airship course are the following—

- (i) Preflight preparation;
- (ii) Preflight procedures;

- (iii) Airport operations;
- (iv) Takeoffs, landings, and go-arounds;
- (v) Performance maneuvers;
- (vi) Ground reference maneuvers;
- (vii) Navigation;
- (viii) Emergency operations; and
- (ix) Postflight procedures.

(9) *Areas of operation for a lighter than air-balloon course:* Areas of operation for a lighter than air category-balloon course are the following—

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Balloonport operations;
- (iv) Lift-offs and landings;
- (v) Performance maneuvers;
- (vi) Navigation;
- (vii) Emergency operations; and
- (viii) Postflight procedures.

5. *Supervised pilot-in-command practice.*

Each approved course must include the following supervised pilot-in-command practice on the areas of operation listed in section 4.(c) of this appendix, appropriate to the aircraft category and class rating for which the course applies, and must include:

(a) *For an airplane-single engine course.* At least 5 hours of supervised pilot-in-command time, on the approved areas of operation in section 4.(c)(1) of this appendix, and the training must include at least—

(1) One supervised PIC cross-country flight of at least more than 100 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and

(2) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(b) *For an airplane-multiengine course.* At least 5 hours of supervised pilot-in-command time, on the approved areas of operation in section 4.(c)(2) of this appendix, and the training must include at least—

(1) One supervised PIC cross-country flight over 100 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and

(2) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(c) *For a rotorcraft-helicopter course.* At least 5 hours of supervised pilot-in-command time, on the approved areas of operation in section 4.(c)(3) of this appendix, and the training must include at least—

(1) One supervised PIC cross-country flight over 50 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 25 nautical miles between the takeoff and landing locations; and

(2) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(d) *For a rotorcraft-gyroplane course.* At least 5 hours of supervised pilot-in-command time, on the approved areas of operation in section 4.(c)(4) of this appendix, and the training must include at least—

(1) One supervised PIC cross-country flight over 50 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 25 nautical miles between the takeoff and landing locations; and

(2) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(e) *For a powered-lift course.* At least 5 hours of supervised pilot-in-command time, on the approved areas of operation in section 4.(c)(5) of this appendix, and the training must include at least—

(1) One supervised PIC cross-country flight over 100 nautical miles duration, landings at a minimum of three points, and one route of the flight being a straight line distance of at least 50 nautical miles between the takeoff and landing locations; and

(2) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(f) *For a glider-nonpowered course.*

(1) At least 2 flights of supervised pilot-in-command time, on the approved areas of operation in section 4.(c)(6) of this appendix; and

(2) If the course covers ground launch procedures, the supervised pilot in command time must include at least 2 flights using a winch or auto tow on the approved areas of operation in section 4.(c)(6) of this appendix.

(g) *For a glider-powered course.* At least 2 flights of supervised pilot-in-command time, on the approved areas of operation in section 4.(c)(7) of this appendix.

(h) *For a lighter than air-airship course.* At least 5 hours of supervised pilot-in-command time with an authorized flight instructor, on the approved areas of operation in section 4.(c)(8) of this appendix.

(i) *For a lighter than air-balloon course.* At least 2 flights of supervised pilot-in-command time, on the approved areas of operation in section 4.(c)(9) of this appendix, in the balloon for which the course applies.

6. *Stage checks and end-of-course tests.*

(a) Each student enrolled in a private pilot course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, and must consist of the approved areas of operation of section 4 of this appendix for the aircraft category and class rating for which the course applies.

(b) Each student must demonstrate satisfactory proficiency prior to being endorsed to operate an aircraft in supervised PIC flight.

Appendix C—Instrument Rating Course

1. *Applicability.* This appendix prescribes the minimum curriculum for an instrument rating course and an additional instrument rating course, required under this part, for:

- (a) Instrument-airplane single-engine.
- (b) Instrument-airplane multiengine.
- (c) Instrument-helicopter.
- (d) Instrument-airship.
- (e) Instrument-powered-lift.

2. *Eligibility for enrollment.* A person must have the following to enroll in the flight portion of the instrument rating course:

(a) A private pilot certificate with an aircraft category and class rating appropriate to the instrument rating for which the course applies.

(b) At least a valid third-class medical certificate issued under part 67 of this chapter.

3. *Aeronautical knowledge training.*

(a) Each approved course must include the aeronautical knowledge areas listed in section 3.(b) of this appendix, appropriate to the instrument rating for which the course applies, and must include at least:

(1) 30 hours of training, if the course is for an initial instrument rating.

(2) 20 hours of training, if the course is for an additional instrument rating.

(b) Each approved course must include the following aeronautical knowledge areas:

(1) The applicable Federal Aviation Regulations for IFR flight operations;

(2) The appropriate information in the "Airman's Information Manual;"

(3) The air traffic control system and procedures for instrument flight operations;

(4) IFR navigation and approaches by use of radio aids;

(5) Use of IFR en route and instrument charts procedure approach;

(6) The procurement and use of aviation weather reports and forecasts, and the elements of forecasting weather trends on the basis of that information and personal observation of weather conditions;

(7) The safe and efficient operation of aircraft under IFR and conditions appropriate to the instrument rating for which the course applies;

(8) The recognition of critical weather situations and windshear avoidance;

(9) Aeronautical decision making and judgment; and

(10) Flight deck resource management, to include crew communication and coordination.

4. *Flight training.*

(a) Each approved course must include the following flight training on the areas of operation listed in section 4.(d) of this appendix, appropriate to the instrument-aircraft category and class rating for which the course applies, and must include at least:

(1) 35 hours of instrument training, if the course is for an initial instrument rating.

(2) 15 hours of instrument training, if the course is for an additional instrument rating.

(b) *Use of flight training devices.*

(1) The course may include training in a flight training device, provided they are representative of the aircraft for which the course is approved for, meet requirements of this paragraph, and the training is given by an authorized ground or flight instructor.

(2) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 5 percent of the total flight training hour

requirements of the approved course, or of this section, whichever is less.

(4) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part and a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or by this section, whichever is less. However, training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements.

(c) In addition, each approved course must include the following flight training on the areas of operation listed in section 4.(d) of this appendix, appropriate to the instrument-aircraft category and class rating for which the course applies, and must include:

(1) *For an instrument-airplane single engine course.* Instrument training time from an authorized instructor, on the approved areas of operation in section 4.(d) of this appendix, and the training must include at least one cross country flight that—

(i) Is in a single engine airplane and is performed under IFR;

(ii) Is a distance of at least 250 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 100 nautical miles between airports;

(iii) Involves an instrument approach at each airport; and

(iv) Involves three different kinds of approaches with the use of navigation aids.

(2) *For an instrument-airplane multiengine course.* Instrument training time from an authorized instructor, on the approved areas of operation in section 4.(d) of this appendix, and the training must include at least one cross country flight that—

(i) Is in a multiengine airplane and is performed under IFR;

(ii) Is a distance of at least 250 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 100 nautical miles between airports;

(iii) Involves an instrument approach at each airport; and

(iv) Involves three different kinds of approaches with the use of navigation aids.

