



# Federal Register

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## Part II

### Department of Transportation

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Federal Aviation Administration

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**14 CFR Part 1 et al.**  
**Certification of Aircraft and Airmen for**  
**the Operation of Light-Sport Aircraft;**  
**Proposed Rule**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Parts 1, 21, 43, 45, 61, 65 and 91**

[Docket No. FAA-2001-11133; Notice No. 02-03]

RIN 2120-AH19

**Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft****AGENCY:** Federal Aviation Administration (FAA), DOT.**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA is proposing requirements for the certification, operation, maintenance, and manufacture of light-sport aircraft. Light-sport aircraft are often heavier and faster than ultralights and include airplanes, gliders, balloons, powered parachutes, weight-shift-control aircraft, and gyroplanes. This action is necessary to address advances in sport and recreational aviation technology, gaps in the existing regulations, and several petitions for rulemaking and for exemptions from existing regulations. The intended effect of this action is to provide for the manufacture of safe and economical aircraft and to allow operation of these aircraft by the public in a safe manner.

**DATES:** Send your comments on or before May 6, 2002.

**ADDRESSES:** Address your comments to the Docket Management System, U.S. Department of Transportation, Room Plaza 401, 400 Seventh St., SW., Washington, DC 20590-0001. You must identify the docket number at the beginning of your comments, and you should submit two copies of your comments.

You may also submit comments through the Internet to <http://dms.dot.gov>. You may review the public docket containing comments to these proposed regulations in person in the Dockets Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Dockets Office is on the plaza level at the Department of Transportation building at the address above. Also, you may review public dockets on the Internet at <http://dms.dot.gov>.

**FOR FURTHER INFORMATION CONTACT:**

Susan Gardner at 202/267-5008 for questions regarding airman certification and operational issues (14 CFR parts 1, 43, 45, 61, 65, and 91). For questions regarding aircraft certification (14 CFR part 21), call Steve Flanagan at 202/267-

5008. Due to the large volume of questions we expect from this proposal, please leave a message and we will answer your questions within 3 days. Please use this phone number for questions only. If you wish to submit a public comment, please review the procedures below to ensure that your comments are included in the docket.

**SUPPLEMENTARY INFORMATION:**

- I. Public Comment Procedures
- II. Overview of the Proposal
- III. Effects of the Proposal on the Public and Industry
- IV. Background
  - A. Current rules
  - B. The FAA's reasons for this proposal
- V. The Aviation Rulemaking Advisory Committee (ARAC)
- VI. Section-by-Section Analysis of the Proposal
  - A. What are the proposed changes to 14 CFR part 1?
  - B. What are the proposed changes to 14 CFR part 21?
  - C. What are the proposed changes to 14 CFR part 43?
  - D. What are the proposed changes to 14 CFR part 45?
  - E. What are the proposed changes to 14 CFR part 61?
  - F. What are the proposed changes to 14 CFR part 65?
  - G. What are the proposed changes to 14 CFR part 91?
- VII. Paperwork Reduction Act
- VIII. International Compatibility
- IX. Regulatory Evaluation
 

Summary Executive Order 12866 and DOT Regulatory Policies and Procedures

  - A. Economic evaluation
  - B. Initial regulatory flexibility determination
  - C. International trade impact statement
  - D. Initial unfunded mandates assessment
- X. Executive Order 13132, Federalism
- XI. Environmental Analysis
- XII. Energy Impact

**I. Public Comment Procedures**

The FAA invites you to participate in this rulemaking action by submitting written data, views, or arguments. We also invite comments relating to the environmental, energy, federalism, or economic impact that might result from adopting the proposals in this document. Substantive comments should contain cost estimates. In your comments, identify the regulatory docket or notice number you are commenting on. Submit them in duplicate to the DOT Rules Docket address specified above.

We will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. The docket is available for public inspection before and after the comment closing date.

We will consider all comments received on or before the closing date before taking action on this proposed rulemaking. We will consider comments filed late as far as possible without incurring expense or delay. We may change the proposals in this document in response to comments.

If you want FAA to acknowledge receipt of your comments include a pre-addressed, stamped postcard. In the message area, identify the document you are commenting on by notice or docket number. We will date stamp the postcard and mail it to you.

We also anticipate holding an electronic public meeting during the comment period. You will be able respond on-line via the Internet to questions that we will ask you regarding this proposal. We will publish a notice in the **Federal Register** shortly announcing more details about this virtual public meeting.

**Availability of Rulemaking Documents**

You can get an electronic copy of this document from the Internet by taking the following steps:

(1) Go to the search function of the Department of Transportation's electronic Docket Management System (DMS) web page (<http://dms.dot.gov/search>).

(2) On the search page, type in the last four digits of the docket number shown at the beginning of this document. Click on "search."

(3) On the next page, which contains the docket summary information, click on the item you want to see.

You can also get an electronic copy using the Internet through the FAA's web page at <http://www.faa.gov/avr/arm/nprm/nprm.htm> or the **Federal Register**'s web page at [http://www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html).

You can also get a copy by submitting a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Ave., SW., Washington, DC 20591, or by calling (202) 267-9680. Make sure to identify the docket number or notice number of this rulemaking.

**II. Overview of the Proposal**

This proposal addresses three major issues:

- Certification of light-sport aircraft;
- Certification of pilots and flight instructors to operate light-sport aircraft; and
- Certification of repairmen to maintain light-sport aircraft.

We discuss these issues in more detail below.

*Certification of Light-Sport Aircraft*

Light-sport aircraft are small, simple-to-operate, low-performance aircraft. The FAA is proposing to limit these aircraft to a maximum of 2 occupants, a 1,232-lb. (560 kg.) takeoff weight, a 39-knot stall speed, a 115-knot maximum operating speed, a single engine, and fixed landing gear. Refer to the definition of light-sport aircraft in the proposed rule for a complete list of limits for those aircraft. Helicopters and powered lift would not be light-sport aircraft due to their complexity.

The FAA currently issues two major types of airworthiness certificates—standard and special. The special airworthiness certificate includes six categories—primary, restricted, limited, provisional, special flight permits, and experimental. We propose to add a seventh category of special airworthiness certificate—light-sport. You could use aircraft issued a special light-sport airworthiness certificate for sport and recreation, flight training, or rental. The special airworthiness certificate would ensure that aircraft used for these purposes are designed

and manufactured to an identified standard. The FAA would exclude gyroplanes for this certificate.

The FAA currently issues special experimental certificates for eight purposes. We propose to add a new purpose—to operate light-sport aircraft—for issuing an experimental certificate. There would be three ways to get an experimental certificate for the purpose of operating light-sport aircraft. First, if you operate a light-sport aircraft that does not meet the existing definition of ultralight vehicle in 14 CFR 103.1, you would have to apply for an experimental airworthiness certificate for your aircraft under this provision. You would have to apply to register your aircraft not later than 24 months after the effective date of the final rule. You would then have your aircraft inspected and an airworthiness certificate issued not later than 36 months after the effective date of the final rule. You could use aircraft with an airworthiness certificate issued for this experimental purpose for sport and recreation, and flight training. For a period of 3 years after the effective date

if the final rule, you could operate these aircraft for compensation or hire, while conducting flight training.

Second, you could get an experimental airworthiness certificate for an aircraft you assembled from an eligible kit. You could use these aircraft only for sport and recreation, and flight training.

And finally, you could get an experimental airworthiness certificate to operate a light-sport aircraft if it previously had been issued a special, light-sport aircraft airworthiness certificate and you do not want to comply with the operating limitations associated with a special light-sport certificate. For example, you could do this if you wanted to alter the aircraft without the manufacturer's authorization, or you choose not to comply with the mandatory safety-of-flight actions. You could use these aircraft only for sport and recreation, and flight training.

**Table 1.—Proposed New or Expanded Airworthiness Certificate Categories and Purposes**

#### AIRCRAFT AIRWORTHINESS CERTIFICATE

Airworthiness certificate	Categories/Other	Purposes
I. Standard .....	A. Normal. B. Utility. C. Acrobatic. D. Commuter. E. Transport. F. Manned free balloons. G. Special classes of aircraft.	
II. Special .....	A. Primary. B. Restricted. C. Limited. D. Light-Sport (§ 21.186). <sup>1</sup> E. Provisional. F. Special Flight Permits. G. Experimental (§ 21.191) .....	1. Research and development. 2. Showing compliance with regulations. 3. Crew training. 4. Exhibition. 5. Air racing. 6. Market surveys. 7. Operating amateur-built aircraft. 8. Operating primary category kit-built aircraft. 9. Operating light-sport aircraft (§ 21.191(i)). <sup>1</sup> a. existing aircraft that do not meet part 103. b. kit-built, light-sport aircraft. c. aircraft previously certificated under § 21.186.

<sup>1</sup> New airworthiness certificate categories and/or purposes.

*Certification of Pilots and Flight Instructors to Operate Light-Sport Aircraft*

The FAA is also proposing two new pilot certificates and two new aircraft category ratings to allow operations of light-sport aircraft. Currently, we issue student, recreational, private,

commercial, and airline transport pilot certificates. This proposal would add a student pilot certificate for operating light-sport aircraft and a sport pilot certificate. We would issue the sport pilot certificate and flight instructor certificate with a sport pilot rating without any category and class ratings. However, the applicable aircraft

category, class, and make and model privileges would be established through logbook endorsements.

The FAA currently issues airplane, helicopter, gyroplane, glider, balloon, airship, and powered-lift aircraft category ratings. We propose to add powered parachute and weight-shift-control aircraft category ratings for the

private pilot certificate. The weight-shift-control aircraft category rating

would include land and sea class ratings.

**Table 2.—Proposed New or Expanded Pilot/Flight Instructor Categories and Class Ratings**

#### PILOT/FLIGHT INSTRUCTOR CERTIFICATION

Proposed new or expanded pilot/flight instructor certificates	Proposed new aircraft category/class ratings	Proposed new aircraft category/class privileges
Student—operating light-sport aircraft .....	N/A .....	Airplane (Land/Sea), Gyroplane, Airship, Balloon, Weight-shift-control (Land/Sea), and aircraft Powered Parachute.
Sport .....	N/A .....	Airplane (Land/Sea), Gyroplane, Glider, Airship, Balloon, Weight-shift-control (Land/Sea), and Powered Parachute.
Private .....	Powered Parachute Weight-Shift-Control (Land/Sea).	
Flight Instructor .....	Sport Pilot.	

A student pilot operating light sport aircraft, a sport pilot, and a flight instructor with a sport pilot rating could operate or provide training only in a light sport aircraft that meets the definition under 14 CFR part 1. These light sport aircraft could be issued any one of the standard or special airworthiness certificates shown in Table 1.

The FAA proposes to revise recreational pilot certificate privileges to align them with the proposed privileges for sport pilots, primarily to permit operation in Class B, C, and D airspace. To operate in that airspace, you would have to get appropriate training and logbook endorsements. We also propose to revise the training requirements for the private pilot certificate to permit private pilots to operate powered parachutes and weight-shift-control aircraft.

This proposal also addresses flight instructor certification and ground instructor privileges. The FAA would add a new rating for flight instructors—the sport pilot rating—and would revise privileges for ground instructors to train sport pilots and flight instructors with a sport pilot rating.

#### Certification of Repairmen To Maintain Light-Sport Aircraft

We also would add a new repairman certificate, which we would issue with a maintenance or inspection rating. If we issue you an inspection rating, you could perform the annual condition inspection on your own aircraft that has an experimental, light-sport airworthiness certificate. If we issue you a maintenance rating, you could perform all of the inspections required for an aircraft with an experimental, light-sport airworthiness certificate, and the inspections and other maintenance required on an aircraft with a special, light-sport airworthiness certificate. A maintenance rating would allow you to

work on category—specific aircraft that you may not own.

#### III. Effects of the Proposal on the Public and Industry

This section of the preamble describes in general terms how the proposal would affect certain categories of people. A reader who is interested in a quick overview of the proposal may find this part useful. In preparing this overview, we condensed the material and focused on the major concepts of this proposed rule. If you are looking for a detailed description, you should read the section-by-section analysis portion of the preamble.

#### I Own or Plan To Purchase a Light-Sport Aircraft Within 24 Months After the Rule Is Effective. How Would This Proposal Affect Me?

If you own or plan to purchase an ultralight that meets the definition of ultralight vehicle in part 103 of our regulations (14 CFR part 103), this proposal doesn't affect you.

If your aircraft or the aircraft you plan to purchase doesn't meet the definition of ultralight vehicle in 14 CFR part 103, you would have to apply to register your aircraft with the FAA not later than 24 months after the effective date of the final rule. You would then have your aircraft inspected by the FAA (or representative of the FAA) and an experimental, light-sport airworthiness certificate must be issued not later than 36 months after the effective date of the final rule.

If you currently operate an ultralight vehicle under a training exemption and you also have applied to the FAA for aircraft registration, you would be allowed to continue to operate under the training exemption until you are issued an experimental, light-sport airworthiness certificate. If your aircraft does not meet 14 CFR part 103 and you are not authorized to operate under a training exemption, you would not be

allowed to operate under 14 CFR part 91 until you register your aircraft with the FAA and receive an airworthiness certificate for your aircraft.

#### I'd Like To Buy a Ready-to-Fly Light-Sport Aircraft and Use It for Training and Rental. How Would This Proposal Affect Me?

If you buy a U.S.-manufactured, ready-to-fly light-sport aircraft after the effective date of the final rule and intend to use it for training or rental, you could apply for a special airworthiness certificate in the light-sport category. To get the certificate, you would have to present the following information to the FAA:

- The manufacturer's statement of compliance;
- The applicable maintenance and inspection procedures;
- The pilot flight training manual;
- The pilot operating handbook; and
- Statements concerning any prior or future alterations.

You'd also have to get the aircraft registered and inspected by the FAA.

If you buy an imported light-sport aircraft, you would have to provide the same information as required for a U.S.-manufactured aircraft, and you would also have to provide the additional information under 14 CFR 21.186(d).

#### I'd Like To Buy a Light-Sport Aircraft Kit. How Would This Proposal Affect Me?

If you buy a light-sport aircraft kit after the effective date of the final rule, you would have to assemble the kit according to the manufacturer's instructions and could apply for an experimental airworthiness certificate for the purpose of operating light-sport aircraft. To get the certificate you would provide evidence that the kit is an eligible kit. You would also have to present the following information to the FAA:

- The kit manufacturer's statement of compliance;
- The applicable maintenance and inspection procedures;
- The pilot flight training manual; and
- The pilot operating handbook.

In addition, you'd have to get the aircraft registered and inspected by the FAA.

*I Would Like To Fly a Light-Sport Aircraft and I Don't Hold a Pilot Certificate. How Would This Proposal Affect Me?*

For most types of light-sport aircraft, including powered parachutes and weight-shift-control aircraft, you would have to obtain at least a sport pilot certificate. First, you would have to get a student pilot certificate for operating light-sport aircraft (called a "student certificate" in this preamble).

To get a student certificate, you would have to—

- Meet certain eligibility requirements related to language and age (at least 16 years old, or 14 years old to operate a glider or balloon);
- Have a U.S. driver's license or an airman medical certificate;
- Receive and log ground and flight training in specific aeronautical areas; and
- Meet specific requirements for solo and solo cross-country.

As a student certificate holder, you'd be subject to most of the existing limits on student certificate holders. You also couldn't fly when visibility is less than 3 miles, at night, above certain altitudes and speeds, in certain airspace, contrary to any operating limitation for the aircraft or the pilot, and outside the United States.

To get a sport pilot certificate, you would have to—

- Obtain a student certificate for operating light-sport aircraft;
- Meet certain eligibility requirements related to language and age (at least 17 years old, or 16 years old to operate a glider or balloon);
- Have a U.S. driver's license or an airman medical certificate;
- Receive and log ground and flight training in specific aeronautical areas;
- Meet aeronautical experience requirements; and
- Pass a knowledge test and a practical test.

The FAA would issue you a sport pilot certificate and your logbook would be endorsed authorizing you privileges in that specific category, class, and make and model of aircraft.

As a sport pilot certificate holder, you couldn't fly—

- When visibility is less than 3 miles;

- At night;
- Above certain altitudes and speeds;
- In certain airspace;
- For other than sport and recreational purposes;
- Contrary to any operating limitation for the aircraft or the pilot;
- While towing an object;
- While carrying a passenger for compensation or hire; or
- Outside the United States without authorization.

You also couldn't demonstrate an aircraft in flight if you're an aircraft salesperson. You could share operating expenses with another pilot.

*Once I Hold a Sport Pilot Certificate, What Must I Do To Fly a Different Category, Class, or Make and Model of Light-Sport Aircraft?*

To fly an additional make and model of light-sport aircraft, you'd have to receive and log aircraft-specific ground and flight training for the additional make and model from an authorized instructor.

To fly another category or class of light-sport aircraft, you'd have to receive and log ground and flight training in certain operational areas from an authorized instructor, and successfully complete a proficiency check from a different authorized instructor. The authorized instructor who certifies your proficiency for the additional make and model or category and class privileges would endorse your logbook establishing those specific privileges.

*I Would Like To Become a Light-Sport Aircraft Instructor. How Would This Proposal Affect Me?*

If you don't hold a flight instructor certificate issued under 14 CFR part 61, you would have to obtain a flight instructor certificate with a sport pilot rating. To get it, you would have to—

- Meet certain eligibility requirements related to language and age (at least 18 years old);
- Have a sport pilot certificate or a private pilot certificate;
- Receive and log ground training in the fundamentals of instruction;
- Receive and log ground and flight training in specific aeronautical areas;
- Meet aeronautical experience requirements; and
- Pass a knowledge test and a practical test.

The FAA would issue you a flight instructor certificate with a sport pilot rating and your logbook would be endorsed authorizing you privileges to provide training in that specific category, class, and make and model of aircraft.

If you already hold a current and valid flight instructor certificate issued

under 14 CFR part 61, you could provide flight training toward a sport pilot certificate without further showing of proficiency. You would be subject to certain limitations.

*Once I Hold a Flight Instructor Certificate With a Sport Pilot Rating, What Must I Do To Provide Training In a Different Category, Class, Or Make And Model Of Light-Sport Aircraft?*

To provide training in an additional make and model of light-sport aircraft, you'd have to receive and log aircraft-specific ground and flight training for the additional make and model from an authorized instructor.

To provide flight training in another category or class of light-sport aircraft, you'd have to receive and log ground and flight training in certain operational areas from an authorized instructor, and successfully complete a proficiency check from a different authorized instructor.

The authorized instructor who certifies your proficiency authorizing you to provide training for the additional make and model or category and class privileges would endorse your logbook establishing those specific privileges.

*I'm an Ultralight Pilot and an Ultralight Flight Instructor With an FAA-Recognized Organization. How Will This Rule Affect Me?*

The training programs of FAA-recognized ultralight organizations already cover many of the proposed requirements. This proposal would establish how you would credit your experience toward the aeronautical experience requirements for a sport pilot certificate and a flight instructor certificate with a sport pilot rating.

*I Already Have An FAA Pilot Certificate and Want To Fly Light-Sport Aircraft. How Would The Proposal Affect Me?*

If you already have at least a private pilot certificate, you would have to—

- Receive and log specific training for any make and model of light-sport aircraft for which you hold a category and class rating and that you haven't piloted; and
- Get a logbook endorsement from the authorized instructor who trained you certifying your proficiency.

If you want to add category and class privileges for which you do not have an aircraft category or class rating on your private pilot certificate, you would have to meet the requirements for the addition of those privileges established in this proposal.

**Who Can Perform Maintenance, Which Includes Inspections, On a Ready-To-Fly Aircraft With a Special, Light-Sport Airworthiness Certificate?**

The following persons could perform maintenance and preventive maintenance on an aircraft with a special light-sport airworthiness certificate: (1) An appropriately rated mechanic, (2) an appropriately rated repair station, and (3) a repairman (light-sport aircraft) with a maintenance rating. Certificated pilots could also perform preventive maintenance.

**Who Can Perform Inspections On an Aircraft With an Experimental, Light-Sport Airworthiness Certificate?**

The following persons could perform inspections on an aircraft with an experimental, light-sport airworthiness certificate: (1) An appropriately rated mechanic, (2) an appropriately rated repair station, and (3) a repairman (light-sport aircraft) with a maintenance rating. Additionally, if you want to perform inspections on your own experimental aircraft, you would have to obtain a repairman certificate (light-sport aircraft) with an inspection rating.

**How Do I Get a Repairman Certificate (Light-Sport Aircraft) With a Maintenance or Inspection Rating?**

To get a repairman certificate (light-sport aircraft), you would have to—

- Meet certain eligibility requirements relating to age, language, and citizenship or residency;
- Demonstrate the requisite skill to determine whether a light-sport aircraft is in a condition for safe operation; and
- Meet the requirements for one of the following ratings:

For an inspection rating, you would have to—

- Complete a 16-hour training course on the inspection requirements of the particular make and model of light-sport aircraft.

For a maintenance rating, you would have to—

- Complete an 80-hour training course on the maintenance requirements of the particular category of light-sport aircraft.

**I Manufacture Light-Sport Aircraft. How Does This Proposal Affect Me?**

If you manufacture aircraft intended for certification as a special, light-sport aircraft, you would have to—

- Manufacture those aircraft in accordance with airworthiness standards developed by a consensus of industry and FAA (consensus standards);

- Attest on a Statement of Compliance for each aircraft that it conforms to the consensus standards;
- Test each aircraft in accordance with a production acceptance test specifications described in the consensus standard;
- Develop and identify the system you would use for monitoring and correcting safety-of-flight issues in accordance with the consensus standards;
- Develop and make available a Pilot Operating Handbook for safe operation applicable to the aircraft;
- Develop and make available a manufacturer's pilot flight training manual for the aircraft; and
- State that you will provide FAA unrestricted access to your facilities.

**I Manufacture Light-Sport Aircraft Kits. How Does This Proposal Affect Me?**

If you manufacture aircraft kits, intended to be assembled by the purchaser into aircraft eligible for certification as an experimental aircraft for the purpose of operating light-sport aircraft, you would have to—

- Manufacture at least one ready-to-fly aircraft. For the purposes of this certificate, an aircraft make and model is eligible for a kit if the aircraft make and model has been issued a special, light-sport airworthiness certificate;
- Manufacture the aircraft kit in accordance with standards developed by a consensus of industry and the FAA (consensus standard);
- Attest on a statement of compliance that the kit conforms to the consensus standard;
- Provide complete assembly instructions; and
- Develop and make available the applicable supporting documentation.

**Does This Proposal Impose Any Requirements on the Light-Sport Aircraft Industry?**

Yes, industry would have to work with the FAA to develop consensus standards governing the following:

- Design and performance criteria;
- Quality assurance system requirements;
- Completed aircraft production acceptance or "pass-through" test specifications; and
- A system for continued operational safety monitoring.

Although aircraft issued special airworthiness certificates in the light-sport category would not need a type certificate or have to be produced under a production certificate, the FAA proposes that these aircraft meet consensus standards. By consensus standards, we mean standards

developed by the industry through a consensus process with FAA participation. Industry would present those standards to the FAA for review and publication in the **Federal Register** for public comment. After the FAA accepts the consensus standards, we would publish them in the **Federal Register**.

There would be separate standards for each aircraft class to which FAA could issue a certificate in the light-sport aircraft category. We have determined it is appropriate to use consensus standards, consistent with Office of Management and Budget (OMB) Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities," February 10, 1998.

## I. Background

### A. Current Rules

Several FAA regulatory initiatives have addressed sport and recreational general aviation needs:

- We issued regulations regarding ultralight vehicles under 14 CFR part 103 (47 FR 38776; September 2, 1982),
- We created the recreational pilot certificate under 14 CFR part 61 (54 FR 13028; March 29, 1989), and
- We established a new category of aircraft, primary category, under 14 CFR part 21 (57 FR 41367; September 9, 1992).

We discuss these regulatory initiatives below.

### Ultralight Vehicle Regulations

The FAA adopted part 103 in 1982 (47 FR 38776; September 2, 1982) in response to existing and rapidly growing hang glider activity. This activity made our earlier guidance inadequate.

Part 103 defines an ultralight as either an unpowered or powered vehicle with certain weight, speed, and other limitations. An ultralight can carry only one occupant and be used for sport and recreational purposes. It does not have a U.S. or foreign airworthiness certificate. Ultralight vehicle operators must comply with certain operating restrictions. Generally, you can operate these vehicles only between sunrise and sunset; you must yield the right-of-way to all aircraft; you may not operate over congested areas or over any open air assembly of people, and you may not operate for compensation or hire. See part 103 for more information on limits on ultralight vehicles.

Ultralight vehicles are not subject to the aircraft certification requirements of 14 CFR part 21, the maintenance

requirements of 14 CFR part 43, the identification and marking requirements of 14 CFR part 45, or the registration requirements of 14 CFR part 47. In addition, to operate one of these vehicles, you do not need to comply with the airman certification requirements in 14 CFR part 61, medical certification requirements in 14 CFR part 67, or the operating rules in 14 CFR part 91.

#### Recreational Pilot Certificate Regulations

The FAA established the recreational pilot certificate under part 61 in 1989 (54 FR 13028; March 29, 1989). We intended this certificate to be a lower cost alternative to the private pilot certificate. We believed this new certificate would be attractive for persons interested in flying basic, experimental, or homebuilt aircraft.

As a recreational pilot, you may operate a single-engine airplane or rotorcraft certificated for no more than four occupants with a powerplant of no more than 180 horsepower (hp). You are not only subject to the limits of a private pilot, but also have additional limits. These additional limits include not being permitted to carry more than one passenger; tow an object; fly between sunset and sunrise; fly above 10,000 feet MSL or 2,000 feet AGL, whichever is higher; fly without visual reference to the surface; or operate in airspace in which you need to communicate with air traffic control (ATC). See part 61 for information on other limits placed on recreational pilots.

However, in this current rulemaking we are proposing to allow a recreational pilot to operate in airspace in which communication with ATC is required, as long as the pilot receives training on that operation and a logbook endorsement authorizing it. This would parallel a similar privilege we are proposing for sport pilots.

#### Primary Category Aircraft Regulations

In 1992, the FAA established a new category of aircraft, primary category aircraft, under §§ 21.24 and 21.184 (57 FR 41367, September 9, 1992), because of concerns that the decline in general aviation in the United States was in part due to higher certification costs for aircraft. The new category had simplified procedures for type, production, and airworthiness certification.

Primary category aircraft must be unpowered or have only a single, naturally aspirated engine. They are also subject to speed, weight, and load limits. They may not be used to carry persons or property for hire, although

under certain conditions they may be rented or used for flight instruction. See part 21 at the sections listed above for more information about the limits placed on this category of aircraft.

#### The Status of Current Rules

Despite the efforts discussed above to address sport and recreation general aviation needs, those rules, for various reasons, have not achieved the regulatory goals we set out to achieve. Since we issued the regulations, the state of the art in ultralight vehicles has advanced considerably and our rules are out-of-date. New advancements in technology have improved safety, including light-engine technology and reliability, more effective application of low-speed aerodynamic principles, and new materials. Although part 103 covers ultralight activities, an increasing number of ultralight vehicles are operating outside the current regulations. This is because the vehicles either exceed the part 103 ultralight weight limit (254 pounds) or they have two seats. For many operators, installing any new equipment or using new materials (some of which increase the level of safety) causes the vehicle to exceed the weight requirements of part 103.

Seeing the need for training to reduce accidents, manufacturers have built two-place training vehicles and organizations have established programs to qualify ultralight flight instructors. However, these vehicles do not meet the current definition of ultralight vehicle, and are not manufactured, certificated, or maintained to a standard. So, while the FAA currently does not require certification for ultralight vehicle operators, flight instructors, or vehicles, we issued exemptions to allow these larger ultralights to be used for training, but not for other sport or recreational flight. You can find a detailed discussion of exemptions for two-place ultralight training vehicles in the following documents: Aero Sports Connection (ASC) Exemption No. 6080, docket No. 27953; Experimental Aircraft Association (EAA) Exemption No. 3784, docket No. 23477; United States Hang Glider Association (USHGA) Exemption No. 4721, docket No. 23492; and United States Ultralight Association (USUA) Exemption No. 4274, docket No. 24427.

Neither the recreational pilot certificate nor the primary category airworthiness certificate regulations have accommodated the sport and recreational flying community. Only about half of the recreational pilot certificates we have issued are active. Specifically, as of January 10, 2001, the FAA has issued 638 recreational pilot

certificates, but only 336 of those were active. Most initial pilot applicants have chosen to pursue a private pilot certificate, rather than a recreational pilot certificate, because the former provides more benefits for little extra cost. Since the primary category aircraft certification option covers only single-engine airplanes and rotorcraft, it excludes increasingly popular aircraft such as powered parachutes and weight-shift-control aircraft. And, although we intended the certification process for these aircraft to be abbreviated and economical compared to standard category certification, we have not achieved that goal. As of March 14, 2001, we have certificated only two aircraft in the primary category.

Finally, we have received numerous requests for exemptions from part 103, a petition for rulemaking from the United States Ultralight Association (docket No. 25591), and two petitions for exemption relating to powered parachutes, one from North American Powered Parachute Federation (NAPPF) and one from Aero Sports Connection (ASC) (docket No. 29674). The last petition also dealt with weight-shift-control aircraft.

The FAA currently does not have aircraft category ratings or training and certification requirements for powered parachutes and weight-shift-control aircraft in part 61. Before you fly one of these aircraft, you don't have to receive any training specific to them, but you must get a pilot certificate with a rating in another aircraft category and class. This requires pilots to get training in aircraft that do not have the same operating characteristics as the aircraft they will be flying. Although current regulations do not require any additional training in the powered parachute or weight-shift-control aircraft, many pilots exercise reasonable judgement and get that additional training. This significantly increases the cost of getting a pilot certificate to operate powered parachutes and weight-shift-control aircraft without any added benefit to the pilot or to public safety.

#### B. The FAA's Reason for This Proposal

The FAA is proposing this rule to increase safety in the light-sport aircraft community by closing the gaps in existing regulations and accommodating new advances in technology. Although we issued exemptions to temporarily resolve the training issues, to extend them on a long-term basis would be an inappropriate use of the exemption process. The FAA believes that a permanent and appropriate level of regulation is necessary.

The FAA analyzed the existing accident data of ultralights that do not meet part 103 to determine deficiencies in safety. Accident data from the NTSB and part 103 exemption holders show that 36 accidents occurred between 1995–2001 involving aircraft that would meet the proposed definition of light-sport aircraft. Those accidents resulted in 51 fatalities. (The organizations that hold part 103 training exemptions are required to report to the FAA accidents involving two-place training vehicles.) The data indicate that some of these accidents also involve vehicles that are not covered under part 103 and were not used for training under an exemption. Because light-sport flying is becoming more and more popular, there is concern that more accidents could occur without regulatory intervention.

We believe that many of these accidents could have been avoided with this proposed rule. There are many safety benefits of certificating sport pilots, light-sport aircraft, and repairmen who would maintain these aircraft. The FAA has identified a number of factors related to training and certification that contribute to the prevention of accidents. For example, certificated sport pilots would—

- (1) Meet minimum requirements to be eligible to operate aircraft,
- (2) Be trained and tested to a standard,
- (3) Routinely receive notices of FAA safety programs and are eligible to participate in that supplemental training (current operators of ultralight vehicles do not receive these notices),
- (4) Be required to be aware of safety- and security-related information contained in Notices to Airmen (NOTAMs), which could impact a flight and potentially reduce accidents (current operators of ultralight vehicles are not required to receive these NOTAMs),

(5) Be required to receive weather briefings and therefore are better prepared to avoid bad weather (current operators of ultralight vehicles are not required to receive weather briefings),

(6) Have access to DUAT (direct user access terminal) automated weather service, and

(7) Be required to complete recurrent training, which would maintain pilot skills.

