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# The Gliding Federation of Australia Inc.



**Operations** 

# **Operations Directive**

No. 01/16 (Revision 3)

# The Air Experience Instructor

# **Foreword**

This document addresses the training required for an Air Experience Instructor (AEI) Rating, the privileges and limitations attaching to the endorsement. Consistency of training standards for AEIs is important in ensuring that initial experience in gliding and soaring flight includes proper foundations of control, lookout, and airmanship.

An Air Experience Flight is an instructional and training flight, even if the participant has minimal or zero control input. The following pages outline the competency-based training system for aspiring Air Experience Instructors.

Revision 1 revised the minimum qualification to a GPC and replaces the minimum requirements in the Operational Regulations.

Revision 2 aligned the AEI revalidation requirements to Operations Advice Notice No. 01/20 'Flight Reviews' as amended by Operations Directive 02/20 on 3 August 2020.

This revision clarifies the power flying credits at paragraph 1.2.

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# **Conduct of AEFs**

Flight instruction in gliders can only be delivered by a person who holds a valid Instructor rating issued by the GFA.

An Air Experience Instructor is the minimum authority for conducting Air Experience Flights subject to the following privileges and limitations.

#### Requirements

- 1.1. Minimum age 16 years.
- 1.2. 200 launches, or 50 hours total gliding experience with a minimum of 100 launches. For powered sailplane pilots, the minimum experience requirements include a minimum of 15 hours or 30 launches in powered sailplanes. Power pilots may count 10% of their power flying hours and launches towards these minimum requirements after a minimum of 10 hours or 50 launches gliding experience have been achieved.
- 1.3. Glider Pilot Certificate (GPC).
- 1.4. Thoroughly conversant with flight rules and procedures and free of basic flying faults.
- 1.5. Must consistently demonstrate correct checks, lookout and airmanship.
- 1.6. Powered sailplane pilots must demonstrate proper engine management, propeller systems and the assessment of weight & balance and fuel usage relevant to the glider being flown.
- 1.7. Trained within the club by a Level 2 Instructor (or higher) in accordance with the syllabus appended to this Operations Directive.

#### **Privileges and Limitations.**

- 2.1. The AEI must carry out all launches, circuits, approaches and landings.
- 2.2. The AEI is not authorised to allow the other person on the controls below 800ft AGL.
- 2.3. The AEI may introduce, and hand over control, the following exercises:
  - Lookout (mandatory)
  - Primary effects of the elevator (including demonstration of the first stall).
  - Primary effects of the ailerons.
  - Primary effects of the rudder.
  - Coordinated use of aileron and rudder rolling in and out of gentle S-turns (below 30 degrees bank), with appropriate lookout.
- 2.4. The AEI rating specifically EXCLUDES the teaching of:
  - Any Stalling Exercises (except first stall with effect of the elevator)
  - Any Spinning Exercises.
  - · Launching.
  - Circuit planning.
  - Approach control and landing.
- 2.5. The AEI rating specifically excludes the holder performing any form of "check flight", including site checks
- 2.6. The AEI may engage in ab-initio training subject to the above limitations.
- 2.7. A pilot holding an AEI rating and a GFA Sport Coach Accreditation may also carry out in-flight coaching in the following Glider Pilot Certificate (GPC) Training Syllabus items only:
  - Item 14 FLARM use
  - Item 17 Thermal centring techniques
  - Item 18 Thermal entry
  - Item 19 Soaring with other gliders
  - Item 31 Thermal sources and selection
  - Item 36 Navigation and airspace
  - Item 37 Cruising, speed to fly and height bands

#### Revalidation

- 3.1. The AEI must undergo standardisation check flights with their CFI (or delegate) during their flight review
- 3.2. Standardisation check flights shall be conducted in accordance with Operations Advice Notice No. 01/20 'Flight Reviews'.

#### Competencies to conduct flight training

#### 4.1. <u>Unit description</u>

This unit describes the skills and knowledge required of an Air Experience Instructor to effectively conduct air experience flight training in gliders.

## 4.2. <u>Elements and performance criteria</u>

#### 4.2.1. Plan flight training

- (a) plan air experience flight training exercise to ensure an effective, efficient and safe outcome;
- (b) identify potential threats and errors and apply suitable risk mitigation;
- (c) consider availability and program suitable training glider and briefing facilities;
- (d) establish airworthiness (and fuel state if applicable) of the training glider;
- (e) determine that environmental conditions are suitable for the training exercise.