(3) *For an instrument-helicopter course.* Instrument training time from an authorized instructor, on the approved areas of operation in section 4.(d) of this appendix, and the training must include at least one cross country flight that—

(i) Is in a helicopter and is performed under IFR;

(ii) Is a distance of at least 100 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 50 nautical miles between airports;

(iii) Involves an instrument approach at each airport; and

(iv) Involves three different kinds of approaches with the use of navigation aids.

(4) *For an instrument-powered-lift course.* Instrument training time from an authorized instructor, on the approved areas of operation in section 4.(d) of this appendix, and the training must include at least one cross country flight that—

(i) Is in a powered-lift and is performed under IFR;

(ii) Is a distance of at least 250 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 100 nautical miles between airports;

(iii) Involves an instrument approach at each airport; and

(iv) Involves three different kinds of approaches with the use of navigation aids.

(5) *For an instrument-airship course.*

Instrument training time from an authorized instructor, on the approved areas of operation in section 4.(d) of this appendix, and the training must include at least one cross country flight that—

(i) Is in an airship and is performed under IFR;

(ii) Is a distance of at least 50 nautical miles along airways or ATC-directed routing with one of the routes being at least a straight-line distance of 25 nautical miles between airports;

(iii) Involves an instrument approach at each airport; and

(iv) Involves three different kinds of approaches with the use of navigation aids.

(d) *Areas of operation:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Air traffic control clearances and procedures;

(iv) Flight by reference to instruments;

(v) Navigation aids;

(vi) Instrument approach procedures;

(vii) Emergency operations; and

(viii) Postflight procedures.

5. *Stage checks and end-of-course tests.*

Each student enrolled in an instrument rating course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, and must consist of the appropriate approved areas of operation of section 4 of this appendix for the aircraft category and class rating for which the course applies.

Appendix D—Commercial Pilot Certification Course.

1. *Applicability.* This appendix prescribes the minimum curriculum for a commercial pilot certification course required under this part, for:

(a) Airplane category—single-engine class.

(b) Airplane category—multiengine class.

(c) Rotorcraft category—helicopter class.

(d) Rotorcraft category—gyroplane class.

(e) Powered-lift category.

(f) Glider category—nonpowered class.

(g) Glider category—powered class.

(h) Lighter-than-air category—airship class.

(i) Lighter-than-air category—balloon class.

2. *Eligibility for enrollment.*

(a) A person must have the following to enroll in the flight portion of the commercial pilot certification course:

(1) At least a private pilot certificate;

(2) At least a valid third-class medical certificate issued under part 67 of this chapter for a rating in an aircraft other than a glider or a balloon;

(3) A signed and dated statement affixed to the application certifying that no known

medical defect exists that would make the person unable to pilot a glider or balloon, as appropriate; and

(4) If the course is for a rating in an airplane, powered-lift category, or an airship class, then the person must—

(i) Hold an instrument rating in the aircraft that is appropriate to the aircraft category and class rating for which the course applies; or

(ii) Be concurrently enrolled in an instrument rating course that is appropriate to the aircraft category and class rating for which the course applies and satisfactorily accomplish the required instrument rating practical test prior to completing the commercial pilot certification course.

(b) A person must meet the aeronautical experience requirements prescribed in part 61 of this chapter for a commercial pilot certificate that is appropriate to the aircraft category and class rating for which the course applies upon completion of this course.

3. *Aeronautical knowledge training.*

(a) Each approved course must include the aeronautical knowledge areas listed in paragraph (b) of this section, appropriate to the aircraft category and class rating for which the course applies, and must include at least:

(1) 100 hours of training, if the course is for an airplane category rating, powered lift category rating, or a lighter-than-air category with an airship class rating.

(2) 65 hours of training, if the course is for a rotorcraft category rating.

(3) 25 hours of training, if the course is for a glider category rating.

(4) 20 hours of training, if the course is for a lighter-than-air category with a balloon class rating.

(b) *Aeronautical knowledge areas.* Each approved course must include the aeronautical knowledge areas listed in this paragraph, appropriate to the aircraft category and class rating for which the course applies:

(1) The Federal Aviation Regulations that apply to commercial pilot privileges, limitations, and flight operations;

(2) Accident reporting requirements of the National Transportation Safety Board;

(3) Basic aerodynamics and the principles of flight;

(4) Meteorology to include recognition of critical weather situations, windshear recognition and avoidance, and the use of aeronautical weather reports and forecasts;

(5) Safe and efficient operation of aircraft;

(6) Weight and balance computations;

(7) Use of performance charts;

(8) Significance and effects of exceeding aircraft performance limitations;

(9) Use of aeronautical charts and magnetic compass for pilotage and dead reckoning;

(10) Use of air navigation facilities;

(11) Aeronautical decision making and judgement;

(12) Principles and functions of aircraft systems;

(13) Maneuvers, procedures, and emergency operations appropriate to the aircraft;

(14) Night and high altitude operations; and

(15) Descriptions of and procedures for operating within the National Airspace System.

4. *Flight training.*

(a) Each approved course must include the following flight training on the areas of operation listed in paragraph (c) of this section, appropriate to the aircraft category and class rating for which the course applies, and must include:

(1) *For an airplane-single engine course.* At least 20 hours of training on the approved areas of operation listed in paragraph (c)(1) of this section that includes at least—

(i) Five hours of instrument training in a single engine airplane;

(ii) Ten hours of training in a single engine airplane that has a retractable landing gear, flaps, and a controllable pitch propeller, or is turbine-powered;

(iii) One cross-country flight in a single engine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iv) Except as provided in § 61.131 of this chapter, one cross-country flight in a single engine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(v) Three hours in a single engine airplane, in preparation for the practical test within the 60 days preceding the date of the test.

(2) *For an airplane-multiengine course.* At least 20 hours of training on the approved areas of operation listed in paragraph (c)(2) of this section that includes at least—

(i) Five hours of instrument training in a multiengine airplane;

(ii) Ten hours of training in a multiengine airplane that has a retractable landing gear, flaps, and a controllable pitch propeller, or is turbine-powered;

(iii) One cross-country flight in a multiengine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iv) Except as provided in § 61.131 of this chapter, one cross-country flight in a multiengine airplane of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(v) Three hours in a multiengine airplane, in preparation for the practical test within the 60 days preceding the date of the test.

(3) *For a rotorcraft-helicopter course.* At least 20 hours of training on the approved areas of operation listed in paragraph (c)(3) of this section that includes at least—

(i) Five hours of instrument training in a helicopter;

(ii) One cross-country flight in a helicopter of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iii) Except as provided in § 61.131 of this chapter, one cross-country flight in a helicopter of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(iv) Three hours in a helicopter, in preparation for the practical test within the 60 days preceding the date of the test.

(4) *For a rotorcraft-gyroplane course.* At least 20 hours of training on the approved areas of operation listed in paragraph (c)(4) of this section that includes at least—

(i) Five hours of instrument training in a gyroplane;

(ii) One cross-country flight in a gyroplane of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iii) Except as provided in § 61.131 of this chapter, one cross-country flight in a gyroplane of at least 2 hours in duration, a total straight-line distance of more than 50 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(iv) Three hours in a gyroplane, in preparation for the practical test within the 60 days preceding the date of the test.