Under this proposal, certificated sport pilots could credit ultralight flight time toward higher-level certificates, which would increase the experience level and qualification of sport pilots. In addition, sport pilots would receive make and model training, which is not required for any other pilot certificate.

Certificated light-sport aircraft would—

(1) Be designed, manufactured, tested, and supported according to the latest standard,

(2) Be manufactured under a quality assurance system that meets a standard,

(3) Receive safety-of-flight bulletins, similar to airworthiness directives and service bulletins (there are no safety-of-flight bulletins currently being issued to operators of ultralight vehicles),

(4) Be required to have make- and model-specific training and maintenance instructions,

(5) Have a make- and model-specific pilot operating handbook for safe operation of the aircraft,

(6) Have a make- and model-specific maintenance and inspection procedures manual, and

(7) Be eligible to use airports, which provide more access to maintenance facilities and emergency services. Vehicles without airworthiness certificates typically are not allowed to use airports.

Certificated repairmen (light-sport aircraft) would—

(1) Meet minimum training and testing requirements, which would ensure that repairmen have the necessary skills to inspect (or maintain) light-sport aircraft and certify that they are safe to fly (currently no certificated repairman or mechanic receives any safety and training information targeted to light-sport aircraft),

(2) Meet minimum requirements ensuring that the persons working on the aircraft are mature individuals who can read and understand maintenance manuals and instructions. These proposed requirements are similar to requirements for part 145 repair stations and repairmen for amateur-built aircraft,

(3) Receive FAA's aircraft-specific safety and training information targeted to repairmen needs,

(4) Be trained on how to report faults or failures to the FAA and light-sport aircraft manufacturers. This would greatly improve how light-sport aircraft manufacturers correct faults and make a safer product.

Also, certificating sport pilots, light-sport aircraft, and repairmen would allow the FAA to identify and take certificate action against them. The threat of certificate action could improve compliance with the regulations, and therefore, improve safety.

Certificated sport pilots and operators of light-sport aircraft would have better access to insurance. They would be more widely recognized by existing industry and trade organizations because the pilots and aircraft would

meet the same operating rules as all other pilots and aircraft. These organizations would likely publish more safety-related material addressing sport flying.

Finally, the NTSB would investigate any accidents or incidents involving certificated sport pilots or light-sport aircraft, which could help identify ways to improve safety and reduce future accidents. (The NTSB generally does not investigate accidents involving ultralight vehicles.) The FAA bases many of its policy and rule changes on NTSB recommendations following accidents and incidents. Industry also uses NTSB data to develop safety initiatives and new training materials.

The ultralight aircraft industry has urged us to initiate rulemaking to address light-sport aircraft and has received strong support among its members. According to most of these supporters, regulating this industry would significantly increase the popularity of sport flying and would consequently have a positive impact on their businesses. Thriving businesses typically have more resources to improve their products, and, in this case, could produce safer aircraft. We agree with these statements and also believe that regulating this industry would offer other safety enhancements.

Although there would be some costs involved with this proposal, we believe it to be the least costly of the viable alternatives. (Refer to section IX "Regulatory Evaluation Summary" for more details on the costs and benefits of the proposal.) Industry leaders have indicated that regulations ultimately would lower the cost to participate in light-sport aircraft activities, while ensuring appropriate public safety. In a letter sent to the Director of the Office of Management and Budget on August 10, 2001, EAA stated that they see this proposal as an opportunity to decrease the cost of aircraft ownership and operation. The General Aviation Coalition indicated its support of sport pilot and light-sport aircraft regulations to the Administrator at its July 18, 2001, meeting with the FAA Administrator.

According to one manufacturer of sport aircraft kits, rules covering these aircraft would benefit public safety in several ways, including: (1) Providing appropriate rules for students to learn to fly light-sport aircraft, (2) improving flight instructor training on light-sport aircraft, and (3) providing rules for the continued airworthiness of the aircraft. Another manufacturer states that new regulations would improve pilot skills to fly these aircraft, encourage new flying skills, and would ensure that the aircraft are safe and high quality.

Finally, one manufacturer of kit planes believes that regulating the light-sport aircraft certification process would increase safety by eliminating aircraft that do not meet a certain standard.

Several letters were received while the Department of Transportation and the Office of Management and Budget were reviewing this proposal. Buckeye Industries, Inc., Flightstar Sportplanes, and EAA all expressed their support of this proposal and requested expedited review of this proposal. You may find copies of all of the above letters in the docket.

The FAA is especially interested in receiving specific comments regarding the various costs of the proposal and the extent to which the affected public is willing to bear these costs as an acceptable part of business or recreation. These costs can be broken down into the following three components: aircraft certification; annual condition inspection and repairman certification; and sport pilot certificate and flight instructor certification (with a sport pilot rating). Each of these costs is discussed further in section IX "Regulatory Evaluation Summary". The FAA seeks information and data regarding each of these cost areas and if these costs are considered reasonable.

In summary, the FAA believes that these proposed regulations would improve safety and would:

- Provide an economical means for manufacturers to obtain FAA certification for light-sport aircraft;
- Provide an economical means for pilots to obtain a certificate to fly those aircraft;
- Provide a reasonable and appropriate means to overcome the limits of the ultralight regulations, the recreational pilot certificate, and the primary category airworthiness certificate;
- Eliminate the need for exemptions from part 103 to conduct flight training in aircraft that do not meet the requirements of that part;
- Provide the public safe access to general aviation without creating a significant financial barrier; and
- Create more eligible pilots to meet the needs of future airline and military demand.

## V. The Aviation Rulemaking Advisory Committee (ARAC)

### *ARAC's Role in This Rulemaking*

The FAA established the Aviation Rulemaking Advisory Committee (ARAC) in 1991 to help us by providing input from outside the Federal government on major regulatory issues

affecting aviation safety. The ARAC includes representatives of air carriers, manufacturers, general aviation, labor groups, universities, associations, airline passenger groups, and the general public. In 1993, we formed an ARAC working group to review part 103 and recommend whether we needed new or revised standards for sport aircraft (58 FR 47172, September 7, 1993). In 1995, we revised our charge to ARAC (60 FR 33247, June 27, 1995).

The ARAC considered a variety of alternatives to deal with light-sport aircraft issues. In their final recommendation, they focused on three areas. You can read ARAC's entire report in the docket for this proposed rule.

### *ARAC's Recommended Sport Pilot Certificate*

The ARAC recommended FAA include detailed privileges and limits in part 61, tailored to diverse aircraft types, and appropriate to the low weight and speed of those aircraft. They wanted to enhance safety by providing a pilot certificate for those who wish to exercise pilot privileges that exceed the current limits of part 103. They wanted to achieve this goal without making the certificate requirements so stringent they were economically impractical.

In addition, ARAC recommended FAA allow the training and flight time used to obtain a sport pilot certificate to be applicable to higher-level airmen certificates. They believed this would encourage individuals to obtain a higher-level airman certificate.

### *ARAC's Airman Medical Certification Recommendations*

The ARAC recommended a self-evaluation medical requirement that would allow sport pilot applicants to certify at the time of application that they have no known medical defect. They considered but did not recommend requiring that an applicant hold a current and valid U.S. driver's license; requiring a letter from an aviation medical examiner (AME) or a personal physician addressing that physician's knowledge of the applicant's health; and allowing a Flight Standards Review Board (FSRB) to define medical requirements unique to each specific type of aircraft. They rejected these options because, in their opinion, a driver's license requirement would involve unnecessary paperwork and recordkeeping, a letter from an AME or other physician would create yet another class of airman medical certificate, and involving a medical examiner through the FSRB would be unnecessary because the activities

allowed under the proposed sport pilot certificate would be of a limited nature and the medical requirements for each rating would always be the same.

### *ARAC's Recommended Flight Standards Review Board (FSRB)*

Under this recommendation, a person interested in a sport pilot class or "type" rating not previously established by FAA could request that we establish an appropriate class or "type" rating using an FSRB. The requester would suggest to FAA requirements and limits for the specific category, class, and "type" rating. Typically, an aircraft manufacturer or a national organization whose members are interested in the sport pilot class would make these requests. If you wanted to be certificated for these aircraft, you would apply under the appropriate generic requirements of the proposed sport pilot certificate and the specific requirements for your aircraft as established by the FSRB.

### *FAA's Response to the ARAC Recommendations*

The ARAC working group submitted its recommendations to FAA for review in July, 1998. Much of FAA's proposal is based on ARAC's sport pilot certification recommendation, but it also addresses many issues not considered by the ARAC. We decided we needed to cover aircraft and airman certification as well as operational and maintenance issues. Therefore, we have expanded on ARAC's recommendation and are proposing a complete regulatory solution that would address these issues. Our proposal expands pilot certification and training requirements; addresses the airworthiness certification of light-sport aircraft, to include powered parachutes and weight-shift-control aircraft; establishes a new repairman certificate to ensure continuing airworthiness requirements are met; and revises operational requirements to address these aircraft.

There are several specific points on which FAA does not agree with ARAC. We do not agree we should allow sport pilots to tow objects. We believe pilots who tow objects should have a higher level of experience and training than the sport pilot certificate will allow. Existing regulations allow private pilots to do this. We did not agree with permitting an aircraft salesperson to demonstrate an eligible aircraft in flight to a potential buyer. We believe sales demonstration flights are not consistent with the nature of sport and recreational flying.

While the FAA agrees a sport pilot certificate would not warrant a separate

class of airman medical certification, we do not agree that a U.S. driver's license requirement is unreasonable or a paperwork burden. The FAA would amend Form 8710-1, "Application for an Airman Certificate and/or Rating," to add an item for applicants to verify at the time of application that they hold a current and valid U.S. driver's license or a current and valid airman medical certificate. The FAA's proposal does not include ARAC's recommendation for an FSRB because of the potential administrative burden a board could create. We discuss specific ARAC recommendations more fully in the section-by-section analysis of this notice.

## **VI. Section-by-Section Analysis of the Proposal**

### *A. What Are the Proposed Changes to 14 CFR Part 1?*

*Proposed section 1.1* would be revised to add the terms "light-sport aircraft," "consensus standard," "powered parachute," and "weight-shift-control aircraft" to the list of definitions.

#### **Definition of "Light-Sport Aircraft"**

This proposal would establish a new category of aircraft—light-sport aircraft that would include airplanes, gliders, gyroplanes, powered parachutes, lighter-than-air, and weight-shift-control aircraft. These aircraft fall between "small aircraft" as defined in current § 1.1 and "ultralight vehicles" as defined in current § 103.1. Helicopters and powered-lift aircraft would be excluded from the definition of light-sport aircraft due to their complex operation, maintenance, design, and manufacture.

A light-sport aircraft would have a maximum takeoff weight of 1,232 lbs (560 kilograms), or a maximum gross weight of 660 lbs (300 kilograms) for lighter-than-air aircraft. These weight limits should accommodate a significant number of aircraft that are simple, low performance, and have no more than two occupants. These aircraft may be manufactured in the United States or another country.

A light-sport aircraft would have a maximum speed in level flight with maximum continuous power ( $V_H$ ) of 115 knots. This limits the commanded kinetic energy of an aircraft flown by a pilot holding a sport pilot certificate. The FAA chose to use  $V_H$  as the limiting speed for powered, light-sport aircraft as it is simple to verify during testing. The FAA believes that aircraft with a  $V_H$  greater than 115 knots would be inappropriate for operation by persons with the minimum training and

experience of a sport pilot, which prepares them for flying simple, low performance aircraft for sport and recreation. This value is consistent with light-sport aircraft airworthiness design standards adopted by other airworthiness authorities.

An unpowered light-sport aircraft (e.g. glider) would have a maximum never-exceed speed ( $V_{NE}$ ) of 115 knots, as  $V_H$  is not applicable. This speed limitation also limits the commanded kinetic energy of an aircraft flown by a pilot holding a sport pilot certificate. For a  $V_{NE}$  equal to 80% of the aircraft's structural design limit speed, a 115-knot  $V_{NE}$  limit for aircraft would mean that structural design limits would preclude gliders with a speed capability in excess of 144 knots from being approved as light-sport aircraft ( $144 \times .80 = 115$ ).

A light-sport aircraft would have a maximum stall speed in the landing configuration ( $V_{SO}$ ) of 39 knots. This value for a maximum stall speed is a characteristic of low-performance aircraft and would assist in ensuring that light-sport aircraft possess handling characteristics commensurate with the training and experience of sport pilots. It is also consistent with foreign airworthiness standards for similar performance aircraft.

A light-sport aircraft would have a maximum stall speed in the landing configuration without the use of lift-enhancement devices ( $V_{S1}$ ) of 44 knots. The FAA selected this value to allow for the use of simple lift-enhancing systems that can result in a 5-knot stall speed decrease. With this limit, if more effective lift-enhancement systems are used on the aircraft, the resulting  $V_{SO}$  would be lowered further. The FAA recognizes that this limitation, combined with the  $V_{SO}$  limit, also would limit the maximum speed of the aircraft.

A light-sport aircraft would carry no more than two occupants, including the pilot. This limitation is consistent with the size of the aircraft and the limitations of a sport pilot certificate.

A light-sport aircraft would be limited to a single, non-turbine engine, if powered. The FAA believes that the requirement for no more than one engine keeps the aircraft simple and limits speed. The requirement for a non-turbine engine is intended to limit the engine to a simple-to-operate design, such as a conventional reciprocating engine (including a rotary or diesel engine) and would also permit simple alternatives, such as electric engines.

A light sport aircraft, if powered, would be limited to a fixed or ground-adjustable propeller. The FAA determined that a propeller that could not be adjusted in pitch in flight was

necessary to limit the operational complexity of the aircraft and would be consistent with the skills necessary to hold a sport pilot certificate.

The cabin of a light-sport aircraft would be unpressurized. Cabin pressurization systems and the associated pressure vessel are complex to design and manufacture and the systems can be difficult to operate. The FAA determined that the requirement for an unpressurized cabin is consistent with the skills necessary to hold a sport pilot certificate and with the philosophy of light-sport aircraft design and manufacture.

A light-sport aircraft would have fixed landing gear, except that for seaplanes, repositionable landing gear that would allow the wheels to be rotated for amphibious operations would be acceptable. Retractable gear systems are complex to design, manufacture, and maintain, and may be complex to operate in flight. The FAA determined that the requirement for fixed landing gear is consistent with the philosophy of keeping light-sport aircraft design, manufacture, and operation simple. Repositionable gear on a seaplane is of simple design and operation. Accordingly, the FAA has determined that repositionable gear would be consistent with the skills necessary to hold a sport pilot certificate as it is analogous to a ground adjustable pitch propeller.

#### **Definition of "Consensus Standard"**

The FAA is proposing that the light-sport aircraft industry develop and reach a consensus on an airworthiness standard that would govern light-sport aircraft—(1) design and performance, (2) quality assurance system requirements, (3) production acceptance test specifications, and (4) continued operational safety monitoring system characteristics. This standard would be used by the manufacturer of an aircraft intended to be issued a special light-sport airworthiness certificate or of a kit intended for certification as a light-sport aircraft. Consensus standard means, for the purpose of certificating light-sport aircraft, an industry-developed consensus airworthiness standard that addresses these four topics, as described below.

(1) Design and performance. The consensus standard would govern light-sport aircraft design and performance. A suitable standard would identify minimum aircraft flight and ground performance standards, in addition to design practices to prohibit, that would ensure a safe aircraft for the operator. It would also establish flight proficiency training requirements that would be

applicable to the particular class of light-sport aircraft. Design and performance standards maintained or recognized by other civil aviation authorities (CAA's) could be selected or otherwise form the basis for a light-sport aircraft airworthiness standard.

Examples of commonly used design and performance standards for conventional fixed-wing airplanes are BCAR section S (Britain), TP10141 (Canada), and JAR-VLA (JAA). The light-sport aircraft industry also may choose to utilize other nationally recognized airworthiness design standards for the consensus standards.

(2) Quality assurance. The consensus standard would govern the necessary quality assurance system requirements used in the manufacture of light-sport aircraft. The standard would establish quality assurance procedures so a manufacturer could attest that individual aircraft produced all meet the same minimum safety standards and are built as intended.

(3) Production acceptance. The consensus standard would govern the necessary characteristics of the production acceptance test specifications used in the manufacture of light-sport aircraft. A suitable standard would identify the required final product acceptance test procedures that ensure a completed product is safe and performs as intended.

(4) Safety monitoring. The consensus standard would govern the characteristics of the manufacturer's continued operational safety monitoring system. The consensus standard would establish reference system requirements for monitoring and correcting safety-of-flight issues. A suitable standard would include a process by which aircraft owners and operators would be notified of occurrences that are hazards to safety of flight and the appropriate corrective action. A suitable standard would ensure that the manufacturer reviews the operational experience of the fleet and corrects any deficiencies. In addition, it would identify processes that would ensure manufacturers learn about problems experienced on aircraft in service. Safety monitoring also would include processes by which manufacturers evaluate the reported problems for their safety of flight. It would also define the processes by which manufacturers develop repairs and communicate them to operators for problems that are determined to be hazards to flight safety.

A suitable consensus standard would also establish the procedures by which the industry reviews and updates the consensus standards. It would establish procedures to periodically review the

standard every two years, and to update the standard when if necessary. Industry may chose to initiate a shorter review period.

#### Definitions of "Powered Parachute" and "Weight-Shift-Control Aircraft"

This proposal would establish two new kinds of light-sport aircraft-powered parachutes and weight-shift-control aircraft. The aircraft would be controlled by a pilot within a suspended fuselage. The inclusion of a fuselage permits the designer of the aircraft to standardize a design based on structural geometry and engineering principles of flight rather than the individual characteristics of the pilot. The definitions describe the characteristics of powered parachutes and weight-shift-control aircraft as they exist today. While the proposed definitions are not intended to hinder future developments of these aircraft designs, they specifically intend to exclude configurations in which the engine and/or wing is mounted on the person operating the aircraft.

A powered parachute would be defined as powered aircraft that derive their lift from a non-rigid wing that inflates into a lifting surface when exposed to a wind. A powered parachute consists of a non-rigid wing, a suspended fuselage, and an engine that is an integral part of the aircraft.

Weight-shift-control aircraft would be defined as powered aircraft with a framed pivoting wing and a fuselage. The aircraft is controllable only in pitch and roll by the pilot's ability to change the aircraft's center of gravity. For these two-axis-control aircraft, the line of action of the thrust and the suspended mass of the fuselage would ensure that a laterally applied control force would result in motion about the roll axis. An aircraft with these characteristics, but with three-axis control (i.e. also controllable about the yaw axis) would not meet the definition of a weight-shift control aircraft.

#### B. What Are the Proposed Changes to 14 CFR Part 21?

*Proposed section 21.175* would add light-sport aircraft to the list of special airworthiness certificates in current § 21.175(b).

*Proposed section 21.181* would be revised to indicate that a light-sport aircraft airworthiness certificate is effective as long as the aircraft is maintained in accordance with its operating limitations and the aircraft is registered in the United States. The FAA notes that the proposal would not require the maintenance requirements of part 43 to apply to these aircraft.

This section also would be revised to indicate that certificates for experimental and primary category kit-built aircraft would be of unlimited duration, unless the FAA finds good cause to establish a specific period.

*Proposed section 21.182* would be revised to require all aircraft issued experimental certificates for the purpose of operating light-sport aircraft to be identified under § 45.11.

*Proposed section 21.186* would establish the eligibility requirements for the issuance of a special airworthiness certificate in the light-sport category ("special light-sport aircraft") and the purposes for which the FAA would issue such a certificate. It would set forth the required contents of a manufacturer's Statement of Compliance for a light-sport aircraft. It also would set forth requirements for importing light-sport aircraft. Special light-sport aircraft are designed and manufactured without an FAA type or production certificate and are accordingly limited to operating for sport and recreation, flight training, or rental.

Only complete, "ready-to-fly" aircraft would be eligible for special light-sport airworthiness certificates. If there is a change to the consensus standard, all newly manufactured aircraft would have to comply with the changed standard. This would ensure that a new aircraft always meets the latest standard. Changes to a consensus standard would not apply retroactively to previously manufactured aircraft, unless required by the changed standard. Industry may agree to apply a change to the consensus standards retroactively. If a change addresses an unsafe condition, it would need to be handled as a mandatory safety-of-flight action.

Aircraft that would be eligible for this certificate would not need a type or production certificate. However, the proposal would require the aircraft manufacturer to attest that the aircraft design and manufacture complies with a consensus standard. The manufacturer would indicate this on a Statement of Compliance, which would be provided to the original purchaser of the aircraft. The person who will be the registered owner of the aircraft will identify and register these aircraft in accordance with 14 CFR parts 45 and 47.

To maintain eligibility for the special light-sport aircraft airworthiness certificate, the operator would be required to comply with operating limitations under the proposed § 91.327 as part of the aircraft's airworthiness certificate. The operating limitations would also address the maintenance and inspection requirements, preventive

maintenance, as well as flight test programs, operations in various airspace classes, and pilot qualification. This is because these aircraft would not have a type certificate and, therefore, would not be required to be maintained in accordance with 14 CFR part 43.

Maintenance and inspection procedures required by the operating limitations would meet the scope and detail of Appendix A to 14 CFR part 43. Similar to part 43, a certificated pilot could perform preventive maintenance.

The operating limitations would also require the operator to accomplish any safety-of-flight actions (maintenance or alterations) that the manufacturer deems necessary for continued operational safety. This is proposed because the aircraft would not be manufactured in accordance with a type design and hence the FAA would not issue Airworthiness Directives. If an operator chooses not to perform this maintenance, the special airworthiness certificate in the light-sport category would no longer be valid; however, the operator may still apply for an experimental certificate for the aircraft. These restrictions on the special light-sport aircraft would provide the higher level of safety required for an aircraft to be used for flight training or rental.

The special airworthiness certification option would be in addition to existing methods of obtaining airworthiness certification. No existing airworthiness certification option would be eliminated or restricted for aircraft that meet the definition of light-sport aircraft. An aircraft that meets the proposed definition of light-sport aircraft is not required to have a special light-sport certificate and may be eligible to hold other airworthiness certificates, provided that it meets the applicable requirements of subpart H of part 21.

Aircraft that otherwise meet the light-sport aircraft criteria that are shown via test to have a higher  $V_H$  would not be issued a special airworthiness certificate under the terms of this rule. Such higher performance aircraft currently could be type-certified in other categories such as normal, primary, or special class (e.g., JAR-VLA); and could be operated by the holder of at least a recreational pilot certificate.

An aircraft would no longer be eligible for the special light-sport certificate if it is altered such that it no longer meets the definition of light-sport aircraft. For example, an alteration to a powered aircraft that results in a  $V_H$  greater than 115 kts (e.g., installation of a cruise propeller on an aircraft initially certificated with a climb propeller) would render the aircraft ineligible.

The definition of light-sport aircraft includes gyroplanes; however, gyroplanes would not be issued special airworthiness certificates in the light-sport category under proposed § 21.186. The FAA would issue an experimental, operating light-sport aircraft airworthiness certificate under § 21.191(i)(1) to existing gyroplanes that do not meet part 103 but meet the proposed definition of light-sport aircraft. Because gyroplanes could not be certificated under § 21.186, they would not be eligible for airworthiness certificates under § 21.191(i)(2) and (3). The FAA recognizes that this may limit the number and types of gyroplanes that a sport pilot may fly; however, the FAA notes that a sport pilot may fly a gyroplane that has a standard or special category airworthiness certificate provided the aircraft meets the definition of light-sport aircraft.

The FAA may issue special, light-sport aircraft airworthiness certificates to aircraft manufactured before the effective date of the rule. These aircraft would be required to meet the consensus standard in effect at the time of manufacture. To get the certificate you would have to make application for registration not later than 24 months after the effective date of the rule. You would also have to present the required information (as above) to the FAA and make the statements concerning any prior or future modifications. This would require the manufacturer of your aircraft to be in a position to issue a retroactive Statement of Compliance for your specific aircraft serial number. If it is an imported aircraft, you would also have to provide the additional import information on a retroactive basis.

Because of these requirements, not all aircraft models will be eligible for a special airworthiness certificate. While the FAA does not expect many manufacturers would retroactively issue Statements of Compliance for aircraft manufactured before the effective date of the rule, the FAA does not want to rule out this possibility.

Proposed § 21.186(b) would define the requirements for getting a special light-sport aircraft airworthiness certificate.

Proposed § 21.186(b)(1) describes the items that the registered owner would be required to present to be eligible for a special airworthiness certificate in the light-sport category. The registered owner would submit a copy of the manufacturer-issued Pilot Operating Handbook for the aircraft and the manufacturer-issued maintenance and inspection procedures. These items would be required to provide the registered owner with access to the information on how to operate aircraft

safely and the technical data to inspect and properly maintain the aircraft. The registered owner would also present a manufacturer's Statement of Compliance to ensure that the aircraft presented is in a condition for safe operation.

Proposed § 21.186(b)(2) would exclude aircraft that have been previously issued an airworthiness certificate in the standard or primary category from being eligible for a special light-sport certificate. The intent of this proposal is to enable aircraft that can meet a consensus standard to obtain an airworthiness certificate without demonstrating to the FAA that the aircraft complies with the standards for the issuance of a standard or primary category airworthiness certificate. The FAA believes that to allow aircraft with existing certificates in the standard or primary category to attain a special light-sport certificate would be an unnecessary burden on the manufacturers, the operators, and the FAA. This is because the proposal would require the manufacturers of light-sport aircraft to implement a system specific to their aircraft models to monitor the continued airworthiness. Additionally, the FAA believes there would be little interest in "downgrading" from a standard or primary category certificate to a special light-sport, as the airworthiness certificate would have more restrictive operating limitations.

Proposed § 21.186(b)(3) would require that the aircraft be inspected by the FAA (or an FAA-designated representative) and be in a condition for safe operation. The person conducting the inspection would rely upon Manufacturer's Statement of Compliance to assist in determining that the aircraft complies with consensus standards unless FAA experience with the manufacturer dictates otherwise.

Proposed § 21.186(b)(4) would address authorized modifications to light-sport aircraft. The registered owner would provide a statement indicating that either the aircraft has not been altered after the date of manufacture, or that the aircraft was altered with the authorization of the manufacturer. Absent a responsible manufacturer, other persons acceptable to the FAA who have established a program to review the alterations to the manufacturer's aircraft may also authorize an alteration. That person would review the alteration for compliance with the applicable standard. In order to authorize an alteration the person must accept continued airworthiness responsibility for the altered aircraft. This requirement

would assist in ensuring that the aircraft meets the applicable consensus standard throughout its useful life.

Proposed § 21.186(b)(5) would address authorized modification to the aircraft. The registered owner would provide a statement indicating that any future alterations to the aircraft will be performed with the authorization of the manufacturer. Other persons acceptable to the FAA who have established a program to review the alterations to the manufacturer's aircraft may also authorize an alteration. That person would review the alteration for compliance with the applicable standard. In order to authorize an alteration the person must accept continued airworthiness responsibility for the altered aircraft. This requirement would assist in ensuring that the aircraft meets the applicable consensus standard throughout its useful life.

Proposed § 21.186(c) would require manufacturers of aircraft intended for certification as a special, light-sport aircraft, or of kits intended for certification as experimental aircraft for the purpose of operating light-sport aircraft (under proposed § 21.191(i)(2)), to produce those aircraft or aircraft kits in accordance with consensus standards. The FAA believes that light-sport aircraft can be designed and manufactured with less FAA oversight than that required for an aircraft with a type or production certificate. Accordingly, light-sport aircraft would conform to an industry-developed consensus airworthiness standard, which the FAA would define as a "consensus standard."

The manufacturer would have to perform specific tasks and attest to their satisfactory completion on a manufacturer's Statement of Compliance. A Statement of Compliance would be required for each specific aircraft to be issued a special, light-sport aircraft airworthiness certificate; or for each kit issued an experimental certificate for the purpose of operating light-sport aircraft.

Furthermore, proposed § 21.186(c) would define the items that must be contained in the manufacturer's Statement of Compliance. The manufacturer's quality assurance system would identify a company official who would be authorized to make the certifications on the Statement of Compliance. The official who makes the certifications would need to have control and direct supervisory participation in the activities that the statement addresses.

Proposed § 21.186(c)(1) would require the Statement of Compliance to contain the aircraft make and model

designation, aircraft serial number, class of light-sport aircraft, and date of manufacture for each aircraft or kit intended for certification under proposed § 21.186 or 21.191(i)(2). This provision is intended to specify the minimum basic identification on the Statement of Compliance for each aircraft (or kit, when applicable) produced. A manufacturer could include in its Statement of Compliance additional information to help describe or otherwise identify the aircraft.

Proposed § 21.186(c)(2) would require the Statement of Compliance to fully identify the consensus standard used to manufacture the aircraft. The identification would include the effective date of the consensus standard. This requirement would provide a permanent record of compliance by aircraft and by serial number with a particular consensus standard.

Although aircraft issued special airworthiness certificates in the light-sport category would not have a type certificate or be produced under a production certificate, the FAA proposes that these aircraft would meet consensus standards, which would mean an industry-developed consensus airworthiness standard. The light-sport aircraft industry, with FAA participation, would develop an acceptable minimum airworthiness standard for each aircraft class that could be issued a special airworthiness certificate in the light-sport category. The airworthiness standards would govern light-sport aircraft design and performance, quality assurance system requirements, production acceptance test specifications, and continued operational safety monitoring system characteristics. These standards would provide a level of safety that is higher than that provided by the standards permitted for an experimental certificate issued for the purpose of operating amateur-built aircraft under current § 21.191(g).

For aircraft that would be eligible for the special, light-sport aircraft airworthiness certificate, the FAA believes that the use of consensus standards is appropriate. The FAA has made this determination in accordance with Office of Management and Budget (OMB) Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities," dated February 10, 1998. Specifically, the FAA believes that this determination is consistent with a primary goal of the government in using voluntary consensus standards-reduced regulatory development costs to the

government and reduced regulatory compliance costs to the industry.

Proposed § 21.186(c)(3) would require the Statement of Compliance to include a statement that the aircraft complies with the current consensus standard identified in proposed § 21.186(c)(2). This would attest to the satisfactory completion of all analyses, tests, and inspections necessary to demonstrate that the aircraft complies with that standard.

Proposed § 21.186(c)(4) would require the Statement of Compliance to include a statement that the manufacturer has found that the specific aircraft conforms to the manufacturer's design data. This determination would be made using a quality system that conforms to the consensus standard. This determination would apply to the aircraft (or kit, when applicable) and its components, including purchased components. Thus, this statement would attest to the existence of a quality assurance system that complies with the consensus standard.

Proposed § 21.186(c)(5) would require the Statement of Compliance to include full identification of the following:

(1) The Pilot Operating Handbook describing the proper methods and procedures for safely operating the aircraft.

(2) The manufacturer's inspection and maintenance program for the continued airworthiness of the aircraft. This would require the manufacturer to establish and make available the technical information necessary to inspect and maintain the aircraft.

(3) The pilot flight training providing information on the model-specific features and characteristics of the aircraft, because the sport pilot certificate would require specific training by make and model. (Without such a manual, a sport pilot would not be able to receive a make and model logbook endorsement and thus could not operate the aircraft.)

Under the proposal, this paragraph would also require the Statement of Compliance to include a statement that the manufacturer would make this information available to any interested party.

Proposed § 21.186(c)(6) would require the Statement of Compliance to fully identify the document describing the system the manufacturer agrees to use for monitoring and correcting safety-of-flight issues. The FAA believes this is an important requirement because light-sport aircraft would not have a type certificate, and therefore, the manufacturer may not have the service difficulty reporting and correcting responsibilities required of a type

certificate holder. The intent of this requirement is to require a system to monitor and correct safety-of-flight issues for these aircraft. By making this statement, the manufacturer would also attest that the manufacturer's continued operational safety monitoring system complies with the consensus standard.

