

GLIDING INSTRUCTION IN EUROPE

*By Jerzy Waszewicz**

GLIDERS are now being used for many different purposes and no one knows for certain what the post war utilization will be. It may be well to look again at the way gliding developed in Europe in order to understand the background of the gliding and soaring movement.

Gliding, at the end of the last war, sprang up in Europe as a sport which tempted those who liked to wrestle with unknown forces, for in aviation, at that time, knowledge of aerodynamics and structure was fairly limited. To the amazement of even those in the field of gliding there was a quick development of ideas involving design, construction and flight technique. The results had direct applications in the fields of power planes and pilot training.

The Germans, who were prohibited from flying power planes, took this sport of gliding and adapted it to meet their problems. Their first objective was to train the young to feel at home in the air, to become acquainted with meteorology, and then train the chosen few in power planes. With the help of propaganda and excellent organization, very large numbers were attracted to gliding and soaring. The scientific aspects of the movement were developed through an institute created to study aerodynamics and meteorology.

At almost the same time, the Russians started their glider program, aimed more toward the commercial and aerodynamic aspects. Gliding was pushed as a sport for the training of large groups of people.

Poland was the third country in which the government subsidized a glider training program. In a short time gliding became one of the most popular sports. In a few years gliding and soaring, which started out as a sport, was regarded with respect because of the personality qualities and aeronautical skills it produced. Scientists found it a challenging field of research in the solution of problems in aviation which found immediate practical applications in the power plane field. A great surge in meteorological progress was based largely on the discoveries gained from the experiments carried out in the field of gliding and soaring. The importance of streamlining was fully proven in soaring as the all-important aid to aerodynamic efficiency.

After a few years of experience, it was ruled in Poland

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in 1937 that all power plane instruction must be preceded by a minimum of six weeks of glider training to facilitate selection and to inculcate fundamentally correct air habits. This was not prompted by a desire to save money in instruction, but because it was firmly believed that training in gliders would produce the best pilots and improve the safety record.

Before the present war, in Germany where glider instruction was obligatory for all young men finishing high school, there were about 80,000 glider pilots. Of this number 2,000 were Silver C pilots and 40 were Golden C pilots. There were more than 1,000 glider schools and more than 10,000 gliders. Thanks to this glider program, German aviation has a wealth of pilots.

The Germans tested the efficacy of their glider training program with many experiments. It will be of interest to tell of one experiment.

A glider pilot of no power plane experience, but with about 100 hours of glider flight, after 10 days of training was able to fly twin engined bombers. After one month of training, this glider pilot was able to fly on operational flights.

Germany in 1939 had about 10,000 glider pilots whose flight time averaged close to 100 hours. To give a pilot 100 hours of glider time takes about four months of training. This is certainly not too long in comparison with the flight time offered to aviation cadets in the United States. It is certainly not too long when all the advantages of glider time are considered in preparing a pilot for power time.

During this war, Germany has expanded its glider training program, not only in the instruction phase, but in design, experimentation, and construction.

The specific advantages of glider training may not be apparent to those not acquainted with gliding and soaring, but consider that European countries found it worth while to subsidize a glider program as a basis for their position as air powers. In France, immediately after the armistice in 1941, a new organization patterned after Poland, Russia, and Germany was instituted.

After the present war it is not unlikely that a glider program will be set up in the countries of the Western hemisphere for purposes of training, science, and sport, and that glider flight training, construction, and design will be pursued as never before.

Soaring