(5) *For a powered-lift course.* At least 20 hours of training on the approved areas of operation listed in paragraph (c)(5) of this section that includes at least—

(i) Five hours of instrument training in a powered-lift;

(ii) One cross-country flight in a powered-lift of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in day-VFR conditions;

(iii) Except as provided in § 61.131 of this chapter, one cross-country flight in a powered-lift of at least 2 hours in duration, a total straight-line distance of more than 100 nautical miles from the original point of departure, and occurring in night-VFR conditions; and

(iv) Three hours in a powered-lift, in preparation for the practical test within the 60 days preceding the date of the test.

(6) *For a nonpowered glider course.* At least 10 hours of flight training and 10 flights on the approved areas of operation of paragraph (c)(6) of this section, that includes—

(i) At least 3 flights in preparation for the practical test within the 60 days preceding the date of the test; and

(ii) If the course is for ground launch procedures privileges, the course must also include at least 5 flights of flight training in a nonpowered glider using a winch or auto tow on the approved areas of operation of paragraph (c)(6) of this section.

(7) *For a powered glider course.* At least 10 hours of flight training on the approved areas of operation of paragraph (c)(7) of this section, that includes at least 3 hours in preparation for the practical test within the 60 days preceding the date of the test;

(8) *For an airship course.* At least 20 hours of training in airships on the approved areas of operation in paragraph (c)(8) of this section, which includes at least—

(i) Three hours in an airship, in preparation for the practical test within the 60 days preceding the date of the test;

(ii) Five hours of instrument training in airships;

(iii) One cross-country flight in an airship of at least 1 hour in duration, a total straight-

line distance of more than 25 nautical miles from the original point of departure, and occurring in day-VFR conditions; and

(iv) One cross-country flight in an airship of at least 1 hour in duration, a total straight-line distance of more than 25 nautical miles from the original point of departure, and occurring in night-VFR conditions, except as provided in § 61.131 of this chapter.

(9) *For a balloon course.* At least 10 hours of flight training that includes at least 10 flights of flight training in balloons on the approved areas of operation of paragraph (c)(9) of this section, and includes—

(i) If the course is involves training in a gas balloon, the training must include at least—

(A) Two flights of 1 hour each in a gas balloon;

(B) One flight in a gas balloon involving a controlled ascent to 10,000 feet above the surface; and

(C) Two flights in a gas balloon, in preparation for the practical test within the 60-day period preceding the date of the test.

(ii) If the course involves training in a balloon with an airborne heater, the training must include at least—

(A) Two flights of 30 minutes each in a balloon with an airborne heater;

(B) One flight involving a controlled ascent to 5,000 feet above the surface in a balloon with an airborne heater; and

(C) Two flights in a balloon with an airborne heater, in preparation for the practical test within the 60-day period preceding the date of the test.

(b) *Use of flight training devices.*

(1) Training in a flight training device may be included in the course, provided it is representative of the aircraft for which the course is approved for, meets the requirements of this paragraph, and is given by an authorized ground or flight instructor.

(2) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part and a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or by this section, whichever is less. However, training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements.

(c) *Areas of operation.* Each approved course must include the flight training on the areas of operation listed in this paragraph, that are appropriate to the aircraft category and class rating for which the course applies:

(1) *For an airplane-single engine course:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and seaplane base operations;

(iv) Takeoffs, landings, and go-arounds;

(v) Performance maneuvers;

(vi) Navigation;

(vii) Stalls and slow flight;

(viii) Emergency operations;

(ix) High altitude operations; and

(x) Postflight procedures.

(2) *For an airplane-multiengine course:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and seaplane base operations;

(iv) Takeoffs, landings, and go-arounds;

(v) Performance maneuvers;

(vi) Navigation;

(vii) Stalls and slow flight;

(viii) Emergency operations;

(ix) Multiengine operations;

(x) High altitude operations; and

(xi) Postflight procedures.

(3) *For a rotorcraft-helicopter course:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and heliport operations;

(iv) Hovering maneuvers;

(v) Takeoffs, landings, and go-arounds;

(vi) Performance maneuvers;

(vii) Navigation;

(viii) Emergency operations;

(ix) Special operations; and

(x) Postflight procedures.

(4) *For a rotorcraft-gyroplane course:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport operations;

(iv) Takeoffs, landings, and go-arounds;

(v) Performance maneuvers;

(vi) Navigation;

(vii) Flight at slow airspeeds;

(viii) Emergency operations; and

(ix) Postflight procedures.

(5) *For a powered-lift course:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and heliport operations;

(iv) Hovering maneuvers;

(v) Takeoffs, landings, and go-arounds;

(vi) Performance maneuvers;

(vii) Navigation;

(viii) Stalls and slow flight;

(ix) Emergency operations;

(x) High altitude operations;

(xi) Special operations; and

(xii) Postflight procedures.

(6) *For a glider-nonpowered course:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and gliderport operations;

(iv) Launches and landings;

(v) Performance speeds;

(vi) Soaring techniques;

(vii) Performance maneuvers;

(viii) Navigation;

(ix) Stalls and slow flight;

(x) Emergency operations; and

(xi) Postflight procedures.

(7) *For a glider-powered course:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and gliderport operations;

(iv) Takeoffs, landings, and go-arounds;

(v) Performance speeds;

(vi) Soaring techniques;

(vii) Performance maneuvers;

(viii) Navigation;

(ix) Stalls and slow flight;

(x) Emergency operations; and

(xi) Postflight procedures.

(8) *For a lighter than air-airship course:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport operations;

(iv) Takeoffs, landings, and go-arounds;

(v) Performance maneuvers;

(vi) Navigation;

(vii) Emergency operations; and

(viii) Postflight procedures.

(9) *For a lighter than air-balloon course:*

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Balloonport operations;

(iv) Lift-offs and landings;

(v) Performance maneuvers;

(vi) Navigation;

(vii) Emergency operations; and

(viii) Postflight procedures.

5. *Supervised pilot-in-command training.*

Each approved course must include supervised pilot-in-command practice on the areas of operation listed in section 4.(c) of this appendix, appropriate to the aircraft category and class rating for which the course applies, and must include:

(a) *For an airplane-single engine course.* At least 10 hours of supervised PIC flying in a single engine airplane on the approved areas of operation in section 4.(c)(1) of this appendix, which includes at least—

(1) One cross-country flight, if the training is being performed in the state of Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 150 nautical miles;

(2) One cross-country flight, if the training is being performed in a State other than Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 250 nautical miles; and

(3) 5 hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower, except as provided in § 61.131 of this chapter.

(b) *For an airplane-multiengine course.* At least 10 hours of supervised PIC flying in a multiengine airplane on the approved areas of operation in section 4.(c)(2) of this appendix, which includes at least—

(1) One cross-country flight, if the training is being performed in the state of Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 150 nautical miles;

(2) One cross-country flight, if the training is being performed in a State other than Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 250 nautical miles; and

(3) 5 hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower, except as provided in § 61.131 of this chapter.

(c) *For a rotorcraft-helicopter course.* At least 10 hours of supervised PIC flying in a helicopter on the approved areas of operation in section 4.(c)(4) of this appendix, which includes at least—

(1) One cross-country flight, if the training is being performed in the state of Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 150 nautical miles;

(2) One cross-country flight, if the training is being performed in a State other than Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 250 nautical miles; and

(3) 5 hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower, except as provided in § 61.131 of this chapter.