This proposal would establish a requirement for manufacturers to have a system to monitor and correct safety-of-flight issues, because aircraft holding a special, light-sport aircraft airworthiness certificate would not have a type certificate. The manufacturer would be responsible for monitoring and notifying operators to correct unsafe conditions in aircraft that have been issued special airworthiness certificates in the light-sport category for as long as these aircraft are U.S.-registered. The manufacturer also would be responsible for issuing corrective actions in accordance with its program to monitor and correct safety-of-flight issues and would notify the owner of the affected aircraft of the corrective action to resolve problems. The FAA does not normally issue airworthiness directives (AD's) against products without a type certificate. Therefore, to ensure the success of this proposal, the FAA expects manufacturers to implement a vigorous system to monitor and correct safety-of-flight issues. The FAA specifically requests comments on the manner in which the continued airworthiness of light-sport aircraft should be addressed.

To ensure continued airworthiness of the aircraft, the FAA proposes that when an aircraft is certificated, the FAA would assign appropriate operating limitations requiring certain inspections. The operating limitations associated with the airworthiness certificate would specify that the manufacturer's safety-of-flight actions must be complied with. This proposal also addresses how the continued airworthiness would be handled for these aircraft and who would perform the maintenance and inspections to ensure continued airworthiness.

Under this proposal, the owner would ensure that the corrective action is addressed in accordance with the operating limitations proposed for the special, light-sport aircraft airworthiness certificate. Failure to comply with mandatory safety-of-flight actions from the manufacturer would mean that the aircraft is no longer in compliance with the conditions of its airworthiness certificate. However, an operator who chooses not to comply with the manufacturer's program may seek an experimental certificate for the aircraft.

If public safety requires issuance of an AD, the FAA has the ability to issue one; however, the FAA expects that such action would be needed only as a consequence of a serious breakdown in the manufacturer's fulfillment of its responsibilities for maintaining continued airworthiness.

If a manufacturer ceases to exist (or ceases to provide continued airworthiness support), the lack of a responsible party for the continued airworthiness support of in-service aircraft would be a potential safety hazard for the aircraft operator and the public. Thus, the proposal would permit the manufacturer to transfer responsibility for monitoring and correcting safety-of-flight issues to a suitable third party capable of supporting the fleet. The consensus standard would include procedures to ensure that a person acceptable to the FAA can be identified to assume the continuing airworthiness responsibilities of the manufacturers of light-sport aircraft. If an airworthiness issue arises and there is no known responsible person, the FAA could take certificate action against the individual aircraft.

Proposed § 21.186(c)(7) would require the Statement of Compliance to include a statement that the manufacturer would provide the FAA unrestricted access to its facilities, upon request. Access to facilities would include access to design, manufacturing, and quality system data. Because the light-sport aircraft manufacturer would not be required to hold an FAA design or production approval, this requirement would be needed to facilitate the FAA's ability to make any inspections and tests necessary to determine compliance with the provisions of this section. The FAA may also need to preserve this access under its bilateral obligations.

Proposed § 21.186(c)(8) would require a manufacturer's statement that completed (non-kit) aircraft were tested in accordance with a production acceptance test procedure that meets the consensus standard. Furthermore, the manufacturer would be required to make a determination that a completed aircraft is in a condition for safe operation before the FAA could issue an airworthiness certificate. This statement would also attest that the manufacturer has determined that the aircraft's performance is acceptable and that the aircraft is in a condition for safe operation.

Proposed § 21.186(d) would specify the additional requirements that the registered owner must meet to obtain a special airworthiness certificate in the light-sport category when importing a

light-sport aircraft. These requirements are in addition to those in proposed § 21.186(b).

Proposed § 21.186(d)(1) would require the applicant for the special airworthiness certificate to provide evidence that an imported light-sport aircraft was manufactured in a country with which the United States has an agreement for the import/export of that product. This is because the FAA would rely on the CAA's of other countries to assess the airworthiness of these aircraft. The agreement must address aircraft with special airworthiness certificates and the appropriate class of light-sport aircraft for these aircraft to be imported or exported. Typically, these agreements are in the form of Bilateral Airworthiness Agreements or Bilateral Aviation Safety Agreements with Implementation Procedures for Airworthiness, but other types of agreements would be suitable. The FAA would consider agreements that address "all aeronautical products" as being applicable to all classes of light-sport aircraft, including those new classes such as powered parachutes and weight-shift-control aircraft.

Proposed § 21.186(d)(2) would require the applicant for the special airworthiness certificate to provide evidence that the make and model of the aircraft to be imported is eligible for an airworthiness certificate or flight authority in the country of manufacture. This would constitute evidence that the civil aviation authority (CAA) of the country of manufacture has established a proper level of oversight for this type of product and would perform its export bilateral obligations with regard to the continued airworthiness of the product.

Proposed § 21.186(d)(3) would require the applicant for the special airworthiness certificate to provide evidence that the CAA of the country of export has found that the aircraft is in a condition for safe operation. This requirement would be the same for used or new aircraft. However, if a used aircraft is imported from a country that is not the country of manufacture, additional inspection and documentation may be required to demonstrate the airworthiness of the aircraft.

*Proposed section 21.191(i) would establish a new purpose for which the FAA may issue an experimental airworthiness certificate for the purpose of operating light-sport aircraft. Under the proposal, there would be three methods for obtaining an experimental airworthiness certificate for this purpose. Experimental certificates could be issued for: (1) Existing aircraft that exceed the weight, occupant, or*

performance limitations of the current part 103; (2) kit-built light-sport aircraft; and (3) aircraft previously certificated under the proposed § 21.186.

The FAA created this new purpose for the experimental certificate in lieu of combining this purpose with the current purpose of operating amateur-built aircraft. The FAA did not want to have aircraft that could not demonstrate compliance with § 21.191(g) (the 51-percent rule) to be certificated under that paragraph.

The experimental airworthiness certification option set forth in this proposal would be in addition to existing methods of obtaining airworthiness certification. No existing airworthiness certification option would be eliminated or restricted for aircraft that meet the definition of light-sport aircraft. Additionally, this proposal wouldn't affect vehicles eligible to operate under part 103.

Aircraft that otherwise meet the light-sport aircraft definition that are shown via test to have a higher  $V_H$  would not be issued an airworthiness certificate under the terms of this rule. An aircraft would no longer be eligible for the experimental light-sport certificate if it is altered such that it no longer meets the definition of light-sport aircraft. For example, an alteration to a powered aircraft that results in a  $V_H$  greater than 115 kts (e.g., installation of a cruise propeller on an aircraft initially certificated with a climb propeller) would render the aircraft ineligible.

An aircraft issued an experimental, operating light-sport aircraft airworthiness certificate under proposed § 21.191(i) would be issued operating limitations under current § 91.319(b) as part of the certificate. The limitations would address maintenance, flight test programs, operations in various airspace classes, and pilot qualification. Operating limitations would prohibit the operation of experimental light-sport aircraft for compensation or hire, except when operated while conducting flight training in aircraft certificated under proposed § 21.191(i)(1), and also would prohibit rental of these aircraft.

Operating limitations also would address the different purposes for which an experimental certificate would be issued. Operating limitations for existing aircraft that exceed the weight, occupant, or performance limitations of part 103 would be similar to those that currently exist for vehicles operating under part 103, although flight training, under certain circumstances described previously, would be an allowable use. Operating limitations for new aircraft, either assembled from an eligible kit or previously issued a special certificate

under § 21.186, would be similar to those for aircraft issued experimental, operating amateur-built aircraft.

When an experimental, operating light-sport aircraft airworthiness certificate is issued for an aircraft that has not previously completed flight testing, operating limitations would require the owner to complete phase I flight testing to demonstrate that the aircraft is safe for flight. Operating limitations issued for these aircraft would be similar to those currently issued for experimental, amateur-built aircraft. Upon completion of phase I flight test, the pilot should record in the aircraft records that the aircraft meets § 91.319(b). The aircraft would be considered to have completed phase I flight testing if the aircraft has met the phase I flight test requirement at the time of application, and the owner can attest that the aircraft meets the requirements for safe flight and has made the appropriate entry in the aircraft's maintenance record.

The continued airworthiness of light-sport aircraft issued experimental certificates would follow the experience and precedent that has been established for the continued airworthiness of experimental amateur-built aircraft. The aircraft owner would be responsible for ensuring the continued airworthiness of the aircraft. The FAA has not generally issued AD's for aircraft with experimental certificates in the past and expects this policy to continue. Similar to aircraft with special, light-sport aircraft airworthiness certificates, the FAA would issue an AD if public safety requires; however, the FAA expects that such action would be required only as a consequence of a serious breakdown in the manufacturer's fulfillment of its responsibilities for maintaining continued airworthiness.

Under the proposal, there would be three ways a person could obtain an experimental airworthiness certificate for the operation of light-sport aircraft ("experimental light-sport").

Proposed 21.191(i)(1) would establish the eligibility requirements and time frame for the first method of issuing an experimental airworthiness certificate for the operation of light-sport aircraft ("experimental light-sport").

This method would allow a person to obtain an experimental certificate for the operation of light-sport aircraft if that person applies to register the aircraft not later than 24 months after the effective date of the rule. The FAA would have to issue an experimental airworthiness certificate for the aircraft not later than 36 months after the effective date of the rule. This provision would not apply to aircraft that meet the

definition of ultralight vehicle in § 103.1. Light-sport aircraft could be used only for sport and recreation and flight training. However, for 36 months after the effective date of the rule, a person could operate these aircraft for compensation or hire while conducting flight training.

The owner of an aircraft that does not meet the current definition of ultralight vehicle in § 103.1 would be able to obtain an experimental certificate for their aircraft. To get the certificate, the owner would have to apply to the FAA to register the aircraft not later than 24 months after the effective date of the rule. Then, the registered owner would be required to have the aircraft inspected and an airworthiness certificate issued by a qualified representative of the FAA not later than 36 months after the effective date of the rule. The FAA wouldn't issue experimental, operating light-sport aircraft airworthiness certificates under § 21.191(i)(1) after 36 months after the effective date of the final rule.

Once the FAA has inspected the aircraft and determined it is safe to operate, the FAA would issue an experimental, operating light-sport aircraft airworthiness certificate with the appropriate operating limitations. Identification of the aircraft with a data plate per current § 45.11 would be required.

The process for getting an experimental, operating light-sport aircraft airworthiness certificate would be the same for an imported aircraft as for an aircraft manufactured in the United States.

Aircraft certified under this method could be used only for sport and recreation and flight training; however, until 36 months after the effective date of the rule, flight training would be permitted in existing light-sport aircraft that do not meet part 103 (those certificated under proposed § 21.191(i)(1)) and are operated for compensation or hire. Permitting these aircraft to be used for flight training while the aircraft is being used for compensation or hire for a 36-month period would ensure that flight training currently permitted under exemptions could continue while light-sport aircraft manufacturers begin production of aircraft that could be certificated under proposed § 21.186. This 36-month period also would provide industry with time to develop and reach a consensus on the airworthiness standards appropriate for light-sport aircraft. The owner of an aircraft certificated under proposed § 21.191(i) would be authorized to receive flight

training in the aircraft regardless of this 36-month provision.

Persons who currently operate vehicles under a training exemption and who have applied for an aircraft registration would be allowed to continue to operate under the training exemption until the FAA issues an experimental, operating light-sport aircraft airworthiness certificate. Persons operating aircraft under a training exemption would still have to apply for registration and for an airworthiness certificate, as proposed. Persons with vehicles that exceed the weight/occupant limitations of part 103 and who do not hold a training exemption would not be permitted to operate under part 91 until the aircraft is registered and is issued an experimental, operating light-sport aircraft airworthiness certificate. The FAA intends for the experimental, operating light-sport aircraft airworthiness certificate to be for aircraft meeting the criteria for light-sport aircraft that do not currently hold a valid airworthiness certificate and that cannot be operated under the provisions of part 103.

Proposed 21.191(i)(2) would establish the eligibility requirements and time frame for the second method of issuing an experimental airworthiness certificate for the operation of light-sport aircraft [“experimental light-sport”]. A person could obtain an experimental certificate for the operation of light-sport aircraft, if the aircraft was assembled from an eligible kit without the supervision and quality system of the manufacturer. The aircraft could be used only for the purpose of sport and recreation and for receiving flight training.

An aircraft assembled from a kit could alternatively be eligible for an experimental amateur-built certificate, provided the assembler can meet the requirements of § 21.191(g).

A gyroplane kit could not be an eligible kit, because a gyroplane would not be issued an airworthiness certificate in the light-sport category under proposed § 21.186.

Experimental, kit-built aircraft may also benefit from manufacturer support provided to aircraft with special, light-sport aircraft airworthiness certificates.

Proposed 21.191(i)(3) would establish the eligibility requirements and time frame for the third method of issuing an experimental airworthiness certificate for the operation of light-sport aircraft [“experimental light-sport”]. In this method a person could obtain an experimental certificate for the operation of light-sport aircraft if the aircraft previously was issued a special

airworthiness certificate in the light-sport category under § 21.186. These aircraft also could be used only for sport and recreation and flight training, even if they were previously operated for compensation or hire while conducting flight training or used as rental aircraft.

This method is intended to permit aircraft previously issued a special, light-sport aircraft airworthiness certificate under proposed § 21.186 that no longer meet the operating limitations of proposed § 91.327 to be certificated for this purpose. The operating limitations would then be to those of current § 91.319(b).

An aircraft that did not comply with a manufacturer’s mandatory safety of flight bulletin or had unauthorized alterations would be eligible for the experimental certificate using this method.

*Proposed section 21.193(e)* would include general requirements for registered owners who seek to obtain an experimental certificate for a light-sport aircraft under proposed § 21.191(i)(2) assembled from a kit. This section has similar requirements to those of § 21.186(b) for aircraft eligible for special light-sport airworthiness certificates.

Proposed § 21.193(e)(1) would define the requirements that an eligible kit must meet. A kit would be considered eligible if the aircraft make and model previously has been issued a special airworthiness certificate in the light-sport category and that aircraft was manufactured and assembled by the aircraft kit manufacturer. This requires that the manufacturer has completed the process of designing, manufacturing, assembling, and testing the same make and model aircraft.

Under the proposal, the owner would have to provide evidence that the aircraft was assembled per the kit manufacturer’s instructions, and would have the aircraft inspected by the FAA. The applicant also would need to provide the Statement of Compliance issued by the manufacturer. Once the aircraft has been inspected and determined to be safe to operate, the FAA would issue an experimental, operating light-sport airworthiness certificate with the appropriate operating limitations. Aircraft assembled from a kit and imported complete into the United States would not be eligible for an experimental certificate under proposed § 21.191(i)(2). This person could obtain only an experimental airworthiness certificate if the aircraft is eligible under § 21.191(g).

Proposed § 21.193(e)(2) would require registered owner to have a copy of the Pilot Operating Handbook. This would

provide the registered owner access to information on how to safely operate the aircraft.

Proposed § 21.193(e)(3) would require the registered owner to have a copy of the maintenance and inspection procedures for the aircraft. This would provide the registered owner access to information on how to safely maintain the aircraft.

Proposed § 21.193(e)(4) would require the registered owner to provide a Statement of Compliance for the design and manufacture of the kit aircraft. This Statement would include all the items required on a Statement of Compliance for a special light-sport aircraft, except for a statement that it has been tested in accordance with a production acceptance procedure. This statement would not be required because the Statement of Compliance for a kit would address only the work performed by or under the control of the kit manufacturer. In lieu of a statement that the aircraft has been tested in accordance with a production acceptance procedure, this proposal would require the kit manufacturer to provide assembly instructions for the aircraft kit. The instructions should provide enough detail so that if the kit were assembled by a qualified person, the completed aircraft would perform acceptably and be in a condition for safe operation.

Proposed § 21.193(e)(5) would require the registered owner to present the completed assembly instructions used to assemble the aircraft to the FAA.

Proposed § 21.193(e)(6) would require that an imported kit be manufactured in a country that has an agreement with the United States for the import and export of the aircraft to be made from the kit. This would preclude the manufacture of kits in countries that the United States has not assessed with respect to the manufacture of these kits.

#### C. What Are the Proposed Changes to 14 CFR Part 43?

*Proposed section 43.1* would be revised to reflect that part 43 would not apply to an aircraft for which a special airworthiness certificate in the light-sport category was issued. The FAA has made this determination because these aircraft would not be issued a type certificate.

#### D. What Are the Proposed Changes to 14 CFR Part 45?

The FAA is proposing revisions to part 45 to require aircraft registration markings for powered parachutes and weight-shift-control aircraft. The revisions would set forth requirements

for the size of these registration marks and how they should be displayed.

*Proposed section 45.27* would require each operator of a powered parachute or weight-shift-control aircraft to display registration marks. The marks would be required to be displayed horizontally and in two diametrically opposite positions on any structural member or airfoil.

*Proposed section 45.29* would permit an aircraft issued an experimental certificate for the purpose of operating a light-sport aircraft to display marks at least 3 inches high when the maximum cruising speed of the aircraft does not exceed 180 kts CAS. This proposal is identical to that contained in § 45.29(b)(iii) for exhibition aircraft and amateur-built aircraft. The proposal also would require marks displayed on all powered parachutes and weight-shift-control aircraft. This proposal is similar to the current requirement for airships, balloons, and non-spherical balloons.

#### E. What Are the Proposed Changes to 14 CFR Part 61?

The FAA is proposing a new sport pilot certificate and flight instructor certificate with a sport pilot rating. The proposal would establish two new aircraft category and class ratings, weight-shift-control (with land and sea class ratings), and powered parachute, in addition to new training and certification requirements for these new aircraft ratings at the sport pilot and private pilot levels.

The FAA would establish a Special Federal Aviation Regulation (SFAR) under part 61 that would apply to the issuance of a student pilot certificate to operate light-sport aircraft, a sport pilot certificate, a flight instructor certificate with a sport pilot rating, and ground instructor privileges for these certificates. The FAA's decision to propose many of these rule changes in the format of an SFAR was based on a number of factors. First, the proposed SFAR would consolidate all requirements for sport pilot certification, flight instructor certification with a sport pilot rating, student pilot certification to operate a light-sport aircraft, and ground instructor privileges applicable to certificates issued under the SFAR in one location. The FAA believes that this approach would make it easier for you to use the certification rules that apply to you. Additionally, because this proposal would be a significant amendment to part 61, we see this as an opportunity to revise our regulations using plain language writing techniques, which would make the regulations clearer to you. Finally, it provides us

with greater flexibility to further refine the new regulations over a period of time. We will evaluate the impact of the SFAR after we have had operational experience with the regulations. At that point, we will determine the most appropriate location for the provisions of the SFAR and we expect to integrate them into the permanent portion of 14 CFR part 61. The proposed certification of sport pilots is a new concept that may require revisions once it is put into place. Although the question-and-answer format in the rule text is a departure from what you may be used to, it is easier to understand and apply. The FAA specifically requests that you comment on the language of the NPRM and on the proposal to incorporate these rules initially as an SFAR, rather than in the body of part 61.

#### Part 61 SFAR No. 89

##### General

*Proposed section 1* would set forth the scope of SFAR 89. It would state that the SFAR would establish the requirements to apply for a student pilot certificate to operate a light-sport aircraft, a sport pilot certificate, and a flight instructor certificate with a sport pilot rating. It would also establish requirements for ground instructors who would provide training for a sport pilot certificate or a flight instructor certificate with a sport pilot rating.

*Proposed section 3* of SFAR 89 would list the eligibility requirements for student pilot, sport pilot, and flight instructor certificates.

If you are an applicant for a student pilot certificate, you would have to be at least 16 years old to operate a light-sport aircraft other than a glider or a balloon. You would have to be at least 14 years old to apply for a certificate to operate a light-sport glider or balloon.

If you are an applicant for a sport pilot certificate, you would have to be at least 17 years old to operate light-sport aircraft other than a glider or balloon. You would have to be at least 16 years old to apply for a certificate to operate a light-sport glider or balloon. These age limitations are consistent with the current age requirements for recreational and private pilot certificates.

If you are an applicant for a flight instructor certificate with a sport pilot rating, you would have to be at least 18 years old. This age requirement is consistent with age requirements for all other flight instructor certificates.

The FAA is not considering changes to the existing age requirements, because there has not been any indication of a decrease in the level of

safety due to the age of a pilot or flight instructor.

Student pilots, sport pilots, and flight instructors would have to be able to read, speak, write, and understand the English language, which currently is required of all student pilots, private pilots, and flight instructors. The FAA may place operating limitations on you, as necessary, for the safe operation of light-sport aircraft. This procedure would be identical to that used for current student pilot, private pilot, and flight instructor applicants.

*Proposed section 5* would indicate that the SFAR would remain effective until superseded or rescinded. The FAA expects to incorporate the provisions of SFAR 89 into the permanent portions of 14 CFR part 61 after evaluating the operational needs of the SFAR.

*Proposed section 7* of SFAR 89 would establish that a sport pilot certificate issued under this SFAR would not expire.

*Proposed section 9* of SFAR 89 would indicate that the term "light-sport aircraft," as used in the SFAR, would be defined in § 1.1. This definition would provide the criteria for a light-sport aircraft and which aircraft you would be authorized to fly. A light-sport aircraft may hold either a standard or special airworthiness certificate.

*Proposed section 11* of SFAR 89 would indicate that the term "authorized instructor," as used in this SFAR, would be defined under § 61.1. The definition of authorized instructor would be amended to include a flight instructor with a sport pilot rating.

*Proposed section 13* of SFAR 89 would require that as a sport pilot, you would have to comply with parts 61 and 91 and any other applicable regulations under 14 CFR.

*Proposed section 15* of SFAR 89 would require you, while exercising the privileges of a student pilot operating light-sport aircraft or a sport pilot (other than a glider or balloon), to hold and possess either a current and valid U.S. driver's license or a current and valid airman medical certificate issued under part 67. The FAA would consider a U.S. driver's license to be any license to operate a motor vehicle issued by a state, the District of Columbia, Puerto Rico, a territory, a possession, or the Federal government. Consistent with all other pilot certificates, if you are a student pilot or a sport pilot operating a light-sport balloon or glider, you would not be required to hold a current and valid U.S. driver's license or a current and valid airman medical certificate.

If you do not possess a current and valid airman medical certificate and

your driver's license is revoked or rescinded for any offense, you couldn't exercise the privileges of your sport pilot certificate until your license is reinstated. If you choose to use your driver's license to satisfy the medical requirements for your sport pilot certificate (or a student pilot operating light-sport aircraft), your driver's license must be in your personal possession at all times when you conduct operations under your sport pilot certificate. Similarly, if you choose to use a current and valid airman medical certificate to meet the medical requirements for your sport pilot certificate, you would be required to carry that medical certificate at all times when you conduct operations under your certificate.

It should be noted that any restrictions on a U.S. driver's license (e.g., vision restrictions) also would apply when exercising the privileges of a student pilot certificate operating light-sport aircraft or a sport pilot certificate.

The FAA proposes to require a pilot to hold and possess a U.S. driver's license because it provides generally accepted evidence of basic health. Further, the FAA believes the medical standards that permit an individual to drive an automobile in close proximity to other automobiles at high speeds provides an adequate level of safety to operate a light-sport aircraft.

Although the process for applying for a driver's license varies throughout the United States, U.S. issuing authorities typically require applicants to verify some basic level of health on their various driver's license applications. Each State requires an applicant to meet minimum vision standards. Additionally, many authorities require applicants to provide a summary of any medical condition(s) that might preclude them from obtaining a U.S. driver's license in that jurisdiction. In the District of Columbia, for example, applicants for a driver's license are asked to indicate whether they have ever been treated for any of the following: stroke or paralysis; loss of function in an extremity; alcoholism or drug abuse; a mental disorder; a brain disorder; diabetes; glaucoma; cataracts or other eye diseases; any heart disorder; seizure disorder or fainting spells; poor muscle control, or dizzy spells. If a driver's license applicant affirms having received treatment for any of these conditions, a licensed physician must further evaluate whether that person should be allowed to drive a motor vehicle. The FAA believes that the level of health evidenced by a U.S. driver's license is a necessary

prerequisite to safely operate a light-sport aircraft.

If the U.S. driver's license of a pilot who does not possess a current and valid airman medical certificate is revoked or rescinded for any offense—including, among others, substance abuse, excessive speeding, careless and reckless operation of a vehicle, numerous traffic violations—the individual's pilot certificate would not be valid until the license is reinstated. Unless and until the U.S. driver's license is reinstated, a pilot would not be authorized to operate a light sport aircraft. If an individual is precluded from driving an automobile, then the FAA believes that the individual should not operate a light-sport aircraft “a more complex and demanding activity.

It is possible that a student pilot or a sport pilot whose U.S. driver's license has been revoked or rescinded could seek airman medical certification as a means to obtaining certification to operate light-sport aircraft. However, on FAA Form 8500-8, Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate, under Items 18 and 20, applicants must state whether their U.S. driver's license has been denied, suspended, cancelled, or revoked. An applicant must authorize the FAA, as set forth under existing § 67.7, access to search the National Driver Register to obtain information on and condition(s) that might preclude the issuance of an airman medical certificate.

Under the proposal if a pilot knows or has reason to know of any medical condition that would affect his or her ability to operate a light-sport aircraft, then the pilot would have to refrain from acting as a pilot in command. Data available in the National Aviation Safety Data Analysis Center (NASDAC) accident database indicates that a pilots medical condition is rarely a causal factor in general aviation accidents. A review of balloon and glider accidents contained in that database from 1990 to 2000 revealed that only two accidents occurred because of a pilot's medical condition. The absence of any medical certificate requirement for persons operating balloons and gliders has not resulted in a demonstrated reduction in safety.

The ARAC, in its findings, provided accident summary data from 1986 through 1992 indicating that the percentage of aviation accidents involving medical causal factors is lower for those activities that do not require medical certificates than for those activities that do. During this 7-year timeframe, the ARAC indicates there were 761 accidents in lighter-than-

air aircraft and gliders—operations that do not require airman medical certification. Only one of the 761 accidents showed a medical cause, according to ARAC (slightly more than one-tenth of one percent of total accidents). For general aviation operations requiring airman medical certification, ARAC indicates there were 46,976 total accidents, 99 of which (slightly more than one-fifth of one percent) showed a medical cause. The FAA believes, therefore, that medical conditions are not a significant cause of accidents in aircraft that are used for sport and recreational purposes.

Copies of the following items are filed in the docket for this rulemaking: examples of medical questions asked on selected U.S. driver's license application forms and on FAA Form 8500-8; NASDAC accident data; and ARAC's final recommendation containing it's accident data findings.

*Proposed section 17 of SFAR 89* consists of a table that sets forth the circumstances under which a medical deficiency would preclude a student pilot or sport pilot from operating a light-sport aircraft. These provisions would be consistent with the prohibitions against operating with a medical deficiency specified in § 61.53.

#### Student Pilot Certificate—Operating Light-Sport Aircraft

*Proposed section 31 of SFAR 89* consists of a table that sets forth the procedures that you would follow when you apply for a student pilot certificate to operate a light-sport aircraft. This proposed process to obtain a student pilot certificate to operate a light-sport aircraft is consistent with current part 61 rules to obtain a student pilot certificate.

*Proposed section 33 of SFAR 89* would establish that you could not operate a light-sport aircraft in solo flight unless you have met the requirements under § 61.87(a)–(c). Those requirements are the general, aeronautical knowledge, and pre-solo flight training requirements for all student pilots. Additionally, the proposal would establish that you must meet the existing student pilot requirements under § 61.87(d), (g), and (i)–(k). Those requirements are the maneuvers and procedures for your pre-solo flight training in a single-engine airplane, glider, gyroplane, airship, or balloon. This proposal would establish new maneuvers and procedures for pre-solo flight training in a powered parachute or weight-shift-control aircraft. These maneuvers and procedures would be similar to those specified in current § 61.87 with certain

variations due to the unique nature of those aircraft.

This proposal also would establish that a student pilot may not operate a light-sport aircraft on a solo cross-country flight, unless he or she meets the general solo cross-country requirements of current § 61.93(a) and receives the endorsements specified in § 61.93(b)–(c).

This proposal also would establish the maneuvers and procedures for solo cross-country flight training in a single-engine airplane, glider, gyroplane, or airship. A student pilot would have to receive and log flight training for the maneuvers and procedures specified in § 61.93(e), (h), (j), and (k), as applicable. This proposal also would establish new maneuvers and procedures for solo cross-country flight training in a powered parachute or weight-shift-control aircraft. There would be no cross-country requirements for balloons.

*Proposed section 35 of SFAR 89* would set forth limits for you to operate light-sport aircraft as a student pilot. You would have to comply with §§ 61.87(l), 61.89(a)(1)–(4), (a)(7), and (a)(8). You would be restricted from operating a light-sport aircraft that has a VH that exceeds 87 knots CAS. The FAA believes that limiting a student pilot to this airspeed would establish an acceptable level of safety in view of the minimal amount of training required to be eligible for a student pilot certificate.

Additionally, you could not operate a light-sport aircraft with a flight or surface visibility of less than 3 statute miles, at night, at an altitude of more than 10,000 feet MSL or 2,000 feet AGL (whichever is higher), or outside the United States. However, you could operate light-sport aircraft on a solo flight in Class B, C, or D airspace if you have received the ground and flight training from an authorized instructor. You must also receive a logbook endorsement specifying that you are proficient to operate in the specific airspace or the airport at which you intend to fly solo.

Current part 103 operating rules permit an ultralight pilot to operate in Class B, C, or D airspace only if the area over which the pilot operates is not congested, and the pilot has obtained prior authorization from ATC. The FAA does not want to restrict you from operating light-sport aircraft in the same airspace, but in the interest of safety, decided to require you to get additional training and an endorsement from an authorized instructor if you want to operate and carry passengers in this airspace.

You would have to comply with any operating limitation placed on the light-

sport aircraft's airworthiness certificate. You also would have to comply with any limitation or endorsement on your pilot certificate, airman medical certificate, U.S. driver's license, or any other limitation or endorsement from an authorized instructor.

You would have to hold a student pilot certificate, FAA Form 8710–2, "Student Pilot Certificate" or FAA Form 8420–2 "Medical Certificate—Class and Student Pilot Certificate," identical to all other student pilots. All applicable endorsements for your student pilot certificate and logbooks would apply. The FAA would revise AC No. 61–65 "Certification: Pilots and Flight and Ground Instructors" to address the new endorsements for a student pilot operating light-sport aircraft.

*Proposed section 37 of SFAR 89* would establish how to obtain a logbook endorsement for operations in Class B, C, or D airspace and at airports located in Class B, C, or D airspace. The FAA would require this endorsement within 90 days before you conduct flights in that airspace or at those airports. This proposal is consistent with the requirements established for other student pilots operating in Class B airspace. Persons operating ultralight vehicles are authorized to fly into Class B, C, or D airspace that is not over a congested area without training, but they must have ATC prior authorization. The new requirement has the potential to raise the level of safety for pilots operating similar aircraft in this airspace by requiring training before conducting such operations.

#### Sport Pilot Certificate

*Proposed section 51 of SFAR 89* would establish the aeronautical experience requirements needed for a sport pilot certificate. You would have to receive and log ground training from an authorized instructor or complete a home-study course on aeronautical knowledge areas that would be applicable to the light-sport aircraft category or class privilege you seek. Your instructor would review your home-study course to determine that it adequately addresses the aeronautical knowledge areas. The proposed aeronautical knowledge areas are partly based on existing criteria for part 103 FAA-recognized training programs, and partly based on existing criteria contained in part 61 for existing pilot certificates. The FAA believes the training in these subject areas would be appropriate for an applicant for a sport pilot certificate and they reflect the simplicity of the aircraft and the less complex operating environment in which a sport pilot would operate.

