



# **INTRODUCTORY FLIGHT PILOT ENDORSEMENT COURSE AND COACH INFORMATION AND RESOURCES**

## **INTRODUCTION**

EU and UK regulation notes that 'Introductory flight' means any flight against remuneration or other valuable consideration consisting of an air tour of short duration, offered by an approved training organisation or an organisation created with the aim of promoting aerial sport or leisure aviation, for the purpose of attracting new trainees or new members.

The safety management processes used by our clubs aim in particular to protect third parties and unqualified pilots. People who come to our clubs to have a flight in a glider should not be exposed to unnecessary risk. It is also important that our pilots involved in flying passengers are not unnecessarily exposed to potential liabilities in the event of something going wrong. That is why the activities of BGA standardised Introductory Flight Pilots (IFPs) are included in the BGA's aviation risk insurance policy that has been historically limited to instructors.

Please note that the IFP is not an instructor and the IFP endorsement is not an instructor rating.

### **IFP Requirements, Privileges and Limitations**

For IFP requirements, privileges and limitations please refer to BGA Law and Rules 'Gliding Certificates and Endorsements Requirements'.

## **BECOMING AN IFP**

This booklet outlines the standards expected from pilots undertaking a BGA Introductory Flight endorsement course and offers guidance in preparing for the course and the safe conduct of an introductory flight.

IFP is available for both unpowered sailplanes, Self-Launching Sailplanes (SLS), and Touring Motor Gliders (TMG).

### **First Steps**

Perhaps you have a personal wish to become an IFP, or maybe you have been approached by somebody from within your club. In any case, you must have the approval of your club CFI before continuing.

Once you have support from your club, your CFI or senior instructor will review your basic handling skills.

### **The IFP course**

The IFP course will be run at individual clubs by nominated Approved Coaches. Approved coaches include CFI's, FIC's, BI Coaches, and RE's. Once all the relevant exercises have been completed and signed off, you will be assessed by a coach who has not been involved in your training.

All pilots and coaches must hold the relevant licence and recency for the aircraft type used.

### **Post course**

Once the BGA office receives the completed IFP application form 9 (available on BGA website) and has responded to you noting that you have been included on the database and your club CFI has authorised you to operate at the club as an IFP, you may conduct introductory flights. There is a requirement for an annual refresher of your flying to continue to fly passengers. The content for this annual refresher is detailed in appendix 2.

## RESOURCES FOR THE IFP AND IFP COURSE COACH

### CARING FOR YOUR STUDENT – FROM ARRIVAL TO DEPARTURE

#### 1. Assess your passenger

*Why is your passenger here?*

The motivation of your passenger will vary and can depend on whether they have come as a member of a group or as an individual. Within a visiting group there can be the additional factor of peer pressure. They will not want to miss out (or chicken out), when in company with the others. Whether as a member of the group, or as an individual, each of the following factors can apply:

- They have a genuine interest in taking up the sport.
- They are seeking a thrill.
- They have always wanted to try gliding.
- They are seeking status.

*What sort of person is your passenger?*

The method of handling each introductory flight will depend on your passengers' background. For example consider the extremes of an aeromodeller, (or person with previous flying experience) against that of the adventurer who wishes to celebrate an "80th" birthday! It is also important to communicate at a level appropriate to their background and age. Avoid "talking down" and take care not to confuse with technicalities or jargon.

*What does your passenger want from the experience?*

These may range from a requirement for a smooth, unexciting flight, to someone who wants a thrill. Remember:

- Do not push a passenger into anything.
- Do not let a friend push a passenger into anything.
- Do not let anyone push **you** into anything beyond **your limits or experience**

#### 2. The alien aeronautical environment

*Early Flying Sensations*

Sensitivity to flying sensations is common and in some cases may be extreme. Passengers may be disturbed by increased "G" or being banked in a turn. Warn them about these sensations and give assurances that everyone adapts quite quickly to gentle turns, and normal attitude changes.

Stalling, reduced "G" and more extreme manoeuvres will always be disconcerting to some people. In extreme cases reduced "G" may completely disorientate – and result in irrational behaviour.

*Adverse Passenger Reactions*

Flights should be of limited duration. Continuous circling can induce nausea. Remember the flight is supposed to be an enjoyable experience!

The following signs are indicative of passengers beginning to feel unhappy!

- Silence!
- Inability to respond to questions
- Tense neck muscles
- Holding on
- Leaning away from the turn

- White and perspiring

Fresh air will help if they are feeling ill, and a rapid but smooth controlled descent (70 knots and full airbrake) may be necessary. Be sympathetic and tactful. A yes response to the question 'would you like to go down now' is a sure sign something is wrong.