(d) *For a rotorcraft-gyroplane course.* At least 10 hours of supervised PIC flying in a gyroplane on the approved areas of operation in section 4.(c)(4) of this appendix, which includes at least—

(1) One cross-country flight, if the training is being performed in the state of Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 150 nautical miles;

(2) One cross-country flight, if the training is being performed in a State other than Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 250 nautical miles; and

(3) 5 hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower, except as provided in § 61.131 of this chapter.

(e) *For a powered-lift course.* At least 10 hours of supervised PIC flying in a powered-lift on the approved areas of operation in section 4.(c)(5) of this appendix, which includes at least—

(1) One cross-country flight, if the training is being performed in the state of Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 150 nautical miles;

(2) One cross-country flight, if the training is being performed in a State other than Hawaii, that must involve landings at a minimum of three points and one of the routes having a straight-line distance of at least 250 nautical miles; and

(3) 5 hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower, except as provided in § 61.131 of this chapter.

(f) *For a glider-nonpowered course.* At least 5 supervised PIC flights in a nonpowered glider on the approved areas of operation of section 4.(c)(6) of this appendix.

(g) *For a glider-powered course.* At least 5 supervised PIC flights in a powered glider on the approved areas of operation of section 4.(c)(7) of this appendix.

(h) *For a lighter than air-airship course.* At least 10 hours of pilot in command flight training with an authorized flight instructor in airships, on the approved areas of

operation in section 4.(c)(8) of this appendix, which includes at least—

(i) One cross-country flight with landings at a minimum of three points, and one of the routes having a straight-line distance of at least 25 nautical miles from the original point of departure; and

(ii) 5 hours in night-VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) except as provided in § 61.131 of this chapter.

(i) *For a lighter than air-balloon course.* At least 2 flights of supervised pilot-in-command time, on the approved areas of operation in section 4.(c)(9) of this appendix, in the balloon for which the course applies.

6. Stage checks and end-of-course tests.

(a) Each student enrolled in a commercial pilot course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, consisting of the approved areas of operation of section 4 of this appendix for the aircraft category and class rating for which the course applies.

(b) Each student must demonstrate satisfactory proficiency prior to being endorsed to operate an aircraft in supervised PIC flight.

Appendix E—Airline Transport Pilot Certification Course

1. *Applicability.* This appendix prescribes the minimum curriculum for an airline transport pilot certification course under this part, for:

(a) An airplane category-single engine class rating.

(b) An airplane category-multiengine class rating.

(c) A rotorcraft category-helicopter class rating.

(d) A powered-lift category rating.

2. *Eligibility for enrollment.* A person must have the following to enroll in the flight portion of the airline transport pilot certification course:

(a) Meet at least one of the following requirements—

(1) Hold at least a commercial pilot certificate and an instrument rating;

(2) Meet the requirements of § 61.73 of this chapter to qualify for a commercial pilot certificate and an instrument rating, in the case of a person who is a rated pilot in the U.S. military; or

(3) Hold either a foreign airline transport pilot or foreign commercial pilot license and an instrument rating, in the case of a person who holds a pilot license issued by a member State to the International Civil Aviation Organization.

(b) Hold at least a third-class medical certificate issued under part 67 of this chapter; and

(c) Meet the aeronautical experience requirements prescribed in subpart G, part 61 of this chapter for an airline transport pilot certificate that is appropriate to the aircraft category and class rating for which the course applies upon completion of this course.

3. Aeronautical knowledge training.

(a) Each approved course must include the aeronautical knowledge areas listed in

paragraph (b) of this section, appropriate to the aircraft category and class rating, and must include at least 40 hours of training.

(b) Aeronautical knowledge areas.

(1) The applicable Federal Aviation Regulations of this chapter that relate to airline transport pilot privileges, limitations, and flight operations appropriate to the aircraft rating for which the course applies;

(2) Meteorology including knowledge of and effects of fronts, frontal characteristics, cloud formations, icing, and upper air-data;

(3) General system of weather and NOTAM collection, dissemination, interpretation, and use;

(4) Interpretation of weather charts, maps, forecasts, sequences, abbreviations, symbols, and use;

(5) National Weather Service function as it pertains to operation in the National Airspace System;

(6) Windshear and microburst awareness, identification, and avoidance;

(7) Principles of air navigation under instrument meteorological conditions in the National Airspace System;

(8) Air traffic control procedures and pilot responsibilities as they relate to en route operations, terminal area and radar operations, and instrument departure and approach procedures;

(9) Aircraft loading, weight and balance, use of charts, graphs, tables, formulas, and computations, and the effects on aircraft performance that are appropriate to the aircraft category and class rating for which the course applies;

(10) Aircraft aerodynamics relating to the aircraft's flight characteristics, performance, and normal and abnormal flight regimes and characteristics that are appropriate to the aircraft category and class rating for which the course applies;

(11) Flight crewmember physiological factors;

(12) Aeronautical decisionmaking and judgment; and

(13) Flight deck resource management to include crew communication and coordination.

4. Flight training.

(a) Approved course requirements.

(1) Flight training in the approved areas of operation of paragraph (c) of this section must be included in the aircraft category and class rating for which the course applies; and

(2) At least 25 hours of flight training, of which at least 15 hours must be instrument flight training, must be included in the aircraft for which the course applies.

(b) Use of flight training devices.

(1) Training in a flight training device may be included, provided it is representative of the aircraft for which the course is approved, meets the requirements of this paragraph, and is given by an authorized ground or flight instructor.

(2) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of

5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part and a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or by this section, whichever is less. However, training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements.

(c) *Areas of operation.* Each approved course must include the flight training on the areas of operation listed in this paragraph, that are appropriate to the aircraft category and class rating for which the course applies:

(1) For an airplane category-single engine class rating with a type rating course, if a type rating is required, are as follows—

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;
- (vii) Normal and abnormal procedures;
- (viii) Emergency procedures; and
- (ix) Postflight procedures.

(2) For an airplane category-multiengine class rating with a type rating course, if a type rating is required, are as follows—

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;
- (vii) Normal and abnormal procedures;
- (viii) Emergency procedures; and
- (ix) Postflight procedures.

(3) For a powered-lift category rating with a type rating course, if a type rating is required, are as follows—

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;
- (vii) Normal and abnormal procedures;
- (viii) Emergency procedures; and
- (ix) Postflight procedures.

(4) For a rotorcraft category-helicopter class rating with a type rating course, if a type rating is required, are as follows—

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;
- (vii) Normal and abnormal procedures;
- (viii) Emergency procedures; and
- (ix) Postflight procedures.

5. Stage checks and end-of-course tests.

(a) Each student enrolled in an airline transport pilot course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, consisting of the approved areas of operation of section 4.(c) of this appendix in the aircraft category and class rating for which the course applies.

(b) Each student must demonstrate satisfactory proficiency prior to being endorsed to operate an aircraft in supervised PIC flight.