There would be no requirement for training on radio communications with ATC or for operations in Class B, C, or D airspace, because operation in that airspace requires an additional endorsement that has specific training requirements under proposed section 37 of SFAR 89.

*Proposed section 53 of SFAR 89* would establish that you would have to receive and log ground and flight training from an authorized instructor on the areas of operations applicable to the light-sport aircraft category or class privileges you seek. These areas would be consistent with the flight proficiency requirements established for higher certificate levels under part 61. The FAA would establish new flight proficiency requirements for weight-shift-control aircraft and powered parachutes. The flight proficiency requirements are partly based on existing criteria for part 103 FAA-recognized training programs, and partly based on criteria contained in part 61 for existing pilot certificates.

*Proposed section 55 of SFAR 89* would set forth the aeronautical experience requirements for your sport pilot certificate. To obtain your sport pilot certificate for all category and/or class privileges, with some variations for lighter-than-air aircraft and gliders, you would have to log at least 20 hours of flight time. This experience would include aeronautical experience requirements for weight-shift-control aircraft and powered parachutes. This experience generally would include at least 15 hours of flight training in an aircraft from an authorized instructor and 5 hours of solo flight training in the areas of operation established for a student pilot operating light-sport aircraft. The training for each category, with some variations for the different categories of aircraft, would include at least 2 hours of cross-country flight training; 10 takeoffs and landings to a full stop; 1 solo cross-country flight; and 3 hours of flight training in preparation for the practical test.

The proposal would specify cross-country distances for each category of aircraft. Due to the slow operating speeds of powered parachutes, the FAA would amend the definition of "cross-country time" in § 61.1(b)(3). Any flight over 15 nm would be considered a cross-country flight for training purposes in a powered parachute. The aeronautical experience requirements for a sport pilot are partly based on existing criteria for part 103 FAA-recognized training programs, and partly based on criteria contained in part 61 for existing pilot certificates.

The FAA considered, but did not agree with, the ARAC proposal, that cross-country flight should be permitted through a separate endorsement, so that cross-country privileges would be needed only by those sport pilots who choose to operate outside the small radius of their local airport. However, the FAA concluded that most ultralight operators conduct short cross-country flights. Therefore, to ensure a minimum level of safety is met for carrying a passenger, the FAA is proposing to require cross-country training for all sport pilot certificates. The FAA notes that many instructors within FAA-recognized ultralight organizations conduct some cross-country training, even though it is not required by all of those organizations. The FAA determined that, unless a sport pilot receives a minimum amount of training on cross-country procedures, the pilot would not have the skills necessary to navigate properly and avoid airspace that he or she would be prohibited from entering.

*Proposed section 57 of SFAR 89* would establish the tests that you would have to take to obtain a sport pilot certificate. You would have to pass a test on the aeronautical knowledge areas, after receiving a logbook endorsement from an authorized instructor certifying that you are prepared for the knowledge test. That instructor would have conducted your training or reviewed and evaluated your home-study course on the aeronautical knowledge areas. If you completed a home-study course, the authorized instructor would be required to review your home-study course to ensure that it prepared you for the knowledge test on the aeronautical knowledge areas listed in section 51 of the SFAR. The FAA would develop this general knowledge test with industry input; it would not be aircraft-category specific.

You would have to pass the required practical test on the areas of operation that apply to the light-sport aircraft privilege you seek. You would have to receive a logbook endorsement from an authorized instructor certifying that you have met the applicable aeronautical knowledge and experience requirements and are prepared for the required practical test. That instructor would have conducted the required flight training in preparation for the practical test on the areas of operation that apply to the light-sport aircraft privilege you seek. An FAA designated pilot examiner or an FAA aviation safety inspector who is qualified in that category, class, and make and model of light-sport aircraft would conduct this practical test. After successfully passing the practical test

for a sport pilot certificate, you would be issued a pilot certificate and the FAA designated pilot examiner or FAA aviation safety inspector would make the appropriate logbook endorsements establishing that you are proficient in this category, class and make and model of light-sport aircraft.

The FAA envisions that the initial cadre of FAA-designated examiners would come from the group of "advanced" flight instructors established in FAA-recognized ultralight organizations, or existing designated pilot examiners who are currently qualified in these types of light-sport aircraft. These advanced flight instructors serve in a similar role as pilot examiners for the FAA-recognized ultralight organizations. The initial cadre of FAA-designated pilot examiners authorized to certificate these new pilots would receive standardized FAA-designated examiner training and would be designated under 14 CFR part 183 as a representative of the FAA. Although an FAA aviation safety inspector would still have the authority to give the practical test for the certification of a sport pilot or flight instructor with a sport pilot rating, the FAA expects that most tests would be administered by FAA-designated examiners.

The FAA would develop Practical Test Standards for each category and class of aircraft for the sport pilot certificate. The FAA intends to seek industry input in developing these standards. Additionally, the FAA would amend AC No. 61-65, "Certification: Pilots and Flight and Ground Instructors," to address the new endorsements that would be necessary for this proposed certificate.

*Proposed sections 59 and 61 of SFAR 89* would establish that your sport pilot certificate would not list aircraft category and class ratings. You would receive logbook endorsements for each category and class of light-sport aircraft that you are entitled to operate. The designated pilot examiner or FAA inspector who conducted your practical test would provide your initial endorsements.

You would be required to have a logbook endorsement from an authorized instructor in your logbook for each additional category and class of light-sport aircraft you operate. You must also have a logbook endorsement for each additional make and model of light-sport aircraft that you operate.

The ARAC's proposal called for the establishment of "type ratings" in addition to category and class ratings for these new light-sport aircraft. The ARAC thought this was necessary

because the listed "classes of light-sport aircraft" may be further divided to address such dissimilar features as pusher and tractor engine locations; single- and double-surface wings; conventional tail, canard tail, and tailless aircraft in many of the above categories; and tricycle or conventional landing gear configurations. The FAA does not think that it is necessary to establish ratings on the sport pilot certificate to operate various types of light-sport aircraft. However, the FAA believes that a pilot should be required to demonstrate proficiency to operate each aircraft and is proposing to require a one-time logbook endorsement by an authorized instructor for each additional make and model of light-sport aircraft the sport pilot wishes to fly, in lieu of the ARAC "type rating" recommendation. The proposed training and one-time logbook endorsement requirement would ensure that any time a pilot exercising sport pilot privileges chooses to fly a new make and model of aircraft within a specific category he or she would receive the appropriate training.

This new concept requiring a logbook endorsement for each make and model of light-sport aircraft would ensure that if you fly any of the unique light-sport aircraft that fall into the broad aircraft categories and class ratings of aircraft established in § 61.5, you would receive training and demonstrate a minimum level of proficiency to an authorized instructor.

The FAA will work with industry to develop procedures to allow flight instructors with a sport pilot rating to issue logbook endorsements for a particular group of make and model aircraft having similar operating characteristics. This process should reduce the administrative burden of obtaining logbook endorsements for all make and models of aircraft the pilot wishes to fly. The FAA has implemented a similar policy for check airmen and pilots operating under part 135. The FAA specifically requests comments on whether the make and model endorsements for sport pilots is in the public interest.

*Proposed sections 63 and 65 of SFAR 89* would establish how you receive sport pilot privileges to operate additional categories, classes, or makes and models of light-sport aircraft.

If you want to fly an additional category or class of light-sport aircraft, you would have to receive training from an authorized instructor in the specific make and model aircraft you intend to operate. That instructor would endorse your logbook, certifying that you meet the aeronautical experience

requirements. After completing this training, you would be required to receive a proficiency check and an additional logbook endorsement from a different authorized instructor. This instructor's endorsement would certify you are proficient on the areas of operation for the additional light-sport aircraft category or class and make and model privilege you seek. Having a second instructor conduct your proficiency check would serve as an independent verification of your abilities.

If you want to fly an additional make and model of light-sport aircraft within the same category of aircraft for which you already have privileges, you would have to receive training from an authorized instructor on the specific training requirements for the light-sport aircraft make and model you seek. Then, that authorized instructor would endorse your logbook certifying that you are proficient in that make and model of light-sport aircraft. You would not need the additional proficiency check required for the operation of an additional category or class of aircraft. This is similar to the "type rating" concept proposed by ARAC.

This new concept of requiring logbook endorsements authorizing privileges, rather than obtaining ratings through flight tests with FAA personnel or designated examiners, would make the sport pilot certificate more affordable than a recreational pilot or a private pilot certificate. It also would significantly reduce the number of FAA aviation safety inspectors and FAA designated examiners needed to support airman certification.

*Proposed section 67 of SFAR 89* would establish that as a sport pilot, you would have to carry on all flights your pilot certificate and a logbook or documented proof of appropriate endorsements specified in § 61.31, for example, a tail-wheel endorsement. This is necessary because you would not carry ratings listed on the certificate like other pilot certificates. Your sport pilot privileges would be documented through logbook endorsements. The FAA would permit other "documented proof," because in some light-sport aircraft it may be impracticable to carry a logbook. Documented proof could include a photocopy of your logbook endorsements or a preprinted form that includes your endorsement.

#### Privileges and Limits of Holders of a Sport Pilot Certificate

*Proposed sections 71–79 of the SFAR* would contain your sport pilot certificate privileges and limits. You would be permitted to operate a light-

sport aircraft, as defined in § 1.1, for which you hold the proper logbook endorsements. You could not operate light-sport aircraft at night, in Class A airspace; however, you could operate in class B, C, or D airspace if you receive the ground and flight training and a logbook endorsement. You also would not be permitted to operate an aircraft outside the United States unless you have prior authorization from the country in which you want to operate. Your sport pilot certificate does not meet minimum ICAO requirements and would carry the limitation "Holder does not meet ICAO requirements."

You would be required to operate a light-sport aircraft in accordance with part 91 but could not carry more than one passenger, or operate for a purpose other than sport and recreational flying, such as carrying a passenger for compensation or hire. You could share the operating expenses of a flight with a passenger, and you could demonstrate an aircraft in flight to a prospective buyer unless you are an aircraft salesperson. You could not to tow any object.

The FAA also considered permitting you to be reimbursed for aircraft operating expenses that are directly related to search and location operations. However, the FAA believes that search and location operations go beyond the scope of sport and recreational flying and that this privilege should be limited to pilots who hold at least a private pilot certificate.

You also could not operate light-sport aircraft: (1) In a passenger-carrying airlift sponsored by a charitable organization; (2) at an altitude of more than 10,000 feet MSL or 2,000 feet AGL, whichever is higher; (3) when the flight or surface visibility is less than 3 statute miles; (4) without visual reference to the surface; (5) that exceeds a  $V_H$  of 87 kts CAS (unless the pilot received ground and flight training and a logbook endorsement); (6) contrary to any limitations placed on an aircraft's airworthiness certificate; or (7) contrary to any limitation or endorsement on that person's pilot certificate, airman medical certificate, U.S. driver's license or any other limitation or endorsement from an authorized instructor.

You would not be authorized to fly at night, which currently is defined in § 1.1 as the time between the end of evening civil twilight and the beginning of morning civil twilight as published in the American Almanac. An ultralight vehicle can usually operate only between sunrise and sunset, which is more restrictive than the provisions for a sport pilot. However, when the vehicle

is operated in uncontrolled airspace and with anti-collision lights, it can be operated during the twilight periods 30 minutes before official sunrise and 30 minutes after official sunset.

Unlike ultralight vehicles, light-sport aircraft could operate in congested areas and controlled airspace. Therefore, you would be permitted to operate light-sport aircraft at night only if it is equipped with lights, as required by § 91.209 and you are appropriately certificated. Although you could not operate at night with a sport pilot certificate, you could operate, even light-sport aircraft, at night with a private pilot certificate.

The FAA would allow you to fly over congested areas, which is not allowed under part 103. However, any particular light-sport aircraft may have operating limitations that prohibit such operations. You could not conduct any operation prohibited by the operating limitations of the light-sport aircraft.

As a sport pilot, you would have to comply with any limits on your pilot certificate, airman medical certificate, and driver's license (if your driver's license is being used to meet the medical requirements of the SFAR). For example, if your driver's license requires you to wear glasses while driving, you also would have to wear them while flying.

*Proposed section 81 of SFAR 89* would establish how you receive a logbook endorsement to operate in Class B, C, or D airspace. You would receive specific ground and flight training on the use of radios, communications, navigation systems/facilities, and radar services; operations at airports with an operating control tower; and operations within Class B, C, or D airspace. The authorized instructor who conducts your training would then endorse your logbook with a one-time logbook endorsement. Similar to current part 103 and the recreational pilot certificate, you couldn't operate in Class A airspace, because your sport pilot certificate wouldn't be issued with an instrument rating.

If you want to operate in airspace that requires communication with ATC, you would complete the training requirements above; however, the FAA would not require this training for you to get your sport pilot certificate. You can avoid some training costs by choosing to operate outside that airspace. The FAA believes that many sport pilots would operate outside of this type of airspace, because their aircraft is not properly equipped for operations within this airspace, because of the aircraft's operating limitations, or by choice. Many pilots choose not to

equip their aircraft for operations in this airspace due to the additional costs to purchase, install, and maintain the equipment, in addition to the extra weight it adds.

*Proposed section 83 of SFAR 89* would establish how to receive a logbook endorsement to operate a light-sport aircraft exceeding a  $V_H$  of 87 knots CAS. You would receive and log ground and flight training from an authorized instructor, and then receive a one-time logbook endorsement certifying proficiency in the operation of this type of light-sport aircraft.

Again, by establishing separate training requirements that can be accomplished at any time, the FAA would relieve you from incurring these training costs if you chose not to operate in this type of aircraft. The FAA believes that most light-sport aircraft a sport pilot would operate would not exceed a  $V_H$  of 87 knots. Therefore the FAA is not proposing more extensive training requirements for the issuance of the sport pilot certificate than would be necessary to operate aircraft exceeding a  $V_H$  of 87 knots.

The FAA recognizes the need to allow for aircraft with a  $V_H$  as high as 115 knots to meet the definition of a light-sport aircraft, but we also recognize the need for additional training requirements and a one-time logbook endorsement to provide the appropriate level of safety for operation of these aircraft. This concept is similar to the requirements specified in § 61.31 for additional training and endorsements (e.g., high-performance airplanes, complex airplanes).

The FAA considered proposing no maximum  $V_H$  for these aircraft, but determined that aircraft that exceed a  $V_H$  of 115 kts CAS would not be suited solely for sport and recreational operations. The FAA believes that the operation of aircraft that exceed a  $V_H$  of 115 kts is more appropriate for persons who meet the training and experience requirements of at least a recreational pilot certificate. When a pilot has the ability to use an aircraft primarily for other than sport and recreational purposes, the FAA believes that pilot should have the minimum training required at the private pilot certificate level. That training provides basic instrument training, night training, and additional navigation and cross-country training. Pilots who use aircraft for other than sport and recreational purposes need more training and experience because they are more likely to encounter flight into marginal weather, inadvertent flight into instrument meteorological conditions, or night flight.

#### Transitioning to a Sport Pilot Certificate

*Proposed section 91 of SFAR 89* would allow you to exercise the privileges of the holder of a sport pilot certificate if you already hold a current and valid private pilot certificate, or higher, issued under part 61. You would not be required to demonstrate any further level of proficiency to exercise the privileges of a sport pilot certificate. However, you would be limited to the aircraft category and class ratings listed on your private pilot certificate, or higher, when exercising sport pilot privileges. You also would have to meet the training and endorsement requirements in proposed sections 63 and 65 of the SFAR for any additional categories or classes, and makes and models of light-sport aircraft you currently are not rated in and wish to fly. If you have not acted as pilot in command of a specific make and model aircraft, you would be required to receive training on the make and model of light-sport aircraft you wish to fly. You would have to log your pilot-in-command time in accordance with § 61.51. For aircraft manufactured after the effective date of the rule, the manufacturer would provide a flight training manual that would include specific training requirements. If you meet these specific training requirements, you would satisfy the training required by this section for the operation of a particular make and model of light-sport aircraft.

You also would need a logbook endorsement from an authorized instructor who certifies you are proficient to fly that make and model aircraft. You also would have to carry your logbook or documented proof of endorsements to verify the proper endorsements.

*Proposed section 93 of SFAR 89* would set forth procedures for you to obtain a sport pilot certificate if you have been flying ultralight vehicles under part 103 but do not hold a pilot certificate issued under part 61. If you are an ultralight pilot registered with an FAA-recognized ultralight organization before 24 months after the effective date of the rule, you would have to meet minimum age, language, and medical requirements established in proposed sections 3 and 15 of the SFAR. You also would have to pass the appropriate knowledge and practical tests for the certificate. You would not have to meet the aeronautical knowledge, flight proficiency, and aeronautical experience requirements in proposed sections 51–55 of the SFAR. The FAA has concluded that if you have successfully completed the training

conducted by an FAA-recognized ultralight organization and you are a pilot registered with that organization, you would meet the level of experience required by proposed sections 51–55 of the SFAR. You wouldn't need a separate endorsement from an authorized instructor recommending you for the knowledge and practical test.

The proposal would require you to obtain a notarized copy of your ultralight pilot records from the FAA-recognized ultralight organization. Those records would document that you are a registered ultralight pilot with that FAA-recognized ultralight organization; and would list each category and class of ultralight vehicle that the organization recognizes that you are qualified to operate. You would still have to pass the knowledge test and practical test for a sport pilot certificate.

The proposal would require you to present records, along with the results from the knowledge test, to a designated pilot examiner or FAA inspector when applying for your sport pilot certificate. The designated pilot examiner or FAA inspector would review these records and document the appropriate endorsements for each category and class of ultralight vehicle that you are qualified to operate in your logbook, after you successfully complete the practical test.

*Proposed section 93(b) of the SFAR* would address ultralight pilots registered with an FAA-recognized ultralight organization after 24 months after the effective date of the rule. These pilots would be required to meet the same requirements set forth in proposed section 93(a) of the SFAR. However those pilots would be required to meet proposed sections 51–55 of SFAR 89. In meeting the requirements, a pilot would be permitted to credit his or her ultralight flight and ground time in accordance with the logging of flight and ground time requirements under proposed section 177 of the SFAR.

*Proposed section 93(c) of SFAR 89* would apply to you if you are not registered with an ultralight organization. You would be required to meet the eligibility requirements in proposed sections 3 and 15 of SFAR 89, the experience requirements in proposed sections 51–55 of SFAR 89, and pass the appropriate knowledge and practical tests for the certificate. When you successfully complete the practical test, the designated pilot examiner or FAA inspector would document in your logbook the appropriate endorsements for the category, class, and make and model of light-sport aircraft. You would not be permitted to credit your ultralight flight and ground time toward the

experience requirements in proposed sections 51–55 of the SFAR. The FAA has concluded that although you may have received some form of training, we would not have evaluated the training or the qualifications of the trainers. Therefore, we would be unable to assess whether it would be appropriate to credit that training toward the issuance of your sport pilot certificate.

With the adoption of part 103, the FAA chose not to promulgate rules regarding ultralight pilot certification, vehicle certification, and vehicle registration, preferring that the ultralight community assume the initiative for developing these important safety programs. The FAA has granted exemptions to permit the ultralight industry to conduct flight training in aircraft that do not meet the definition of ultralight vehicles specified in part 103. Aero Sports Connection (ASC), Experimental Aircraft Association (EAA), and the United States Ultralight Association (USUA) currently are conducting such flight training programs under exemptions. The FAA issued these exemptions because the organizations demonstrated to the FAA that they have the capability to establish the training programs, aircraft and operator certification and registration programs, and safety programs for ultralight vehicle owners and operators. At this time, the FAA considers only these organizations to be "FAA-recognized ultralight organizations."

The ARAC noted that the flight training provided by these FAA-recognized ultralight organizations has resulted in an improving safety record for ultralight vehicle operations. The success of these flight training programs exemplifies the ability of the aviation industry to take responsibility for the safety of its flight operations. Therefore, the FAA concurs with the ARAC recommendation to allow credit of ultralight flight and training experience.

The FAA-recognized ultralight organizations have established training programs that today meet most of the training requirements established for a sport pilot certificate. Any requirements that may not be met by these programs, such as the cross-country requirements, must be met by the applicant in addition to the 3 hours in preparation for the practical test.

*Proposed section 95 of SFAR 89* would require you to meet all the requirements under proposed sections 3, 15, and 51 through 57 of the SFAR if you don't hold a pilot certificate and have never flown an ultralight vehicle.

#### Flight Instructor Certificate With a Sport Pilot Rating

*Proposed section 111 of SFAR 89* would apply to you if you are exercising your privileges of a flight instructor certificate with a sport pilot rating. If you are acting as pilot in command of a light-sport aircraft other than a glider or balloon, the FAA would require you to hold and possess a current and valid U.S. driver's license or a current and valid airman medical certificate issued under 14 CFR part 67. You would not need to meet this requirement if the other pilot is acting as pilot in command.

*Proposed section 113 of SFAR 89:* To apply for a flight instructor certificate with a sport pilot rating, you would have to receive and log ground training from an authorized instructor on the aeronautical knowledge areas applicable to the category or class of light-sport aircraft in which you want to provide instruction. You also would have to receive and log ground training on the fundamentals of instructing unless you are a certified teacher. The aeronautical knowledge requirements are partly based on existing criteria for part 103 FAA-recognized training programs and on criteria contained in part 61 for existing flight instructor certificates. Consistent with all flight instructor certificates, you would not have to comply with the fundamentals of instructing requirements if you meet any of the experience requirements established in proposed section 113(b) of SFAR 89.

*Proposed sections 115 and 117 of SFAR 89* would establish the flight proficiency and aeronautical experience requirements for you to get a flight instructor certificate with a sport pilot rating. You would have to receive and log ground and flight training on the areas of operation applicable to the flight instructor privileges you seek. The flight proficiency requirements are partly based on existing criteria for part 103 FAA-recognized training programs and on existing criteria contained in part 61 for existing flight instructor certificates. The FAA also would establish new flight proficiency requirements for weight-shift-control aircraft and powered parachutes.

Traditionally, the FAA requires a flight instructor to hold a commercial pilot certificate and, in some cases, an instrument rating. The FAA does not think this is necessary for flight instructors with a sport pilot rating due to the simplicity of the aircraft, the limited operating environment, and the purposes of the operations (sport and recreation). However, the FAA believes

it is necessary to have a minimum amount of aeronautical experience to be eligible for a flight instructor certificate with a sport pilot rating. You would have to meet a minimum level of aeronautical experience, which would include up to 150 hours of flight time with variations for the different aircraft categories. The specific aeronautical experience requirements would be established in proposed section 117 of the SFAR for each category and/or class of light-sport aircraft. This would include the aeronautical experience requirements for weight-shift-control aircraft and powered parachutes.

*Proposed section 119 of SFAR 89* would establish which FAA tests you would have to take to receive a flight instructor certificate with a sport pilot rating. You would have to pass the required knowledge test on the fundamentals of instructing, unless you qualify for credit for this knowledge under proposed section 113(b) of SFAR 89. In addition, you would have to pass the required knowledge test on the aeronautical knowledge areas appropriate to a sport pilot certificate listed in section 113(c) of SFAR 89 and receive a logbook endorsement from an authorized instructor certifying that you are prepared to take the knowledge tests.

You would have to pass the practical test on the areas of operation that apply to the flight instructor privilege you seek. You would have to receive a logbook endorsement from an authorized instructor certifying that you have met the applicable aeronautical knowledge and experience requirements and are prepared for the required practical test. You would have to receive the flight training in preparation for the practical test on the areas of operation that apply to the light-sport aircraft privilege you seek. An FAA designated pilot examiner or an FAA aviation safety inspector who is qualified in that category, class, and make and model of light-sport aircraft would conduct this practical test. If you pass the practical test, the FAA-designated pilot examiner or FAA aviation safety inspector would make the appropriate endorsements showing that you are proficient to provide training in the category, class, and make and model of light-sport aircraft in which you passed the practical test.

The FAA would develop Practical Test Standards for each category and class of aircraft for the flight instructor certificate with a sport pilot rating. Additionally, the FAA would amend AC No. 61–65, "Certification: Pilots and Flight and Ground Instructors," to address the new endorsements that

would be necessary for this new certificate.

If you wish to obtain flight instructor privileges in an airplane, glider, or weight-shift-control aircraft, you would be required to obtain training and demonstrate proficiency in stall awareness, spin entry, spins, and spin recovery procedures in those aircraft. After you demonstrate instructional proficiency in all those areas, an authorized instructor would again endorse your logbook, indicating specifically that you are competent and possess instructional proficiency in those areas. If you fail to show proficiency in the knowledge or skill of stall awareness, spin entry, spins, or spin recovery instructional procedures, an examiner must retest you on all those items in the appropriate category of aircraft certificated for spins.

*Proposed section 121 of SFAR 89* would establish recordkeeping requirements for flight instructors with a sport pilot rating. You would have to retain the records required by this section for at least 3 years. You would sign the logbook of each person for whom you provided flight training or ground training, and would maintain a record in a logbook or a separate document that contains the requirements established in this section. These proposals are consistent with the requirements established for other flight instructors certificated under part 61.

*Proposed section 123 of SFAR 89:* After successfully passing the practical test for the issuance of your flight instructor certificate with a sport pilot rating, regardless of the particular light-sport aircraft privilege you sought, your certificate would not include category and class ratings. You would receive the initial logbook endorsements, as a sport pilot, for the category, class, and make and model of light-sport aircraft from the designated pilot examiner or FAA inspector who conducted the practical test. This is consistent with proposals for the sport pilot certificate explained in section 59 of the SFAR above.

*Proposed section 125 of SFAR 89* would require you to have the proper logbook endorsements from an authorized instructor in your logbook for each additional category and class of light-sport aircraft in which you would provide training. This is in addition to your logbook endorsement for each additional make and model of light-sport aircraft you will provide training in. This is consistent with proposals for the sport pilot certificate explained in proposed section 61 of SFAR 89 above.

*Proposed section 127 of SFAR 89* would establish how you would obtain privileges to provide flight training for

an additional category or class of light-sport aircraft. You would receive a logbook endorsement from an authorized instructor certifying your training on the areas of operation for the additional category or class. Then you would receive a proficiency check and a logbook endorsement from a different authorized instructor certifying you are proficient in the areas of operation for the additional category or class. The FAA is proposing that your proficiency check be conducted by a second instructor so you have an independent verification of your abilities.

*Proposed section 129 of SFAR 89* would establish how to you would obtain privileges to provide flight training in an additional make and model. You would receive a logbook endorsement from the authorized instructor who conducted your training on the requirements for that make and model. Your logbook endorsement would certify that you are proficient to provide flight training in that additional make and model. You would not need a proficiency check by another flight instructor.

*Proposed section 131 of SFAR 89* would require you to carry a logbook or documented proof of endorsements on all flights while exercising the privileges of your flight instructor certificate with a sport pilot rating.

*Proposed section 133 of SFAR 89* would state your authority as a flight instructor with a sport pilot rating. Within the limitations of your flight instructor certificate, you could give training and endorsements for: (1) A student pilot certificate for operating light-sport aircraft; (2) a sport pilot certificate; (3) a sport pilot privilege; (4) a flight review; (5) a practical test for a sport pilot; (6) a knowledge test for a sport pilot; and (7) a proficiency check for an additional category or class and make and model privilege as described above.

*Proposed section 135 of SFAR 89* proposes that you would be subject to specific limitations as a flight instructor with a sport pilot rating. You must have received proper logbook endorsement(s) for your pilot certificate and flight instructor certificate in the category, class, and make and model of light-sport aircraft. You would have to comply with the limitations established in § 61.87(n), limitations on flight instructors authorizing solo flight; § 61.93(d), limitations on authorized instructors to permit solo cross-country flights; § 61.195(a), hours of training; § 61.195(d)(1)–(d)(3), limitations on endorsements for student pilots; and § 61.195(d)(5), limitations on endorsements for flight reviews.

You could not provide flight training required for the issuance of a sport pilot certificate or privilege, or a flight instructor certificate with a sport pilot rating or privilege, unless you have at least 5 hours of pilot-in-command time in the specific make and model of light-sport aircraft in which your training is provided. The FAA believes it would be in the best interest of safety to require you to have at least 5 hours of pilot-in-command time in the specific make and model of light-sport aircraft before you are authorized to provide flight instruction. This is in addition to the minimum flight experience required for the issuance of a flight instructor certificate. A similar requirement exists today in § 61.191(f) for flight instructors providing training in a multiengine airplane, helicopter, or powered-lift. Many of these light-sport aircraft have unique operating characteristics. This proposal would prevent flight instructors qualified in other aircraft from providing training in light-sport aircraft without any experience in the specific make and model of light-sport aircraft. Lack of specific make and model experience has contributed to a number of ultralight accidents, and the FAA believes that this proposal would reduce these types of accidents.

You could not provide training for operations in Class B, C, or D airspace, unless you have the endorsement specified in proposed section 81 of the SFAR or are authorized to conduct operations in this airspace. Additionally, you couldn't provide training in a light-sport aircraft with a  $V_H$  greater than 87 knots CAS, unless you have the endorsement specified in proposed section 83 of the SFAR or are otherwise authorized to operate that aircraft.

*Proposed section 137 of SFAR 89* would specify that you would not be required to meet any additional requirements for training first-time flight instructor applicants. The FAA may, however, revise these provisions based upon a review of safety data obtained after the implementation of this proposal. Instructors who would initially train first-time flight instructor applicants may not have a level of experience commensurate to that of instructors who currently train first-time flight instructor applicants under part 61.

*Proposed section 139 of SFAR 89* would establish that flight instructors with a sport pilot rating would not be allowed to make any self-endorsement for a certificate, privilege, flight review, authorization, practical test, knowledge test, or proficiency check required by

the SFAR. This is consistent with existing requirements in § 61.195(i).

#### Transitioning to a Flight Instructor Certificate With a Sport Pilot Rating

*Proposed section 151* of SFAR 89 would allow you to exercise the privileges of a flight instructor with a sport pilot rating if you already hold a current and valid flight instructor certificate issued under part 61. You would be limited to providing instruction in the same aircraft category and class listed on your existing pilot certificate and flight instructor certificate. Additionally, you would have to receive training on any specific make and model of light-sport aircraft in which you have not acted as pilot-in-command. You would need a logbook endorsement from the authorized instructor who conducted your training certifying proficiency in that make and model of light-sport aircraft. You also would have to comply with the requirement in proposed section 135 of SFAR 89, which would require at least 5 hours of pilot-in-command time in the specific make and model light-sport aircraft before you could provide instruction in that aircraft.

If you want to provide training in additional categories, classes, or makes and models of light-sport aircraft, you would have to obtain the proper logbook endorsement(s), as proposed in sections 127 and 129 of the SFAR.

*Proposed section 153* of SFAR 89 would allow you to apply for a flight instructor certificate with a sport pilot rating if you are an ultralight flight instructor. You must be registered with an FAA-recognized ultralight organization not later than 36 months after the effective date of the rule, and hold either a current and valid sport pilot certificate, or a current and valid private pilot certificate issued under part 61.

You would have to comply with proposed sections 3 and 111 of SFAR 89, which would establish the minimum age, language, and medical requirements. You would not need to meet the experience requirements in sections 115 and 117 of the SFAR, establishing the aeronautical knowledge, flight proficiency, and aeronautical experience, except that you would have to have at least the minimum total pilot flight time in the category and class of light-sport aircraft specified in proposed section 117 of SFAR 89.

You would not need to meet the pilot-in-command, time in aircraft category, or cross-country pilot flight time requirements specified in proposed section 117 of SFAR 89. You would be

allowed to credit flight time as the operator of an ultralight vehicle in accordance with the logging of flight and ground time requirements in section 177 of SFAR 89.

