### SPORT PILOT AIRPLANE REQUIREMENTS Single Engine Land

Simplified Flight Hours for Sport Pilot Airplane Single Engine Land Checklist: Applicant needs to be able to show these times and the specific flights to the examiner

Total flight time in any category and class of aircraft at least 20 hrs

**Dual flight training** minimum in any aircraft at least 15 hrs including:

- □ 2 hrs dual cross country in a light sport airplane
- **3** hrs dual checkride prep in a light sport airplane in past 2 calendar months

Solo flight minimum in single engine airplane 5 hrs including:

- □ Solo cross country time in single engine airplane
  - Including one flight over 75 nm total, 3 landing points, and at least one leg over 25 nm
- □ 10 solo takeoffs and landings to a full stop at an airport

<u>Cross Country</u> flight must include a landing at an airport more than 25 nautical (not statute) miles from the *original point of departure*. Additional cross country requirements apply – e.g. long solo XC has to include one leg of over 25 nm, plus be over 75 nm total.

## Sec. 61.87 Solo requirements for student pilots

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

(b) Aeronautical knowledge. A student pilot must demonstrate satisfactory aeronautical knowledge on a knowledge test that meets the requirements of this paragraph:

(I) The test must address the student pilot's knowledge of—

(i) Applicable sections of parts 61 and 91 of this chapter;

(ii) Airspace rules and procedures for the airport where the solo flight will be performed, and

(iii) Flight characteristics and operational limitations for the make and model of aircraft to be flown.

(2) The student's authorized instructor must—

(i) Administer the test; and

 $(\mathrm{ii})\,\mathrm{At}$  the conclusion of the test, review all incorrect answers with the

student before authorizing that student to conduct a solo flight.

(c) *Pre-solo flight training*. Prior to conducting a solo flight, a student pilot must have:
(1) Received and logged flight training for the maneuvers and procedures of this section that are appropriate to the make and model of aircraft to be flown, and

(2) Demonstrated satisfactory proficiency and safety, as judged by an authorized instructor, on the maneuvers and procedures required by this section in the make and model of aircraft or similar make and model of aircraft to be flown.

(d) *Maneuvers and procedures for pre-solo flight training in a single-engine airplane*. A student pilot who is receiving training for a single-engine airplane rating or privileges must receive and log flight training for the following maneuvers and procedures:

 ${\scriptstyle ({\rm I})}$  Proper flight preparation procedures, including preflight planning and

preparation, powerplant operation, and aircraft systems;

(2) Taxiing or surface operations, including runups;

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

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

(5) Climbs and climbing turns;

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

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

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

(9) Flight at various airspeeds from cruise to slow flight;

(10) Stall entries from various flight attitudes and power combinations with

recovery initiated at the first indication of a stall, and recovery from a full stall;

(II) Emergency procedures and equipment malfunctions;

 $({\bf I2}) \ Ground \ reference \ maneuvers;$ 

(13) Approaches to a landing area with simulated engine malfunctions;

(14) Slips to a landing; and

(15) Go-arounds.

Solo Endorsements:

- I. Before FAA knowledge test endorsement that candidate is prepared for the test
- Before Solo BOTH Student Pilot certificate and logbook need to be endorsed for solo flight, for the specific make and model, including limitations on solo flights; logbook endorsement only lasts 90 days; one-time endorsement for use of communications (FAR61.325); tailwheel student must have endorsement for Tailwheel PIC 61.31(i); champ students must have endorsement for aircraft with a V<sub>H</sub> of over 87 knots (FAR 61.327)
- 3. Pre Solo knowledge test endorsement logbook also needs to say that the pre-solo test has been satisfactorily completed.

Logbook endorsements are required before any of the following solo operations:

\*Refer to AeroDynamic's syllabus for a guide to solo limitations.

- Landing at an airport less than 25nm away: solo endorsements and a one-time logbook endorsement for each airport student is allowed to land at.
- Additional airport over 25nm away requires three endorsements, plus CFI must have given them instruction to and from that airport:
  - I. Student pilot certificate once for solo cross country
  - 2. Logbook for solo cross country
  - 3. One time endorsement for the specific airport for repeated flights

- Solo cross country flight to an airport more than 50nm away requires three endorsements:
  - 1. Student pilot certificate needs a one time XC endorsement;
  - 2. Logbook for solo cross country
  - 3. Each solo XC flight of over 50nm needs a separate specific endorsement

### Logging the required training for Checkride Applicants:

The FARs are very specific. The ground training for the Aeronautical Knowledge needed to pass the knowledge test either needs to be logged if given by an instructor, or a home study course can be completed. In either case the candidate must have an endorsement before talking the knowledge test. For the flight proficiency training, the student must have both flight and ground training logged by their instructor showing the areas of operation.

\*AeroDynamic provides flight and ground training logs to make this easier. Please ask the office for these.

We have included below the relevant sections from the FARs:

§61.309 What aeronautical knowledge must I have to apply for a sport pilot certificate? Except as specified in §61.329, 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, as appropriate.

(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, as applicable.

(k) Aeronautical decision making and risk management.

(l) Preflight actions that include-

(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 if you encounter delays.

# §61.311 What flight proficiency requirements must I meet to apply for a sport pilot certificate?

Except as specified in §61.329, 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, as appropriate, for airplane single-engine land or sea, glider, gyroplane, airship, balloon, powered parachute land or sea, and weight-shift-control aircraft land or sea 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 only to gliders).
- (h) Navigation.
- (i) Slow flight (not applicable to lighter-than-air aircraft and powered parachutes).
- (j) Stalls (not applicable to lighter-than-air aircraft, gyroplanes, and powered parachutes).
- (k) Emergency operations.
- (l) Post-flight procedures.

### Endorsements for the checkride, CFI needs to certify:

- I. All solo endorsements are correct
  - a. pre-solo knowledge
  - b. initial solo
  - c. any additional 90-day solo
  - d. solo xc
  - e. student pilot certificate endorsements,
  - f. communication in towered airspace (61.325), and any others that apply.
- 2. FAR 61.39(a)(6)(i, ii, iii) Prerequisites for practical tests
  - a. Reviewed areas of deficiency on knowledge test report
  - b. Received and logged training for checkride within 2 calendar months
  - c. Is prepared for the practical test
- 3. Endorsement certifying that all ground and flight training has been completed per the FARs for their license/rating.

## Example: Sport Pilot Practical Test Endorsement

per FAR  $6_{1.39}(a)(6)(iii)$  and resolved the areas of deficiency. I certify he/she has received and logged the ground instruction required by FAR  $6_{1.309}(a)$  through (1), the flight instruction required by FAR  $6_{1.311}(a)$  through (1), and 2 hours of flight training in preparation for the practical test in the preceding two calendar months per FAR  $6_{1.313}(a)(1)(iv)$  and FAR  $6_{1.39}(a)(6)(i)$ . I certify I find him/her competent to perform each pilot operation safely as a sport pilot per FAR  $6_{1.39}(a)(6)(i)$ .