#### *Emotional and Psychological Considerations*

Most people will do their utmost to conceal their innermost fears. Signs of nervousness are sweating, hyper-ventilation, talking more than normal – although the latter may also be a sign of overconfidence).

#### *Use the Right Phraseology!*

Passengers could easily have their worst fears “confirmed” by a poor choice of words and phrases. “It’s only wood and fabric”. “Some parts look flimsy, but in fact the glider is immensely strong”

Passengers should always be assured that they are being well looked after. Needless to say, the positive and decisive attitude of the IFP to flying reinforces the passengers confidence, but this confidence must not be abused.

### **3. Preparing your passenger**

Pre-flight discussions should not be lengthy affairs and should be carried out outside the glider, so that face to face contact can be assured away from too many distractions. This discussion also serves to prepare the passenger for the experience, make sure they understand what is going on and what is expected of them, including that they don’t operate any inappropriate control. They also serve to prepare the IFP for the flight. Keep it simple.

Points which may be covered might include:

#### *On arrival*

Make sure that visitors are either escorted to and from the launch point, or accurately briefed on the following:

- How to get to the Launch Point.
- Potential hazards en route.
- Keeping behind the glider to be launched.
- Are aware of the approach paths in use.
- The possibility of aircraft landing other than at the Launch Point.
- Keeping within a particular area for safety while waiting

#### *Outside the glider*

Describe the type of glider, its construction (wood/ metal / GRP), and its country of origin. Identify the main parts of the glider and explain how the controls achieve their effect. Check the weight of your passenger, making your own assessment if they seem unsure. If any doubt remains, have them weighed, or carry extra ballast to make sure that the minimum loading is exceeded.

In the case of children or other very small/light passengers, they may have to be carried in the rear seat. Consideration should be given to small passengers and children as to whether the parachute fits sufficiently well that it would be effective in an emergency. You should consider and younger passenger’s maturity and their ability to react confidently in the event of a bail out situation or other emergency. The seating height governs the view your passenger has, and a good view reduces the possibility of motion sickness. Remember - you are flying illegally if outside the weight limits for the glider. It’s hazardous. Insurance may not pay out in the event of a claim.

### *Alongside/In the glider*

The following are likely to be included in your ongoing briefing;

- Wearing and adjusting the parachute.
- Removing the parachute.
- In the unlikely event of needing it, the use of the parachute and how to exit the glider in an emergency.
- Adjusting the seating. (foam must be firm / shock absorbing if used)
- Adjusting the harness. (Is it effective)?
- Areas in the cockpit for your passenger to hold on to if required.
- Controlling the canopy. (Emphasise – **Not for passengers**)!
- Operating the release. (Emphasise – **Not for passengers**)!
- How to exit the glider after landing. (Who will get out first)?
- Loose articles – cameras etc – extreme caution.
- Explain the basis of the launch and what to expect.

### *Inside the glider*

Reinforce how to get in and out, and assist the entry of your passenger. Help them settle onto the seat. Explain again how to fasten, adjust and release the harness. Point out the canopy jettison, and summarise how to exit the glider in an emergency. Explain again where to put their hands and feet. What can, and cannot be touched! Your passengers' feet must be well clear of the pedals during the launch / landing ('flat on the floor').

Having used this briefing to explain the risks and how together the IFP and passenger are mitigating them, don't forget that the passenger is there to have fun and enjoy the experience!

### *Post flight Discussion*

Share in the experience with your passenger and answer any questions that arise about the flight, or gliding in general, and how to become a member. All passengers on Introductory Flights are potential members!

After the flight, ensure your passenger is not abandoned. If you are unable to look after him / her, make sure an enthusiastic colleague continues the good work already achieved!

## **THE INTRODUCTORY FLIGHT**

A safe flight follows meticulous and risk adverse preparation.

### *Are the circumstances suitable for a safe flight?*

The safety of the passenger is paramount and if there is any factor that needs consideration with regard to the safety of the flight, there is no decision necessary - **the flight should not take place.**

In is essential that:

- you are current
- you are familiar with the aircraft
- you are current on the launch method to be used
- the weather is suitable (see Meteorological limits within these notes)? Are you sure you can easily cope with today's conditions?
- Your licence and experience is valid

Some other challenges for consideration;

- Low Sun?
- Misting canopy?
- Are there adequate options available should a launch failure occur and are you current in handling launch failures in these conditions? No wind and a short runway can be very challenging

- Is there time available for the flight?