You would not need to meet the aeronautical knowledge requirement specified in section 113 of SFAR 89 if you passed the Fundamentals of Instruction knowledge test given by the FAA or an FAA-recognized ultralight organization.

The FAA believes that if you are a flight instructor with an FAA-recognized ultralight organization, you would have a level of experience equivalent to that required by sections 113–117 of the SFAR. You would not need a separate logbook endorsement from an authorized instructor recommending you for the practical test.

The proposal would require you to obtain a notarized copy of your ultralight flight instructor records from your FAA-recognized ultralight organization. Those records must document that you are a registered ultralight flight instructor with that FAA-recognized ultralight organization and must list each category and class of ultralight vehicle in which the organization recognizes you are qualified to operate and authorized to provide flight training. You would be required to pass the knowledge test on the aeronautical knowledge areas specified in proposed section 113 of SFAR 89 and the practical test on the areas of operation listed in proposed section 115 of SFAR 89.

The proposal would require you to present these records, as well as the results from your knowledge test, to a designated pilot examiner or FAA inspector when you apply for a flight instructor certificate with a sport pilot rating. After you pass the practical test, the examiner or inspector would review your records and endorse your logbook for each category and class of ultralight vehicle in which you are qualified and authorized to provide flight training.

This proposal would establish a transition phase to ensure that ultralight flight instructors have ample time to obtain both their sport pilot and flight instructor certificates with a sport pilot rating. Also, this would allow the FAA-recognized ultralight organizations to continue to instruct under the existing exemptions. During this 36-month transition phase, an ultralight flight instructor could continue to instruct in a two-place vehicle under an existing exemption. This same flight instructor could also hold a flight instructor certificate with a sport pilot rating and be authorized to instruct a sport pilot, a student pilot operating light-sport

aircraft, or a flight instructor with a sport pilot rating.

At the end of the 36 months, the existing training exemptions would expire and would not be renewed. At that point, all two-place training vehicles that meet the definition of a light-sport aircraft would be required to be certificated as light-sport aircraft and there would no longer be a need for these exemptions. Any flight training in a light-sport aircraft would be required to be conducted by a certificated flight instructor. The FAA recognizes that persons who wish to operate ultralight vehicles under part 103 would still need to receive training to safely operate a single-place vehicle. Under this proposal, a certificated flight instructor with a sport pilot rating could train an ultralight pilot to fly a single-place ultralight under part 103.

*Proposed section 155* of SFAR 89 proposes that, if you have never provided flight or ground training in an aircraft or an ultralight vehicle, you would have to meet all the requirements in sections 3 and 111–117 of the SFAR to apply for a flight instructor certificate with a sport pilot rating.

#### Pilot Logbooks

*Proposed section 171* of SFAR 89 would require you, as the holder of a sport pilot certificate or a flight instructor certificate with a sport pilot rating, to document and record training time and aeronautical experience. You would be allowed to credit ground and flight time earned as a sport pilot toward a higher certificate under § 61.51.

*Proposed section 173* of SFAR 89 would allow you, as the holder of a sport pilot certificate, to log flight time as pilot in command only when you are the sole manipulator of the controls of an aircraft for which you have privileges. This includes any time during which you are the sole occupant of the aircraft. This is equivalent to the provisions in § 61.51(e) for the logging of pilot-in-command time for all other certificates.

*Proposed section 175* of SFAR 89 would allow you to credit training time and aeronautical experience documented as a sport pilot toward the requirements for a higher certificate or rating.

*Proposed section 177* of SFAR 89 would allow you to credit training time and aeronautical experience as the operator of an ultralight vehicle toward the experience requirements for a sport pilot certificate. Your ultralight training time and aeronautical experience would have to be documented as specified by an FAA-recognized ultralight

organization with which you are a registered ultralight pilot. You would be allowed to credit only the training time and aeronautical experience logged in the same category and class of ultralight vehicle as the category and class of light-sport aircraft for which privileges you seek.

*Proposed section 179 of SFAR 89* would prohibit you from crediting aeronautical experience obtained as the operator of an ultralight vehicle to meet the requirements for a higher level certificate or rating specified in § 61.5 if you have a sport pilot certificate. However, you would be allowed to credit time used to meet the requirements for the issuance of a sport pilot certificate under the SFAR (i.e., a maximum of 20 hours) for the issuance of a higher level certificate. The FAA does not generally permit aeronautical experience obtained in a noncertificated aircraft to be used to meet the requirements for the issuance of a certificate under part 61; however, the FAA has proposed this limited exception to this policy to facilitate the issuance of airman certificates to sport pilots who have obtained their aeronautical experience in ultralight vehicles.

#### Recent Flight Experience Requirements for a Sport Pilot Certificate or a Flight Instructor Certificate With a Sport Pilot Rating

*Proposed section 191 of SFAR 89* would require a sport pilot to comply with the recent flight experience requirements under § 61.57, which is applicable to all other pilots. The FAA thinks that the recent flight experience requirements for persons acting as pilot in command are minimum standards that should apply to all certificated pilots. We do not find any benefit to making this requirement less restrictive.

*Proposed section 193 of SFAR 89* would require a sport pilot to comply with the flight review requirements under § 61.56, which is applicable to all other pilots. As with proposed section 191 of SFAR 89, the FAA thinks that the flight review requirements for persons acting as pilot in command are minimum standards that should apply to all certificated pilots, and we do not find any benefit to making this requirement less restrictive.

*Proposed section 195 of SFAR 89* would specify that to renew your flight instructor certificate, you would have to comply with the requirements in § 61.197, which is consistent with the requirement for all other flight instructors.

*Proposed section 197 of SFAR 89* would specify that, if your flight

instructor certificate with a sport pilot rating expires, you may exchange that certificate for a new certificate by passing a practical test as prescribed in section 119 of SFAR 89. Any privilege authorized by the expired certificate would be reinstated. This proposal is consistent with the requirement for all other flight instructors.

#### Ground Instructors

*Proposed section 211 of SFAR 89* would specify that a ground instructor would continue to be required to meet only the eligibility requirements established in § 61.213 for a ground instructor certificate or rating.

*Proposed section 213 of SFAR 89* would specify that if you hold the privileges of a ground instructor certificate with a basic ground instructor rating under § 61.215(a), you would remain authorized to provide the training and recommendations specified in that paragraph. To accommodate the proposed sport pilot certificate, this paragraph also would permit you to provide: (1) Ground training in the aeronautical knowledge areas required for the issuance of a sport pilot certificate or privileges; (2) ground training required for a sport pilot flight review; and (3) a recommendation for a knowledge test required for the issuance of a sport pilot certificate.

*Proposed section 215 of SFAR 89* would specify that if you hold the privileges of an advanced ground instructor rating under § 61.215(b), you would continue to be authorized to provide the training and recommendations specified in that paragraph. The privileges specified by that section permit an advanced ground instructor to provide: (1) Ground training in the aeronautical knowledge areas required for the issuance of any certificate or privileges under the SFAR, (2) ground training required for a sport pilot flight review, and (3) a recommendation for a knowledge test required for the issuance of any certificate under the SFAR.

The following discussion of the changes to 14 CFR part 61 address amendments to current sections and would not be included in SFAR 89.

*Proposed section 61.1* would be amended to permit an authorized instructor to provide ground or flight training under the proposed SFAR. It also would be modified to revise the definition of cross-country time to accommodate the certification of persons seeking a sport pilot certificate with powered parachute privileges, or private pilot certificate with a powered parachute rating. For these certificates, the FAA would consider cross-country

time as time acquired during a flight that includes a point of landing at least a straight-line distance of 15 nm from the original point of departure. This revision reflects the slow operating speed of powered parachutes.

*Proposed section 61.5* would add a sport pilot certificate, and a flight instructor certificate with a sport pilot rating, to the list of certificates and ratings issued under this part. It also would add ratings for the powered parachute aircraft category, weight-shift-control aircraft category, and weight-shift-control aircraft class ratings for land and sea.

*Proposed section 61.31* would be amended by revising the exceptions to that section. Currently, paragraph (k)(2) lists those persons to whom the rating limitations of this section do not apply. Paragraph (k)(2)(iii) states that the rating limitations do not apply to the holder of a pilot certificate when operating an aircraft under the authority of an experimental or provisional aircraft type certificate. Therefore, the rating limitations in this section currently do not apply to pilots when operating aircraft with experimental or provisional aircraft type certificates even if they carry passengers.

The proposal would revise this provision to state that the rating limitations of this section would apply for flight operations involving the carriage of passengers in these aircraft. In this case, pilots would need to hold an appropriate category and class rating to operate the aircraft when carrying passengers. The FAA notes the logbook endorsements that provide sport pilots with additional category and class privileges do not constitute category and class ratings under part 61. These aircraft have varying performance characteristics, operational profiles, and diverse control and flight features. In addition, the pilots who would be flying these aircraft will have varying levels of experience. Therefore, in the interest of safety and to protect the public, the FAA is proposing to change § 61.31(k). Certificated pilots who operate experimental aircraft would be required to hold an appropriate category and class rating if they wish to carry passengers.

*Proposed section 61.99* would be revised to correct the introductory language of the section. The proposal would delete the word "training" from the phrase "flight training time." This revision would make this section consistent with those sections that establish aeronautical experience requirements for other certificates issued under this part.

*Proposed section 61.101* would be revised by adding the phrase “current and valid” before the term “recreational pilot certificate.” The proposal also would add a new paragraph (d), which would permit you to operate in Class B, C, or D airspace if you hold a current and valid recreational pilot certificate. You would have to receive and log ground and flight training from an authorized instructor on the aeronautical knowledge and areas of operation appropriate to the aircraft rating you hold and operation in that airspace. Secondly, you would have to be found proficient on these ground and flight training requirements. And thirdly, you would have to receive a logbook endorsement from an authorized instructor certifying that you have received training on these ground and flight training requirements and been found proficient.

The FAA also is proposing to allow recreational pilots to operate on a flight outside the United States only with prior authorization from the country in which the operation would be conducted. This proposal is consistent with a similar proposal for the sport pilot certificate.

*Proposed section 61.107* would be revised to include new flight proficiency requirements for a person obtaining a private pilot certificate with a powered parachute rating or a weight-shift-control aircraft rating.

*Proposed section 61.109* would include new aeronautical experience requirements for a private pilot obtaining a powered parachute rating or a weight-shift-control aircraft rating. Consistent with ICAO requirements for a private pilot certificate and all other private pilot requirements under part 61, the minimum flight time proposed for the issuance of the certificate with either rating would be 40 hours. The 40 hours would include 20 hours of flight training from an authorized instructor and 10 hours of solo flight training in specified areas of operation. These areas of operation would address night training, cross country training, and operations at airports with operating control towers.

*Proposed section 61.195* would establish the qualifications for a flight instructor who provides training for the issuance of a private pilot certificate with a weight-shift-control aircraft or powered parachute rating. You would have to hold at least a flight instructor certificate with a sport pilot rating and at least a private pilot certificate with a category and class rating appropriate to the aircraft in which the training is sought. Unlike the private pilot certificate, commercial pilot certificates

would not have powered parachute or weight-shift-control aircraft ratings. Therefore, the FAA would not require a flight instructor conducting flight training in those aircraft to hold a commercial pilot certificate. Similarly, because instrument ratings would not be issued for the operation of these aircraft, the FAA would not require a flight instructor conducting flight training in these aircraft to also hold an instrument rating.

#### *F. What Are the Proposed Changes to 14 CFR Part 65?*

Under this proposal, the FAA would establish the repairman certificate (light-sport aircraft). That certificate would be issued with inspection and maintenance ratings. The purpose of this new certificate is to permit persons, in addition to appropriately rated mechanics and repair stations, to perform maintenance on light-sport aircraft that have special airworthiness certificates. The FAA envisions that this new certificate would facilitate the maintenance of these aircraft by their owners and operators.

*Proposed section 65.101* would be revised to indicate that its requirements would not apply to the repairman certificates established by this proposal.

*Proposed section 65.107* would set forth the eligibility requirements, privileges, and limitations if you want to obtain a repairman certificate (light-sport aircraft). This proposal would require you to be at least 18 years of age, which would be identical to the requirements for all current repairman certificates. The proposal would require you to read, speak, write, and understand the English language. This is identical to the requirement for current repairmen who are not employed outside the United States. The proposal also includes provisions for the FAA to place limitations on the certificate if you are unable to meet any of the English language eligibility requirements for medical reasons. This provision is similar to those in the eligibility requirements for pilot certificates issued under part 61. The proposal would require you to meet citizenship or residency requirements identical to those for repairman certificates issued to experimental aircraft builders under § 65.104. The proposal also would require you to demonstrate the requisite skill to determine whether a light-sport aircraft is in a condition for safe operation.

The proposal also would establish additional eligibility requirements if you want to obtain a repairman certificate (light-sport aircraft) with an inspection rating or with a maintenance

rating. For either rating, you would have to meet the general eligibility requirements described above. For an inspection rating, you would be required to complete a 16-hour training course acceptable to the FAA on the inspection requirements for the particular make and model of light-sport aircraft certificated under § 21.191(i) for which you seek an inspection rating. For a maintenance rating, you would be required to complete an 80-hour course applicable to the particular category of light-sport aircraft for which you intend to exercise privileges.

The proposal also would specify the privileges of the certificate and ratings. If you have an inspection rating, you would be permitted to perform a condition inspection on a light-sport aircraft with an experimental certificate that you own. If you have a maintenance rating, you would be permitted to perform maintenance on a light-sport aircraft that has a special airworthiness certificate issued under proposed § 21.186 or 21.191(i). Because the definition of maintenance includes inspections, your maintenance rating would allow you to perform any required inspection of a light-sport aircraft with a special airworthiness certificate issued under proposed § 21.186 or 21.191(i). You would be required to have completed training on the same category of light-sport aircraft on which you will perform maintenance. Additionally, to perform a major repair on a light-sport aircraft, you would be required to complete acceptable training appropriate to the repair performed.

The proposed paragraph would also note that the privileges and limitations in § 65.103 for a repairman certificate issued under § 65.101 would not apply to a repairman certificate (light-sport aircraft) while exercising the privileges of that certificate.

#### *G. What Are the Proposed Changes to 14 CFR Part 91?*

The majority of the proposed amendments to part 91 would facilitate the integration of powered parachutes and weight-shift-control aircraft into the general operating rules.

*Proposed section 91.1* would be revised to include current section 91.325 and proposed § 91.327 in the list of rules that a person would be required to comply with while operating an aircraft in the airspace overlying the waters between 3 and 12 nm from the coast of the United States.

*Proposed section 91.113* would be amended to address the addition of the two new categories of aircraft and the effect they would have on converging

aircraft. The proposal would give gliders and airships the right of way over weight-shift-control aircraft and powered parachutes. Balloons would continue to have right of way over any other category of aircraft.

*Proposed section 91.126* would be amended to include powered parachutes, so that they also would have to avoid the flow of fixed-wing aircraft when approaching to land at an airport without an operating control tower in Class G airspace. The FAA is proposing this revision because powered parachute operating characteristics are similar to those of helicopters when operating in airport traffic patterns. The FAA would establish new procedures in the Aeronautical Information Manual to address traffic pattern procedures for powered parachutes.

*Proposed section 91.131* would be amended to permit a sport pilot who has received the training and endorsement required by section 4 of SFAR 89 to operate within Class B airspace or takeoff or land at an airport within Class B airspace. The current rule would permit operations by student pilots operating light-sport aircraft provided the required training and endorsements were received.

*Proposed section 91.155* would be amended by revising paragraph (b) to include the two new categories of aircraft that would be permitted to operate in Class G airspace. At night, powered parachutes and weight-shift-control aircraft could be operated when the visibility is between 1 and 3 statute miles. They would have to remain clear of clouds if operated in an airport traffic pattern within one-half mile of the runway. These provisions currently apply only to airplanes. Although they have different control characteristics, the FAA has determined that weight-shift-control aircraft and airplanes should be permitted to operate similarly in the NAS. Powered parachutes are similar in many ways to helicopters, but do not have the capability to hover or back up, which affords helicopters more maneuverability. Therefore, the FAA is proposing that powered parachutes may be operated in an airport traffic pattern; however, to remain in compliance with § 91.126, they must avoid the flow of fixed-wing aircraft similar to helicopter operations.

*Proposed section 91.213* would be amended to allow for any light-sport aircraft to operate with inoperative equipment unless a master Minimum Equipment List has been developed for the aircraft. Currently, rotorcraft, non turbine-powered airplanes, gliders, and lighter-than-air aircraft are also afforded a similar privilege.

*Proposed section 91.319* would establish procedures used by the FAA to permit operators of experimental aircraft to receive compensation while conducting flight training, which would include testing and evaluation. The current rule prohibits the operation of an aircraft with an experimental category airworthiness certificate for other than the purpose for which the aircraft was certificated or for the carriage of persons or property for compensation or hire.

To permit the operation of these experimental aircraft for compensation or hire while conducting initial flight training, the FAA would revise paragraph (a)(2) of this section. Proposed § 21.191(i)(1) would permit aircraft certificated under that paragraph to be operated for compensation or hire for flight training only for 36 months after the effective date of the rule. After that 36-month period, these aircraft would be allowed to continue to be used for flight training; however, the aircraft could not be operated for compensation or hire while training is being conducted.

To permit the operation of experimental aircraft (certificated under proposed § 21.191) for compensation or hire for the sole purpose of flight training, the FAA is proposing to allow owners of experimental aircraft to apply for a Letter of Deviation Authority issued by the FAA. A deviation authority request should be forwarded to the General Aviation and Commercial Division, AFS-800, for review and issuance. The request would contain a statement of the proposed operation and justification for the deviation.

If an operator is granted deviation authority, the operator may be authorized to provide flight training in experimental aircraft and receive compensation for the use of the aircraft. This provision would not be intended to allow commercial operators to establish training schools using experimental aircraft. In the interest of safety, and as a result of recommendations from the National Transportation Safety Board, the FAA has determined that allowing flight training in experimental aircraft when the aircraft is operated for compensation or hire under certain circumstances is in the public interest.

*Proposed section 91.327* would establish operating limitations of an aircraft having a light-sport category airworthiness certificate issued under proposed § 21.186. Such aircraft could be used for sport and recreation, flight training, and rental as long as the owner adheres to all conditions and provisions for maintenance and alteration, as stipulated in the operating limitations.

The aircraft must be purchased from a manufacturer that has completed a production and reliability test program to a consensus standard. These limitations would prohibit a person from operating these aircraft for other than the purpose for which it was certificated, or while carrying persons or property for compensation or hire, except while conducting flight training or renting the aircraft.

Special airworthiness certificates commonly include various additional operating limitations allowing or prohibiting specific operations. Operating limitations applicable to light-sport category aircraft also may restrict certain operations or prohibit aerobatic maneuvers. The proposal also would state that the FAA may prescribe additional limitations necessary for operation of the aircraft.

The aircraft must also be maintained in accordance with the manufacturer's maintenance and inspection procedures and have a condition inspection performed once every 12 calendar months, and its owner or operator must comply with a program for monitoring safety-of-flight issues for the aircraft. Additionally, the proposal would require an aircraft used for flight instruction to have a condition inspection performed within the preceding 100 hours of aircraft time in service. This provision is similar to that contained in § 91.409 for other aircraft. The maintenance and inspection procedures required by the operating limitations would meet the scope and detail of Appendix A to 14 CFR part 43. And consistent with part 43, a certificated pilot could perform preventive maintenance on these aircraft.

*Proposed section 91.409* would be amended to extend to experimental light-sport aircraft the relief from inspection requirements that already apply to all other aircraft with a current experimental certificate. The FAA notes however, that these aircraft would still be required to meet the maintenance requirements of their operating limitations.

## VII. Paperwork Reduction Act

This proposal contains the following new information collection requirements. As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the Department of Transportation has submitted the information requirements associated with this proposal to the Office of Management and Budget for its review.

*Title:* Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft.

**Summary:** This proposal would establish requirements for the certification, operation, and maintenance of light-sport aircraft. For the operation of light-sport aircraft, the FAA is proposing to establish a sport pilot certificate and a flight instructor certificate with a sport pilot rating. The FAA also is proposing to establish requirements for student pilots and private pilots to operate these aircraft, and to revise the recreational pilot certificate to align it with privileges proposed for the new sport pilot certificate. The FAA proposes a new repairman certificate with ratings for individuals who would inspect and maintain light-sport aircraft.

In addition, the FAA is proposing a new category of special airworthiness certificate for light-sport aircraft that meet a consensus standard. This proposal also would revise the requirements for the issuance of experimental certificates to include light-sport aircraft.

This proposal would generate a need for new designated pilot examiners and designated airworthiness representatives to support the certification of these new aircraft, pilots, flight instructors, and ground instructors.

**Respondents:** The likely respondents to this proposed information requirement are designated pilot examiners; airman certification representatives; designated airworthiness representatives authorized by 14 CFR part 183; pilots, flight instructors, ground instructors authorized by 14 CFR part 61; operators, owners, and manufacturers of light-sport aircraft authorized by 14 CFR parts 21 and 45; and repairman authorized by 14 CFR part 65 who would be responsible for maintaining light-sport aircraft.

**Frequency:** The FAA estimates the number of respondents impacted by this proposal and the annual frequency of information requirements to be as established in the table below.

Respondents	Frequency (avg. yearly total)
14 CFR part 65—No. of Repairmen:	
Inspection Rating .....	1,725
Maintenance Rating .....	182
Total .....	1,907
14 CFR part 61—No. of Sport Pilots, Flight Instructors w/ sport pilot rating, and Ground Instructors:	
Pilots .....	1,714
Flight Instructors .....	192

Respondents	Frequency (avg. yearly total)	Annual cost to respondents—\$1,518,027 Annual cost to government—\$ 138,688 The agency is soliciting comments to—
Ground Instructors .....	50	
Total .....	1,956	
14 CFR part 183—No. of Designated Pilot Examiners (DPE) and Airman Certification Representatives (ACR):		
DPE's .....	300	
ACR's .....	5	
Total .....	305	
14 CFR part 183—No. of Designated Airworthiness Rep's (DAR's):		
DAR from the FAA Aircraft Certification Office (AIR) .....	100	
DAR from the FAA Flight Standards Office (AFS) .....	200	
Total .....	300	
14 CFR parts 45 and 21—No. of Aircraft:		
Existing Aircraft (§ 21.191(i)) .....	1,725	
New Aircraft (§ 21.186) .....	182	
Total .....	1,907	

**Annual Burden Estimate:** This proposal would result in an annual recordkeeping and reporting burden as follows:

#### 14 CFR Part 21

Responses—1,907  
Burden hours (Public)—2,725 hours  
Burden hours (Government)—2,725 hours  
Annual cost to respondents—\$1,427, 500  
Annual cost to government—\$40, 875

#### 14 CFR Part 47

Responses—4,580  
Burden hours (Public)—2,530 hours  
Burden hours (Government)—2,846 hours  
Annual cost to respondents—\$28, 463  
Annual cost to government—\$25, 656

#### 14 CFR Part 61

Responses—2,150  
Burden hours (Public)—3,476 hours  
Burden hours (Government)—107 hours  
Annual cost to respondents—\$25, 800  
Annual cost to government—\$23, 650

#### 14 CFR Part 183

Responses—605  
Burden hours (Public)—1,007.5 hours  
Burden hours (Government)—1,027  
Annual cost to respondents—\$26, 195  
Annual cost to government—\$29, 315

#### 14 CFR Part 65

Responses—1,907  
Burden hours (Public)—698 hours  
Burden hours (Government)—630 hours  
Annual cost to respondents—\$10, 069  
Annual cost to government—\$19, 192

#### Total Impact of the Proposal

Responses—11,149  
Burden hours (Public)—10,436.5 hours  
Burden hours (Government)—7,335 hours

- (1) Evaluate whether the proposed information requirement is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- (2) Evaluate the accuracy of the agency's estimate of the burden;
- (3) Enhance the quality, utility, and clarity of the information to be collected; and
- (4) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Individuals and organizations may submit comments on the information collection requirement by April 8, 2002, and should direct them to the address listed in the **ADDRESSES** section of this document.

According to the regulations implementing the Paperwork Reduction Act of 1995, (5 CFR 1320.8(b)(2)(vi)), an agency may not conduct or sponsor, a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control number for this information collection will be published in the **Federal Register**, after the Office of Management and Budget approves it.

#### VIII. International Compatibility

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. Under this proposal, the FAA would issue student pilot certificates for operating light-sport aircraft, sport pilot certificates, and airworthiness certificates, which would not be issued pursuant to the requirements of the Convention on International Civil Aviation, dated December 7, 1944.

#### IX. Regulatory Evaluation Summary—Executive Order 12866 and DOT Regulatory Policies and Procedures

##### A. Economic Evaluation

Proposed changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs each Federal agency proposing or adopting a regulation to first make a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory

Flexibility Act of 1980 requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this act requires agencies to consider international standards, and use them where appropriate as the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 requires agencies to prepare a written assessment of the costs and benefits and other effects of proposed and final rules. An assessment must be prepared only for rules that impose a Federal mandate on State, local or tribal governments, or on the private sector, likely to result in a total expenditure of \$100 million or more in any one year (adjusted for inflation.)

In conducting these analyses, the FAA has determined that this proposed rule has benefits that justify its costs; is "significant," as defined in regulatory policies and procedures of the Department of Transportation (44 FR 11034; February 26, 1979); and is a "significant regulatory action," as defined in section 3(f) of Executive Order 12866. This proposed rule is a significant action because of public interest rather than on the basis of economic impacts. It is subject to review by the Office of Management and Budget. This proposed rule is not expected to have a significant impact on a substantial number of small entities, nor to present a significant impediment to international trade. It would not impose an unfunded mandate on State, local, or tribal governments, or on the private sector. These analyses, available in the docket, are summarized below.

#### Analysis of Costs

The proposal would impose an estimated compliance cost of \$40.4 million (\$34.0 million, discounted) in 1999 dollars over the next 10 years (2002–2011), as the result of the new certification standards. The cost estimate is based on three components. Each of these cost components is discussed below.

#### *Light-Sport Aircraft Airworthiness Certification Costs*

This section of the proposal would amend 14 CFR part 21 by providing for the issuance of special light-sport aircraft and experimental light-sport aircraft airworthiness certificates. Specifically, existing light-sport aircraft would obtain experimental light-sport airworthiness certificates and newly manufactured light-sport aircraft would

obtain special light-sport airworthiness certificates. All newly manufactured light-sport kit-built aircraft would obtain experimental light-sport airworthiness certificates. The special and experimental light-sport aircraft certificates would be issued for the purposes of: (1) Enhancing aviation safety by ensuring that all light-sport aircraft operating in the future meet an acceptable standard, (2) facilitating sport and recreation operations, and (3) enhancing flight training and rental activities (excluding experimental light-sport aircraft). This section of the proposal would impose an estimated one-time compliance cost of \$13.9 million (\$11.8 million, discounted), in 1999 dollars over the next 10 years.

#### **Annual Condition Inspection and Repairman Certification Costs**

This section of the proposal would amend 14 CFR part 91 by requiring that operators of light-sport aircraft have their aircraft inspected for maintenance compliance annually (commonly referred to in this evaluation as "annual condition inspections"). A new repairman certificate would be established with ratings for individuals who would inspect and maintain light-sport aircraft. The cost of compliance associated with meeting this annual condition inspection requirement and the cost to obtain a repairman certificate are estimated to be \$16.7 million (\$14.4 million, discounted), in 1999 dollars over the next 10 years.

#### **Sport Pilot Certificate and Flight Instructor Certification (With a Sport Pilot Rating) Costs**

This section of the proposal would amend 14 CFR part 61 by requiring that operators of light-sport aircraft obtain at least a sport pilot certificate and by requiring that operators who instruct sport pilots obtain a flight instructor certificate with a sport pilot rating. The proposed rule would impose an estimated compliance cost of \$9.8 million (\$7.8 million, discounted) over the next 10 years.

#### Analysis of Benefits

The estimated benefits of avoiding the accidents involving light-sport aircraft are \$221.4 million (\$153.3 million, discounted). The estimated benefits are based only on the avoidance of fatalities in these accidents. Injuries and property loss were not included in this analysis due to lack of information. The FAA believes that the benefits from avoided injuries and property are small in comparison to the benefits of avoided fatalities. According to FAA and Aviation Rulemaking Advisory

Committee (ARAC) technical personnel, the benefits of avoiding the fatalities due to these accidents would be achieved, in part, by requiring airworthiness certificates for light-sport aircraft, and pilot certificates (sport pilot and flight instructor with a sport pilot rating) for those who wish to fly light-sport aircraft.

The monetary estimate of \$221.4 million (\$153.3 million, discounted) for potential safety benefits is based on accident information obtained from several sources. One major accident data source was the National Transportation Safety Board (NTSB) database on aviation accidents. However, the NTSB focuses primarily on aircraft and generally does not collect accident data or investigate accidents involving fat ultralight vehicles because they are non-registered aircraft. For this reason, accident data were obtained from additional sources. The additional accident data sources include the three organizations that conduct training in two-place fat ultralights under an exemption from part 103. The FAA sometimes requires exemption holders to collect specific data while operating under an exemption. The FAA may decide that it should initiate rulemaking to address provisions under an exemption. If so, this data may be used to justify and support such an action. The FAA began gathering data on part 103 training accidents and incidents in 1995 when it issued the first exemption from part 103 for training. The three training exemption holders are Aero Sport Connection (ASC), Experimental Aircraft Association (EAA), and the U.S. Ultralight Association (USUA). The part 103 training exemption requires the three exemption holders to report to the FAA accidents that involve vehicles operated under that exemption.

A review of the information from all these data sources revealed that there were 41 fatal accidents between 1995 and 2001 that involved fat ultralight vehicles and light aircraft. (The FAA verified that data from the three exemption holders were not counted more than once.) These accidents were determined to be relevant based on conversations with several industry representatives, and the relevancy determination focused on two essential factors. First, only those aircraft that fall within the proposed definition of light-sport aircraft were considered. Second, only those accidents that either could have been prevented or whose likelihood of occurrence could have been significantly reduced were considered. For example, in instances where enhanced training and/or required safety standards could have

reduced accidents, these types of accidents were considered relevant.

A review of the 1995–2001 data showed that there were 51 fatalities in accidents involving aircraft that would be defined by this rule as light-sport aircraft. During that 6-year period there were roughly 8 or 9 fatalities a year. At that rate, there would be 83 fatalities during the next 10 years.

In this analysis, the FAA estimates that a total of 82 fatalities could potentially be avoided by adopting the proposed rule. The FAA assumed that there could only be five fatalities potentially avoided during the first year because not all light-sport aircraft operators could comply with all of the proposed requirements during the first year after the proposed rule was issued. If the value of a fatality avoided is \$2.7 million, then the 10-year potential benefit of the proposed rule would be \$221.4 million (\$153.3 million, discounted).

The assessment of potential safety benefits is subject to the following uncertainties:

- Accuracy as to the actual number light-sport aircraft accidents contained in the NTSB's historical record for primarily U.S.-registered aircraft. There is uncertainty as to what extent the NTSB's database has fully captured those accidents involving unregistered light-sport aircraft over the past 10 years.
- Accuracy as to the actual number of light-sport aircraft accidents contained in the historical records of the three organizations that hold a training exemption to train in two-place fat ultralights. There is uncertainty as to what extent these exemption holders' databases have fully captured those accidents for unregistered light-sport aircraft over the past 10 years.

Because the accident databases listed above may not capture all relevant accidents, the potential safety benefits estimate for light-sport aircraft may be understated. In view of the uncertainties, the FAA solicits comments from the general aviation community and the recreational light-sport aircraft industry in particular. All commenters are asked to provide documented information in support of their comments.

