

Fill in the blank questions <u>www.SportAviationCenter.com</u>

#### This training module

This workbook is to be used by the student for self study and the instructor as a tool for training students to learn to fly a trike or weight shift aircraft. Information needed to complete the fill in the blanks is on the DVD.

Basic learn to fly principles presented here can be used for Ultralights, and Light Sport Aircraft. Additional training modules, experience, and instruction will be required to become a Sport Pilot, Sport Pilot CFI, or Private Pilot. These are the fill in the blank for the student to fill in while watching the DVD.

The Training syllabus has multiple choice questions similar to these fill in the blank for measurement during the training process.

#### Instructor tips

Integrate this training module into the flight and ground training.

The correct answers on the multiple choice questions can be used as a reference plus provide additional information for the instructor for discussion.

#### DVD fill in the blank questions Option A

#### Ground School Session—View the DVD with the student

- View DVD and pause program to interact on points or questions.
- Allow student to play and pause to fill in the blanks on their own.
- Discuss and evaluate all questions. The incorrect answers especially need to be discussed.

# DVD fill in the blank questions Option B

#### Student Homework—Student watches DVD on their own

 Student watches the DVD and answers the "fill in the blanks" questions. Discuss and evaluate all questions. The incorrect answers especially need to be discussed and customized to student capabilities and limitations.

#### First Flights – Preflight, Startup, Taxi

2a-1 What is the best way to find a good instructor?

2a-2 What must to do to make certain an aircraft is airworthy before you fly?

2a-3 Once you get into the aircraft to fly, what are the three tasks to perform?

2a-4 Why is it important to secure all objects before you take off?

2a-5 What are the four important safety tasks performed right before you start the engine?

2a-6 Once you start your engine, what safety procedure must be followed during warm up and before you release the brakes and start rolling?

2a-7 How do you maintain control of the wing on the ground when your hands are needed?

2a-8 Once you start rolling, what is the first thing you do?

2a-9 What engine checks should be done right before takeoff?

2a-10 Before entering the main runway, what is the most important safety task to do?

2a-11 Once you taxi out to takeoff, before applying full throttle, what do you do?

## Takeoff, turns, climb & descent

2b-1 After applying full throttle for takeoff, what do you do next?

2b-2 When a trike lifts off the ground during takeoff, what is the typical procedure?

2b-3 How do you control the speed and angle of attack of the wing?

2b-4 How do you control the longitudinal roll of the aircraft to make a turn?

2b-5 What is trim speed?

2b-6 What is the basic procedure to climb and descend in the aircraft?

2b-7 What is a "J" turn?

2b-8 What is the best way to vary the climb and descent angles of the aircraft path?

2b-9 How does the aircraft handle differently when flying at faster speeds?

2b-10 How does the aircraft handle differently when flying at minimum controlled airspeed??

#### Ground reference, airport, landing, shutdown

2c-1 What are the first ground reference maneuvers you will practice with your instructor?

2c-2 What is the standard way to enter an airport pattern?

2c-3 What are good exercises to prepare for airport patterns and landings?

2c-4 When you are on final approach, what do you normally do with the throttle?

2c-5 As you descend to the runway on final approach, what speed do you fly?

2c-6 Describe the basic procedure for getting the aircraft ready to touchdown?

2c-7 Once you are gliding down the runway, what is the best way to touchdown?

2c-8 As your wheels touch the ground during landing, what do you do with the wing?

2c-9 After taxiing into position and shutting down the aircraft engine, what are the system tasks before you exit aircraft?

# Section 3 Student to Solo Practical Maneuvers

3a-1 How do you know where you are in your flight training program?

3a-2 What do you do to make sure you practice runway incursion avoidance at the airfield while taxing into position?

#### Steep Turns, Stalls, slipping turns, ground reference, throttle control

3a-3 What is the minimum recommended altitude for performing high banked turn maneuvers?

3a-4 What do you do before performing a maneuver, in which you might lose altitude?

3a-5 In a high banked turn, what must be done with the pitch of the aircraft?

3a-6 What are the stall characteristics of the trike wing?

3a-7 How do you recover from a minimum controlled airspeed stall?

3a-8 How do you pull out of a steep dive?

3a-9 What is a slipping turn used for?

3a-10 What is a spiral dive?

3a-11 How do you operate the hand throttle and fly the aircraft?