Appendix F—Flight Instructor Certification Course

1. *Applicability.* This appendix prescribes the minimum curriculum for a flight instructor certification course and an additional flight instructor rating course required under this part, for:

- (a) Airplane category—single-engine class.
- (b) Airplane category—multiengine class.
- (c) Rotorcraft category—helicopter class.
- (d) Rotorcraft category—gyroplane class.
- (e) Powered-lift category.
- (f) Glider category—nonpowered class.
- (g) Glider category—powered class.
- (h) Lighter-than-air category—airship class.
- (i) Lighter-than-air category—balloon class.

2. *Eligibility for enrollment.* A person must have the following to enroll in the flight portion of the flight instructor or additional flight instructor rating course:

(a) A commercial or an airline transport pilot certificate, with an aircraft category and class rating appropriate to the flight instructor rating for which the course applies; and

(b) An instrument rating in an aircraft that is appropriate to the aircraft category and class rating for which the course applies, if the course is for a flight instructor-airplane, -helicopter, -powered-lift, -airship, or -instrument-(category and class) rating.

3. Aeronautical knowledge training.

(a) Approved course requirements.

Each approved course must include the knowledge areas listed in paragraph (b) of this section, and must include at least:

(1) 40 hours of training, if the course is for an initial issuance of a flight instructor certificate; or

(2) 20 hours of training, if the course is for an additional flight instructor rating.

(b) Aeronautical knowledge areas.

- (1) The learning process;
- (2) Elements of effective teaching;
- (3) Student evaluation, quizzing, and testing;
- (4) Course development;
- (5) Lesson planning;
- (6) Classroom training techniques; and
- (7) The aeronautical knowledge areas in which training is required for—

(i) A recreational, private, and commercial pilot certificate that is appropriate to the aircraft category and class rating for which the course applies; and

(ii) An instrument rating that is appropriate to the aircraft category and class rating for which the course applies, if the course is for an airplane or powered-lift category, or a lighter-than-air category with an airship class.

(c) School hours credited.

A student who satisfactorily completed 2 years of study on the principles of education in a college or university may be credited with no more than 20 hours of the required training in paragraph (a)(1) of this section.

4. Flight training.

(a) Approved course requirements.

Each approved course must include flight training in the approved areas of operation of

paragraph (c) of this section for the flight instructor rating for which the course applies; and must include at least:

(1) Twenty-five hours, if the course is for an airplane, rotorcraft, or powered-lift category rating, or a lighter-than-air category with an airship class rating;

(2) Ten hours and 10 flights, if the course is for a glider category with a nonpowered class rating;

(3) Ten hours, if the course is for a glider category with a powered class rating; or

(4) Eight flights, if the course is for a lighter-than-air category with a balloon class rating.

(b) Use of flight training devices.

(1) The course may include training in a flight training device, provided they are representative of the aircraft for which the course is approved for, meet requirements of this paragraph, and the training is given by an authorized ground or flight instructor.

(2) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part and a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or by this section, whichever is less. However, training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements.

(c) Areas of operation.

Each approved course must include the flight training on the areas of operation listed in this paragraph, that are appropriate to the aircraft category and class rating for which the course applies:

(1) For an airplane-single engine course:

- (i) Fundamentals of instructing;
- (ii) Technical subject areas;
- (iii) Preflight preparation;
- (iv) Preflight lesson on a maneuver to be performed in flight;
- (v) Preflight procedures;
- (vi) Airport and seaplane base operations;
- (vii) Takeoffs, landings, and go-arounds;
- (viii) Fundamentals of flight;
- (ix) Performance maneuvers;
- (x) Ground reference maneuvers;
- (xi) Stalls, spins, and slow flight;
- (xii) Basic instrument maneuvers;
- (xiii) Emergency operations; and
- (xiv) Postflight procedures.

(2) For an airplane-multiengine course:

- (i) Fundamentals of instructing;
- (ii) Technical subject areas;
- (iii) Preflight preparation;
- (iv) Preflight lesson on a maneuver to be performed in flight;
- (v) Preflight procedures;
- (vi) Airport and seaplane base operations;

- (vii) Takeoffs, landings, and go-arounds;
- (viii) Fundamentals of flight;
- (ix) Performance maneuvers;
- (x) Ground reference maneuvers;
- (xi) Stalls and slow flight;
- (xii) Basic instrument maneuvers;
- (xiii) Emergency operations;
- (xiv) Multiengine operations; and
- (xv) Postflight procedures.
- (3) *For a rotorcraft-helicopter course:*
 - (i) Fundamentals of instructing;
 - (ii) Technical subject areas;
 - (iii) Preflight preparation;
 - (iv) Preflight lesson on a maneuver to be performed in flight;
 - (v) Preflight procedures;
 - (vi) Airport and heliport operations;
 - (vii) Hovering maneuvers;
 - (viii) Takeoffs, landings, and go-arounds;
 - (ix) Fundamentals of flight;
 - (x) Performance maneuvers;
 - (xi) Emergency operations;
 - (xii) Special operations; and
 - (xiii) Postflight procedures.
- (4) *For a rotorcraft-gyroplane course:*
 - (i) Fundamentals of instructing;
 - (ii) Technical subject areas;
 - (iii) Preflight preparation;
 - (iv) Preflight lesson on a maneuver to be performed in flight;
 - (v) Preflight procedures;
 - (vi) Airport operations;
 - (vii) Takeoffs, landings, and go-arounds;
 - (viii) Fundamentals of flight;
 - (ix) Performance maneuvers;
 - (x) Flight at slow airspeeds;
 - (xi) Ground reference maneuvers;
 - (xii) Emergency operations; and
 - (xiii) Postflight procedures.
- (5) *For a powered-lift course:*
 - (i) Fundamentals of instructing;
 - (ii) Technical subject areas;
 - (iii) Preflight preparation;
 - (iv) Preflight lesson on a maneuver to be performed in flight;
 - (v) Preflight procedures;
 - (vi) Airport and heliport operations;
 - (vii) Hovering maneuvers;
 - (viii) Takeoffs, landings, and go-arounds;
 - (ix) Fundamentals of flight;
 - (x) Performance maneuvers;
 - (xi) Ground reference maneuvers;
 - (xii) Stalls and slow flight;
 - (xiii) Basic instrument maneuvers;
 - (xiv) Emergency operations;
 - (xv) Special operations; and
 - (xvi) Postflight procedures.
- (6) *For a glider-nonpowered course:*
 - (i) Fundamentals of instructing;
 - (ii) Technical subject areas;
 - (iii) Preflight preparation;
 - (iv) Preflight lesson on a maneuver to be performed in flight;
 - (v) Preflight procedures;
 - (vi) Airport and gliderport operations;
 - (vii) Launches and landings;
 - (viii) Fundamentals of flight;
 - (ix) Performance speeds;
 - (x) Soaring techniques;
 - (xi) Performance maneuvers;
 - (xii) Stalls, spins, and slow flight;
 - (xiii) Emergency operations; and
 - (xiv) Postflight procedures.
- (7) *For a glider-powered course:*
 - (i) Fundamentals of instructing;
 - (ii) Technical subject areas;