#### 4.2.2. Conduct pre-flight briefing

- (a) confirm the air experience trainee is mentally and physically prepared for flight training;
- (b) brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight;
- (c) brief the trainee on how the flight will be conducted to meet the training outcomes;
- (d) confirm the trainee's ability to recall the training outcomes, underpinning knowledge, handling technique and planned flight scenario;
- (e) discuss threat and error management issues applicable to the proposed flight (requires lookout techniques among other items) and confirm the trainee understands their responsibility for managing those issues (airmanship).

#### 4.2.3. Conduct airborne training

- (a) demonstrate elements:
  - (i) introduce tasks in manageable portions without trainee overload;
  - (ii) make clear, concise and systematic explanations;
  - (iii) coordinate demonstration with patter, including a clear explanation of the manoeuvre;
  - (iv) make smooth control inputs without abrupt manoeuvring, using accepted techniques;
  - (v) demonstrate the manoeuvre.

#### (b) directs task performance:

- (i) implements handover and takeover procedures for control of glider;
- (ii) provides direction appropriate to trainee's progress;
- (iii) provides instructions in a clear, concise and timely manner;
- (iv) provides sufficient practice for the trainee to achieve the task;
- (v) intervenes only to the extent necessary to assist the trainee's progress or to maintain safety.
- (c) monitors trainee performance (unassisted practice):
  - (i) identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard;
  - (ii) provide additional instruction and demonstration as necessary to assist trainee:
  - (iii) encourage the trainee to develop self-assessment skills;
  - (iv) note training events for debriefing, assessment and pilot motivation; and
  - (v) identifies when the student is suffering fatigue and initiates a break in training activities during the flight.

#### 4.2.4. Manage threats and errors

- (a) manage responsibilities as pilot in command for the safe operation of the glider and maintain situation awareness while providing instruction;
- (b) identify and manage threats and errors;
- (c) intervene to recover the glider if trainee does not manage an undesired glider state;
- (d) develop the trainee's responsibility through the application of human factors principles for threat and error management.

## 4.2.5. Conduct post-flight briefing

- (a) ask the trainee to self-assess performance against the performance criteria;
- (b) describe, clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance criteria;
- (c) identify any deficiencies in performance and suggest remedial actions and training;
- (d) discuss threat and error management issues encountered during the flight;
- (e) brief the trainee on the details of the next training exercise;
- (f) record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercise;
- (g) provide motivational feedback and advice on progression options.

#### 4.2.6. Complete post-training administration

- (a) relevant staff are informed of trainee's performance and results;
- (b) air experience certificate, training records and logbook entries completed.

# 4.2.7. Review training

- (a) evaluate training effectiveness with trainees and other appropriate stakeholders;
- (b) identify and incorporate adjustments to delivery, presentation and content of training when appropriate.

# 4.3. Range of variables

- a. activities are performed in accordance with published procedures;
- b. flight training includes the units and elements authorised by the flight training endorsement(s) held by the air experience instructor;
- c. aeronautical knowledge training, including pre- and post-flight briefings, is provided to support the flight training units and elements;
- d. flight training and glider operation is conducted in accordance with regulatory requirements and safe operational practices and includes administrative procedures associated with authorising and recording flight training and maintaining training records;

#### 4.4. Underpinning knowledge of the following:

- a. relevant sections of the GFA Operational Regulations and Manual of Standard Procedures;
- b. cognitive basis of airmanship, situational awareness, captaincy, prioritisation, load shedding and decision making;
- c. instructor professionalism, including interpersonal skills, implications of being a role-model, self-reflection and self-managed professional development;
- d. effective use of a course of training, curricula and syllabus and lesson plans;
- e. debriefing and feedback techniques;
- f. transfer of control (handover and takeover or follow-through) drills and procedures;
- g. principles of flight;
- h. techniques for introducing tasks in manageable segments to avoid overloading a trainee and principles for integrating task segments;
- i. checklists:
- j. common student errors and suggested suitable remedial instruction;
- k. operational concept of threat and error management in relation to flight training in terms of:
  - (i) managing threats; (ii) managing errors; and (iii) managing undesired glider state;
- I. goal fixation effects on good decision making;
- m. requirements for completing relevant documentation;
- n. principles, purpose and location of controls, monitoring devices, and systems;
- o. procedures to be followed in the event of an emergency (as per Club SMS).

