Airplane Flying Handbook (FAA-H-8083-3A)

This book is for airplanes only. Weight-Shift Control (WSC) Trikes and Powered Parachutes (PPC) have their own FAA Flying Handbook.

Following is a list of what to study from this FAA handbook, and also what you do not need to study—sport pilots need to study all areas except those listed as "ignore this section" below. Notes on differences between sport and private requirements are also included.

Chapter 1—Introduction to Flight Training

Page 1-2 Role of Examiner—Sport Pilot DPE are also national based in addition to local FSDO and can be found here:

www.faa.gov/licenses_certificates/airmen_certification/sport_pilot/

Chapter 2—Ground Operations

- Page 2-1 *Visual Inspection*—Typically an FCC radio station license is not required in a LSA. For S-LSA Safety Directives are used issued by the manufacturer instead of Airworthiness Directives for Standard Category Aircraft (Classic LSA such as Piper Cubs, Taylorcrafts, etc).
- Page 2-1 Visual Inspection—For LSA the AFM/POH may be Aircraft Operation Instructions (AOI)
- Page 2-5 *Fuel and Oil*—Auto gas is used in many LSA and does not need an STC. Check POH for details on your engine. Some LSA may not have fuel drains because they use auto fuel containing alcohol which absorbs water.
- Page 2-7 *Engine Starting*—RPM of four stroke ROTAX engines is higher with minimum idle setting at 1400 RPM and recommended setting at 1800 RPM for smooth operations.
- Page 2-8 *Hand Propping*—Hand propping for ROTAX four stroke engines is very difficult because of the gearbox does not allow the engine to get up to RPM enough to produce a spark. Do not hand prop a ROTAX engine. Charge the battery or jump it with a car battery and cables if necessary.

Chapter 3—Basic Flight Maneuvers

Page 3-3 *Integrated Flight Instruction*—Some LSA may not have an attitude indicator so reference can be made to the other flight instruments installed in the aircraft.

Chapter 4—Slow Flight, Stalls and Spins

Page 4-12 through end of chapter *Spins*—S-LSA are not approved for spins but the knowledge of spin procedures should be covered in flight instruction.

Chapter 6—Ground Reference Maneuvers

Pages 6-9 through 6-12—All "Eights" maneuvers are not required for Sport Pilot proficiency.

Page 6-13—Read and understand "pivotal altitude" through the end of chapter.

Chapter 7—Airport Traffic Patterns

Slower airplanes should do smaller patterns called "tight" or "inside" patterns so the aircraft is completing the pattern in the same time as the faster aircraft.

Chapter 9—Performance Maneuvers

Page 9-3 through the end of chapter—Steep Spiral, Chandelle, and Lazy Eight maneuvers are not

required for Sport Pilots.

Chapter 10—Night Operations

This is a good chapter for Sport Pilots to review because it would be relevant for flying after sunset during twilight when conditions similar to night flying are possible and should be understood.

Chapter 11—Transition to Complex Airplanes

Pages 11-1 through 11-3 *Wing Flaps*—Read and study this section on wing flaps but ignore the remainder of the chapter.

Chapter 12—Transition to Multiengine Airplanes

Ignore this chapter.

Chapter 13—Transition to Tailwheel Airplanes

Ignore this chapter unless you are learning or transitioning to a tailwheel airplane.

Chapters 14 and 15—Transition to Turbopropeller/Jet Powered Airplanes Ignore these chapters.

Chapter 16—Emergency Procedures

Pages 16-9 to 16-10 *Landing Gear Malfunction*—Although the LSA does not have a retractable landing gear. This should be studied in case of a situation where a fixed landing gear is damaged.

Page 16-12 to end of chapter—*Inadvertent Flight into IMC Conditions*—Sport Pilots are not trained to use instruments for flight nor do all LSA have attitude indicators. This is a good section to read and understand. However, sport pilots must not make any flight into IMC conditions. If encountered, you should immediately turn and exit the IMC area. Do not try to fly by instruments.