

1– FAMILIARISATION WITH THE SAILPLANE

SPL syllabus: Exercise 1 Familiarisation with the sailplane			
(i)	Characteristics of the sailplane	(iv)	Cable release and undercarriage
(ii)	Cockpit layout: instruments and equipment including radio	(vi)	Checklists drills and controls
(iii)	Flight controls: stick, pedals, airbrakes, flaps (if available) and trim		

INTRODUCTION

This chapter deals with glider familiarisation for the first few flights. Type conversion is covered in a separate chapter. If this is their first time on the airfield, you will have already covered the safety aspects and orientation to the airfield before moving onto this stage.

For many people, their first flight in a glider will be the first time that they have sat at the controls of an aircraft. It is often a daunting and strange but exciting experience. There is a balance to be achieved in not flooding them with too much information, but on the other hand making sure that the basics are covered clearly and accurately. As a minimum, you need to give them enough information to know what they can safely touch during their first lesson/s, and what they need to know for safety drills, such as an instruction to bail out.

There is also a whole new vocabulary associated with the aircraft and the skill of flying. Terms such as attitude or aileron are routine for pilots, but you need to check that your trainee understands what you are saying and describing. If they have already had an introductory flight and are committed to learning to fly, it is worth going back to a more detailed talk through/walk round the aircraft, to make sure everything has been covered thoroughly.

You can either start with the walk round the aircraft or show them the cockpit area – which ever works best in the circumstances.

The walkaround

Present the type of sailplane which will be used. Ideally show them the cockpit layout in the glider you are going to fly, but a similar glider, even if it a single seater may have to serve the purpose.

Point out all the key control surfaces and the basics of what they do. Where they may or may not handle the aircraft and canopy. Where the rope hooks on. How to open the canopy and the emergency jettison. The fact that gliders are inspected or 'DI'd' every day.

The cockpit

Reassure them that the two-seater glider has all the controls duplicated in both cockpits so that even if you ask them to have a go at an exercise that you have demonstrated, you can still take control at any point. Explain the cockpit layout: the flight controls and the colour coding system: stick, pedals, airbrakes, flaps (if available), cable release, trim and undercarriage (if available). Explain to them how to hold the stick and what you mean if you ask them to 'follow through.' The trainee needs to understand what you mean by 'I have control/you have control' and that they must release the stick if you say 'I have control' at any point.

Point out the basic instruments and how to read them. Include the ASI/vario and altimeter but do not overload the trainee with the technicalities of more complicated electronic instruments on the first few flights. If there are any switches that you might ask them to adjust in the air e.g. volume on the vario

Check that the trainee knows how to put on a parachute and adjust it and to avoid accidentally deploying the parachute by inadvertently pulling the handle. Explain the use of the parachute and bail out procedure. You might perceive this as raising anxiety levels in your trainees, but the analogy with the safety briefing on an airliner might help put it into context. The use of a parachute is extremely unlikely, but it might just save their life. (see chapter 2)

Explain how to get in and then sit the trainee in the glider (having checked their weight) and check the position of the student on the seat for comfort, visibility, ability to use all controls and obtain free and full movement. Demonstrate how to adjust the rudder pedals and if necessary, how to adjust the seat back. Explain how the canopy locks and how to open the scoop or DV panel to get some fresh air if they need it. Point out the canopy jettison, but it is usually best to advise them not to open the canopy on their own when you land for the first time.

Explain the use of the harness, including adjustment and its release mechanism.

Briefly explain all checklists, drills, and controls – it is reassuring to the trainee to see you do the final walk around and helps it establish this as part of your (and subsequently their) standard behaviour/routine. Explain the need for/give an outline of the pre-take-off checks before you get to the stage of getting in at the launch point.

Finally, give them the opportunity to ask questions and then check that they have understood the key safety points i.e.

- What they may and may touch
- Hand over routine for air exercises
- Canopy jettison and bail out drill

Threat and Error considerations

As always, when you are conducting any exercise with a trainee you must consider the Threat and Error management considerations. In this case they are:

Threat and error management

Threats:

Damage through careless handling

Trainee not seated correctly to reach controls

Trainee misinterprets instruments

Errors:

Trainee moves controls or knobs inappropriately

Mitigation:

Re-enforce where the fragile parts of the glider are, especially canopy handling.

Check the trainee seating, especially on new type.

Check trainee identifies instruments when changing to different glider

Check trainees understanding of different controls and release mechanisms.