In addition to safety benefits, there would be a benefit gained from "consumer surplus," which is derived from the recreational value gained from operating light-sport aircraft. If the derived (net) recreational value is \$25 per recreational day and a sport pilot conducted 20 days of recreational flying annually, a sport pilot would obtain \$500 in net annual recreational benefits.

The FAA estimates that 9,000 pilots will seek a sport pilot certificate, providing an additional estimated benefit of recreational value gained of \$4.5 million annually. The FAA solicits comments regarding the recreational values established from the general aviation community and the recreational light-sport aircraft industry in particular.

#### **Benefit-Cost Comparison**

The proposed rule costs much less than the estimated potential benefits. The estimated cost of the proposed rule is \$40.4 million (\$34.0 million, discounted). The estimated potential benefits of avoiding 82 fatalities are \$221.4 million (\$153.3 million, discounted). The estimated benefits are based only on the avoidance of fatalities in these accidents. The FAA believes that some of the identified benefits may not be achieved. However, if the proposed rule is 23 percent effective, or more, then the rule would be cost-beneficial.

#### ***Analysis of Alternatives***

##### ***Status Quo Alternative***

When analyzing alternatives to any proposed regulatory action, the status quo is typically analyzed with other alternatives. However, this is not the case for this evaluation. The status quo represents a situation in which the FAA would issue training exemptions from part 103 indefinitely. This would perpetuate "rulemaking by exemption," which does not qualify as a viable alternative. The FAA issued exemptions for flight training in 1995 after the initiation of this rulemaking project. The FAA issued the exemptions under the assumption that they would soon be superceded by rulemaking.

##### ***Alternative One—Strictly Enforce Current Regulations***

Under this option, the FAA would rescind the three existing exemptions from part 103 that allow training in two-place fat ultralight vehicles. Rescinding the existing exemption would be necessary because it is DOT and FAA policy to issue exemptions only to those with unique situations, usually for a limited time. The FAA does not intend to issue exemptions to address situations of a general nature. In that case, the FAA initiates rulemaking.

Anyone who wanted to learn to fly an ultralight could not receive any flight training in a two-place fat ultralight before soloing because those ultralights do not meet part 103. Future two-place fat ultralights would have to be certificated in the primary or standard category to be used for flight training.

The design standards for these airworthiness certificates may not be appropriate for many of the fat ultralights in the ultralight community.

Some existing or new fat ultralights would be eligible for an experimental airworthiness certificate. In this case, the operator of the aircraft would be responsible for building a majority of the aircraft and these aircraft would not be eligible for flight training.

#### ***Costs***

***1. Significant costs for private pilot certificates and flight instructor certificates for existing fat ultralights.*** The FAA estimates the cost to operators of existing fat ultralights to obtain a private pilot certificate and flight instructor certificate to be \$45.9 million (\$40.9 million, discounted) over 10 years.

***2. Significant costs for private pilot certificates and flight instructor certificates for future fat ultralights.*** Under this alternative, the costs of obtaining a pilot certificate or an instructor certificate would be much higher than under the proposed rule. The FAA believes that if this alternative is adopted, the number of new pilots would be much less than would be the case with the proposed rule. The FAA estimates the cost to operators of future fat ultralights to obtain private pilot certificates and flight instructor certificates to be \$33.4 million (\$27.0 million, discounted) over 10 years.

***3. Significant aircraft certification costs to manufacturers.*** Aircraft manufacturers can expect to incur costs to obtain airworthiness certificates for the fat ultralights they manufacture. Based on information received from several industry sources, under strict enforcement of the current rules, the cost of aircraft certification would be higher than under the proposed rule. Only newly produced fat ultralights would be eligible to receive a primary or standard category airworthiness certificate (existing fat ultralights were not manufactured under a production certificate and, therefore, would not be eligible for these types of airworthiness certificate). Primary and standard category airworthiness certificates allow the operator to conduct flight training and rental activities. For those fat ultralights that would meet such standards, the potential cost of compliance is estimated to be as low as \$4,800 per fat ultralight for a primary airworthiness certificate, or as high as \$6,400 per fat ultralight for a standard airworthiness certificate. Those fat ultralights that do not meet the standards for primary or standard category airworthiness certificates could

be eligible for an experimental airworthiness certificate. The potential cost of compliance for experimental airworthiness certificate is estimated as \$750 per fat ultralight. The FAA estimated the cost of aircraft certification under this alternative to be \$6.9 million (\$5.7 million, discounted) by assuming that each new pilot or flight instructor would purchase a new aircraft during the same year the pilot received his/her pilot certificate or his/her flight instructor certificate. The new aircraft would be certificated as either an experimental aircraft or a primary aircraft. In this analysis, the FAA assumed that 95 percent of the new pilots and flight instructors would purchase an experimental aircraft and only five percent of them would purchase a primary aircraft. In this case the weighted average certification cost would be \$952.50 per new aircraft. Aircraft certification costs would be underestimated if a higher percentage of new aircraft are certificated as primary aircraft rather than experimental aircraft. Some new pilots may also choose to purchase new aircraft that received a standard airworthiness certificate. To the extent that this happens the aircraft certification costs would also be underestimated. This alternative does not provide a method for aircraft certification of powered parachutes. They can not be certificated under experimental amateur-built, primary, or standard category. Additionally, weight-shift-control aircraft can not be certificated under standard or primary category.

*4. Increased FAA Costs.* The FAA did not estimate the increased cost to the FAA of strictly enforcing current regulations. The FAA would either have to hire new inspectors or shift inspectors away from other enforcement activities (e.g., air carrier operations) to enforce the current regulations on ultralight activities.

Since the cost of this alternative is at least \$86.2 million (\$73.6 million, discounted) and is more expensive than the proposed rule, alternative 1 (strictly enforcing the current rules) must be much more effective (greater than 47 percent) than the proposed rule (23 percent) in order to be cost beneficial.

#### Alternative 2—Proposed Rule (Preferred)

Under this preferred alternative, the FAA would establish unique requirements for the certification, operation, and maintenance of light-sport aircraft, including powered parachutes and weight-shift-control aircraft. Anyone operating fat ultralights (single-place or 2-place types) would be

required to obtain at least a sport pilot certificate. Flight instructors would obtain a sport pilot rating. This alternative would eliminate the need for training exemptions from part 103 and would also establish requirements for private pilots to operate powered parachutes and weight-shift-control aircraft. Under this alternative, the FAA would also establish a new repairman certificate with ratings for individuals who would inspect and maintain light-sport aircraft.

As discussed earlier, the potential benefits from this alternative are estimated to be \$221.4 million (\$153.3 million, discounted). The FAA believes that many of these benefits could be achieved by requiring:

1. All operators of fat ultralights to obtain sport pilot or flight instructor (with a sport pilot rating) certificates. Accidents would be reduced as a result of required training for all pilots operating light-sport aircraft. The FAA believes that training and testing, appropriate to the type of operation conducted, reduces aircraft accidents.

2. All sport pilots to receive training tailored to specific make/model light-sport aircraft and sport and recreational operations. Due to the unique characteristics of each make/model of light-sport aircraft within the same category, this training is necessary to gain the skills necessary to operate those aircraft.

In addition, a sport pilot could choose to add privileges, as needed, with appropriate training. This would reduce accidents or incidents by limiting the privileges and would allow a sport pilot to gain the skills necessary to operate in a simple operating environment and build experience. This building block approach would allow a sport pilot to gain additional skills through additional training, (e.g. operations in Class D, C, or B airspace) when the pilot wants to add more privileges.

3. All aircraft to meet the needed certification requirements. Accidents would be reduced because light-sport aircraft would be manufactured to a standard. In addition, these aircraft would be inspected by the FAA or a representative to ensure they are safe to fly before the issuance of an airworthiness certificate. Standard materials and processes would be used to build these aircraft.

4. All aircraft to meet the needed aircraft maintenance requirements. Accidents would be reduced because required maintenance done in regular intervals by certificated repairmen or mechanics would ensure that light-sport aircraft are maintained properly.

5. Training for repairmen. Establishing maintenance standards and repairman training standards means well-maintained, safer aircraft. The aircraft would be maintained and inspected by individuals who would be trained by manufacturers or industry organizations on these unique types of light-sport aircraft. Repairmen would be trained on specific make and model light-sport aircraft.

The benefits listed in items 2 and 5 above are unique to the proposed rule alternative (preferred). Those two benefits would not be achieved by strictly enforcing current regulations. Benefits in items 1, 3, and 4 above would be achieved under either alternative.

As stated earlier, these proposed requirements are estimated to cost \$40.4 million (\$34.0 million, discounted). If the proposed rule were only 23 percent effective, the proposed rule would be cost beneficial.

The FAA selected this alternative primarily because, not only is the proposed rule less costly than the current rule, it likely would provide a higher level of safety because of the additional two unique safety benefits. In addition, this alternative would fulfill the FAA's responsibility under 49 U.S.C. 44701, which requires the FAA to promote safe flight of civil aircraft and establish regulations covering aircraft operations.

#### B. Initial Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organizations, and governmental jurisdictions subject to regulation." To achieve that principle, the Act requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The Act covers a wide-range of small entities, including small businesses, not-for-profit organizations and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If the determination is that it will, the agency must prepare a regulatory flexibility analysis as described in the Act. However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities,

section 605(b) of the Act provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

There are two types of small commercial entities that would be potentially affected by the proposal: (1) Flight instructors with a sport pilot rating and (2) Certificated repairmen (maintenance). These entities are considered small. Since there is no established size criterion for these types of operators, all of them (flight instructors and maintenance repairmen) are considered to be small from a worst case standpoint. Each of these small entities is discussed below.

#### Flight Instructors With a Sport Pilot Rating

Of the 10,000 existing operators of fat ultralight vehicles that would be affected by the proposal between 2002 and 2003, an estimated 1,000 (or 10 percent) would become flight instructors with a sport pilot rating. An estimated 925 additional new flight instructors with a sport pilot rating are expected to enter the industry between 2002 and 2011, as part of those newly produced light-sport aircraft.

While a small number of new flight instructors with a sport pilot rating would teach part-time for the love of flying, the vast majority (about 75–90 percent) of them likely would be compensated beyond coverage of their operating expenses. These individuals would either be self-employed independent flight instructors for hire, who operate and own flight schools, or they would be employed as flight instructors at flight schools. In most cases, the FAA believes these individuals operate as self-employed independent flight instructors. All of these flight instructors are considered small commercial entities. The proposal would impose, at most, an annualized cost of compliance of \$274 on each of the potentially affected flight instructors over the next 10 years. While no financial data is available for these entities, due to their small size and the nature of their general aviation operations (i.e., many of them have yet to start operating as small entities), the magnitude of the potential compliance cost impact is not considered to be significant.

#### Repairmen (Maintenance)

The proposal would potentially affect an estimated 19,065 light-sport aircraft operators seeking either a sport pilot certificate or a flight instructor

certificate with a sport pilot rating over the next 10 years. For those reasons noted previously in the major assumptions section of this evaluation, an estimated 5 percent of these operators are expected to obtain repairman certificates to perform aircraft maintenance on training and rental aircraft. These light sport-aircraft repairmen (maintenance) would operate as independent small commercial entities or as employees for small fixed base operators.

The proposal would impose an annualized cost of compliance of about \$513 on each of the potentially affected repairmen over the next 10 years. For the same reasons stated previously for flight instructors, no financial data are available for these entities. Nonetheless, the magnitude of the potential compliance cost impact is not considered significant.

In view of the above discussion, the FAA certifies that the proposal would not have a significant economic impact on a substantial number of small entities operating either as light-sport aircraft repairmen (maintenance) or flight instructors with a sport pilot rating.

#### C. International Trade Impact Statement

The Trade Agreement Act of 1979 prohibits Federal agencies from engaging in any standards or related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. This effort includes both barriers affecting the export of American goods and services to foreign countries and barriers affecting the import of foreign goods and services into the United States.

In accordance with the above statute, the FAA has assessed the potential effect of the proposal and has determined that it would not present a significant impediment to either U.S. firms doing business aboard or foreign firms doing business in the United States. The proposal, if adopted as a rule, is expected to stimulate a great deal of growth for the light-sport aircraft aviation industry in the United States and abroad. The belief that no significant trade disadvantage would take place is based on the premise that the number of the requirements contained in the proposal (namely, aircraft certification standards) essentially mirrors those that already exist internationally.

#### D. Initial Unfunded Mandates Assessment

The Unfunded Mandates Reform Act of 1995 (the Act), enacted as Pub. L. 104–4 on March 22, 1995, is intended, among other things, to curb the practice of imposing unfunded Federal mandates on State, local, and tribal governments.

Title II of the Act requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in a \$100 million or more expenditure (adjusted annually for inflation) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a "significant regulatory action."

Since the highest annual cost of compliance would be about \$15.5 million, the proposal does not contain such a mandate. Therefore, the requirements of Title II of the Unfunded Mandates Reform Act of 1995 do not apply.

#### X. Executive Order 13132, Federalism

The FAA has analyzed this proposed rule under the principles and criteria of Executive Order 13132, Federalism. We determined that this action would not have a substantial direct effect 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, we determined that this notice of proposed rulemaking would not have federalism implications.

#### XI. Environmental Analysis

FAA order 1050.1D defines FAA actions that may be categorically excluded from preparation of a National Environmental Policy Act (NEPA) environmental impact statement. In accordance with FAA Order 1050.1D, appendix 4, paragraph 4(j), this proposed rulemaking action qualifies for a categorical exclusion. Currently there are no noise certification regulations that apply to light-sport aircraft.

#### XII. Energy Impact

The energy impact of this proposed rule has been assessed in accordance with the Energy Policy and Conservation Act (EPCA), Pub. L. 94–163, as amended (42 U.S.C. 6362) and FAA Order 1053.1. The FAA has determined that this proposed rule is not a major regulatory action under the provisions of the EPCA.

**List of Subjects****14 CFR Part 1**

Air transportation.

**14 CFR Part 21**

Aircraft, Aviation safety, Exports, Imports, Reporting and recordkeeping requirements.

**14 CFR Part 43**

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

**14 CFR Part 45**

Aircraft, Exports, Signs and symbols.

**14 CFR Part 61**

Aircraft, Airmen, Alcohol abuse, Drug abuse, Recreation and recreation areas, Reporting and recordkeeping requirements, Teachers.

**14 CFR Part 65**

Air traffic controllers, Aircraft, Airmen, Airports, Alcohol abuse, Drug abuse, Reporting and recordkeeping requirements.

**14 CFR Part 91**

Afghanistan, Agriculture, Air traffic control, Aircraft, Airmen, Airports, Aviation safety, Canada, Cuba, Ethiopia, Freight, Mexico, Noise control, Political candidate, Reporting and recordkeeping requirements, Yugoslavia.

**The Proposed Amendment**

In consideration of the above, the Federal Aviation Administration proposes to amend parts 1, 21, 43, 45, 61, 65, and 91 of title 14, Code of Federal Regulations (14 CFR parts 1, 21, 43, 45, 61, 65, and 91) 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), 40113, 44701.

2. Amend § 1.1 by adding the following definitions in alphabetical order:

**§ 1.1 General definitions.**

\* \* \* \* \*

*Consensus standard* means, for the purpose of certificating light-sport aircraft, an industry-developed consensus airworthiness standard that governs aircraft design and performance, quality assurance system requirements, production acceptance test specifications, and continued operational safety monitoring system characteristics.

\* \* \* \* \*

*Light-sport aircraft* means an aircraft, other than a helicopter or powered-lift, that is limited to:

(1) A maximum takeoff weight of 1,232 pounds (560 kilograms) or, for lighter-than-air aircraft, a maximum gross weight of 660 pounds (300 kilograms);

(2) A maximum airspeed in level flight with maximum continuous power ( $V_H$ ) of 115 knots CAS under standard atmospheric conditions;

(3) A maximum never-exceed speed ( $V_{NE}$ ) of 115 knots CAS for a glider;

(4) A maximum stalling speed or minimum steady flight speed in the landing configuration ( $V_{SO}$ ) of 39 knots CAS;

(5) A maximum stalling speed or minimum steady flight speed without the use of lift-enhancing devices ( $V_{SI}$ ) of 44 knots CAS;

(6) A maximum seating capacity of two persons, including the pilot;

(7) A single, non-turbine engine, if powered;

(8) A fixed or ground-adjustable propeller, if powered;

(9) A fixed-pitch, semi-rigid, teetering two-blade rotor system, if a gyroplane;

(10) A non-pressurized cabin, if equipped with a cabin; and

(11) Fixed landing gear, or for seaplanes, repositionable landing gear.

\* \* \* \* \*

*Powered parachute* means a powered aircraft that derives its lift from a non-rigid wing that inflates into a lifting surface when exposed to a wind. A powered parachute is propelled by an engine that is an integral part of the aircraft and is controlled by a pilot within a fuselage suspended beneath the non-rigid wing.

\* \* \* \* \*

*Weight-shift-control aircraft* means a powered aircraft with a framed pivoting wing and a fuselage that is controllable in pitch and roll only by the pilot's ability to change the aircraft's center of gravity.

\* \* \* \* \*

**PART 21—CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS**

3. The authority citation for part 21 continues to read as follows:

**Authority:** 42 U.S.C. 7572; 49 U.S.C. 106(g), 40105, 40113, 44701–44702, 44707, 44709, 44711, 44713, 44715, 45303.

4. Amend § 21.175 by revising paragraph (b) to read as follows:

**§ 21.175 Airworthiness certificates: classification.**

\* \* \* \* \*

(b) Special airworthiness certificate categories are primary, restricted, limited, light-sport, provisional, and experimental airworthiness certificates; and special flight permits.

5. Amend § 21.181, by revising paragraphs (a)(1) and (a)(3) to read as follows:

**§ 21.181 Duration.**

(a) \* \* \*

(1) Standard airworthiness certificates and special airworthiness certificates issued for primary, restricted, or limited category aircraft are effective as long as the maintenance, preventive maintenance, and alterations are performed in accordance with parts 43 and 91 of this chapter, and the aircraft is registered in the United States. A special airworthiness certificate in the light-sport category is effective as long as the aircraft is maintained in accordance with the operating limits limitations issued with the airworthiness certificate, and the aircraft is registered in the United States.

\* \* \* \* \*

(3) An experimental certificate for research and development, showing compliance with regulations, crew training, or market surveys is effective for one year after the date of issue or renewal unless FAA prescribes a shorter period. The duration of amateur-built, exhibition, air-racing, primary kit-built, and light-sport experimental certificates is unlimited, unless FAA establishes a specific period for good cause.

\* \* \* \* \*

6. Amend § 21.182 by revising paragraph (b)(2) to read as follows:

**§ 21.182 Aircraft identification.**

\* \* \* \* \*

(b) \* \* \*

(2) An experimental certificate for an aircraft not issued for the purpose of operating amateur-built aircraft, operating primary kit-built aircraft, or operating light-sport aircraft.

\* \* \* \* \*

7. Add § 21.186 to read as follows:

**§ 21.186 Issue of special airworthiness certificates for light-sport category aircraft.**

(a) *Special, light-sport category aircraft airworthiness certificates.* The FAA issues a special airworthiness certificate in the light-sport category to operate a light-sport aircraft, other than a gyroplane, for sport and recreation, flight training, or rental.

(b) *Eligibility.* To be eligible for a special airworthiness certificate in the light-sport category—

(1) A registered owner must submit—  
(i) The applicable pilot operating handbook;

(ii) The applicable maintenance and inspection procedures;

(iii) The manufacturer's Statement of Compliance as described in paragraph (c) of this section;

(iv) A written statement declaring that the aircraft has not been altered after its date of manufacture; or that any alteration performed on the aircraft meets the applicable consensus standard and has been authorized by the manufacturer or a person acceptable to FAA who has established a program to review alterations performed on the manufacturer's aircraft; and

(v) A written statement declaring that any future alterations performed on the aircraft will meet the applicable consensus standard and be authorized by the manufacturer or a person acceptable to FAA who has established a program to review alterations performed on the manufacturer's aircraft;

(2) The aircraft must not have been previously issued an airworthiness certificate in the standard or primary category; and

(3) The aircraft must be inspected by FAA and found to be in a condition for safe operation.

(c) *Manufacturer's Statement of Compliance for light-sport category aircraft.* A manufacturer of an aircraft intended for certification with a special airworthiness certificate in the light-sport category must issue a Statement of Compliance that:

(1) Identifies the aircraft make and model designation, aircraft serial number, class of light-sport aircraft, and the date of manufacture;

(2) Identifies the consensus standard used to manufacture the aircraft;

(3) States that the aircraft complies with the consensus standard specified in paragraph (c)(2) of this section;

(4) States that the manufacturer has determined the aircraft conforms to the manufacturer's design data, using a quality system that complies with the consensus standard;

(5) Identifies the applicable pilot operating handbook, maintenance and inspection procedures, pilot flight-training manual and states that this information will be made available to any interested person;

(6) Identifies a document describing the system the manufacturer will use for monitoring and correcting safety-of-flight issues;

(7) States that, upon request of the FAA, the manufacturer will provide unrestricted access to its facilities; and

(8) States that the aircraft was tested in accordance with a production acceptance test procedure that meets a consensus standard, that the

manufacturer has found the aircraft performance acceptable, and that the aircraft is in a condition for safe operation.

(d) *Imported light-sport aircraft.* For an imported aircraft to be eligible for a special airworthiness certificate in the light-sport category, a registered owner must meet the requirements of paragraph (b) of this section and provide to the FAA evidence that:

(1) The aircraft was manufactured in a country with which the United States has an agreement for the import or export of that product;

(2) The make and model of the aircraft to be imported is eligible for an airworthiness certificate or flight authority in the country of manufacture; and

(3) The civil aviation authority of the country of export has determined that the aircraft is in a condition for safe operation.

8. Amend § 21.191 by revising the paragraph caption of paragraph (h) and adding paragraph (i) to read as follows:

#### **§ 21.191 Experimental certificates.**

\* \* \* \* \*

(h) *Operating primary kit-built aircraft.* \* \* \*

(i) *Operating light-sport aircraft.*

(1) Operating a light-sport aircraft for which a person applied for registration no later than [Date 24 months after the effective date of the final rule.] and for which FAA issued an experimental airworthiness certificate under this paragraph no later than [Date 36 months after the effective date of the final rule.]. Only aircraft that do not meet the provisions of § 103.1 of this chapter may receive this certificate. The FAA issues this certificate for the purpose of sport and recreation and flight training. A person may operate an aircraft for compensation or hire with this certificate while conducting initial flight training until [Date 36 months after the effective date of the final rule.].

(2) Operating a light-sport aircraft that was assembled from an eligible kit by a person without the supervision and quality system of the manufacturer for the purpose of sport and recreation and flight training.

(3) Operating a light-sport aircraft that was previously issued a special airworthiness certificate in the light-sport category under § 21.186 for the purpose of sport and recreation and flight training.

9. Amend § 21.193 by adding paragraph (e) to read as follows:

#### **§ 21.193 Experimental certificates: general.**

\* \* \* \* \*

(e) In the case of a light-sport aircraft assembled from a kit to be certificated in accordance with § 21.191(i)(2), a registered owner must provide the following:

(1) Evidence that any aircraft of the same make and model previously has been issued a special airworthiness certificate in the light-sport aircraft category and has been manufactured and assembled by the aircraft kit manufacturer;

(2) The applicable pilot operating handbook;

(3) The applicable instructions for maintenance and inspection procedures;

(4) A Statement of Compliance issued by the manufacturer that meets the scope and detail of § 21.186(c) for that specific aircraft kit, except that in-lieu of § 21.186(c)(8), the statement should identify the applicable Assembly Instructions for that aircraft;

(5) The instructions that were used to assemble the aircraft; and

(6) For an imported aircraft kit, evidence that the aircraft kit was manufactured in a country with which the United States has an agreement for the import or export of the product to be made from the kit.

### **PART 43—MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION**

10. The authority citation for part 43 continues to read as follows:

**Authority:** 49 U. S. C. 106(g), 40113, 44701, 44703, 44705, 44707, 44711, 44713, 44717.

11. Amend § 43.1 by revising paragraph (b) to read as follows:

#### **§ 43.1 Applicability.**

\* \* \* \* \*

(b) This part does not apply to any aircraft for which FAA issued a special airworthiness certificate in the light-sport aircraft category or an experimental certificate, unless FAA had previously issued a different kind of airworthiness certificate for that aircraft.

### **PART 45—IDENTIFICATION AND REGISTRATION MARKING**

12. The authority citation for part 45 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40103, 40109, 40113–40114, 44101–44105, 44107–44108, 44110–44111, 44504, 44701, 44708–44709, 44711–44713, 45302–45303, 46104, 46304, 46306, 47122.

13. Amend § 45.27 by adding paragraph (e) to read as follows:

#### **§ 45.27 Location of marks; nonfixed-wing aircraft.**

\* \* \* \* \*

(e) *Powered parachute and weight-shift-control aircraft.* Each operator of a powered parachute or a weight-shift-control aircraft must display the marks required by § 45.23. The marks must be displayed horizontally and in two diametrically opposite positions on any structural member or airfoil.

14. Amend § 45.29 by revising paragraphs (b)(1)(iii), and (b)(2) to read as follows:

#### **§ 45.29 Size of marks.**

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

(iii) Marks at least 3 inches high may be displayed on an aircraft for which FAA has issued an experimental certificate under § 21.191(d), § 21.191(g), or § 21.191(i) of this chapter to operate as an exhibition aircraft, an amateur-built aircraft, or a light-sport aircraft when the maximum cruising speed of the aircraft does not exceed 180 knots CAS; and

\* \* \* \* \*

(2) Airships, spherical balloons, nonspherical balloons, powered parachutes, and weight-shift-control aircraft must be at least 3 inches high; and

\* \* \* \* \*

#### **PART 61—CERTIFICATION: PILOTS, FLIGHT INSTRUCTORS, AND GROUND INSTRUCTORS**

15. The authority citation for part 61 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701–44703, 44707, 44709–44711, 45102–45103, 45301–45302.

16. Add SFAR No. 89 to part 61 to read as follows:

#### **SFAR No. 89—Sport Pilot Certification**

##### **General**

##### **Section**

1. What is the purpose of this SFAR?
3. When am I eligible for a certificate under this SFAR?
5. Does this SFAR expire?
7. Does a sport pilot certificate issued under this SFAR expire?
9. What is a light-sport aircraft?
11. Who is an authorized instructor?
13. Do regulations other than those contained in this SFAR apply to a sport pilot?
15. Must I hold an airman medical certificate?
17. Am I prohibited from operating a light-sport aircraft if I have a medical deficiency?

##### **Student Pilot Certificate to Operate Light-Sport Aircraft**

31. How do I apply for a student pilot certificate to operate light-sport aircraft?
33. What solo requirements must a student pilot operating light-sport aircraft meet?

35. Are there any limits on how a student pilot may operate a light-sport aircraft?
37. How do I obtain privileges to operate in Class B, C, or D airspace and at an airport located in Class B, C, or D airspace?

##### **Sport Pilot Certificate**

51. What aeronautical knowledge must I have to apply for a sport pilot certificate?
53. What flight proficiency requirements must I meet to apply for a sport pilot certificate?
55. What aeronautical experience must I have to apply for a sport pilot certificate?
57. What tests do I have to take to receive a sport pilot certificate?
59. Will my sport pilot certificate list light-sport aircraft category and class ratings?
61. May I operate all categories, classes, and makes and models of light-sport aircraft with my sport pilot certificate?
63. How do I obtain privileges to operate an additional category or class of light-sport aircraft?
65. How do I obtain privileges to operate an additional make and model of light-sport aircraft?
67. Must I carry my logbook with me in the aircraft?

##### **Privileges and Limits of Holders of a Sport Pilot Certificate**

71. What type of aircraft may I fly if I hold a sport pilot certificate?
73. What are my limits for the operation of light-sport aircraft?
75. May I demonstrate an aircraft in flight to a prospective buyer?
77. May I carry a passenger?
79. May I share operating expenses of a flight with a passenger?
81. How do I obtain privileges to operate in Class B, C, or D airspace?
83. How do I obtain privileges to operate a light-sport aircraft that has a  $V_H$  greater than 87 knots CAS?

##### **Transitioning to a Sport Pilot Certificate**

91. How do I obtain a sport pilot certificate if I already hold at least a private pilot certificate issued under 14 CFR part 61?
93. How do I obtain a sport pilot certificate if I do not hold a pilot certificate issued under 14 CFR part 61, but I have been flying ultralight vehicles under 14 CFR part 103?
95. How do I obtain a sport pilot certificate if I don't hold a pilot certificate and have never flown an ultralight vehicle?

##### **Flight Instructor Certificate With a Sport Pilot Rating**

111. Must I hold an airman medical certificate?
113. What aeronautical knowledge requirements must I meet to apply for a flight instructor certificate with a sport pilot rating?
115. What training must I have in areas of operation to apply for a flight instructor certificate with a sport pilot rating?
117. What aeronautical experience must I have to apply for a flight instructor certificate with a sport pilot rating?
119. What tests do I have to take to get a flight instructor certificate with a sport pilot rating?

121. What records do I have to keep and for how long?
123. Will my flight instructor certificate with a sport pilot rating list light-sport aircraft category and class ratings?

125. Am I authorized to provide training in all categories and classes of light-sport aircraft with my flight instructor certificate with a sport pilot rating?

127. How do I obtain privileges to provide flight training in an additional category or class of light-sport aircraft?

129. How do I obtain privileges authorizing me to provide flight training in an additional make and model of light-sport aircraft?

131. Do I need to carry my logbook with me in the aircraft?

133. What privileges do I have if I hold a flight instructor certificate with a sport pilot rating?

135. What are the limits of a flight instructor certificate with a sport pilot rating?

137. Are there any additional qualifications for training first-time flight instructor applicants?

139. May I give myself an endorsement?

##### **Transitioning to a Flight Instructor Certificate With a Sport Pilot Rating**

151. What if I already hold a flight instructor certificate issued under 14 CFR part 61 and want to exercise the privileges of a flight instructor certificate with a sport pilot rating?
153. What if I am only a registered ultralight instructor with an FAA recognized ultralight organization?
155. What if I've never provided flight or ground training in an aircraft or an ultralight vehicle?

##### **Pilot Logbooks**

171. How do I log training time and aeronautical experience?
173. How do I log pilot-in-command flight time?
175. May I use training time and aeronautical experience logged as a sport pilot toward a higher certificate or rating issued under 14 CFR part 61?
177. May I credit training time and aeronautical experience logged as an ultralight operator toward a sport pilot certificate?
179. May I use aeronautical experience I got as the operator of an ultralight vehicle to meet the requirements for a higher certificate or rating issued under 14 CFR part 61?

##### **Recent Flight Experience Requirements for a Sport Pilot Certificate or a Flight Instructor Certificate With a Sport Pilot Rating**

191. What recent flight experience requirements must I meet for a sport pilot certificate?
193. What are the flight review requirements for a sport pilot certificate?

195. How do I renew my flight instructor certificate?

197. What must I do if my flight instructor certificate with a sport pilot rating expires?

##### **Ground Instructor Privileges**

211. What are the eligibility requirements for a ground instructor certificate?

213. What additional privileges do I have if I hold a ground instructor certificate with a basic ground instructor rating?  
 215. What additional privileges do I have if I hold a ground instructor certificate with an advanced ground instructor rating?