Conditions are not always ideal for introductory flights **even if general club activity is continuing**.

Whilst there are always those who will enjoy being thrown about whilst flying, the majority will not appreciate it. Situations best avoided are strong convection or turbulence, poor visibility, and any condition near the limits for flying. As you acclimatise to the flying conditions, it is all too easy to overlook a gradually deteriorating situation. If the first flights are to be a pleasant experience, they must be conducted in appropriate weather conditions. An introductory flight by any pilot, including FI's should be carried out whilst maintaining the lowest risk possible.

The following conditions are considered **inappropriate** for introductory flights

DO NOT LAUNCH IF:

- Launching into cloud
- Launching in rain, or if the flight is likely to be in flown in rain.
- Launching with rain/snow/ice on the glider.
- Launching with misted canopy.

SEEK ADVICE FROM THE INSTRUCTOR IN-CHARGE BEFORE LAUNCHING IF:

- The wind is turbulent (varying by more than 10 kts).
- The wind is strong (>20 kts)
- Cloud base is less than 1200'
- Flight visibility is less than 5km
- Launching above more than 4/8th cloud

All flights must be completed by time of official night.

Introductory flights must be conducted so as to keep risk to the lowest possible. **If in doubt, minimise the risk.**

Good flight planning is essentially evaluating the situation, identifying the risk, and taking action to eliminate the risk. If a risk still exists, then the flight is ill advised and should not be attempted. Remember the old pilot's adage "a superior pilot uses his superior judgment to avoid those situations requiring his superior skill."

#### *Pre-Flight Important Detail*

It is most important that the IFP prepares him/herself and the glider for the flight. Many accidents are caused by poor pre-flight preparation. Factors to focus on could include:

- Aircraft serviceability DI
- Pilot and passenger weights – c of g position max all up weight
- Seating position – control clearance
- Loose articles – cameras mobile phones etc.
- Pre-flight checklists
- Eventualities
- Cable position
- Conflicting air traffic
- Weather

#### *Pre-Flight Checks and the Flight*

Having strapped in, briefly explain your actions as you carry out your pre-flight checks but avoid discussing EVENTUALITIES as this may be alarming to your passenger. Once the checks are complete, keep the interest of your passenger whilst the final preparations are being made. If for any reason there will be a long delay, it may be best to exit the glider until

flying recommences. Hot cockpits = uncomfortable or nauseous pilots. Ballast – do you believe your passenger? If in doubt, weigh them.

Comment “just in advance” on areas of flight which are potentially upsetting:

- Bumpy ground run.
- Noise.
- High nose attitude on winch launch.
- Noise of cable release.
- Lowering the nose.
- Opening of airbrakes.
- Level of turbulence to be expected.

The content of the flight is determined by the needs of the passenger NOT THE NEEDS OF THE IFP.

Avoid “jargon” (or disconcerting language!)

Having decided that the flight is possible in safety, a plan of the flight/s can now be considered. The passenger should be briefed accordingly with any limitations of the flight identified (e.g. “Today there is very little lift so we will be only able to do a simple circuit”).

To make sure that a safe circuit is possible at the end of the flight, all soaring should be carried out upwind and to one side of the launch run. Care should be taken to stay **well within gliding range of the landing area** so that at the termination of the flight a safe circuit can be achieved. A high well-planned circuit will allow for alternative landing areas to be reached should the originally selected area become obstructed. Being too adventurous increases workload and in consequence increases risk. If hill soaring, in marginal conditions or with high congestion, exercises will have to be curtailed to reduce workload and the flight aborted, to maintain safety limits.

Your skill in avoiding an accident in difficult conditions does not need to be tested EVER.

Having decided what is possible, advise your passenger and carry out the pre-flight checks. If you are interrupted whilst doing pre-flight checks **stop and start again. Don't rush it.**

Plan to land well into the landing area, do not try to land short or into a cul-de-sac. Always keep an alternative landing area available at all times. Higher steeper approaches are safer than low shallow ones and provide more options.

During the flight be prepared to modify the plan if conditions dictate but do not dither if you need to do something to bring the flight to a safe conclusion.

Simultaneous flying and talking involves a higher than normal work load. There are additional pressures simply due to the presence of another person. This pressure could result in your failing to cope with a situation that you would manage easily when flying solo. If the situation does get difficult, **KEEP QUIET** and fly the glider! Be aware of your responsibilities to your passenger, and fly well **within** the normal limits used when flying solo. If your normal solo flying is ‘adventurous’, don't be with your passenger. If due to a large passenger the view from the rear cockpit is restricted, fly the glider from the front.