#### **OBTAINING AN AEI RATING**

Candidates for an AEI rating must have the support of the club Chief Flying Instructor. Training of Air Experience Instructors (AEIs) is carried out at club level by the club CFI or suitable delegate in accordance with the GFA Instructor Handbook.

#### Training in handling skills

The following exercises should be practiced from the back seat, or in the case of side by side two seaters, the seat that will be occupied by the pilot in command during an AEF.

# **Lookout and Airmanship**

The candidate must use standard lookout techniques, such as scanning the horizon, checking instrument readings, and monitoring the position of the glider in relation to the home landing area. Where any exercises are flown, they should be with consideration to height loss and position with respect to entering a normal circuit.

#### **Speed Control**

The candidate should demonstrate the ability to maintain a safe and appropriate control over airspeed and attitude (with regard to conditions) in any phase of flight. The airspeed on any approach should never be below a pre-declared minimum, and not more than reasonable and appropriate for the conditions. The candidate must be able to maintain a safe speed (no matter the circumstances) on the winch launch and when in the circuit.

#### Lack of Slip and Skid

All turns should be well co-ordinated. If mistakes in coordination are made, the candidate must be able to recognise when the glider is beginning to yaw and take action to smoothly remedy the situation. There must be no tendency to over rudder turns - especially in the circuit.

#### Circuit Planning

Circuits should be planned such that the final turn is completed at a safe height and at a distance back from the landing area appropriate to allow a stable half to full airbrake approach. If a normal circuit cannot be flown, the glider should be positioned such as to achieve a safe landing with as high a final turn as safely possible in the circumstances.

#### Winch Launch Failures

The candidate should be able to fly the correct recovery procedure. Recovery speed should never be below the minimum discussed in eventualities and not more than reasonable. Turns should never be over-ruddered. The emphasis should be on getting safely back on the ground, disregarding convenience.

#### Stalling and Spinning

Candidates should be able to recognise a stall and the individual symptoms. They should be able to recover using standard techniques. They must be able to recognise the difference between a spin and a spiral dive, and use the correct recovery for each. Full opposite rudder must be used on the recovery from a spin.

#### Landings

Landings made by the candidate must be fully held off. Candidates should be able to land and stop within a few metres of a pre-arranged area if it is safe and appropriate. The approach should be planned to ensure spare energy is available should sink be encountered in the latter part. This means planning for a half airbrake approach to the aiming point.

#### Winch launching

Winch launches and failures should always follow safe launching profiles (a good resource is the GFA winch launching manual).

#### **Aerotowing**

The candidate should be able to fly the correct recovery procedure in the event of an aerotow launch failure and have a good understanding of non-manoeuvring areas Candidates must also be able to handle out of position and descents on tow.

#### Powered Sailplanes

There is a greater workload involved with taxing, taking off and climb-out when compared to winch or aero tow, so pilots must demonstrate acceptable performance and remain within a safe gliding distance of the airfield. The candidate should be able to fly the aircraft without relying on the engine to get them out of trouble and must plan the flight so as not need an engine re-start. Candidates must also have a good understanding of emergency procedures in regard to engine failure and fuel fire.

#### **Hand-over and Demonstration of Primary Controls**

It is very important to be clear who is flying the glider at any time. When you hand over control, say clearly "Your aircraft" and only take your hands and feet off the controls when you have heard the trainee say, "My aircraft". Similarly, when you take back control, say clearly "My aircraft" and start flying only when you have heard the trainee say, "Your aircraft".

The only possible exception to "My aircraft", "Your aircraft" etc. might be in a sudden emergency when you can't afford to waste time saying anything before doing it! But still say the words anyway — the trainee will be more likely to let go!

All demonstrations should start from a steady mode of flight (stable platform).

Fly the demonstration as accurately as you can and comment on what you are doing. For example, describe the control movements you are making and the visual references which tell you what the glider is doing. Your words must keep pace with, but be slightly ahead of, the events so that the trainee has time to take them in. For example, you might say something like... "Look ahead at the horizon. When I move the rudder, the glider will yaw" rather than "I am moving the rudder and the glider is yawing". The only way to keep the words 'in front' is by using the minimum number needed to convey the basic meaning. This takes thought and practice.