- (iii) Preflight preparation;
- (iv) Preflight lesson on a maneuver to be performed in flight;
- (v) Preflight procedures;
- (vi) Airport and gliderport operations;
- (vii) Takeoffs, landings, and go-arounds;
- (viii) Fundamentals of flight;
- (ix) Performance speeds;
- (x) Soaring techniques;
- (xi) Performance maneuvers;
- (xii) Stalls, spins, and slow flight;
- (xiii) Emergency operations; and
- (xiv) Postflight procedures.
- (8) *For a lighter than air-airship course:*
 - (i) Fundamentals of instructing;
 - (ii) Technical subject areas;
 - (iii) Preflight preparation;
 - (iv) Preflight lesson on a maneuver to be performed in flight;
 - (v) Preflight procedures;
 - (vi) Airport operations;
 - (vii) Takeoffs, landings, and go-arounds;
 - (viii) Fundamentals of flight;
 - (ix) Performance maneuvers;
 - (x) Ground reference maneuvers;
 - (xi) Emergency operations; and
 - (xii) Postflight procedures.
- (9) *For a lighter than air-balloon course:*
 - (i) Fundamentals of instructing;
 - (ii) Technical subject areas;
 - (iii) Preflight preparation;
 - (iv) Preflight lesson on a maneuver to be performed in flight;
 - (v) Preflight procedures;
 - (vi) Balloonport operations;
 - (vii) Lift-offs and landings;
 - (viii) Fundamentals of flight;
 - (ix) Performance maneuvers;
 - (x) Emergency operations; and
 - (xi) Postflight procedures.

5. Stage check and end-of-course tests.

(a) Each student enrolled in a flight instructor course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, consisting of the appropriate approved areas of operation of section 4 of this appendix for the flight instructor rating for which the course applies.

(b) In the case of a student who is enrolled in a flight instructor-airplane rating or -glider rating course, that student must have:

- (1) Received a logbook endorsement from an authorized flight instructor on ground and flight training on stall awareness, spin entry, spins, and spin recovery procedures in an aircraft that is certificated for spins and that applies to the rating sought; and
- (2) Demonstrated instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures.

Appendix G—Flight Instructor Instrument (Aircraft Category and Class) Certification Course

1. *Applicability.* This appendix prescribes the minimum curriculum for a flight instructor instrument certification course required under this part, for:

- (a) Flight Instructor Instrument—airplane single-engine.
- (b) Flight Instructor Instrument—airplane multiengine.
- (c) Flight Instructor Instrument—helicopter.

- (d) Flight Instructor Instrument—airship.
- (e) Flight Instructor Instrument—powered-lift.

2. *Eligibility for enrollment.* A person must have the following to enroll in the flight portion of the flight instructor instrument course:

(a) A commercial or airline transport pilot certificate with an aircraft category and class rating appropriate to the flight instructor category and class rating for which the course applies; and

(b) A flight instructor certificate with an aircraft category and class rating that is appropriate to the flight instructor instrument (category and class of aircraft) rating for which the course applies.

3. Aeronautical knowledge training.

(a) Approved course requirements.

Each approved course must include the aeronautical knowledge areas listed in paragraph (b) of this section, appropriate to the flight instructor instrument (category and class of aircraft) rating for which the course applies, and must include at least 15 hours of training.

(b) Aeronautical knowledge areas.

(1) Instrument rating aeronautical knowledge areas of this paragraph that are appropriate to the flight instructor instrument (category and class of aircraft) rating for which the course applies;

- (2) Learning process;
- (3) Elements of effective teaching;
- (4) Student evaluation, quizzing, and testing;

(5) Course development;

(6) Lesson planning; and

(7) Classroom training techniques.

4. Flight training.

(a) Approved course requirements.

Each approved course must include at least 15 hours of flight training in the approved areas of operation of paragraph (b) of this section for the flight instructor rating for which the course applies.

(b) Use of flight training devices.

(1) The course may include training in a flight training device, provided they are representative of the aircraft for which the course is approved for, meet requirements of this paragraph, and the training is given by an authorized ground or flight instructor.

(2) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part and a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or by this section, whichever is less. However, training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements.

(c) *Areas of operation.* Each approved course must include the flight training on the areas of operation listed in this paragraph (c)(2) of this section, that are appropriate to the instrument-aircraft category and class rating for which the course applies.

(2) For a flight instructor-instrument rating course.

- (i) Fundamentals of instructing;
- (ii) Technical subject areas;
- (iii) Preflight preparation;
- (iv) Preflight lesson on a maneuver to be performed in flight;
- (v) Air traffic control clearances and procedures;
- (vi) Flight by reference to instruments;
- (vii) Navigation aids;
- (viii) Instrument approach procedures;
- (ix) Emergency operations; and
- (x) Postflight procedures.

5. Stage check and end-of-course tests.

Each student enrolled in a flight instructor instrument course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, consisting of the approved areas of operation of section 4 of this appendix for the flight instructor instrument (category and class of aircraft) rating for which the course applies.

Appendix H—Ground Instructor Certification Course

1. *Applicability.* This appendix prescribes the minimum curriculum for a ground instructor certification course and an additional ground instructor rating course, required under this part, for:

- (a) Ground Instructor—Airplane category.
- (b) Ground Instructor—Rotorcraft category.
- (c) Ground Instructor—Glider category.
- (d) Ground Instructor—Lighter-than-air category.
- (e) Ground Instructor—Powered-lift category.
- (f) Ground Instructor—Instrument.

2. *Aeronautical knowledge training.*

(a) *Approved course requirements.*

Each approved course must include the knowledge areas listed in paragraph (b) of this section, appropriate to the ground instructor category and class rating for which the course applies, and must include a total of at least:

- (1) 20 hours of training, if the course is for an initial issuance of a ground instructor certificate; or
- (2) 10 hours of training, if the course is for an additional ground instructor rating.
- (b) Aeronautical knowledge areas.
- (1) Learning process;
- (2) Elements of effective teaching;
- (3) Student evaluation, quizzing, and testing;
- (4) Course development;
- (5) Lesson planning;
- (6) Classroom training techniques; and
- (7) Aeronautical knowledge areas in which training is required for—
 - (i) A private and commercial pilot certificate that is appropriate to the category and class rating for which the course applies; and
 - (ii) An instrument rating, if applying for a ground instructor instrument rating.

(c) *School hours credited.*

A student who satisfactorily completed 2 years of study on the principles of education in a college or university may be credited with 10 hours of the required training in paragraph (a)(1) of this section.

3. *Stage check and end-of-course tests.*

Each student enrolled in a ground instructor course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, consisting of the approved knowledge areas of section 2 of this appendix for the ground instructor rating for which the course applies.

Appendix I—Additional Aircraft Category or Class Rating Course

1. *Applicability.* This appendix prescribes the minimum curriculum for an additional aircraft category rating course or an additional aircraft class rating course required under this part, for:

- (a) Airplane category—single-engine class.
- (b) Airplane category—multiengine class.
- (c) Rotorcraft category—helicopter class.
- (d) Rotorcraft category—gyroplane class.
- (e) Powered-lift category.
- (f) Glider category—nonpowered class.
- (g) Glider category—powered class.
- (h) Lighter-than-air category—airship class.
- (i) Lighter-than-air category—balloon class.

