

# INTRODUCTION

Glider pilot training can be divided into two parts; knowledge training and flight training. Knowledge training includes topics such as aerodynamics, weather, regulations, and airspace, and is covered by this book's companion, the *Glider Pilot's Handbook of Aeronautical Knowledge*. Flight training, covered in this manual, teaches the student to perform the maneuvers required to safely pilot a glider, such as takeoffs, flying the aerotow, circling flight, and landing.

This manual was written specifically for students pursuing a Private Pilot Certificate with a Glider rating, although it is a useful aid for preparing for a Commercial or Instructor rating as well.

## Using This Manual

Each chapter of this manual addresses a separate stage of flight, such as takeoff, aerotow, or landing. Each chapter is divided into lessons that cover a specific task, skill, or maneuver. You will typically cover lessons from various chapters during a single flight training session.

It is not expected that you will proceed through the chapters in order. Instead, you will start with the first few lessons from each of several chapters.

Each lesson is explained in four parts (with the exception of a few lessons which do not include a list of common errors). The "purpose" outlines the relevance of the task or skill. The "procedure" describes the task or skill in detail. The list of "common errors" points out the usual pitfalls. The "completion standard" is the performance criterion that must be met for the lesson to be considered mastered.

## The Flight Instructor

You will receive your flight instruction from a Certified Flight Instructor in Gliders (CFI-G). This certification is given by the Federal Aviation Administration (FAA).

Good flight instructors are organized, patient, adaptable, creative, conservative, and modest.

Good organizational skills allow the instructor to make efficient use of time and equipment. At the end of each lesson, the instructor should provide you with a plan for the following lesson, so that you know what material to study.

Patience helps the instructor to work with different types of students and to teach effectively. Should a student have difficulty grasping a concept or

performing a maneuver, the instructor must be able to adapt and change the way the concept or maneuver is being taught. Being creative allows the instructor to present the material in different ways.

A good flight instructor is also a conservative pilot, not a “risk taker”. Instructors should never need to show off or purposely get into difficult situations just to prove their skills. To do so is a sign of immaturity and poor judgment.

Finally, and most importantly, a good flight instructor is modest. Modest instructors are able to question their own methods when they are not producing the desired results, and therefore adapt. A modest instructor is still capable of learning.

If multiple instructors are available where you will receive flight training, do not hesitate to get to know them all, so you can choose one suited to your personality and learning style.

## **The Student**

To be a good student you should be prepared, focused, and receptive to hearing what your instructor has to say.

You should prepare for a training session by studying the assigned lessons. You should note any questions you have about the material and bring them to your instructor’s attention.

To be focused during training sessions, you should arrive on time and avoid being rushed or distracted. You should also be rested and not hungry or thirsty.

Most importantly, you should be able to listen to and accept the instructor’s critique of your performance. The best students acknowledge and learn from their mistakes instead of making excuses or giving reasons for poor performance.

The instructor’s primary goal is to train you to be a competent and safe pilot. The secondary goal is to complete the training as quickly (and inexpensively) as possible. Therefore, each time you master a maneuver, the instructor will assign another. Of course, you will usually be “incompetent” at any newly assigned maneuver. This may sometimes make you feel as though you are not making progress. Keep this in mind during your training. Don’t focus on the difficulty you are having with the latest maneuver; instead, consider the list of maneuvers you *have* mastered. If you remember this, you will be less likely to get too frustrated during your training.

## **The Flight Training Process**

In most training sessions, you will practice previously learned skills and learn new ones. When learning a new skill or maneuver, you should read and study the appropriate material, and be prepared to answer either written or oral questions regarding it to demonstrate to your instructor that you understand the information. Your instructor will clear up any confusion and answer any questions you have before the flight.

In the air, your instructor will demonstrate the proper execution of the maneuver described in the lesson. You will then try to perform the maneuver. The learning process can be divided into three stages: experimentation, practice, and mastery. During the experimentation stage, you are learning the cause and effect relationships between the glider and the controls. Once you have a “feel” for these relationships, you can start to practice the maneuver. Finally, you will develop the automatic reactions that indicate the skill has been “hardwired” and mastery of it has been achieved. You may progress through all three stages during a single training session, or you may need several sessions, depending on the difficulty of the maneuver.

After each attempt at the maneuver, your instructor will critique your performance. The critique will include both what you did right, as well as suggestions on how to improve.