For primary effects of controls, it is important to stress the *effects of control inputs by reference to attitude and distant ground features*, rather than the size of control inputs.

Further and specific advice on demonstrating the primary effects of controls is in the Instructor's Handbook, Part 2.

# THE CONDUCT OF AIR EXPERIENCE FLIGHTS

#### Introduction

This section on air experience flying is quite long and detailed and serves to reinforce the importance of proper and considerate handling of people who are experiencing their first flights in a glider.

There are three important things to realise when entering the world of air-experience flying.

- 1. You are now responsible for someone else in the glider as well as yourself. This means that the relatively carefree attitudes, which you may have got used to in solo flying, are now not appropriate. For example, you probably have never had to work to a deadline before. You have chosen your take-off time and planned accordingly, slowly getting your glider ready and launching when conditions are right. Now you may be thrust into quite a different scene. There may be three or four people waiting for air-experience flights and you are one of the pilots chosen to take them. You will have pressures on you that you may never have experienced before, pressures which must be resisted if you are to avoid such pitfalls as rushed or interrupted checks or being distracted by people holding social conversations around the cockpit.
- 2. The content of the flight is determined by the needs of the pupil. The minimum content is a safe flight including a launch, circuit, and landing, depending on the launch type and weather. You must realise it is their first flight, not yours at their expense. The impressions you give during that first flight are extremely important you can sign up a new member or turn that person off gliding for life. An Air Experience Flight is not an opportunity to show off or inflate your ego. In this sense your responsibility is at least equal to the instructor who takes a student through the later training sequences a student who does not get on with a particular instructor will find another instructor, whereas a newcomer having an unpleasant experience on the first flight will probably not even take another flight. He or she may be lost forever.
- 3. Consider what impressions you make. This is your student's first experience of gliding, and you need to be as professional as possible because you are the front line for gliding. Your dress, your manner, and your professional approach will be on show. Remember that:
  - for every 26 unhappy customers, only one will lodge a formal complaint if at all, and an average of 1,560 people will hear about at least one of these unhappy experiences.
  - On average, each unhappy customer will tell 10 people, who in turn will tell 5 others (and vice versa for a good experience).

Think back to your first flight in a glider and how the person who took you up treated you. It will probably help quite a lot in your handling of air experience flights.

#### Confidence

It may seem an obvious thing to say, but you must be confident of your own ability to fly safely and accurately. Not only this, but you must also convey this confidence to the other person, especially if you do not know each other. Put yourself in the other person's place — you have come here of your own volition to be exhilarated, but at the back of your mind is the thought "I hope nothing goes wrong." What you really want is to get down again safely and if you enjoy it immensely, so much the better. You are introduced to someone (a good pilot you hope) about whom you know nothing, and they say such things as "I haven't flown one of these gliders for ages" or "I hope the rope doesn't break". Maybe an exaggeration, but if you had any sense, you would be off like a shot, or you might sit through the entire flight petrified.

Loose talk, even if intended as a joke, can get you off to a bad start. What the person wants to hear is that things will not go wrong, or if they do that their pilot will be able to cope with them in a trained, professional way. They will want to hear the pilot say things like "Rope breaks are very rare, but if we do have one, we will land in one of those paddocks over there, or if we're high enough we'll land back on the airfield."

Note the "will" and not "might" or "maybe" and the fact that the pilot is making decisions and preparing for any eventuality. They think to themselves, "I can trust this person with my life" because that is in fact what they are doing. Let your passenger know beyond doubt that you are going to look after them by

being positive and decisive. Also remember that, like surgeons, air-experience pilots do not have the word "oops" in their vocabulary.

Your tone of voice and pace can also have a major effect on the trainee. Consider how much more confidence is instilled by an instructor's calm, slow, modulated voice, versus a high-pitched frantic gabble.

Obviously, this confidence must be based on actual ability. Overconfidence, complacency, cutting safety margins and showing off must be avoided, or the trust that is put in you will almost certainly be withdrawn.

#### **Early sensations**

Most people on their first flights will experience fairly vivid sensations of positive and negative G and of slip or skid, though they probably will not know what they are called or why they happen. The fact that they do not know why these sensations happen is likely to make them even more vivid.

