



SPORT PILOT TRAINING SYLLABUS

LESSON 1B: Flight basics and GPS operation

TIME: 1 hour Ground Instruction and 1.5 hours Flight Instruction

OBJECTIVE: To introduce the student to the basics of flight. Slow flight, adverse yaw and PIO, Pilot Induced Oscillations demonstration. Use of checklists and GPS.

HOME STUDY: Pilot's Handbook of Aeronautical Knowledge (**PHAK**) Chapters 1-3; Airplane Flying Handbook (**AFH**) Chapters 1-3; You Tube Video: Paul Hamilton's Learn to fly a fixed wing light-sport aircraft. Draw and study the compass rose.

LESSON ITEMS: Preflight planning including aircraft entry, checklist usage, taxiing, pre-takeoff check, takeoff and collision avoidance/scanning. Practice straight and level, turns, climbs, descents, use of trim and flaps. Observe a landing, post-flight procedures, and logbook flight training record entries. Explain Vne and Vfe. Powered descents with 20 degrees flap and 4000 RPM. The use of trim. Power off descents. **Use these words, "With the engine at idle power, the pilot must keep the nose down in order for the wing to develop lift and maintain the aircraft inertia" "This will keep us safe."**

COMPLETION STANDARDS: The lesson is completed when the student observes: the importance of preflight planning and aircraft inspection; how to enter the aircraft; understanding the words, "My aircraft" or "I've got it": how to locate the checklist and its proper usage; how to start the engine; how to taxi; the pre-takeoff check; the take off and take off briefing; traffic scanning techniques; the four fundamentals of flight through hands on experience to include the relationship of pitch and power and the control of airspeed and altitude; how to use trim; the use of flaps and their effect; observing the landing the airplane; exiting the airplane; securing the airplane; how to enter the flight in the pilot logbook and flight training records. How to set up the GPS to go direct to an airport.