# *The Case for the Single-Place Training Glider* IN THE PUBLIC SCHOOLS

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BY ACTUAL experience with the course outlined and by comparison with other glider courses which have been offered, the following training program has been found to be logical and reasonable to glider pilots and educators as well. New York State now gives two units of credit for a year's work in this course. Other non-vocational subjects cannot claim this acknowledgment.

The purpose of an aviation course in the general high school is to provide an opportunity for the student to experience firsthand contact with the various phases of aviation. Such a program must perform the following functions: be a part of the student's liberal education; be a basis for vocational guidance; and be a pre-vocational course. To accomplish this the course should expose the student to the actual construction of aircraft, actual repair and maintenance, theory, and some flight training.

Glider construction and flying answers these aims and in addition gives the added incentive of promoting gliding and soaring as a sport. This course is taught by building a single-place ship from a kit as the construction project, and by teaching such classroom subjects as theory of flight, processes, materials, meteorology, navigation, Civil Air Regulations, history of aviation and nomenclature. These are covered briefly but essentially. The flying is taught up to the high, straight tow stage, which answers the purpose and is comparatively safe. Due to the fact that the schools are a public institution and that teachers have a tremendous responsibility (for they are teaching someone else's children), safety is a prime consideration. Despite this, aviation courses must present all the necessary phases and maintain a low per pupil cost in order to be attractive to the individual schools. Training such as this has seemed to meet the aims; for two years of training at York Central School, consisting of over 1000 flights, has been accomplished without even tearing the fabric on the gliders.

The use of a single-place utility glider is advocated through experience. The necessity is shown by numerous examples from both the construction and the flight training angle. As far as the construction is concerned, probably the most important item is the time element. In most instances, this course will be taught on a two-period (45 minutes each) five-day-week basis and, since the ship should be completed in one school year, the time available is short. The teaching must also be considered for it is assumed that the students know nothing of aircraft work and, in some cases, nothing even of shop work. The cost of the kit must be low to keep within a reasonable budget. Easy construction is a requirement because of the limited skills of the students. Because of the time element, it should not be necessary to spend a large amount of time and space on jig building. Most industrial arts shops are rather small and numerous other activities have to be carried on, so the amount of space is limited. This usually prohibits the building of a two-place ship. It must be kept in mind that cost is the factor in selling this course; therefore, the fact that a utility can be built without purchasing any tools other than those already found in the small shop is a necessary point. The number of operations necessary is small, yet all the processes, procedures, etc., which are vital to the proper teaching of aviation, are included without making the construction laborious.

When we consider the use of this type of ship for training, the reasons become very obvious and its use is easily justified. The first point which must be considered is the cost. The utility is definitely cheaper in its operation than a two-place ship. Auto tow is cheap and, in the case of the school, a necessity. The maintenance costs of a single-place utility are extremely reasonable and, in fact, almost negligible. The original purchase cost of a single-place is at least one-half that of the two-place. Airport rental is a factor in many cases and, if necessity demands it, the utility can be