



SPORT PILOT TRAINING SYLLABUS

LESSON 2: Minimum Controllable Airspeed & the Takeoff

TIME: 45 minutes ground instruction and 1-2 hours flight instruction

OBJECTIVE: Demonstrate and have the student fly at MCA, minimum controllable airspeed. Demonstrate the proper takeoff. Demonstrate and have student fly without touching the stick.

HOME STUDY: Pilot's Handbook of Aeronautical Knowledge (**PHAK**) Chapters 4-6 & 8; Airplane Flying Handbook (**AFH**) Chapters 4&7; You Tube Video: UND: C172 Normal Approach and Landing.

Review lesson items: Preflight planning including aircraft entry, burping the Rotax engine to properly check the oil, checking coolant level and security of exhaust system springs, checklist usage, taxiing, pre-takeoff check, takeoff and collision avoidance/scanning. The four fundamentals of flight (straight and level, turns, climbs, descents); use of trim and flaps. Power setting of 4000 RPM to allow the plane to slow down to V_{fe}, flap extend speed of 75 KIAS. Powered descents at 70KIAS with 20 degrees flap and 4000 RPM. Continuous use of trim. Practice flight without touching the wheel.

New lesson items: MCA slow flight and the proper takeoff. Teach how to use the GPS to get home. For MCA we use full flaps and 40 KIAS for the 30 ft. long wing Bristell and 45 KIAS for the 27 ft. short wing Bristell.

COMPLETION STANDARDS: The student will learn how to takeoff without looking at the airspeed indicator, how to fly at MCA and how to use the GPS to get home.