

FLIGHT TRAINING MANUAL FOR GLIDERS

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INTRODUCTION

Flight Training in Gliders

Learning to fly gliders will probably be one of the most rewarding, and at the same time, the most frustrating, undertakings of your life. At first, you may be overwhelmed by the sights, sounds, and sensations that you experience as you start your flight training. Rest assured that eventually you will be able to focus on and enjoy your lessons.

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.

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”. The instructor should never need to show off or purposely get into difficult situations just to prove his skills. To do so is a sign of immaturity and poor judgment.

Finally, and most importantly, a good flight instructor is modest. Modesty allows the instructor to question and thus improve methods that are not producing the desired results. 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 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.

Once you are competent at a task or skill (although you may not necessarily have mastered it), your instructor will transfer responsibility of it to you. For example, once you can control the glider's pitch and airspeed (Lesson 4.3 Pitch/Speed Control), your instructor will transfer responsibility of this task to you. After this, your instructor will assume that you will always control the glider's speed and pitch, unless explicitly stated otherwise.

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.

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.

About This Manual

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

This manual is designed for use with its companion book, the *Glider Pilot's Handbook of Aeronautical Knowledge*. This manual covers the flight training, while the companion book covers the knowledge training.

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 specific task, skill, or maneuver. 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.

In the front of this manual, you will find a list of topics titled the "Flight Training Progress Record". The progress record includes every lesson that you must master before taking the Practical Test, often referred to as the "flight test". For every topic in the progress record, there is a corresponding lesson in this manual. Both you and your instructor should keep a copy of the progress record so that each of you will know which lessons have been completed and which still need to be worked on.

I hope you will find this manual useful, and that you find the sport of soaring as fun and rewarding as I have.

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