**If the flying gets difficult, KEEP QUIET AND CONCENTRATE!**

REMEMBER: **AVIATE, NAVIGATE, COMMUNICATE** (in that order of priority)

## **APPENDIX 1 - INTRODUCTORY FLIGHT PILOT PASSENGER BRIEFING.**

When operating as an IFP, no instruction must take place. However, there are some blurred lines where we must show passengers some basic safety related procedures in order that they can complete the introductory flight safely.

Passengers must not operate the controls of the aircraft, but passengers may be invited to 'follow through' on the controls, i.e. feeling the movement but not impeding the pilots control inputs. The BGA strongly recommend that pilots:

- Brief their passenger that the pilot in command alone is responsible for controlling the aircraft at all times
- Do not allow their passenger to interfere with the safe conduct of the flight
- Ensure their passenger understands how to respond to in-flight directions including any emergencies as directed by the pilot in command
- Do not allow themselves to become distracted from the priority task of accurate and safe flying, particularly below 1000' AGL.

There are some absolutely essential things that you must show your passenger before it is safe to fly. This will vary from site to site and aircraft to aircraft. An example list is below:

1. How to get to and from the glider or launch point safely, even if they are escorted.
2. How to get in and out of the glider safely, and without damaging anything.
3. What will happen on the flight, so that there are no surprises and they are not panicked by any unusual sounds or sensations.
4. What will happen and how they should react in an emergency – how to get out of the glider after a crash landing if you can't help them, and how to bail out if commanded – what will that command be?
5. Which things they may not touch in the cockpit and what they can when requested perhaps (volume knobs etc).
6. That it's ok to mention anything they think might affect the safety of the flight, including spotting and reporting other aircraft.
7. Dealing with loose articles such as cameras etc.
8. What to do once you have landed.

The items above could be perceived to be instruction, but any pilot who takes their friend for a ride would be expected to carry out a similar explanation. You are simply showing your passenger how to remain safe in an aircraft and airfield environ.

## **APPENDIX 2 - CONTENT FOR THE ANNUAL REFRESHER OF AN IFP**

Introductory Flight Pilots are flying with our most precious cargo – short term members of the club who expect to be kept safe. As such, the annual refresher flight serves to ensure that the pilot not only flies safely, but that his or her judgement is appropriate to the role of an IFP.

The annual refresher must include the launch types to be used by the IFP and should include a minimum of three launches / launch failures (winch/self-launch as appropriate), or in the case of aerotow only, a 3000' aerotow and a practice launch failure (a motor-glider may be used).

Content must include the following:

1. Safe management of the launch.
2. Launch Failures. Discussion only if aerotow or SLS unless a TMG is available. Practice launch failure(s) must be carried out if winching is used for introductory flights. For IFP TMG, a simulated engine failure after take-off, and an engine emergency that if real would result in a field landing cover the launch failure requirement.
3. Stalling/spin avoidance.
4. Safe Approach control and landing well into the airfield with energy,
5. Planning an appropriate flight, well within the ability of the IFP

## **APPENDIX 3 - IFP Course Coach Guidance**

In order to coach IFP's, you must read this booklet and agree to begin teaching IFP's to this syllabus.

Approved coaches include CFI's, FIC's, BI Coaches, and RE's. CFI's and FICs should seek advice and guidance from their SRE if they have not previously coached for the IFP.

For IFP coaching requirements please refer to BGA Law and Rules 'Gliding Certificates and Endorsements Requirements'.

It is very important to note that the IFP is in a different regulatory framework to the Basic Instructor.

## **APPENDIX 4 – IFP TMG**

All the considerations for flying a passenger are similar if using a TMG. Monitoring of all engine parameters (including carburettor ice prevention) are vital but are not part of the gliding experience so should be done quietly unless the passenger shows a particular interest. Gliding performance is best simulated by using idle power plus 2-400 rpm. It is not necessary that the TMG is kept within gliding distance of the airfield, but it should be operated above easily landable terrain. It is recommended the engine is not shut down until the IFP has considerable experience, and then only with easy reach of the airfield.

## **APPENDIX 5 - Suspension of BGA IFP endorsement privileges**

Should you be involved in any serious incident or accident whilst flying sailplanes including TMGs, you should stop using your IFP endorsement subject to review by your CFI and the SRE.

End.