

CHAPTER 2 - THE TRAINING PROCESS

PRE-SOLO TRAINING

Training is carried out in two-seat gliders, most trainers being of “tandem” layout, the student occupying the front seat, the instructor sitting behind. In these gliders, all essential controls and most of the instruments are duplicated for each occupant.



The cockpits of the Polish KR-03A “Puchatek” tandem two-seat trainer

A few gliders, and quite a number of powered sailplanes, are of side-by-side (e.g. Scheibe “Falke”) or “staggered” side-by-side layout (e.g. Schneider “Kookaburra”). In these machines, the controls are duplicated, but instruments are shared.



A Schneider “Kookaburra”, with staggered side-by-side seating, the right-hand seat being about 35 cm behind the left-hand seat

THE PRE-SOLO TRAINING SYLLABUS

The syllabus of pre-solo training appears below. The assumption is made that the person undergoing training has no prior experience. If they have prior experience, e.g. in powered aircraft or ultralights, suitable adjustments to the training may be made.

Air experience. Self-explanatory, but it should be noted that some demonstration of control functions and an opportunity to “have a go” should form part of this flight.
Orientation. This flight stresses the third dimension, important for a person who has very likely spent his or her life entirely in two dimensions.
Stability. The stable platform.
Pre-take-off checks.
Primary effects of controls and the straight glide.
Secondary effects of controls.
Turning.
The launch, winch, autotow, aerotow or self-launch.
Pre-stalling, spinning and aerobatic checks.
Stalling.
Stalling in turns - the incipient spin.
Spinning.
Circuit procedures and planning.
Circuit variations.
The approach and landing.
Launch emergencies.
Flying without instruments.
First solo and post-solo consolidation.
“A” Certificate check flight.
Oral examinations for “A” Certificate.
Application to FAI Certificates Officer for “A” Certificate.

During the training prior to first solo, soaring skills are taught on an opportunity basis.

POST-SOLO TRAINING

For the B Certificate, follow-up training is necessary to build on the skill learned pre-solo and to acquire new ones.

The post-solo training syllabus is as follows:-

Reinforcement of stalling sequences.
Reinforcement of incipient and full spinning sequences.
Reinforcement of launch emergencies.
Problem circuits (flying without instruments, running out of height, different circuit directions, etc).
Cruising and descending on aerotow.
Use of flaps and retractable undercarriage, if not covered pre-solo.
Landings with different airbrake settings, including full-brake and no-brake.
Sideslipping.
Steep turns.
Unusual attitudes.
Aerobatics (optional).
Thermal centring techniques and most efficient use of lift.
Launch speed signals, if not covered pre-solo.
Crosswind takeoffs and landings.
Correct radio procedures.

Revision of air legislation.

Airways procedures.

Application to FAI Certificates Officer for "B" Certificate when all requirements have been met.

As a pilot progresses toward the "C" Certificate, further training is carried out to prepare a pilot for the possibilities of carrying family/friend passengers and attempting the first cross country flight. The training for the C Certificate will concentrate on efficient soaring, passenger awareness and the procedures to be adopted for outlandings.

GUIDE FOR POST-SOLO SELF-IMPROVEMENT

The formal post-solo training syllabus may be supplemented by a bit of self-help. Solo flying is a good opportunity to set definite goals and improve skills, especially in things like thermal centring and efficient soaring. If you have a "B" Certificate, fly with someone else who also has a B (or higher) qualification - you may be surprised how much you can learn from someone else's approach to a problem or indeed from someone else's mistakes (as long as the mistakes are not serious ones!).

Try flying at a different club, with different types of gliders and maybe a different launch method. It really improves flexibility as a pilot, and its fun.

Get some dual flying at your own club and try landing at different parts of the field. Each time you do it, get the instructor to comment upon the quality of your circuit. This is a useful preparation for actual outlandings, but should not be regarded as a substitute for them.

In addition to the flying, get some practice in the following:-

- Reading WAC charts and the various CAA charts relevant to our activities. See chapter on navigation.

- Interpreting synoptic charts and temperature traces.

- Preparing barographs and turning-point cameras.

- Preparing and towing trailers (with special emphasis on reversing).

- How to use a radio correctly, with a view to obtaining a GFA radio-operator's logbook endorsement. See chapter on radio procedures.

- Talk to experienced cross-country pilots about crops, SWER lines and how to recognise good landing paddocks from the air.

- Buy a copy of the FAI Sporting Code, Section D (Gliders) from the FAI Certificates Officer, and study it.

- Ask an instructor what it is like to fly a glider with rain on the wings. Don't go cross-country until you know the answer.