At different points in your training, your instructor may require you to re-demonstrate mastery of a previous lesson. The instructor may set up a flight situation to this end, and may or may not warn you beforehand. These “surprise” evaluations will become more frequent as you near the end of your training.

## **Flight Training Progress Record**

Inside the front cover of this manual you will find a list of topics titled “Flight Training Progress Record”. The progress record includes every skill or maneuver that the student must master before taking the Private Pilot Practical Test, often referred to as the “flight test”. For every topic in the progress record, there is a corresponding lesson in this manual.

Included with this manual you will also find a Flight Training Progress Record card that can be carried by your instructor in the glider during your lessons. The Flight Training Progress Record card allows the instructor(s) to keep accurate records on each student, including all the information required by the FAA.

Extra copies of both versions of the Flight Training Progress Record can be downloaded for free from [www.GliderBooks.com](http://www.GliderBooks.com).

Following are guidelines for using the check boxes on the Flight Training Progress Records:

**GPHAK Prereq.** – This box lists the chapters/sections in the *Glider Pilot's Handbook of Aeronautical Knowledge (GPHAK)* that should be completed before starting on the flight training lesson.

**Read** – The instructor should circle this box when the lesson is assigned as homework. The student marks this box as completed after reading about this lesson in the *Flight Training Manual for Gliders*.

**Review Questions** – The student should mark this box after completing the review questions for this lesson.

**Instruction** – The instructor should mark this box after reviewing/correcting the student's answers, and giving the student ground instruction about the lesson.

**Demonstrated** – The instructor should mark this after demonstrating the lesson to the student.

**Level 1** – The instructor should mark this box when the student understands/observes the errors being made, but is not yet able to take the proper actions to correct them.

**Level 2** – The instructor should mark this box when the student understands/observes the errors being made, and understands the actions that need to be taken to correct the errors, even if the student cannot consistently perform those actions.

**Level 3** – The instructor should mark this box when the student understands/observes the errors being made, understands the actions that need to be taken to correct the errors, and can consistently perform those actions.

**Responsible** – The instructor should mark this box when the student is responsible for performing the action/maneuver covered in this lesson at the appropriate time during the flight without prompting from the instructor.

**Proficient** – The instructor should mark this box when the student consistently performs the action/maneuver covered in this lesson at the level required to meet the Practical Test Standards.

## **Practical Test Preparation Progress Record**

The FAA publishes a book called the *Private Pilot Practical Test Standards for Glider (PTS)*. The PTS describes the areas of operation and the tasks within those areas that the examiner will cover during the practical test (i.e., the "flight" test). It also lists the minimum performance required to successfully complete each task. Students should be familiar with the PTS before taking the practical test. The PTS is available to be downloaded for free from the FAA website.

As the last step in the training process, the instructor and the student will go through each area of operation and task required by the PTS. The Practical Test Preparation Progress Record is used to document this last step. Note that not all of the tasks are required for transition pilots. The Practical Test Preparation Progress Record can be downloaded for free from [www.GliderBooks.com](http://www.GliderBooks.com).

## **Additional Materials**

The instructor will provide you with the following information specific to your home gliderport and the glider used for training:

- Gliderport Standard Operating Procedures (SOP's)
- Glider nomenclature
- Preflight inspection checklist
- Area landmarks
- Local traffic patterns
- Local radio procedures
- Local convergence zones (if applicable)
- Local rope break procedures

This information may be provided in the form of a printed handout, or given verbally.

## **Your Feedback**

We are very interested in getting your feedback on the books. The *Glider Pilot's Handbook of Aeronautical Knowledge* and the *Flight Training Manual for Gliders* are printed in small quantities to give us the ability to quickly incorporate corrections and revisions suggested by both students and instructors. Our desire is to have the textbooks evolve into a tool that will make the training process quicker, cheaper, more thorough, and more enjoyable, both for the student and the instructor.

You can email the author directly at [Russell@GliderBooks.com](mailto:Russell@GliderBooks.com), or you can join our discussion group on "Google". To join the group, visit our webpage at [www.GliderBooks.com](http://www.GliderBooks.com) and click on "Visit this group" to view the discussion, or enter your email and hit "subscribe" to become a member of the group. You must be a member of the group to post, but anyone can view the discussion.

Thank you for choosing our books!



Russell Holtz