2. *Eligibility for enrollment.*

A person must have the following to enroll in the flight portion of an additional aircraft category or additional aircraft class rating course:

- (a) The level of pilot certificate for the additional aircraft category or class rating for which the course applies.
- (b) At least a valid third-class medical certificate issued under part 67 of this chapter, if the course is for a aircraft rating in other than a glider or balloon.
- (c) A signed and dated statement affixed to the application certifying that no known medical defect exists that would make the person unable to pilot a glider or balloon, as appropriate.

3. *Aeronautical knowledge training.*

Each approved course for an additional aircraft category rating and additional aircraft class rating must include:

- (a) The aeronautical knowledge training that apply to that aircraft rating by this part, and that are appropriate to the aircraft rating and pilot certificate level for which the course applies; and
- (b) The total aeronautical knowledge training hours of each approved course must include the ground training time required by this part that are appropriate to the aircraft rating and pilot certificate level for which the course applies.

4. *Flight training.*

Each approved course for an additional aircraft category rating or additional aircraft class rating must include:

- (a) The flight training on the approved areas of operation of this paragraph, that are appropriate to the aircraft rating and pilot certificate level for which the course applies.
- (b) The total flight training time must include the training required by this part, that are appropriate to the aircraft rating and

pilot certificate level for which the course applies.

(c) Flight training devices may be used when the course includes training in a flight training device, provided it is representative of the aircraft for which the course is approved, meets the requirements of this paragraph, and the training is given by an authorized ground or flight instructor.

(d) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(e) Training in a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(f) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part and a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or by this section, whichever is less. However, training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements.

5. *Stage check and end-of-course tests.*

(a) Each student enrolled in an additional aircraft category rating course or an additional aircraft class rating course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, consisting of the approved areas of operation of section 4 of this appendix that are appropriate the aircraft category and class rating for which the course applies at the appropriate pilot certificate level.

(b) Each student must demonstrate satisfactory proficiency prior to being endorsed to operate an aircraft in supervised PIC flight.

Appendix J—Aircraft Type Rating Course, for Other Than Airline Transport Pilot Certificate

1. *Applicability.* This appendix prescribes the minimum curriculum for an aircraft type rating course, for other than airline transport pilot certificate, for:

- (a) A type rating in an airplane category—single engine class.
- (b) A type rating in an airplane category—multiengine class.
- (c) A type rating in a rotorcraft category—helicopter class.
- (d) A type rating in a powered-lift category.
- (e) Other aircraft type ratings specified by the Administrator through aircraft type certificate procedures.

2. *Eligibility for enrollment.*

A person must have the following to enroll in the flight portion of an aircraft type rating course:

- (a) At least a private pilot certificate;
- (b) At least a valid third-class medical certificate issued under part 67 of this chapter;

(c) An instrument rating in the category and class of aircraft that is appropriate to the aircraft type rating for which the course applies, provided the aircraft's type certificate does not have a VFR limitation, except as provided in paragraph (d) of this section; and

(d) Be concurrently enrolled in an instrument rating course in the category and class of aircraft that is appropriate to the aircraft type rating for which the course applies and satisfactorily accomplish the required instrument rating practical test concurrently with the aircraft type rating practical test.

3. *Aeronautical knowledge training.*

(a) *Approved course requirements.*

Each approved course must include the aeronautical knowledge areas listed in paragraph (b) of this section, appropriate to the aircraft type rating for which the course applies, and must include at least 15 hours of training.

(b) *Aeronautical knowledge areas.*

(1) Proper control of airspeed, configuration, direction, altitude, and attitude in accordance with procedures and limitations contained in the Aircraft's Flight Manual, checklists, or other approved material appropriate that apply to the aircraft type;

(2) Compliance with approved enroute, instrument approach, missed approach, ATC, or other applicable procedures that apply to the aircraft type;

(3) Subjects requiring a practical knowledge of the aircraft type, its powerplant, systems, components, operational, and performance factors;

(4) The aircraft's normal, abnormal, and emergency procedures, and the operations and limitations relating thereto;

(5) The appropriate provisions of the approved Aircraft's Flight Manual;

(6) Location and purpose of inspecting of each item on the aircraft's checklist that relate to the exterior and interior preflight; and

(7) Use of the aircraft's prestart checklist, appropriate control system checks, starting procedures, radio and electronic equipment checks, and the selection of proper navigation and communication radio facilities and frequencies.

4. *Flight training.*

(a) *Approved course requirements.*

Each approved course must include:

(1) Flight training on the approved areas of operation of paragraph (c) of this section in the aircraft type for which the course applies; and

(2) At least 25 hours of flight training of which at least 15 hours must be instrument flight training in the aircraft for which the course applies.

(b) *Use of flight training devices.*

(1) The course may include training in a flight training device, provided they are representative of the aircraft for which the course is approved for, meet requirements of this paragraph, and the training is given by an authorized ground or flight instructor.

(2) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part, may be credited for a maximum of 10 percent of the total flight training hour

requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part and a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or by this section, whichever is less. However, training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements.

(c) *Areas of operation.*

Each approved course must include the flight training on the areas of operation listed in this paragraph, that are appropriate to the aircraft category and class rating for which the course applies:

(1) *A type rating for an airplane-single engine course:*

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;
- (vii) Normal and abnormal procedures;
- (viii) Emergency procedures; and
- (ix) Postflight procedures.

(2) *A type rating for an airplane-multiengine course:*

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;
- (vii) Normal and abnormal procedures;
- (viii) Emergency procedures; and
- (ix) Postflight procedures.

(3) *A type rating for a powered-lift course:*

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;
- (vii) Normal and abnormal procedures;
- (viii) Emergency procedures; and
- (ix) Postflight procedures.

(4) *A type rating for a rotorcraft-helicopter course:*

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;
- (v) Instrument procedures;
- (vi) Landings and approaches to landings;
- (vii) Normal and abnormal procedures;
- (viii) Emergency procedures; and
- (ix) Postflight procedures.

(5) *Other aircraft type ratings specified by the Administrator through aircraft type certificate procedures:*

- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Takeoff and departure phase;
- (iv) Inflight maneuvers;

- (v) Instrument procedures;
- (vi) Landings and approaches to landings;
- (vii) Normal and abnormal procedures;
- (viii) Emergency procedures; and
- (ix) Postflight procedures.

5. *Stage check and end-of-course tests.*

(a) Each student enrolled in an aircraft type rating course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, consisting of the approved areas of operation that apply to the aircraft type rating for which the course applies at the airline transport pilot certificate level; and

(b) Each student must demonstrate satisfactory proficiency prior to being endorsed to operate an aircraft in supervised PIC flight.

Appendix K—Special Preparation Courses

1. *Applicability.* This appendix prescribes the minimum curriculum for the special preparation courses that are listed in § 141.11 of this part.

2. *Eligibility for enrollment.* A person must have the following to enroll in the flight portion of a special preparation course:

(a) A pilot, flight instructor, or ground instructor certificate that is appropriate for the operating privilege or authorization that the course applies;

(b) At least a valid third-class medical certificate issued under part 67 of this chapter, if the course involves an aircraft other than a glider or balloon; and

(c) A statement signed and dated by the person certifying the person has no known medical defect that makes the person unable to pilot a glider or balloon, as appropriate.