General

*Section 1. What is the purpose of this SFAR? This SFAR—*

- (a) Establishes requirements to apply for a student pilot certificate to operate light-sport

aircraft, a sport pilot certificate, and a flight instructor certificate with a sport pilot rating;  
 (b) Expands the privileges of ground instructors to permit them to provide training for a sport pilot certificate and for a flight instructor certificate with a sport pilot rating; and

(c) Establishes the following for the certificates and ratings issued by FAA under the provisions of this SFAR:

- (1) Eligibility requirements;  
 (2) Experience requirements;

- (3) Testing requirements;  
 (4) Endorsements;  
 (5) Privileges and limitations;  
 (6) Logging of ground and flight time;  
 (7) Recent flight experience requirements; and

- (8) Transition provisions.

*Section 3. When am I eligible for a certificate under this SFAR?* (a) See the following table for the eligibility requirements for the different kinds of airman certificates issued under this SFAR:

To be eligible for a . . .	You must be able to read, speak, write, and understand English and be . . .
(1) Student pilot certificate for operating light-sport aircraft, (2) Sport pilot certificate, (3) Flight instructor certificate with a sport pilot rating,	At least 16 (or 14 if you are applying to operate a glider or balloon)  At least 17 (or 16 if you are applying to operate a glider or balloon) (i) At least 18; and (ii) Hold a current and valid sport pilot certificate or a current and valid private pilot certificate issued under 14 CFR part 61.
(b) If you can't read, speak, write, and understand English due to medical requirements, the FAA may place limitations on your certificate as are necessary for the safe operation of light-sport aircraft.  <i>Section 5. Does this SFAR expire?</i> This SFAR will remain in effect until superseded, rescinded, or until it is incorporated into the permanent portion of Title 14, Code of Federal Regulations.  <i>Section 7. Does a sport pilot certificate issued under this SFAR expire?</i> No, a sport pilot certificate issued under this SFAR does not expire.  <i>Section 9. What is a light-sport aircraft?</i> A light-sport aircraft is defined in 14 CFR 1.1.	<i>Section 11. Who is an authorized instructor?</i> An authorized instructor is defined in 14 CFR 61.1.  <i>Section 13. Do regulations other than those contained in this SFAR apply to a sport pilot?</i> Yes. As a certificated pilot, you must comply with 14 CFR part 61 and with the general operating and flight rules under 14 CFR part 91 of this chapter. In addition, you must comply with all other applicable regulations under this chapter.  <i>Section 15. Must I hold an airman medical certificate?</i> In lieu of the provisions of 14 CFR 61.23(a)(3)(iii), which require a student pilot to hold an airman medical certificate, you must hold and possess while exercising

the privileges of a student pilot certificate to operate a light-sport aircraft or a sport pilot certificate, when operating other than a glider or balloon:

- (a) A current and valid U.S. driver's license; or

- (b) A current and valid airman medical certificate issued under 14 CFR part 67.

*Section 17. Am I prohibited from operating a light-sport aircraft if I have a medical deficiency?* See the following table to determine when you are prohibited from operating a light-sport aircraft due to a medical deficiency:

If you hold a sport pilot certificate or a student pilot certificate to operate light-sport aircraft . . .	And . . .	Then . . .
(a) That is a glider or balloon,		You must not act as pilot in command of the aircraft if you know or have reason to know of any medical condition that would make you unable to operate the aircraft in a safe manner.
(b) Other than a glider or balloon,	You hold a U.S. driver's license (regardless of whether you hold an airman medical certificate issued under 14 CFR part 67),	You must not act as pilot in command of the aircraft if you know or have reason to know of any medical condition that would make you unable to operate the aircraft in a safe manner.
(c) Other than a glider or balloon,	(1) You hold an airman medical certificate issued under 14 CFR part 67, but don't hold a U.S. driver's license,	(i) You must not act as pilot in command of the aircraft if: (A) You know or have reason to know of any medical condition that would make you unable to meet the requirements of at least a third-class medical certificate; or (B) You are taking medication or receiving other treatment for a medical condition that results in you being unable to meet the requirements of at least a third-class medical certificate.

Student Pilot Certificate for Operating Light-Sport Aircraft

*Section 31. How do I apply for a student pilot certificate to operate light-sport aircraft?*

Use the following table to determine how to apply for a student pilot certificate to operate light-sport aircraft:

If . . .	Then . . .
(a) You are operating a balloon or glider, or you have a current and valid airman medical certificate issued under 14 CFR part 67, or a current and valid U.S. driver's license,	You must apply for a student pilot certificate to operate light-sport aircraft with a Flight Standards District Office (FSDO) or an FAA designated pilot examiner.

If . . .	Then . . .
(b) You are not operating a balloon or a glider, you do not have a current and valid airman medical certificate issued under 14 CFR part 67, and you are not able to get a current and valid U.S. driver's license,	You must apply for a student pilot certificate to operate light-sport aircraft and an airman medical certificate issued under 14 CFR part 67 with an FAA aviation medical examiner.

*Section 33. What solo requirements must a student pilot operating light-sport aircraft meet?* (a) To operate a light-sport aircraft in solo flight, you must meet the requirements under 14 CFR 61.87(a) through (c).

(b) If you are receiving training for single-engine airplane, glider, gyroplane, airship, or balloon privileges, you must receive and log flight training for the maneuvers and procedures specified in 14 CFR 61.87(d), (g), and (i) through (k), as applicable.

(c) If you are receiving training for powered parachute or weight-shift-control aircraft privileges, you must receive and log flight training for the following maneuvers and procedures:

(1) Proper flight preparation procedures, including preflight planning and preparation, preflight assembly and rigging, aircraft systems, and powerplant operations;

(2) Taxiing or surface operations, including run-ups;

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

(4) Straight and level flight, and turns in both directions;

(5) Climbs, and climbing turns in both directions;

(6) Airport traffic patterns, including entry and departure procedures;

(7) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

(8) Descents and descending turns in both directions;

(9) Emergency procedures and equipment malfunctions;

(10) Ground reference maneuvers;

(11) Recovery from partial canopy collapse (powered parachute only);

(12) Meta-stable stalls and avoidance (powered parachute only);

(13) Flight at various airspeeds from maximum cruise to slow flight (weight-shift-control aircraft only);

(14) Stall entry, stall, and stall recovery (weight-shift-control aircraft only);

(15) Straight glides, and gliding turns in both directions;

(16) Go-arounds;

(17) Approaches to landing areas with a simulated engine malfunction;

(18) Procedures for canopy packing and aircraft disassembly (powered parachute only); and

(19) Procedures for disassembly (weight-shift-control aircraft only).

(d) Solo cross-country flight requirements. You may not operate a light-sport aircraft on a solo cross-country flight unless you have met the requirements specified in 14 CFR 61.93(a) through (c).

(e) Maneuvers and procedures for solo cross-country flight training in a single-engine airplane, glider, gyroplane, or airship. If you are receiving training for single-engine airplane, glider, gyroplane, or airship privileges you must receive and log flight

training for the maneuvers and procedures specified in 14 CFR 61.93 (e), (h), (j), and (k), as applicable.

(f) If you are receiving training for powered parachute and weight-shift control privileges, you must receive and log flight training in 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) If equipped for flight using navigation radios, the procedures for the use of radios for VFR navigation; and

(10) Recognition of weather and upper air conditions favorable for the cross-country flight.

*Section 35. Are there any limits on how a student pilot may operate a light-sport aircraft?* As a student pilot you may not operate a light-sport aircraft:

(a) Unless you comply with 14 CFR 61.87(l) and 61.89 (a)(1) through (a)(4), (a)(7), (a)(8), and (b);

(b) With a flight or surface visibility of less than 3 statute miles;

(c) In flight at night;

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

(e) That exceeds a  $V_H$  of 87 knots CAS;

(f) Outside of the United States;

(g) In Class B, C, or D airspace or at an airport located in Class B, C, or D airspace; unless you have received the ground and flight training from an instructor authorized to provide training and any logbook endorsement necessary for the solo flight;

(h) Contrary to any operating limitation placed on the airworthiness certificate of the aircraft being flown; or

(i) Contrary to any limitation or endorsement on your pilot certificate, airman medical certificate, U.S. driver's license, or any other limitation or endorsement from an authorized instructor.

*Section 37. How do I obtain privileges to operate in Class B, C, or D airspace and at an airport located in Class B, C, or D airspace?* If you hold a student pilot

certificate to operate light-sport aircraft and seek to obtain privileges to operate in Class B, C, or D airspace or at an airport located in Class B, C, or D airspace, you must receive and log ground and flight training from an authorized instructor. The instructor must provide a logbook endorsement that certifies you are proficient in the following aeronautical knowledge areas and areas of operation:

(a) The use of radios, communications, navigation systems and facilities, and radar services;

(b) Operations at airports with an operating control tower, to include 3 takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower;

(c) Applicable flight rules of 14 CFR part 91 for operations in Class B, C, or D airspace and ATC clearances;

(d) Ground training for the specific airspace for which the solo flight is authorized, and flight training in the specific airspace for which the solo flight is authorized within the 90-day period preceding the date of the flight into that airspace; and

(e) Ground and flight training for the specific airport for which the solo flight is authorized, if applicable, within the 90-day period preceding the date of the flight at that airport.

#### Sport Pilot Certificate

*Section 51. What aeronautical knowledge must I have to apply for a sport pilot certificate?* To apply for a sport pilot certificate, you must receive and log ground training from an authorized instructor or complete a home-study course on the following aeronautical knowledge areas:

(a) Applicable regulations of this chapter that relate to sport pilot privileges, limits, and flight operations;

(b) Accident reporting requirements of the National Transportation Safety Board;

(c) Use of the applicable portions of the "Aeronautical Information Manual" and FAA advisory circulars;

(d) Use of aeronautical charts for VFR navigation using pilotage, dead reckoning, and navigation systems;

(e) 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) Safe and efficient operation of aircraft, including collision avoidance, and recognition and avoidance of wake turbulence;

(g) 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 applicable;
- (k) Tumble entry, tumble avoidance techniques for weight-shift-control aircraft category privileges;
- (l) Aeronautical decision making and judgment; and
- (m) Preflight action that includes—
  - (1) How to get information on runway lengths at airports of intended use, data on takeoff and landing distances, weather reports and forecasts, and fuel requirements; and

- (2) How to plan for alternatives if the planned flight cannot be completed or delays are encountered.

*Section 53. What flight proficiency requirements must I meet to apply for a sport pilot certificate?* To apply for a sport pilot certificate, you must receive and log ground and flight training from an authorized instructor on the following areas of operation for airplane single-engine, glider, gyroplane, airship, balloon, powered parachute, and weight shift control privileges:

- (a) Preflight preparation;
- (b) Preflight procedures;
- (c) Airport, seaplane base, and gliderport operations, as applicable;
- (d) Takeoffs (or launches), landings, and go-arounds;

- (e) Performance maneuvers, and for gliders, performance speeds;
- (f) Ground reference maneuvers (not applicable to gliders and balloons);
- (g) Soaring techniques (applicable to gliders only);
- (h) Navigation;
- (i) Slow flight and stalls (stalls not applicable to lighter-than-air aircraft and gyroplanes);
- (j) Emergency operations; and
- (k) Post-flight procedures.

*Section 55. What aeronautical experience must I have to apply for a sport pilot certificate?* Use the following table to determine the experience you must have to apply for a sport pilot certificate depending on aircraft category and class:

If you are applying for a sport pilot certificate with . . .	Then you must log	Which must include
	at least . . .	at least . . .
(a) Airplane category and single-engine class privileges,	20 hours flight time, including at least 15 hours of flight training in a single-engine airplane from an authorized instructor and at least 5 hours solo flight training in areas of operation established in section 53 of this SFAR,	(1) 2 hours cross-country flight training; (2) 10 takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport; (3) One solo cross-country flight of at least 75 nautical miles total distance, with a full stop landing, and one segment of the flight consisting of a straight-line distance of at least 25 nautical miles between the takeoff and landing locations; and (4) 3 hours flight training on those areas of operation specified in section 53 of this SFAR preparing for the practical test within 60 days before the date of the test. (1) 5 solo launches and landings; and (2) 3 hours flight training on those areas of operation specified in section 53 of this SFAR preparing for the practical test within 60 days before the date of the test.
(b) Glider category privileges, and you haven't logged 20 hours flight time in a heavier-than-air aircraft,	10 hours flight time in a glider, including 10 flights in a glider receiving flight training from an authorized instructor and at least 2 hours of solo flight time in the areas of operation listed in section 53 of this SFAR,	(1) 3 solo launches and landings; and (2) 3 hours flight training on those areas of operation specified in section 53 of this SFAR preparing for the practical test within 60 days before the date of the test.
(c) Glider category privileges, and you have logged 20 hours flight time in a heavier-than-air aircraft,	3 hours flight time in a glider, including 5 flights in a glider receiving flight training from an authorized instructor and at least 1 hour solo flight training in the areas of operation listed in section 53 of this SFAR,	(1) 2 hours cross-country flight training; (2) 10 takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport; (3) One solo cross-country flight of at least 50 nautical miles total distance, with a full stop landing, and one segment of the flight consisting of a straight-line distance of at least 25 nautical miles between the takeoff and landing locations; and (4) 3 hours flight training on those areas of operation specified in section 53 of this SFAR preparing for the practical test within 60 days before the date of the test.
(d) Rotocraft category and gyroplane class privileges,	20 hours flight time, including 15 hours flight training in a gyroplane from an authorized instructor and at least 5 hours solo flight training in the areas of operation listed in section 53 of this SFAR,	(1) 2 hours cross-country flight training; (2) 10 takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport; (3) One cross-country flight of at least 25 nautical miles between the takeoff and landing locations; and (4) 3 hours flight training on those areas of operation specified in section 53 of this SFAR preparing for the practical test within 60 days before the date of the test.
(e) Lighter-than-air category and airship class privileges,	20 hours flight time, including 15 hours flight training in an airship from an authorized instructor at least 3 hours performing the duties of pilot in command in an airship with an instructor in the areas of operation listed in section 53 of this SFAR,	(1) 2 hours cross-country flight training; (2) 3 takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport;

If you are applying for a sport pilot certificate with . . .	Then you must log	Which must include
	at least . . .	at least . . .
(f) Lighter-than-air category and balloon class privileges,	7 hours flight time in a balloon, including 3 training flights with an authorized instructor and one flight performing the duties of pilot in command in a balloon with an authorized instructor in the areas of operation listed in section 53 of this SFAR,	(1) 2 hours cross-country flight training; (2) One solo cross-country flight of at least 25 nautical miles total distance between take-off and landing locations; and (3) 3 hours flight training on those areas of operation specified in section 53 of this SFAR preparing for the practical test within 60 days before the date of the test.
(g) Powered parachute category privileges,	20 hours flight time, including 15 hours flight training in a powered parachute from an authorized instructor and at least 5 hours solo flight training in the areas of operation listed in section 53 of this SFAR,	(1) 2 hours cross-country flight training; (2) 10 takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport; (3) One solo cross-country flight of at least 25 nautical miles total distance and one segment of the flight consisting of a straight-line distance of at least 15 nautical miles between takeoff and landing locations; and (4) 3 hours flight training on those areas of operation specified in section 53 of this SFAR preparing for the practical test within 60 days before the date of the test.
(h) Weight-shift-control aircraft category privileges,	20 hours flight time, including 15 hours flight training in a weight-shift-control aircraft from an authorized instructor and at least 5 hours solo flight training in the areas of operation listed in section 53 of this SFAR,	(1) 2 hours cross-country flight training; (2) 10 takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport; (3) One solo cross-country flight of at least 75 nautical miles total distance, with a full stop landing, and one segment of the flight consisting of a straight-line distance of at least 25 nautical miles between takeoff and landing locations; and (4) 3 hours flight training on those areas of operation specified in section 53 of this SFAR preparing for the practical test within 60 days before the date of the test.

**Section 57. What tests do I have to take to receive a sport pilot certificate?** To receive a sport pilot certificate you must pass the following tests:

(a) Knowledge test. You must pass the required knowledge test on the applicable aeronautical knowledge areas listed in section 51 of this SFAR. Before you can take the knowledge test for a sport pilot certificate you must receive a logbook endorsement certifying you are prepared for the test from the authorized instructor who trained you or reviewed and evaluated your home-study course on the aeronautical knowledge areas listed in section 51 of this SFAR.

(b) Practical test. You must pass the required practical test on the applicable areas of operation listed in sections 51 and 53 of this SFAR that apply to the light-sport aircraft privilege you seek. Before you can take the practical test for a sport pilot certificate, you must receive a logbook endorsement from the authorized instructor who provided you with flight training on the areas of operation specified in sections 51 and 53 of this SFAR in preparation for the practical test. This endorsement certifies you meet the applicable aeronautical knowledge and experience requirements and are prepared for the required practical test.

**Section 59. Will my sport pilot certificate list light-sport aircraft category and class ratings?** No. Sport pilot certificates do not list light-sport aircraft category and class ratings.

When you successfully pass the practical test for a sport pilot certificate, regardless of the light-sport aircraft privilege you seek, FAA will issue you a sport pilot certificate without any category and class ratings. You will receive a logbook endorsement of the category, class, and make and model aircraft you are authorized to operate.

**Section 61. May I operate all categories, classes, and makes and models of light-sport aircraft with my sport pilot certificate?** No. If you hold a sport pilot certificate, you must have a logbook endorsement from an authorized instructor for each category, class, or make and model of light-sport aircraft you operate.

**Section 63. How do I obtain privileges to operate an additional category or class of light-sport aircraft?** To operate an additional category or class of light-sport aircraft you must:

(a) Receive a logbook endorsement from the authorized instructor who trained you on the areas of operation specified in sections 51 and 53 of this SFAR certifying that you have met the aeronautical and knowledge experience requirements for the additional light-sport aircraft privilege you seek;

(b) Successfully complete a proficiency check from an authorized instructor other than the instructor who conducted your training on the areas of operation specified in sections 51 and 89 of this SFAR for the

additional light-sport aircraft privilege you seek; and

(c) Receive a logbook endorsement certifying you are proficient in the areas of operation and authorized for the additional light-sport aircraft privilege.

**Section 65. How do I obtain privileges to operate an additional make and model of light-sport aircraft?** To operate an additional make and model of light-sport aircraft, you must receive a logbook endorsement from the authorized instructor who provided you aircraft-specific training for the additional light-sport aircraft make and model privileges you seek, certifying you are proficient in that make and model of light-sport aircraft.

**Section 67. Must I carry my logbook with me in the aircraft?** If you hold a sport pilot certificate, you must carry your logbook or documented proof of all required endorsements with you on all flights. Documented proof includes a photocopy of the logbook endorsements or a pre-printed form that includes the endorsements.

**Privileges and Limits of Holders of a Sport Pilot Certificate**

**Section 71. What type of aircraft may I fly if I hold a sport pilot certificate?** If you hold a sport pilot certificate, you may operate any light-sport aircraft, as defined in 14 CFR 1.1, for which you have received the proper logbook endorsements.

**Section 73. What are my limits for the operation of light-sport aircraft?** (a) If you

hold a sport pilot certificate, you must operate a light-sport aircraft in accordance with 14 CFR part 91. You are limited to sport and recreational flying only.

(b) You may not operate a light-sport aircraft:

- (1) At night;
- (2) In Class A airspace;

(3) In Class B, C, or D airspace, unless you have received ground and flight training and a logbook endorsement from an authorized instructor certifying you are authorized to exercise this privilege;

(4) Outside the United States, unless you have prior authorization from the country in which you seek to operate. Your sport pilot certificate carries the limitation "Holder does not meet ICAO requirements;"

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

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

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

(8) Without visual reference to the surface;

(9) That exceeds a  $V_H$  of 87 knots CAS, unless you have received ground and flight training and a logbook endorsement from an instructor authorized to provide this training;

(10) Contrary to any operating limitation placed on the airworthiness certificate of the aircraft being flown;

(11) Contrary to any limitation or endorsement on your pilot certificate, airman medical certificate, U.S. driver's license, or any other limitation or logbook endorsement from an authorized instructor;

(12) While towing any object; or

(13) While carrying a passenger or property for compensation or hire.

*Section 75. May I demonstrate an aircraft in flight to a prospective buyer?* If you are a sport pilot and you are not an aircraft salesperson, you may demonstrate an aircraft in flight to a prospective buyer. However, if

you are an aircraft salesperson; you must hold a private pilot certificate and meet the requirements of 14 CFR 61.113(f).

*Section 77. May I carry a passenger?* Yes. As the holder of a sport pilot certificate, you may carry one passenger.

*Section 79. May I share operating expenses of a flight with a passenger?* Yes. You may share with a passenger the operating expenses of a flight, including fuel, oil, airport expenditures, and rental fees. However, you must pay at least half the operating expenses of a flight.

*Section 81. How do I obtain privileges to operate in Class B, C, or D airspace?* If you hold a sport pilot certificate and seek privileges to operate in Class B, C, or D airspace, you must receive and log ground and flight training from an authorized instructor who provides a logbook endorsement. That endorsement must certify you are proficient in the following aeronautical knowledge areas and areas of operation:

(1) The use of radios, communications, navigation system/facilities, and radar services;

(2) Operations at airports with an operating control tower to include 3 takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower; and

(3) Applicable flight rules of part 91 for operations in Class B, C, or D airspace and ATC clearances.

*Section 83. How do I obtain privileges to operate a light-sport aircraft that has a  $V_H$  greater than 87 knots CAS?* If you hold a sport pilot certificate and seek privileges to operate a light-sport aircraft that has a  $V_H$  greater than 87 knots CAS you must—

(a) Receive and log ground and flight training from an authorized instructor in an aircraft that has a  $V_H$  greater than 87 knots CAS; and

(b) Receive a logbook endorsement from an authorized instructor certifying that you are proficient in the operation of this light-sport aircraft.

#### Transitioning to a Sport Pilot Certificate

*Section 91. How do I obtain a sport pilot certificate if I already hold at least a private pilot certificate issued under 14 CFR part 61?*

(a) If you already hold at least a current and valid private pilot certificate issued under 14 CFR part 61, and you seek to exercise the privileges of a sport pilot certificate, you may do so without any further showing of proficiency, subject to the following limits:

(1) You are limited to the aircraft category and class ratings listed on your existing pilot certificate when exercising your sport pilot privileges;

(2) You must receive specific training for any make and model of light-sport aircraft in which you have not acted as pilot-in-command; and

(3) You must receive a logbook endorsement from the authorized instructor who trained you and certified you are proficient in that make and model of light-sport aircraft.

(b) If you want to exercise the privileges of a sport pilot for a category or class for which you are not currently rated, you must meet the applicable category and class requirements contained in sections 51 through 57 of this SFAR.

*Section 93. How do I obtain a sport pilot certificate if I do not hold a pilot certificate issued under 14 CFR part 61, but I have been flying ultralight vehicles under 14 CFR part 103?* Use the following table to determine how to obtain a sport pilot certificate if you don't hold a pilot certificate issued under 14 CFR part 61, but you have been flying ultralight vehicles under 14 CFR part 103:

If you are . . .	Then you must . . .	And those records must . . .
(a) A registered ultralight pilot with an FAA-recognized ultralight organization not later than 24 months after the effective date of the final rule, and you want to apply for a sport pilot certificate.	<ul style="list-style-type: none"> <li>(1) Meet the eligibility requirements in sections 3 and 15 of this SFAR, but not the experience requirements in sections 51, 53, and 55 of this SFAR;</li> <li>(2) Pass the knowledge test and practical test for a sport pilot certificate; and</li> <li>(3) Obtain a notarized copy of your ultralight pilot records from the FAA-recognized ultralight organization,</li> </ul>	<ul style="list-style-type: none"> <li>(i) Document that you are a registered ultralight pilot with that FAA-recognized ultralight organization;</li> <li>(ii) List each category and class of ultralight vehicle that the organization recognizes that you are qualified to operate; and</li> <li>(iii) Be presented when applying for a sport pilot certificate.</li> </ul>
(b) A registered ultralight pilot with an FAA-recognized ultralight organization after 24 months after the effective date of the final rule, and you want to apply for a sport pilot certificate,	<ul style="list-style-type: none"> <li>(1) Meet the eligibility requirements in sections 3 and 15 of this SFAR;</li> <li>(2) Meet the experience requirements in sections 51, 53, and 55, of this SFAR, however you may credit your ultralight flight and ground time in accordance with section 177 of this SFAR toward the experience requirements in sections 51, 53, and 55 of this SFAR;</li> <li>(3) Pass the knowledge test and practical test for a sport pilot certificate; and</li> </ul>	

If you are . . .	Then you must . . .	And those records must . . .
(c) Not a registered ultralight pilot with an FAA-recognized ultralight organization, and you want to apply for a sport pilot certificate.	(4) Obtain a notarized copy of your ultralight pilot records from the FAA-recognized ultralight organization;  (1) Meet the eligibility requirements in sections 3 and 15 of this SFAR; (2) Meet the experience requirements in sections 51, 53, and 55 of this SFAR; and (3) Pass the knowledge test and the practical test for a sport pilot certificate.	(i) Document that you are a registered ultralight pilot with that FAA-recognized ultralight organization; (ii) List each category and class of ultralight vehicle that the organization recognizes that you are qualified to operate; and (iii) Be presented when applying for a sport pilot certificate.

*Section 95. How do I obtain a sport pilot certificate if I don't hold a pilot certificate and have never flown an ultralight vehicle?* If you don't hold a pilot certificate and haven't flown an ultralight vehicle, you must meet the applicable requirements of sections 3, 15 and 51 through 57 of this SFAR to obtain a sport pilot certificate.

#### Flight Instructor Certificate With a Sport Pilot Rating

*Section 111. Must I hold an airman medical certificate?* While exercising the privileges of a flight instructor certificate with a sport pilot rating and while acting as pilot in command of a light-sport aircraft other than a glider or balloon, you must hold and possess:

- (a) A current and valid U.S. driver's license; or
- (b) A current and valid airman medical certificate issued under 14 CFR part 67.

*Section 113. What aeronautical knowledge requirements must I meet to apply for a flight instructor certificate with a sport pilot rating?*

(a) To apply for a flight instructor certificate with a sport pilot rating, you must receive and log ground training on the fundamentals of instruction from an authorized instructor on all of the following:

- (1) The learning process;
- (2) Elements of effective teaching;
- (3) Student evaluation and testing;
- (4) Course development;
- (5) Lesson planning; and
- (6) Classroom training techniques.
- (b) You do not have to comply with paragraph (a) of this section if:

  - (1) You hold a flight instructor certificate or ground instructor certificate issued under 14 CFR part 61;
  - (2) You hold a current teacher's certificate issued by a State, county, city, or municipality; or
  - (3) You are employed as a teacher at an accredited college or university.
  - (c) You must receive and log ground training from an authorized instructor on the aeronautical knowledge areas applicable to a sport pilot certificate.

*Section 115. What training to meet flight proficiency requirements must I have to apply for a flight instructor certificate with a sport pilot rating?* (a) To apply for a flight instructor certificate with a sport pilot rating for all sport pilot aircraft categories, you must receive and log flight and ground training from an authorized instructor in the following areas of operation:

- (1) Technical subject areas;
- (2) Pre-flight preparation;
- (3) Pre-flight lesson on a maneuver to be performed in flight;
- (4) Pre-flight procedures;
- (5) Airport, seaplane base, and gliderport operations, as applicable;
- (6) Takeoffs (or launches), landings, and go-arounds;
- (7) Fundamentals of flight;
- (8) Performance maneuvers and for gliders performance speeds;
- (9) Ground reference maneuvers (except for gliders and lighter-than-air);
- (10) Soaring techniques;
- (11) Slow flight and stalls (stalls not applicable to lighter-than-air and gyroplanes);
- (12) Spins (applicable to airplanes, gliders, and weight-shift-control aircraft);
- (13) Emergency operations; and
- (14) Post-flight procedures.
- (b) [Reserved]

*Section 117. What aeronautical experience must I have to apply for a flight instructor certificate with a sport pilot rating?* Use the following table to determine the experience you must have for each aircraft category and class:

If you are applying for a flight instructor certificate with a sport pilot rating for . . .	Then you must log at least . . .	Which must include at least . . .
(a) Airplane category and single-engine class privileges,	(1) 150 hours flight time as a pilot,	(i) 100 hours flight time as pilot in command in powered aircraft; (ii) 50 hours flight time in a single-engine airplane; (iii) 25 hours cross-country flight time; (iv) 10 hours cross-country flight time in a single-engine airplane; and (v) 15 hours flight time as pilot in command in a single-engine airplane that is a light-sport aircraft.
(b) Glider category privileges,	(1) 25 hours flight time as pilot in command in a glider, 100 flights in a glider, and 15 flights as pilot in command in a glider that is a light-sport aircraft; or (2) 100 hours in heavier-than-air aircraft, 20 flights in a glider, and 15 flights as pilot in command in a glider that is a light-sport aircraft.	
(c) Rotocraft category and gyroplane class privileges.	(1) 125 hours flight time as a pilot,	(i) 100 hours flight time as pilot in command in powered aircraft; (ii) 50 hours flight time in a gyroplane; (iii) 10 hours cross-country flight time;

If you are applying for a flight instructor certificate with a sport pilot rating for . . .	Then you must log at least . . .	Which must include at least . . .
(d) Lighter-than-air category and airship class privileges,	(1) 100 flight time as a pilot,	(iv) 3 hours cross-country flight time in a gyroplane; and (v) 15 hours flight time as pilot in command in a gyroplane airplane that is a light-sport aircraft. (i) 40 hours flight time in an airship; (ii) 20 hours pilot in command time in an airship; (iii) 10 hours cross-country flight time; (iv) 5 hours cross-country flight time in an airship; and (v) 15 hours flight time as pilot in command in an airship that is a light-sport aircraft. (i) 20 hours flight time in a balloon; (ii) 10 flights in a balloon; and (iii) 5 flights as pilot in command in a balloon that is a light-sport aircraft.
(e) Lighter-than-air category and balloon class privileges,	(1) 35 hours flight time as pilot in-command,	(i) 100 hours flight time as pilot in command in powered aircraft; (ii) 50 hours flight time in a weight-shift-control aircraft; (iii) 25 hours cross-country flight time; (iv) 10 hours cross-country flight time in a weight-shift-control aircraft; and (v) 15 hours flight time as pilot in command in a weight-shift-control aircraft that is a light-sport aircraft.
(f) Weight-shift-control aircraft category privileges,	(1) 150 hours flight time as a pilot,	(i) 75 hours flight time as pilot in command in powered aircraft; (ii) 50 hours flight time in a powered parachute; (iii) 15 hours cross-country flight time; (iv) 5 hours cross-country flight time in a powered parachute; and (v) 15 hours flight time as pilot in command in a powered parachute that is a light-sport aircraft.
(g) Powered-parachute category privileges,	(1) 100 hours flight time as a pilot,	

*Section 119. What tests do I have to take to get a flight instructor certificate with a sport pilot rating? To obtain a flight instructor certificate with a sport pilot rating, you must pass the following tests:*

(a) *Knowledge test.* Before you can take a knowledge test you must receive a logbook endorsement from an authorized instructor certifying that you are prepared for that knowledge test. You must pass knowledge tests on:

(1) The fundamentals of instructing listed in section 113(a) of this SFAR, unless you met the requirements of section 113(b) of this SFAR; and

(2) The aeronautical knowledge areas required by section 113(c) of this SFAR.