The fact is that the person on their first glider flight, unless experienced in some other form of flying, has spent almost all their life at 1G and now finds that, not only do they lean over every time you turn, but they also get pushed into the seat. Then, no sooner have they adapted to this extra body weight, you come out of the turn, and they feel light-headed going back to 1G. It may be very disconcerting, and the person may be convinced that they will never make a pilot because they have not got the constitution for it. The moral should be obvious – be honest and tell the person what to expect before you fly.

Don't lay it on too thick; there is no point in erecting unnecessary obstacles to a person's enjoyment but tell them that everyone has these sensations, and they will become accustomed to them when their eyes have learned to discern the small attitude changes that cause them.

Avoid unnecessary jargon. Use of words like "attitude" and "high and low G" are useless without explanation. Better to use familiar and everyday expressions, like "that hump-back bridge feeling" or "that sensation you get at the bottom of the slope on the Big Dipper". The person will know immediately what you are talking about and what to expect. It is also something you can reinforce when airborne and you fly through a down-gust causing low G "Did you feel that? Remember that hump-back bridge feeling I talked about before take-off...etc?" It is reassuring to your student to know that you also felt something not altogether pleasant.

If you detect signs of anxiety or illness, cut the flight short, keep the bank angles shallow, descend steadily with airbrake into the circuit and conduct a normal landing, preferably with a calming and reassuring voice letting them know you are looking after their comfort and safety. You may need to remind some people to hold onto their shoulder straps if they want to hang onto something for support.

A very small percentage of people never really adapt to low G sensations (low G being defined as less than 1G), even though they can tolerate an increase in positive G. Such people become extremely concerned, even agitated, when they experience low G and it is worth keeping a careful eye on all air experience passengers for any sign of this trouble. If you detect an abnormal sensitivity to low G, cut the flight short if the air is rough and discuss the matter with them on the ground.

#### **Pre-flight briefing**

The essence of a good briefing is just that keep it brief. The accent should be on the things that will directly concern your potential new member, like what to expect from the flight and how to enjoy it.

Unless interest is shown in the controls or instruments, do not volunteer lengthy explanations. Short and simple are the watchwords. Once aboard and the harness is comfortably secure, give a concise briefing about the new environment for the next few minutes. For example: "As you can see, we have a control stick here (point) and some pedals on the floor (point). I will be using these all the time to control the glider, so please keep clear of them until I say so - I'm sure you would like to have a go when we get up there."

"Your harness is nice and snug, so you won't need to hang on to anything. However, if you feel you do want something to hold onto, use this here (point to the appropriate place on your glider type). Please don't touch this yellow knob or the red handle here (explain why). The only other important control is this blue lever here (point) which works the airbrakes. You may see me moving that as we come in to land. You've got some instruments here which tell our height, speed and whether we are going up or down,

but don't worry about them, I have the same set of instruments in front of me. Much better to keep your attention outside and enjoy the view."

"I am now about to commence a pre-flight cockpit check to ensure that everything is in order before we take off."

Apart from explaining about the sensations, something like this is all that you need say. Obviously amplify your descriptions if you are asked, but don't get bogged down by intricate details of how and why everything works. Don't be evasive, but keep your explanations brief and untechnical.

You may need to highlight that unlike driving a car, where steering wheel inputs are required to continue a turn, in a glider turns result from bank and once the glider is banked at the correct angle, further aileron control inputs are not required until rolling straight and level again. It may be worthwhile reminding trainees of their past experiences riding a bicycle, motorcycle, or horse in a turn.

Bear in mind that the technical knowledge you possess has been assimilated over several years. If you try to impart all this knowledge in a few minutes (quite a common error, even for experienced instructors), the newcomer may well think you are a superman for being able to operate all those knobs and levers at once and read all the instruments at the same time. They may not come back as a student if they think it will all be too complicated. Therefore, be brief and truthful, but untechnical and reassuring.

#### **Patter**

You will find that after a few flights you will start developing your own patter. The aim here is not to tell you exactly what to say, but to give a few hints on how and when to say it.

You might find it difficult at first but try to keep a steady and even conversation going. This is important for two reasons; firstly, that an even (not monotonous) speech will be more reassuring than a sudden high-pitched babble when, for example, the cable has just broken; secondly, the two-way talk will give you an insight into how the person is coping with three-axis motion, as well as making them feel more than just nose-ballast. Talk about what you like but make it interesting. For example, on tow you might talk about the gliding club, the aerodrome, the local area, in fact anything that is different from their everyday life and therefore interesting. Get the person involved in the conversation; although they do not know how to fly the glider, they can talk.

