

The use of the Link Trainer in the preliminary training of Glider pilots in instrument flying

BY W. F. LEDERMANN

THE Link Trainer should be used whenever possible for the training of glider pilots in instrument flying. From experience gained one can say that the use of the trainer for preliminary instruction reduces the time and costs of instruction. Even though Link Trainer instruction has certain disadvantages as compared with instruction in an aircraft, particularly when giving instrument flying instruction to glider pilots. Nevertheless it has many advantages.

The pupil starts by learning to watch not one instrument only but a group of instruments which are necessary to fly an aircraft. Knowledge of the instruments particularly of the turn and bank indicator must be acquired at the start. At the same time, the pupil learns to fly by instrument in all attitudes, in other words, the instruments show various readings according to various movements of the controls. But the glider is not fully equipped for instrument flying and the instruction given must not ignore this factor. One can take account of it, for instance, by putting the speed indicator out of operation and by imagining that it has frosted up. Exercises can then be made with the lateral bank indicator, the variometer, the altimeter and the compass and by producing bumps. In this way one obtains the real conditions of flight.

One should not start Link Trainer instruction before the pupil has had about 30 hours of glider flying. The preparatory Link Trainer instruction covers about 6 hours. First of all the exercises are conducted with the hood lifted so that the pupil may familiarize himself with the machine. Then the hood is lowered. One commences by straight line flights with the help of the gyrocompass. After that come changes in direction and flight in wide and narrow circles. When the pupil is proficient in these, the tests are repeated with the magnetic compass - the gyrocompass being switched off -. Later the same programme is repeated with the addition of bumps. Lastly come exercises in spins, reactions and recovery, one or more instruments unserviceable and, according to the whim of the instructor, the pupil can embark on a long distance flight with exercises in navigation.

The straight line flight by magnetic compass can often be fairly difficult but it must be successfully accomplished before the pupil can commence other exercises. The course ends with efficiency tests.

On no account can the instrument flight tests be said to end after the Link Trainer course. A Practical course must follow on board a two seater glider in which the pupil flies under a hood.

In Switzerland, excellent results have been obtained by using the Link Trainer and we can really recommend its use for primary instrument flight training.