### Emergency procedures, airport procedures, engine out practice

3b-1 What are the first tasks to perform partial or complete power loss?

3b-2 How do you first prepare for partial or complete power loss?

3b-3 What is the best way to make certain you are always able to find a suitable landing area in case you have partial or complete power loss?

3b-4 What is the best way to make sure you can make it to a suitable landing area after partial or complete power loss?

3b-5 If you are used to doing simulated power loss when the aircraft is idling, how much less glide angle is there when the engine is shut off?

3b-6 Where does wake turbulence from the wing tip vortices of aircraft travel?

3b-7 If you are behind an aircraft, where do you fly to avoid wing tip vortices?

# Section 4 Out on your own, Building solo time, Further study

#### Responsibilities, regulations

4a-1 What are your new primary responsibilities once you solo and leave your school?

4a-2 Who has the overall responsibility for the safety of the pilot?

4a-3 What is the simplest regulation that allows you to fly a single place aircraft weighing under 254 pounds empty weight without an FAA pilot certificate?

4a-4 What is an ultralight trainer?

4a-5 What is Federal Aviation Regulation (FAR) Part 61?

4a-6 What is Federal Aviation Regulation (FAR) Part 91?

#### The trike for you, aerodynamics/further study

4b-1 What are the two main components to consider when purchasing a trike?

4b-2 At what state of your training is it a good time to purchase a trike?

4b-3 What are larger wings are used for?

4b-4 Aerodynamics is \_\_\_\_\_.

#### **Performance Basics**

4c-1 Trike weight and balance is mainly \_\_\_\_\_.

4c-2 What effect does higher weights, within limitations, have on the trike \_\_\_\_\_\_.

4c-3 Higher engine power or thrust provides \_\_\_\_\_.

4c-4 Density altitude is \_\_\_\_\_\_.

4c-5 What effect does high density altitude have on performance \_\_\_\_\_\_.

## **Engine Instruments**

4d-1 What are the three most important engine instruments for monitoring power and health?

4d-2 What does your engine RPM or tachometer tell you?

4d-3 What is the EGT?

4d-4 What is the CHT?

4d-5 What is the importance of the EGT?

4d-6 What are the engine temperature readings for the different types of engines?

4d-7 Why is it important to maintain engine temperature within the normal range?

4d-8 What does it mean if your EGT goes above the maximum value?

4d-9 What does it mean when your engine temperature goes above the maximum value?

4d-10 What actions should you perform when you first see your engine temperature above the maximum value?

4d-11 What are the primary objectives of the three main engine instruments?

## **Performance Instruments**

4e-1 What is your slowest airspeed?

4e-2 What airspeed is typically the "trim" setting on a weight shift wing?

4e-3 What is Vne speed?

4e-4 What is indicated airspeed?

4e-5 What is true airspeed?

4e-6 You are flying at 10,000 feet MSL and your indicated airspeed instrument reads 50 MPH. What would your true airspeed most likely be?

4e-7 What does the altimeter measure?

4e-8 What is your vertical speed indicator?

#### Navigation, communication, cross country

4f-1 What unique information does the Global Positioning System (GPS) provide you while flying?

4f-2 Why are radios used in aircraft and required in some situations?

4f-3 To broadcast out to other aircraft and towers on your communications system, what must you do?

4f-4 What should you say when you broadcast out on the radio?

4f-5 What is the most significant safety benefit a radio provides?

4f-6 What are the unique characteristics of a "Sectional Aeronautical Chart"?

4f-7 At what stage of your training can you begin planning and conducting cross country flights?

## **Emergencies and ratings**

4g-1 What is an emergency procedure?

4g-2 What constitutes an emergency?

4g-3 How do you practice emergency procedures?

4g-4 After you develop your basic skills as an ultralight pilot, what must you do to become a Sport Pilot or Instructor?

#### Additional trike questions

5a-1 What happens when you lift off in a cross wind?

5a-2 What procedure is used for cross wind takeoffs?

5a-3 Shifting your weight to the side or lowering a wing tip produces what effect?

5a-4 How does the weight shift wing stall near minimum controlled airspeed?

5a-5 Trim speed can be increased on almost every weight shift aircraft buy \_\_\_\_\_\_.

5a-6 Higher performance wing characteristics are generally \_\_\_\_\_\_.