The other important part of good patter, and therefore good introductory flying, is to keep the other person informed about the flight; for example, warning them before each manoeuvre and, if need be, what to expect. Almost every sensation will be new, tell them before it happens.

#### A couple of examples:

- (i) On coming off tow. "Any moment now I'm going to bung off tow and do a right-hand turn." The elements are there, and it is truthful, but "bunging off" is at best meaningless and may even suggest a violent manoeuvre.
  - Compare that with "Any moment now I'll tell you when I shall be releasing the towrope and when it has gone, I will bank the glider over gently to the right. The rope will leave us with a bit of a jolt, which is quite normal. OK, I'm releasing now."
  - See the difference? The newcomer is prepared for everything they are going to feel whether they are sitting through a right-hand turn or not.
- (ii) Inflight. Before turning right, you might say "Check clear right, turning right." This reinforces lookout before turning. Having previously stressed the importance of lookout and invited the trainee to advise of spotting any other glider or aircraft, if they spot one you might say "Well done, a good lookout is important to our safety, and every pair of eyes helps." It does not matter whether they had seen it; your patter and praise will help build a good lookout.
- (iii) On preparing to land. "Well, we're down to 800ft and it's about time we got ourselves established on the downwind leg of the circuit. I'll try to get us down by the aerotow point but it might be tricky in this crosswind. I'm increasing speed and retrimming onto the downwind leg now. There may be a wind-gradient on finals. Turning onto finals now and open the brakes. 55 knots and going well . . . etc."

All good stuff and quite truthful. Read it through again, see where it went wrong and try to think what you would say. There is a bit too much technical jargon and not enough confidence comes across that the pilot is capable. Try this version.

"We're getting lower now and it is time to prepare for landing (getting nicely positioned on the downwind leg). What I'm doing at the moment is getting us positioned so that we will land on that grass strip at the end of the airfield where the tug aircraft is just landing. See it, down there on the right? We need extra speed for a safe approach to land, so any moment now I'm going to lower the nose slightly - you may feel that hump-back bridge sensation as I do it and you will also notice the air noise get louder (Lowers nose and re-trims). One more turn and we will be lined up for a landing just to the right of the line of gliders. We've still got plenty of height, so I'm going to start to use the airbrakes. It might look like we're diving down, but we won't; gliders usually approach quite steeply to land... etc."

The difference in this version is that the pilot is adjusting their own thoughts to what the other person can understand, pre-empting any apprehension and certainly not mentioning their own thoughts of downwind legs, crosswinds, and wind-gradients. Saying the right things is often simply not saying the wrong things.

#### Adverse reactions

Apart from the rather unlikely event of flying somebody who is acutely low G sensitive, the main problem you may encounter is airsickness.

Although it is true that some people are prone to any sort of motion sickness, a large proportion of sickness on early flights can be attributed to extended circling, unnecessarily violent manoeuvring, and inaccurate flying by the pilot.

The general rule is therefore no aerobatics, no steep turns and no dolphin flying. It is also a good idea to limit thermal turns to less than about three in a row, as continuous circling is likely to disorientate the newcomer.

Be careful how much bank you use too - keep the turns rather shallower than you would use if you were by yourself. Naturally you should be keeping your conversation going, but if the other person is quiet or unresponsive, especially if the head is tucked down and looking inside the cockpit, suspect that you have a potentially airsick person on your hands.

This is important. Do not ask, "Ere, mate, you feelin' crook?" or you will find out the messy way. Try "If you're happy, we'll go in and land now; I'm sure someone else is waiting for the glider". It may not be strictly truthful, but it should at least provoke a response. Or you could try... "Okay, I am heading back towards the circuit, have a good look around for other gliders and aircraft and tell me what you see", whilst commencing descent. You might ask "How are you managing, feeling OK"? but this might accentuate their anxiety. If the reply gives you any cause for doubt, it is time to head back.

The main thing is to keep their attention outside the cockpit from the start. Not only will they gain very little knowledge or enjoyment from staring at the instruments, their lack of visual awareness of the glider's motion will make their sensations much more vivid and alarming. Try it yourself on your next flight - do a gentle pushover (low 'G') looking at the horizon then do the same manoeuvre looking down at the stick. That is what your hapless victim will feel.

