

Club OPERATION

EDITOR'S NOTE: Reprints of this article and the ones preceding and following it will be distributed by the Soaring Society to those who are interested in obtaining the information contained.



It is the purpose of this article to answer as many as possible of the questions generally asked by those who are interested in becoming active in the field of gliding and soaring, but who are not familiar with the problems involved. Most of these questions can be broken down into three general ones.

1. How can I learn to fly a glider?
2. Where can I obtain the equipment?
3. What will be involved in starting a club?

Since the answers to the first two questions will be included in a discussion of the last one, we will limit ourselves to the problems of club operation.

Practically all of the glider pilots in the country today have learned to fly in clubs. Since several men are required to handle the craft on the ground, and because of the excessive cost of servicing and upkeep, the only way in which ships could be operated was for a group to work together and pool their resources of finance and labor. The effectiveness of this method is shown by the fact that many clubs operate at a cost of from \$25 to \$35 per year per member, and some are able to get by on \$15. Gliding and soaring, in the past, has been a poor man's sport. However, the low cost figures obtained have not in most cases been due to inferior equipment, but to the industry and skill of the club members. Any group which does not enjoy the team work required for flying, and the satisfaction of personally doing good repair and maintenance work on their equipment will not be able to operate inexpensively.

First, let us describe the types of gliders used, and define a few terms commonly used.

Primary: A glider with an uncovered fuselage, designed for training only. The most important design features are stability, ability to stand abuse, ease of repair, and low cost. It will not soar except under ideal conditions.

Sailplane: A highly streamlined and efficient glider designed for the best possible performance, with cost as a secondary feature. They practically always have tapered

wings of high aspect ratio and span. They are so susceptible to damage on the ground that they can not be used for training, but they are stronger in the air than any other type.

Utility: A glider combining the low cost and ruggedness of a primary with the performance of a sailplane. Their performance does not approach that of the sailplane, but they are capable of extended soaring flights, and they are as satisfactory for training as the primary. Their cost is slightly higher than that of the primary, but is not prohibitive.

The utility is much more suitable as a club ship than the primary, first, because it can be used for both training and soaring, and second, because it affords protection to the pilot in a crash.

Gliding: Coasting down hill in a glider or airplane, or traveling from a higher to a lower altitude.

Soaring: Traveling from a lower to a higher altitude in a glider without the use of power. This is accomplished by gliding in rising currents of air.

Let us first consider the size of our club. The problem encountered here is that of obtaining enough members so that the cost per member will not be prohibitive, and then finding time enough for all the members to fly the club ship. It has been found that in a group that operates during half a day, an instructor can handle not more than six students. If the size of the club is to be a maximum, each group can fly 1/2 day per week, and still keep up the interest of the members. This will allow 18 students to operate in one glider on the average week-end of 1 1/2 days. Needless to say, it requires a high degree of organization to operate continually on such a schedule, but it has often been done. Clubs of 10 to 15 members per ship are not uncommon. School and college clubs, which can operate on week days can accommodate 50 to 60 members per glider.

Next, we will consider the personnel. The most important member of the club is the instructor. He can easily mean the difference between a clear accident record and many hours spent in the repair shop. He will not only see that the students avoid serious crack-ups, but he will prevent the various minor damages and wear and tear that can cause a lot of delay and expense.

If your instructor is an airplane pilot who has never flown a glider, he should be warned to expect trouble. A glider is probably a lot easier to fly than an airplane, but it is very much different in some respects. Unless the airplane pilot knows this, and knows just what to expect, he will have some pretty bad scares, and may crack up. If he learns the proper procedure, and takes the time to follow it, he will learn the peculiarities of glider flight in short order, and will make an excellent instructor. Otherwise, be careful.

The other important member is a skilled mechanic. A licensed airplane mechanic would naturally be the ideal person, but anybody who is skilled in the use of tools can easily learn what is necessary. The only precaution that should be observed is that the government regulations on the proper procedure for various types of repair and construction should be learned. These are given in Air Commerce Manual No. 18, distributed by the Civil