(b) *Practical test.* Before you can take the practical test for a flight instructor certificate with a sport pilot rating, you must receive a logbook endorsement certifying that you meet the applicable aeronautical knowledge and experience requirements and you are prepared for the practical test. You must receive this endorsement from the authorized instructor who provided you the flight training on the areas of operation specified in section 115 of this SFAR that apply to the light-sport aircraft privilege you seek. You must also:

(1) Pass a practical test on the areas of operation listed in section 115 of this SFAR

that are appropriate to the flight instructor privilege you seek;

(2) Pass a practical test in a light-sport aircraft that is representative of the category and class of aircraft for the privilege you seek;

(3) Receive a logbook endorsement from an authorized instructor indicating that you are competent and possess instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures after you have received flight training in those training areas in an airplane, glider, or weight-shift-control aircraft, as appropriate, that is certificated for spins;

(4) Demonstrate you are able to teach stall awareness, spin entry, spins, and spin recovery procedures in an airplane, glider, or weight-shift-control aircraft, as appropriate. If you haven't previously failed a test based on this requirement, and you provide the endorsement required by paragraph (b)(3) of this section, an examiner may accept it instead of the demonstration required by this paragraph; and

(5) If you are taking a retest because you previously failed a test based on the requirement of paragraph (b)(4) of this section, you must pass a test on stall awareness, spin entry, spins, and spin recovery instructional procedures in the applicable light-sport aircraft that is certificated for spins.

*Section 121. What records must I keep and for how long?* (a) You must keep records that include the name of:

(1) Each person whose logbook or student pilot certificate you have endorsed for solo flight privileges, and the date of the endorsement;

(2) Each person for whom you have provided an endorsement for a knowledge test, practical test, or proficiency check and the record must indicate the kind of test or check, the date, and the results;

(3) Each person whose logbook you have endorsed as proficient to operate:

(i) An additional category or class of light-sport aircraft;

(ii) An additional make and model of light-sport aircraft;

(iii) In Class B, C, or D airspace; and

(iv) A light-sport aircraft with a  $V_H$  greater than 87 knots CAS; and

(4) Each person whose logbook you have endorsed as proficient to provide flight training in an additional:

(i) Category or class of light-sport aircraft; and

(ii) Make and model of light-sport aircraft.

(b) You must keep the records listed in paragraph (a) of this section for 3 years. You

may keep these records in a logbook or a separate document.

*Section 123. Will my flight instructor certificate with a sport pilot rating list light-sport aircraft category and class ratings?* No. A flight instructor certificate with a sport pilot rating does not list light-sport aircraft category and class ratings. When you successfully pass the practical test for a flight instructor certificate with a sport pilot rating, regardless of the light-sport aircraft privilege you seek, FAA will issue you a flight instructor certificate with a sport pilot rating without any category and class ratings. You will receive logbook endorsements for the category, class, and make and model aircraft in which you are authorized to provide training.

*Section 125. Am I authorized to provide training in all categories and classes of light-sport aircraft with my flight instructor certificate with a sport pilot rating?* No, you may provide training only in a category and class of light-sport aircraft for which you have received the proper endorsements. If you hold a flight instructor certificate with a sport pilot rating, you must have a logbook endorsement from an authorized instructor for each additional category and class and for each additional make and model of light-sport aircraft in which you provide training.

*Section 127. How do I obtain privileges to provide flight training in an additional category or class of light-sport aircraft?* To obtain privileges to provide flight training for an additional category or class of light-sport aircraft, you must:

(a) Receive a logbook endorsement from the authorized instructor who trained you as specified in section 115 of this SFAR for the additional light-sport aircraft privilege you seek. This endorsement certifies you have met the aeronautical and knowledge experience requirements for the additional light-sport aircraft privilege you seek; and

(b) Successfully complete a proficiency check from an authorized instructor other than the instructor who trained you on the areas specified in section 115 of this SFAR for the additional light-sport aircraft privilege you seek. The authorized instructor will certify in your logbook that you are proficient in the areas of operation and authorized for the additional light-sport aircraft privilege.

*Section 129. How do I obtain privileges authorizing me to provide flight training in an additional make and model of light-sport aircraft?* To obtain privileges to provide flight training in an additional make and model of light-sport aircraft, you must receive a logbook endorsement from the authorized instructor who provided you aircraft-specific training for the additional light-sport aircraft make and model you seek. The endorsement certifies you are proficient to provide flight training in that make and model of light-sport aircraft.

*Section 131. Do I need to carry my logbook with me in the aircraft?* Yes. You must carry your logbook or documented proof of required endorsements with you while exercising the privileges of your flight instructor certificate with a sport pilot rating.

*Section 133. What privileges do I have if I hold a flight instructor certificate with a sport pilot rating?* You are authorized, within

the limitations of your flight instructor certificate with a sport pilot rating, to provide training and logbook endorsements for:

- (a) A student pilot certificate to operate light-sport aircraft;
- (b) A sport pilot certificate;
- (c) A sport pilot privilege;
- (d) A flight review for a sport pilot;
- (e) A practical test for a sport pilot;
- (f) A knowledge test for a sport pilot; and
- (g) A proficiency check for an additional category or class and make and model privilege for a sport pilot certificate or flight instructor certificate with a sport pilot rating.

*Section 135. What are the limits of a flight instructor certificate with a sport pilot rating?* If you hold a flight instructor certificate with a sport pilot rating, you are subject to the following limits:

(a) You may provide ground and flight training only in the category, class, and make and model of light-sport aircraft for which you have received the proper logbook endorsements for both your pilot certificate and your flight instructor certificate;

(b) You must comply with the limitations established in §§ 61.87(n), 61.93(d), 61.195 (a), (d)(1)–(d)(3), and (d)(5);

(c) You must not provide flight training required for a sport pilot certificate or privilege or a flight instructor certificate with a sport pilot rating or privilege unless you have at least 5 hours of pilot-in-command time or aeronautical experience, or any combination thereof, in the make and model of light-sport aircraft. You must get the aeronautical experience as a registered pilot with an FAA-recognized ultralight organization.

(d) You must not provide training for operations in Class B, C, or D airspace, unless you have the endorsement specified in section 81 of this SFAR, or are otherwise authorized to conduct operations in this airspace; and

(e) You must not provide training in a light-sport aircraft with a  $V_H$  greater than 87 knots CAS, unless you have the endorsement specified in section 83 of this SFAR or are otherwise authorized to operate that aircraft.

*Section 137. Are there any additional qualifications for training first-time flight instructor applicants?* No. You do not have to comply with the requirements for training first-time flight instructor applicants specified in 14 CFR 61.195(h).

*Section 139. May I give myself an endorsement?* No. If you hold a flight instructor certificate with a sport pilot rating, you may give yourself an endorsement for any certificate, privilege, flight review, authorization, practical test, knowledge test, or proficiency check required by 14 CFR part 61.

#### Transitioning to a Flight Instructor Certificate With a Sport Pilot Rating

*Section 151. What if I already hold a flight instructor certificate issued under 14 CFR part 61 and want to exercise the privileges of a flight instructor certificate with a sport pilot rating?* (a) If you already hold at least a current and valid flight instructor certificate issued under 14 CFR part 61, and you seek to exercise the privileges of a flight instructor certificate with a sport pilot rating, you may

do so without any further showing of proficiency, subject to the following limits:

(1) You are limited to the aircraft category and class ratings listed on your existing pilot certificate and flight instructor certificate when exercising your flight instructor privileges;

(2) You must receive specific training for any make and model of light-sport aircraft in which you have not acted as pilot in command, and the instructor who conducted your training must endorse your logbook certifying that you are proficient in that make and model of light-sport aircraft; and

(3) You must comply with the requirement in section 135 of this SFAR to have at least 5 hours of pilot in command time in the specific make and model light-sport aircraft.

(b) If you want to exercise the privileges of your flight instructor certificate in a category, class, or make and model of light-sport aircraft for which you are not currently rated you must meet the requirements contained in sections 127 and 129 of this SFAR.

*Section 153. What if I am only a registered ultralight instructor with an FAA recognized ultralight organization?* If you are a registered ultralight instructor with an FAA-recognized ultralight organization not later than [Date 36 months after the effective date of the final rule.], and you want to apply for a flight instructor certificate with a sport pilot rating:

(a) You must hold either a current and valid sport pilot certificate or at least a current and valid private pilot certificate issued under 14 CFR part 61;

(b) You must meet the eligibility requirements in sections 3 and 111 of this SFAR. You do not have to meet the experience requirements in sections 113 through 117 of this SFAR, except as specified in section 153(c) of this SFAR;

(c) You must have at least the minimum total pilot flight time in the category and class of light-sport aircraft specified in section 117 of this SFAR. You need not meet the pilot-in-command, time in aircraft category and class, and cross-country pilot flight time requirements specified in section 117 of this SFAR. You may credit flight time as the operator of an ultralight vehicle in accordance with the logging of flight and ground time requirements under section 177 of this SFAR;

(d) You need not meet the aeronautical knowledge requirement specified in section 113(a) of this SFAR or meet the exception specified in section 113(b) of this SFAR if you have passed the FAA's or an FAA-recognized ultralight organization's Fundamentals of Instruction knowledge test;

(e) You must obtain and present upon application a notarized copy of your ultralight pilot records from the FAA-recognized ultralight organization. Those records must:

(1) Document that you are a registered ultralight flight instructor with that FAA-recognized ultralight organization; and

(2) List each category and class of ultralight vehicle that the organization recognizes that you are qualified to operate and authorized to provide training in; and

(f) You must pass the knowledge test and practical test for a sport pilot certificate.

*Section 155. What if I've never provided flight or ground training in an aircraft or an*

*ultralight vehicle?* You must meet all of the applicable requirements under sections 3 and 11 through 119 of this SFAR to apply for a flight instructor certificate with a sport pilot rating.

#### Pilot Logbooks

*Section 171. How do I log training time and aeronautical experience?* If you hold a sport pilot certificate or flight instructor certificate with a sport pilot rating, you must document and record training time and aeronautical experience according to 14 CFR 61.51 and the pilot logbook requirements of this SFAR.

*Section 173. How do I log pilot-in-command flight time?* If you hold a sport pilot certificate you may log flight time as pilot in command only when—

(a) You are the sole manipulator of the controls of an aircraft for which you have privileges; or

(b) You are the sole occupant of the aircraft.

*Section 175. May I use training time and aeronautical experience logged as a sport pilot toward a higher certificate or rating issued under 14 CFR part 61?* Yes, you may use training time and aeronautical experience documented as a sport pilot to meet the requirements for a higher certificate or rating in accordance with 14 CFR 61.51 and sections 173, 177 and 179 of this SFAR.

*Section 177. May I credit training time and aeronautical experience logged as an ultralight operator toward a sport pilot certificate?* (a) You may credit training time and aeronautical experience as the operator of an ultralight vehicle toward the experience requirements of a sport pilot certificate if—

(1) You are a registered ultralight pilot with an FAA-recognized ultralight organization; and

(2) Your ultralight training time and aeronautical experience is documented in accordance with the provisions for logging training and aeronautical experience specified by that organization.

(b) If you want to credit the training time and aeronautical experience you have logged in an ultralight vehicle toward a sport pilot certificate or flight instructor certificate with a sport pilot rating, you can only do so in the same category and class of light-sport aircraft. That is, if you have been flying a powered parachute ultralight, you can apply your experience to the requirements for a powered parachute light-sport aircraft, but not to the requirements for a weight-shift-control light-sport aircraft.

*Section 179. May I use aeronautical experience I obtained as the operator of an ultralight vehicle to meet the requirements for a higher certificate or rating issued under 14 CFR part 61?* You may not use aeronautical experience you obtained as the operator of an ultralight vehicle to meet the requirements for a certificate or rating specified in 14 CFR 61.5, except for that time credited to meet the requirements for the issuance of a sport pilot certificate under this SFAR.

Recent Flight Experience Requirements for a Sport Pilot Certificate or a Flight Instructor Certificate With a Sport Pilot Rating

*Section 191. What recent flight experience requirements must I meet for a sport pilot*

*certificate?* If you hold a sport pilot certificate, you must comply with the appropriate recent flight experience requirements specified in 14 CFR 61.57.

*Section 193. What are the flight review requirements for a sport pilot certificate?* If you hold a sport pilot certificate, you must comply with the appropriate flight review requirements specified in 14 CFR 61.56.

*Section 195. How do I renew my flight instructor certificate?* To renew your flight instructor certificate, you must comply with the requirements specified in 14 CFR 61.197.

*Section 197. What must I do if my flight instructor certificate with a sport pilot rating expires?* If your flight instructor certificate with a sport pilot rating expires, you may exchange that certificate for a new certificate by passing a practical test as prescribed in section 119 of this SFAR. The FAA will reinstate any privilege authorized by the expired certificate.

#### Ground Instructors

*Section 211. What are the eligibility requirements for a ground instructor certificate?* You must meet the eligibility requirements in 14 CFR 61.213 to be eligible for a ground instructor certificate or rating.

*Section 213. What additional privileges do I have if I hold a ground instructor certificate with a basic ground instructor rating?* If you hold a ground instructor certificate with a basic ground instructor rating, specified in 14 CFR 61.215(a), you are authorized the following additional privileges:

(a) Ground training in the aeronautical knowledge areas required for a sport pilot certificate or privileges under 14 CFR part 61;

(b) Ground training required for a sport pilot flight review; and

(c) A recommendation for a knowledge test required for a sport pilot certificate.

*Section 215. What additional privileges do I have if I hold a ground instructor certificate with an advanced ground instructor rating?* If you hold an advanced ground instructor rating, specified in 14 CFR 61.215(b), you are authorized the following additional privileges:

(a) Ground training in the aeronautical knowledge areas required for any certificate or privileges under this SFAR;

(b) Ground training required for a sport pilot flight review; and

(c) A recommendation for a knowledge test required for the issuance of any certificate under this SFAR.

17. Amend § 61.1 as follows:

a. Revise paragraphs (b)(2)(iii) and (b)(3)(i) introductory text;

b. Redesignate paragraphs (b)(3)(iii), (b)(3)(iv), and (b)(3)(v) as paragraphs (b)(3)(v), (b)(3)(vi), and (b)(3)(vii); and

c. Add new paragraphs (b)(3)(iii) and (b)(3)(iv). The revisions and additions read as follows:

#### § 61.1 Applicability and definitions.

\* \* \* \* \*

(b) \* \* \*

(2) \* \* \*

(iii) A person authorized by the FAA to provide ground training or flight training under SFAR No. 89, SFAR No.

58, or parts 61, 121, 135, or 142 of this chapter when conducting ground training or flight training in accordance with that authority.

(3) \* \* \*

(i) Except as provided in paragraphs (b)(3)(ii) through (b)(3)(vi) of this section, time acquired during flight—

\* \* \* \* \*

(iii) For the purpose of meeting the aeronautical experience requirements (except for powered parachute category privileges) for a sport pilot certificate time acquired during a flight—

(A) Conducted in an appropriate aircraft;

(B) That includes a point of landing that was at least a straight line distance of more than 25 nautical miles from the original point of departure; and

(C) That involves the use of dead reckoning, pilotage, electronic navigation aids; radio aids, or other navigation systems to navigate to the landing point.

(iv) For the purpose of meeting the aeronautical experience requirements for a sport pilot certificate with powered parachute privileges, or private pilot certificate with a powered parachute category rating, time acquired during a flight—

(A) Conducted in an appropriate aircraft;

(B) That includes a point of landing that was at least a straight line distance of more than 15 nautical miles from the original point of departure; and

(C) That involves the use of dead reckoning, pilotage, electronic navigation aids; radio aids, or other navigation systems to navigate to the landing point.

\* \* \* \* \*

18. Amend § 61.5 by:

a. Redesignating paragraphs (a)(1)(ii) through (a)(1)(v) as paragraphs (a)(1)(iii) through (a)(1)(vi);

b. Adding new paragraphs (a)(1)(ii), (b)(1)(vi) and (b)(1)(vii);

c. Redesignating paragraphs (b)(5) and (b)(6) as paragraphs (b)(6) and (b)(7); and

d. Adding new paragraphs (b)(5) and (c)(5). The additions read as follows:

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

(a) \* \* \*

(1) \* \* \*

(ii) Sport pilot.

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

(vi) Powered parachute.

(vii) Weight-shift-control aircraft.

\* \* \* \* \*

(5) Weight-shift-control aircraft class ratings—

- (i) Weight-shift-control aircraft land.
- (ii) Weight-shift-control aircraft sea.

\* \* \* \*

- (i) \*
- (5) Sport pilot rating.

\* \* \* \*

19. Amend § 61.31 by revising paragraph (k)(2)(iii) to read as follows:

**§ 61.31 Type rating requirements, additional training, and authorization requirements.**

\* \* \* \*

(k) \*

(2) \*

(iii) The holder of a pilot certificate when operating an aircraft under the authority of an experimental or provisional aircraft type certificate unless the operation involves carrying passengers;

\* \* \* \*

20. Amend § 61.99 by revising the introductory language to read as follows:

**§ 61.99 Aeronautical experience.**

A person who applies for a recreational pilot certificate must receive and log at least 30 hours of flight time that includes at least:

\* \* \* \*

21. Amend § 61.101 by revising paragraphs (b) introductory text and (c) introductory text, redesignating paragraphs (d) through (i) as paragraphs (e) through (j), adding a new paragraph (d), and revising newly designated paragraphs (e) introductory text, (e)(1), (e)(7) and (e)(11) to read as follows:

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

\* \* \* \*

(b) A person who holds a current and valid 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 has:

\* \* \* \*

(c) A person who holds a current and valid 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 has:

\* \* \* \*

(d) A person who holds a current and valid recreational pilot certificate may act as pilot in command of an aircraft in Class B, C, or D airspace, provided that person has:

(1) Received and logged ground and flight training from an authorized instructor on the following aeronautical knowledge areas and areas of operation, as appropriate to the aircraft rating held:

(i) The use of radios, communications, navigation system/facilities, and radar services;

(ii) Operations at airports with an operating control tower to include 3 takeoffs and landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower; and

(iii) Applicable flight rules of part 91 of this chapter for operations in Class B, C, or D airspace and air traffic control clearances.

(2) Been found proficient on ground and flight training requirements in paragraph (d)(1) of this section; and

(3) Received from an authorized instructor a logbook endorsement, which is carried on the person's possession in the aircraft, that certifies the person has received and been found proficient on the required ground and flight training in paragraph (d)(1) of this section.

(e) Except as provided in paragraphs (d) and (i) of this section, a recreational pilot may not act as pilot in command of an aircraft:

(1) That is certificated—

- (i) For more than four occupants;
- (ii) With more than one powerplant;
- (iii) With a powerplant of more than 180 hp; or

(iv) With retractable landing gear.

\* \* \* \*

(7) In Class A, B, C, or D airspace;

\* \* \* \*

(11) On a flight outside the United States, unless authorized by the country in which the flight is conducted;

\* \* \* \*

22. Amend § 61.107 by adding paragraphs (b)(9) and (b)(10) to read as follows:

**§ 61.107 Flight proficiency.**

\* \* \* \*

(b) \*

(9) For a powered parachute category rating:

(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) Slow flight and stalls;

(ix) Night operations, except as provided in § 61.110;

(x) Emergency operations; and

(xi) Post-flight procedures.

(10) For a weight-shift-control aircraft category rating:

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and seaplane base operations, as applicable;

(iv) Takeoffs, landings, and go-arounds;

(v) Performance maneuvers;

(vi) Ground reference maneuvers;

(vii) Navigation;

(viii) Slow flight and stalls;

(ix) Night operations, except as provided in § 61.110;

(x) Emergency operations; and

(xi) Post-flight procedures.

23. Amend § 61.109 by:

a. Revising the reference “paragraph (i)” to read “paragraph (j)” the introductory text of paragraphs (a), (b), (c), (d), and (e);

b. Revising the reference “paragraphs (i)(2)” to read “paragraph (j)(2)” in paragraph (i)(1);

c. Redesignating paragraph (i) as paragraph (j); and

d. Adding a new paragraph (i).

The addition reads as follows:

**§ 61.109 Aeronautical experience.**

\* \* \* \*

(i) Use the following table to determine the aeronautical experience requirements for a powered parachute rating and a weight-shift-control aircraft rating:

Except as provided in paragraph (k) of this section, a person who applies for a private pilot certificate with. . .	Must log at least 40 hours flight time that includes at least. . .	And the training must include at least. . .
(1) A powered parachute category rating,	20 hours flight training from an authorized instructor and 10 hours solo flight training in the areas listed in § 61.107(b)(9),	(i) Three hours cross-country flight training in a powered parachute; (ii) Except as provided in § 61.110, 3 hours night flight training in a powered parachute that includes: (A) One cross-country flight over 25 nautical miles total distance; and (B) Ten takeoffs and landings (with each landing involving a flight in the traffic pattern) at an airfield;

Except as provided in paragraph (k) of this section, a person who applies for a private pilot certificate with. . .	Must log at least 40 hours flight time that includes at least. . .	And the training must include at least. . .
(2) A weight-shift-control rating,	20 hours flight training from an authorized instructor and 10 hours solo flight training in the areas listed in § 61.107(b)(10),	<ul style="list-style-type: none"> <li>(iii) Three hours flight training in preparation for the practical test in a powered parachute, which must have been performed within the 60-day period preceding the date of the test; and</li> <li>(iv) Ten hours solo flight time in a powered parachute, consisting of at least— <ul style="list-style-type: none"> <li>(A) Three hours solo cross-country time;</li> <li>(B) One solo cross-country flight over 50 nautical miles total distance, with one segment of the flight being a straight line distance of at least 25 nautical miles between takeoff and landing locations; and</li> <li>(C) Three takeoffs and 3 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.</li> </ul> </li> <li>(i) Three hours cross-country flight training in a weight-shift-control aircraft;</li> <li>(ii) Except as provided in § 61.110, 3 hours night flight training in a weight-shift-control aircraft that includes: <ul style="list-style-type: none"> <li>(A) One cross-country flight over 100 nautical miles total distance; and</li> <li>(B) Ten takeoffs and landings (with each landing involving a flight in the traffic pattern) at an airport;</li> </ul> </li> <li>(iii) Three hours flight training in preparation for the practical test in a weight-shift-control aircraft, which must have been performed within the 60-day period preceding the date of the test; and</li> <li>(iv) Ten hours solo flight time in a weight-shift-control aircraft, consisting of at least— <ul style="list-style-type: none"> <li>(A) Five hours solo cross-country time;</li> <li>(B) One solo cross-country flight over 150 nautical miles total distance, with landings at a minimum of three points, and one segment of the flight being a straight line distance of at least 50 nautical miles between takeoff and landing locations; and</li> <li>(v) Three takeoffs and landings (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.</li> </ul> </li> </ul>

\* \* \* \* \*

24. Amend § 61.195 by revising paragraph (b) introductory text, and adding a new paragraph (k) to read as follows:

**§ 61.195 Flight instructor limitations and qualifications.**

(b) *Aircraft ratings.* Except as provided in paragraph (k) of this section, a flight instructor may not conduct flight training in any aircraft for which the flight instructor does not hold:

\* \* \* \* \*

(k) *Weight-shift-control aircraft and powered parachute ratings.* A flight instructor who provides training for a private pilot certificate with a weight-

shift-control aircraft rating or powered parachute rating must hold at least a flight instructor certificate with a sport pilot rating and a private pilot certificate with a category and class rating appropriate to the aircraft in which the training is provided.

**PART 65—CERTIFICATION: AIRMEN OTHER THAN FLIGHT CREWMEMBERS**

25. The authority citation for part 65 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701–44703, 44707, 44709–44711, 45102–45103, 45301–45302.

26. Amend § 65.101 by revising paragraph (b) to read as follows:

**§ 65.101 Eligibility requirements: General.**

\* \* \* \* \*

(b) This section does not apply to a repairman certificate (experimental aircraft builder) under § 65.104 or to a repairman certificate (light-sport aircraft) under § 65.107.

27. Add § 65.107 to subpart E to read as follows:

**§ 65.107 Repairman certificate (light-sport aircraft): Eligibility, privileges and limits.**

(a) Use the following table to determine the eligibility requirements for a repairman certificate (light-sport aircraft):

To be eligible for. . .	You must. . .
(1) A repairman certificate (light-sport aircraft):	<ul style="list-style-type: none"> <li>(i) Be at least 18 years of age;</li> <li>(ii) Be able to read, speak, write, and understand English. If for medical reasons you can't meet one of these requirements, the FAA may place limitations on your repairman certificate necessary to safely perform the actions authorized by the certificate and rating;</li> <li>(iii) Demonstrate the requisite skill to determine whether a light-sport aircraft is in a condition for safe operation; and</li> <li>(iv) Be a citizen of the United States, or a citizen of a foreign country who has lawfully been admitted for permanent residence in the United States.</li> </ul>

To be eligible for . . .	You must . . .
(2) A repairman certificate (light-sport aircraft) with an inspection rating:	(i) Meet the requirements of paragraph (a)(1) of this section; and (ii) Complete a 16-hour training course acceptable to the FAA on the inspection requirements of the particular make and model of light-sport aircraft for which you intend to exercise the privileges of this rating.
(3) A repairman certificate (light-sport aircraft) with a maintenance rating:	(i) Meet the requirements of paragraph (a)(1) of this section; and (ii) Complete an 80-hour training course acceptable to the FAA on the maintenance requirements of the particular category of light-sport aircraft for which you intend to exercise the privileges of this rating.

(b) The holder of a repairman certificate (light-sport aircraft) with a inspection rating may perform a condition inspection on an aircraft owned by the holder with an experimental certificate issued under § 21.191(i) of this chapter, provided that person has completed the training specified in paragraph (a)(2)(ii) of this section on the same make and model of light-sport aircraft to be inspected; and

(c) The holder of a repairman certificate (light-sport aircraft) with a maintenance rating may perform maintenance on a light-sport aircraft that has a special airworthiness certificate issued under § 21.186 or § 21.191(i) of this chapter, provided that person has completed the training specified in paragraph (a)(3)(ii) of this section on the same category of light-sport aircraft on which maintenance is to be performed. To perform a major repair the holder must complete training acceptable to the Administrator appropriate to the repair performed.

(d) Section 65.103 does not apply to the holder of a repairman certificate (light-sport aircraft) while performing under that certificate.

## PART 91—GENERAL OPERATING AND FLIGHT RULES

28. The authority citation for part 91 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 1155, 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46504, 46506–56507, 47122, 47508, 47528–47531, articles 12 and 29 of the Convention on International Civil Aviation (61 stat. 1180).

29. Amend § 91.1 by revising paragraph (b) to read as follows:

### § 91.1 Applicability.

\* \* \* \* \*

(b) Each person operating an aircraft in the airspace overlying the waters between 3 and 12 nautical miles from the coast of the United States must comply with §§ 91.1 through 91.21; §§ 91.101 through 91.143; §§ 91.151 through 91.159; §§ 91.167 through 91.193; § 91.203; § 91.205; §§ 91.209 through 91.217; § 91.221; §§ 91.303 through 91.319; §§ 91.323 through

91.327; § 91.605; § 91.609; §§ 91.703 through 91.715; and § 91.903.

\* \* \* \* \*

30. Amend § 91.113 by revising paragraphs (d)(2) and (d)(3) to read as follows:

### § 91.113 Right-of-way rules: Except water operations.

\* \* \* \* \*

(d) \* \* \*

(2) A glider has the right of way over an airship, powered parachute, weight-shift-control aircraft, airplane, or rotorcraft.

(3) An airship has the right of way over a powered parachute, weight-shift-control aircraft, airplane, or rotorcraft.

\* \* \* \* \*

31. Amend § 91.126 by revising paragraph (b)(2) to read as follows:

### § 91.126 Operating on or in the vicinity of an airport in Class G airspace.

(b) \* \* \*

(2) Each pilot of a helicopter or a powered parachute must avoid the flow of fixed wing aircraft.

\* \* \* \* \*

32. Amend § 91.131 by redesignating paragraph (b)(1)(ii) as (b)(1)(iii), adding new paragraph (b)(1)(ii), and revising paragraph (b)(2) to read as follows:

### § 91.131 Operations in Class B airspace.

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

(ii) The pilot in command holds a sport pilot certificate and has met the requirements of section 81 of SFAR 89; or

\* \* \* \* \*

(2) Notwithstanding the provisions of paragraph (b)(1)(iii) of this section, no person may take off or land a civil aircraft at those airports listed in section 4 of Appendix D of this part unless the pilot in command holds at least a private pilot certificate; or a sport pilot certificate and has met the requirements of section 81 of SFAR 89.

\* \* \* \* \*

33. Amend § 91.155 by revising paragraph (b)(2) to read as follows:

### § 91.155 Basic VFR weather minimums.

(b) \* \* \*

(2) *Airplane, powered parachute, or weight-shift-control aircraft.* If visibility is between 1 and 3 statute miles during night hours, and you are operating in an airport traffic pattern within one-half mile of the runway, you may operate an airplane, powered parachute, or weight-shift-control aircraft clear of clouds.

\* \* \* \* \*

34. Amend § 91.213 by revising paragraph (d)(1)(i) to read as follows:

### § 91.213 Inoperative instruments and equipment.

\* \* \* \* \*

(d) \* \* \*

(1) \* \* \*

(i) Rotorcraft, non-turbine powered airplane, glider, lighter-than-air aircraft, or light-sport aircraft, for which a Master Minimum Equipment List has not been developed; or

\* \* \* \* \*

35. Amend § 91.319 by revising paragraph (a)(2) and adding paragraph (f) to read as follows:

### § 91.319 Aircraft having experimental certificates: Operating limitations.

(a) \* \* \*

(2) Carrying persons or property for compensation or hire except while conducting flight training in an aircraft issued an airworthiness certificate under § 21.191(i)(1) of this chapter.

\* \* \* \* \*

(f) The FAA may issue deviation authority providing relief from the compensation provisions of this section for the purpose of flight training. The FAA will issue this deviation authority as a Letter of Deviation Authority.

(1) The FAA may cancel or amend a Letter of Deviation Authority at any time.

(2) Submit a request for deviation authority to the FAA at least 60 days before the date of intended operations. A request for deviation authority must contain a complete description of the proposed operation and justification for the deviation requested.

36. Add § 91.327 to read as follows:

**§ 91.327 Aircraft having special light-sport category airworthiness certificates: Operating limitations.**

(a) No person may operate an aircraft that has a special airworthiness certificate in the light-sport category—

(1) For other than the purpose for which the certificate was issued;

(2) Carrying persons or property for compensation or hire, except while operating the aircraft for the purpose of conducting flight training or for rental;

(3) Unless the aircraft is maintained in accordance with the aircraft manufacturer's maintenance and inspection procedures by a certificated repairman with a light-sport aircraft-maintenance rating, an appropriately rated mechanic, or an appropriately rated repair station;

(4) Unless a condition inspection is performed once every 12 calendar months in accordance with the aircraft manufacturer's maintenance and inspection procedures by a certificated repairman with a light-sport aircraft-

maintenance rating, an appropriately rated mechanic, or an appropriately rated repair station; and

(5) Unless the owner or operator complies with the provisions of a program for monitoring and correcting the safety of flight issues specified by—

(i) The manufacturer in the statement of compliance for the aircraft; or

(ii) A person acceptable to the FAA, provided the program meets a consensus standard.

(b) No person may operate an aircraft that has a special airworthiness certificate in the light-sport aircraft category for flight instruction unless—

(1) The person complies with the provisions of paragraph (a) of this section; and

(2) A certificated repairman with a light-sport aircraft-inspection rating or light-sport aircraft-maintenance rating, a certificated mechanic with airframe and powerplant ratings, or an appropriately rated repair station performs a condition inspection within the preceding 100

hours of aircraft time in service, as specified in the aircraft manufacturer's maintenance inspection procedures.

(c) The FAA may prescribe additional limitations necessary for operation of the aircraft.

37. Amend § 91.409 by revising paragraph (c)(1) to read as follows:

**§ 91.409 Inspections.**

\* \* \* \* \*

(c) \* \* \*

(1) An aircraft that carries the following special airworthiness certificates: special flight permit, light-sport aircraft, current experimental, or provisional;

\* \* \* \* \*

Issued in Washington, DC, on January 25, 2002.

**Louis C. Cusimano,**

*Acting Director, Flight Standards Service.*

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