#### Letting the other person fly

Showing someone the effects of the controls and how they are used to manoeuvre the glider is the job for a fully trained instructor. However, you will be able to show them the basic effects of the three controls and how they affect the motion of the glider using the 'Introduction to Control' section of the Instructor's Handbook as guidance. The Air Experience Instructor is not authorised to go beyond this very superficial introduction to the effects of controls and must not allow the other person on the controls at all below 800ft AGL.

#### Some do's and don'ts

**DO** reassure your charge and understand their feelings.

**DO** fly smoothly.

**DO**, if you can, fly your friends first. They already know you and probably trust you. You will already have overcome the biggest hurdle.

**DO** think about limiting the flight to no more than 40 minutes.

**DO NOT** allow loose objects into the cockpit.

**DO NOT** do aerobatics (unless specifically requested).

DO NOT spend a long time continuously circling.

**DO NOT** do steep turns, but...

**DO NOT** compromise safety, inasmuch as you may have to turn steeply to avoid collision or do a well-banked turn onto final approach.

**DO NOT** apologise. For example, do not say "What a sloppy turn I did there" or "what a terrible take-off". This person has trusted you with their life and does not want to hear things like that from you.

**DO NOT** use loose talk (Example above). Think what you want to say and imagine how it will be received before you say it.

**DO NOT** fly air experience flights in rough conditions and think very carefully about flying them in the middle of very hot summer days.

#### Flight safety in air experience flying

In air experience flying, you have the safety of someone else to consider, as well as your own. Nowhere is this more important than in the circuit. What is to you, the pilot a perfectly safe and controlled "running out of height" situation might come across to the other person as an emergency with things getting rapidly out of control. Even more so if you have already told them where you are going to land and then say you won't be able to make it. Although you should always fly safely, the margins should be increased when you have someone else to consider as well.

You should ensure that your passenger has no loose objects that could pose a problem in flight. If they have a camera, ensure the passenger holds it in such a manner so that it cannot foul the joystick. Passengers should be advised never place any object on the floor or close to the control column, and should they inadvertently drop something they should immediately tell you. Loose objects such as phones are best left on the ground but if carried, they should be stowed securely in the pocket on the cockpit wall. If portable devices have a wrist strap, they should use them.

Finally, introducing other people to your sport can be very rewarding. You will find it almost like learning to fly all over again and it will certainly add another dimension to your gliding. However, don't collect a rating for the sake of having another piece of paper. To give your best to prospective new members, you should genuinely want to do that. Once you have the rating, use it as often as you can. Not only will staying current help your flying to be safer and more accurate, you will be giving much better value for money. **Remember whose flight it is.** 

# AIR EXPERIENCE INSTRUCTOR TRAINING SYLLABUS

# **DETAILS OF FLYING EXPERIENCE**

Name	Date of birth
Address	
Phone (home and work)	Email:
Club	
Gliding hours (total)	(Last 12 Months)
Launches (total)	(Last 12 Months)
Badges (or part badges) held	
Power flying experience (hrs)	Tug-pilot?
Powered sailplane experience	

**Chief Flying Instructors:** When a topic is first briefed taught or demonstrated, initial the 'Brief' column. Once the trainee has demonstrated proficiency in a topic you may initial the Competent (Comp) column and record the date.

Exercise	Brief	Comp	Date	
PRINCIPLES & METHOD OF FLYING INSTRUCTION				
General teaching principles				
Flight and Risk Management				
Pre- & post-flight briefing				
Flying demonstration				
Trainee practice				
CHECK LISTS				
Pre Take-off Checks				
Pre landing Checks				
LOOKOUT				
How to lookout				

Exercise	Brief	Comp	Date
AIRBORNE TRAINING			
Trainee 'follow through'			
Who has control?			
Keeping in range			
Elevator			
Airspeed Indicator & Speed Monitoring			
Stalling			
Ailerons			
Rudder			
Spin and recovery			·
Spiral dive and recovery			

Overall Assessment (In the space below, add any comments you feel are appropriate).				
I hereby certify that the candidate has be guidelines and a rating issued.	peen trained as an Air Experience Instructor in accordance with th	ıe		
Signature	Date:			
Name	CFI			
NOTE: A distribution of annual fibric commit	Noted Air Experience Instructor Training Cullabus must be returned			

**NOTE:** A duly signed copy of this completed Air Experience Instructor Training Syllabus must be returned to the GFA office.