4 – INITIAL AIR EXPERIENCE

SPL syllabus: Exercise 4 Initial air experience

(i) Area familiarisation

(ii) Lookout procedures

INTRODUCTION

The objective of a trainee's first flight is to familiarise them with being in the air, with the area around the airfield, and to draw their attention to safety and lookout procedures. The instructor also has to analyse the reactions of the student.

There may be subtle differences in how this exercise is conducted, depending on whether it is a first flight for a trainee who is committed to learning to glide, or for a member of the public taking a gliding experience with no fixed intention of carrying on with the syllabus. The key points about safety and familiarisation are the same in either case, but the theory briefing component will be different for a member of public having a First Flight. See the 'First Flights' section of Chapter F – Supervision. The rest of this chapter assumes we are dealing with a trainee on the first step of their training programme.

Most people are a bit apprehensive before their first flight, however much they want to learn to fly. If they seem nervous, let them know that is perfectly normal and that if they are uncomfortable in the air and want to land, they should simply let you know. Explain that most people take a while to adapt to the sensations of being airborne – varying G forces in particular – and that they will almost certainly get used to it. A first flight should be carried out in benign weather and should be quite short. As well as learning to find the airfield and to look out properly, they should enjoy it.

THEORY BRIEFING

The briefing points to cover are:

- How to find the airfield from the air.
- The need for lookout.
- The correct technique for lookout.
- The protocol for changing aircraft control.

Area Familiarisation

The first flight will be local to the airfield and part of its purpose is to enable the trainee to locate and identify the airfield from the air. The glider needs to remain within easy gliding distance of the airfield throughout this flight and this is the first introduction for the trainee to the situational awareness skills needed in all their flying. The wind strength and direction may make a difference to what is 'easy gliding distance.'

A chart or image of an aerial view of the airfield and surrounding area is useful for the trainee to examine before take-off. The instructor can use this to point out local features, readily visible from the air, which will be used to help the pilots orientate themselves in flight.

If there are particular hazards near the site, such as nearby airspace, or terrain that causes curl-over in certain winds, – these should be pointed out and guidance given on how to deal with them e.g. 'Stay this side of the motorway and you know you are clear of airspace' or similar. The trainee will understand such information better later in their training, so this briefing is likely to be repeated more than once as they progress.

Lookout

Lookout is of paramount importance. Pilots need to understand and learn the practical skill of how to carry it out effectively.

The need for lookout may seem so obvious as not to need explanation but bear in mind that most people new to the sport have no concept of how close gliders sometimes fly to each other. Whilst it is good to be able to point out gliders in the distance in various directions, it is absolutely *vital* to make sure the vicinity immediately around you is clear **before** manoeuvring, and to continuously monitor gliders flying nearby.

Emphasise the significant threat if a glider remains in the same position in the canopy, even if it may be at some distance – this means it is on a direct collision course with you. Explain that such a glider may seem small and distant until it very rapidly 'blossoms' to full size as the collision is imminent.

There are blind spots behind and under the glider, and pilots must avoid flying in another glider's blind spots.

The technique for effective lookout is something that must be learned and practised. A rapid scan with no pauses will miss objects; the trainee must learn to pause and focus during the scan before moving on. They need to be able to do an effective scan quickly, and this takes a lot of practice. The scan cycle will be introduced more formally at Exercise 7, Straight Flying, and training on electronic conspicuity will also be given, but right from the first flight the emphasis must be on scanning the whole field of view, pausing from time to time to focus on the horizon and look above and below it.

There is more guidance available on lookout in Chapter D.

Transfer of Control

The protocol for transferring control should be described: 'I have control' 'You have control.' and vice versa. It is important to know which of you is flying the glider. The instruction to 'follow through' indicates that you are flying but you want them to feel what you are doing. Explain that they should lightly hold the stick. Stress that when you have given them control, you are *not* interfering with the controls – and make sure you don't (unless it is an emergency and you don't have time to say 'I have control' first). Also explain that they must release the controls immediately whenever you say 'I have control' – this habit should be formed early in training.

AIR-EXERCISE BRIEFING

Immediately before flight, remind the trainee of the key points to be covered: landmarks to help find the airfield, lookout procedures, and control handover.

If the trainee has not already been introduced to *Threat and Error Management* (TEM) this is a good opportunity. See Chapter B The table below shows the considerations for Exercise 4.

TEM

Threats:	**Mitigation:**
Collision	Lookout!
Adverse student reaction	Monitoring by instructor
	Cutting flight short if necessary
	Guarding controls
Errors:	
Getting out of gliding range or losing sight of the airfield	Familiarisation with local landmarks
Confusion over who is flying	Precise control handover

The points in the TEM table about adverse student reaction are very important but are for the instructor to consider privately. If this is the first time someone has flown in a glider, neither they nor you can tell how they may react, and you must monitor their behaviour and be ready to take control or curtail the flight if necessary. If they are nervous, or start feeling ill, or they may be unable to respond to instructions. They may move the controls clumsily or inappropriately. If the instructor projects an air of calm, cheerful competence, the student is more likely to relax.

If the flight is to include another exercise, such as Exercise 5, Effects of Controls, this would be briefed at this point.

THE AIR EXERCISE

Once airborne, start with the lookout procedure. Remind them how to do it and check that their head and shoulders move as they scan the whole field of view. You will need to remind them from time to time during the flight, that they need to be keeping a good lookout all the time, as well as every time they manoeuvre the glider.

To help you monitor the student's lookout, it helps to ask now and then, how many aircraft they can see. This helps you assess whether they can spot gliders well enough. Being able to pick out a white aircraft against a cloudy sky is a skill that improves with practice. At every appropriate point, emphasise the dangers that were briefed: gliders that are close to you and gliders on a collision course.

Do not let the trainee start a manoeuvre without looking out first. Take control to prevent the manoeuvre and ask them if they know why you did.

During the flight, point out the local landmarks that were briefed, and how they help you locate the airfield. Note the landmarks that keep you out of airspace or other danger areas, if applicable. Try asking the trainee at if they can point to the airfield, to start developing their situational awareness. If there is any noticeable wind you can point out that you are keeping the glider comfortably upwind and never letting it drift too far downwind.

During the flight, monitor your trainee's behaviour and whether they are enjoying the flight and absorbing the lesson.

DE-BRIEFING

After their first glider flight your student may be excited and want to chat about how wonderful it was – obviously, this is to be encouraged.

The lesson points to check are that they can describe the landmarks that help them orientate themselves in the air, that they can describe the procedure for lookout, and that they understand the importance of maintaining a good lookout. If they did well, tell them so, but explain that they will get steadily better at lookout and situational awareness with more practice.

COMMON DIFFICULTIES

Forgetting to maintain the lookout while flying. Beginners need frequent reminders.

Airsickness. Many people feel queasy at first, especially in turbulence or thermalling (avoid prolonged thermalling on a first flight) but most of them acclimatise after a few flights.