3. *General requirements.*

(a) To be approved a special preparation course must:

(1) Meet the appropriate requirements of this appendix; and

(2) Prepare the graduate with the necessary skills, competency, and proficiency to exercise safely the privileges of the certificate, rating, or authorization for which the course is established.

(b) An approved special preparation course must include training on the operating privileges or authorization sought, for developing competency, proficiency, resourcefulness, self-confidence, and self-reliance in the student; and

(c) An approved special preparation course must include flight training in the operating privileges or authorization sought, for developing competency, proficiency, resourcefulness, self-confidence, and self-reliance in the student.

4. *Use of flight training devices.*

(a) The approved special preparation course may include training in a flight training device, provided they are representative of the aircraft for which the course is approved for, meet requirements of this paragraph, and the training is given by an authorized ground or flight instructor.

(b) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part, may be credited for a maximum of 10 percent of the total flight training hour

requirements of the approved course, or of this section, whichever is less.

(c) Training in a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 5 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(d) Training in a flight training device that meets the requirements of § 141.41(a)(1) of this part and a flight training device that meets the requirements of § 141.41(a)(2) of this part, may be credited for a maximum of 10 percent of the total flight training hour requirements of the approved course, or by this section, whichever is less. However, training in a flight training device that meets the requirements of § 141.41(a)(2) of this part may be credited for a maximum of 5 percent of the total flight training hour requirements.

5. *Stage check and end-of-course tests.*

Each person enrolled in a special preparation course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, consisting of the approved areas of operation that are appropriate to the operating privileges or authorization sought and for which the course applies.

6. *Agricultural aircraft operations course.*

An approved special preparation course for pilots in agricultural aircraft operations must include at least the following:

- (a) At least 25 hours of training on—(1) Agricultural aircraft operations;
 - (2) Safe piloting operating practices and procedures for handling, dispensing, and disposing agricultural and industrial chemicals, including operating in and around congested areas; and
 - (3) Applicable provisions of part 137 of this chapter.
- (b) At least 15 hours of flight training on agricultural aircraft operations.

7. *Rotorcraft external-load operations course.*

An approved special preparation course for pilots of external-load operations must include at least the following:

- (a) At least 10 hours of training on—(1) Rotorcraft external-load operations;
 - (2) Safe piloting operating practices and procedures for external-load operations, including operating in and around congested areas; and
 - (3) Applicable provisions of part 133 of this chapter.
- (b) At least 15 hours of flight training on external-load operations.

8. *Test pilot course.*

An approved special preparation course for pilots in test pilot duties must include at least the following:

- (a) Aeronautical knowledge training on—
 - (1) Performing aircraft maintenance, quality assurance, and certification test flight operations;
 - (2) Safe piloting operating practices and procedures for performing aircraft maintenance, quality assurance, and certification test flight operations;
 - (3) Applicable parts of this chapter that pertain to aircraft maintenance, quality assurance, and certification tests; and

(4) Test pilot duties and responsibilities.

(b) At least 15 hours of flight training on test pilot duties and responsibilities.

9. *Special operations course.*

An approved special preparation course for pilots in special operations that are mission specific for certain aircraft, must include at least the following:

- (a) Aeronautical knowledge training on—
 - (1) Performing that special flight operation;
 - (2) Safe piloting operating practices and procedures for performing that special flight operation;
 - (3) Applicable parts of this chapter that pertain to that special flight operation; and
 - (4) Pilot-in-command duties and responsibilities for performing that special flight operation.
- (b) Flight training—
 - (1) On that special flight operation; and
 - (2) To develop skills, competency, proficiency, resourcefulness, self-confidence, and self-reliance in the student for performing that special flight operation in a safe manner.

10. *Pilot refresher course.*

An approved special preparation pilot refresher course for a pilot certificate, aircraft category and class rating, or an instrument rating must include at least the following:

- (a) At least 4 hours of aeronautical knowledge training on—
 - (1) The aeronautical knowledge areas that are applicable to the level of pilot certificate, aircraft category and class rating, or instrument rating, as appropriate, that pertain to that course;
 - (2) Safe piloting operating practices and procedures; and
 - (3) Applicable provisions of parts 61 and 91 of this chapter for pilots.
- (b) At least 6 hours of flight training on the approved areas of operation that are applicable to level of pilot certificate, aircraft category and class rating, or instrument rating, as appropriate, for performing pilot-in-command duties and responsibilities.

11. *Flight instructor refresher course.*

An approved special preparation flight instructor refresher course must include at least a combined total of 16 hours of aeronautical knowledge training, flight training, or any combination of ground and flight training on the following:

- (a) Aeronautical knowledge training on—
 - (1) The aeronautical knowledge areas of part 61 of this chapter that apply to student, recreational, private, and commercial pilot certificates and instrument ratings;
 - (2) The aeronautical knowledge areas of part 61 of this chapter that apply to flight instructor certificates;
 - (3) Safe piloting operating practices and procedures, including airport operations and operating in the National Airspace System; and
 - (4) Applicable provisions of parts 61 and 91 of this chapter that apply to pilots and flight instructors.
- (b) Flight training to review—
 - (1) The approved areas of operations applicable to student, recreational, private, and commercial pilot certificates and instrument ratings; and

(2) The skills, competency, and proficiency for performing flight instructor duties and responsibilities.

12. *Ground instructor refresher course.*

An approved special preparation ground instructor refresher course must include at least 16 hours of aeronautical knowledge training on:

- (a) The aeronautical knowledge areas of part 61 of this chapter that apply to student, recreational, private, and commercial pilots and instrument rated pilots;
- (b) The aeronautical knowledge areas of part 61 of this chapter that apply to ground instructors;
- (c) Safe piloting operating practices and procedures, including airport operations and operating in the National Airspace System; and
- (d) Applicable provisions of parts 61 and 91 of this chapter that apply to pilots and ground instructors.

Appendix L—Pilot Ground School Course

1. *Applicability.* This appendix prescribes the minimum curriculum for a pilot ground school course required under this part.

2. *General requirements.* An approved course of training for a pilot ground school must include training on the aeronautical knowledge areas that are:

- (a) Needed to safely exercise the privileges of the certificate, rating, or authority for which the course is established; and
- (b) Conducted to develop competency, proficiency, resourcefulness, self-confidence, and self-reliance in each student.

3. *Aeronautical knowledge training requirements.*

Each approved pilot ground school course must include:

- (a) The aeronautical knowledge training that apply to that aircraft rating by this part, and that are appropriate to the aircraft rating and pilot certificate level for which the course applies; and
- (b) The total aeronautical knowledge training hours must include an adequate number of hours that are appropriate to the aircraft rating and pilot certificate level for which the course applies.

4. *Stage check and end-of-course tests.*

Each person enrolled in a pilot ground school course must satisfactorily accomplish the stage checks and end-of-course tests, in accordance with the school's approved training course, consisting of the approved areas of operation that are appropriate to the operating privileges or authorization that graduation from the course will permit and for which the course applies.

5. Part 143 is removed and reserved.

PART 143—[RESERVED]

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William J. White,

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