Instructor and Coach Newsletter

Dear Instructors and Coaches

Welcome to the latest edition of the BHPA Instructor and Coach News Letter. This is the first of a new generation of newsletters that will be totally electronic. Not only will this save a load of time and expense, it will also make for more regular newsletters as we can produce them as and when required and at short notice. It does rely however on emails being kept up-to-date on the BHPA database.

This issue is by way of a test and includes information about the new BHPA Pilot Development Structure.

As with all the previous newsletters, please feel free to suggest or (even better) provide articles that may be of use to other instructors and coaches.

Articles and suggestions can be 'emailed only' to;

david-thompson@bhpa.co.uk

The BHPA Pilot Development Structure – our plans for post-CP development

In 2010, David Thomson, senior coach with the Lanarkshire and Lothian Soaring Club had the idea to reform the sometimes confusing post-CP development route. After being co-opted onto the FSC, he gathered together a group of pilots with particular interest in flying safety and pilot development and together they constitute the Pilot Development Panel.

The members are:

- David Thomson (LLSC senior PG coach, XC and occasional comp pilot, chairman of the PDP)
- Toby Colombe (paragliding guide, comp, XC pilot and competition safety rep)
- Pat Dower (senior coach with DSC, comp and XC Pilot, former HG pilot)
- Judith Mole (former HG and current PG pilot, coach and podcaster)
- Jocky Sanderson (SIV and XC instructor, meet director, PG legend)

We are also assisted by Ed Cleasby (Chief Coach of Dales Club) and many, many others. After an initial meeting, the panel decided to put together a web-based modular structure which would guide new and current pilots through their development. We have produced a summary of the consultation meeting held in August in Derbyshire here: http://www.theparaglider.com/webcasts

At present our work is focussing on paragliding, as this is the discipline practiced by most members and because the panel has the greatest expertise in this discipline. If the structure is adopted and suitable expert volunteer can be found, then the structure will be rolled out to hang gliding, speed flying, paramotoring, motorised hang gliding, etc. If you are a pilot from one/more of these disciplines, please read on – we need your feedback/assistance too!

Background

Basically the aim of our sport is enjoyment. The foundation of that enjoyment is performance and safety.

Within our ever-developing sport there is a huge body of knowledge and one our goals is to share this much more effectively through a new Pilot Development Structure. Enjoyment is improved when we feel confident and skilled. Generally enjoyment comes from achieving our goals and performing well - whether it's to soar for half an hour, fly XC, or perfect an acro move. It is tempered if we have incidents, witness accidents and this leads to us having a greater perception of risk and reduced motivation to go flying. As humans we usually then strive to tackle the next step and lack of performance also reduces motivation.

So why do the majority of pilots (80% in the first five years) give up the sport before they've learned how practice it? We believe they are getting the balance of the "big triangle" wrong and are therefore not getting enough enjoyment to justify (or produce the motivation to make) the large commitment which is needed.

Similarly the notion of a pilot's "comfort zone" is important. A pilot who is "out his comfort zone" has tense shoulder muscles (so active flying has been switched off) and stress has caused his decision making to break down, so the pilot is significantly less safe.

However the main thing which new pilots lack is the experience to make really good judgements about which flight is likely to be "out of their comfort zone", so any guidance which helps them plan their development in a steady, step by step manner is really valuable.

Secondly, the panel looked at accidents and our statistics as a sport in the UK. The BHPA's accident reporting an analysis aims to find positive lessons for members to learn in order to prevent similar incidences in the future. However, over the years, we continued to have the same accidents. Using industrial safety analysis, we can identify what can go wrong (either by looking at the hazards, or at the accidents which will potentially occur), the independent "lines of prevention" (i.e. what stops it going wrong) and then regularly compare accident statistics to identify whether anything has been missed.

The vast majority of accidents are human/pilot related and whilst we use safety features and equipment (air bags, parachutes, etc.) these don't stop accidents happening – they are only intended to make it not hurt as much.

A paragliding safety analysis by David Thomson revealed that the primary hazards are potential energy (i.e. we're high) and kinetic energy (i.e. we're moving quickly) and a few others e.g. extreme cold/ altitude, water, electricity or other aircraft. After listing all the possible accidents and lines of prevention, this analysis concluded that the primary causes of paragliding accidents are failures of glider Control and/ or failures of decision making / flight planning. After then reviewing our accident report statistics it is clear that we hardly ever have any "new accidents" - we already know the causes of next year's accidents.

So the overall conclusion of the panel was that the primary way to improve our safety record is to improve the standard of glider control skills and decision making / flight planning across the entire community. These are the fundamental skills of the sport so its clear that we need to change the way we develop pilots.

Current pilot development

Our current system is that instructors teach beginners in the school environment up to club pilot (novice) level. Then pilots are encouraged to join a club and undertake the Pilot rating – with defined tasks and an exam. Whether a CP pilot attempts this qualification is entirely their decision - its voluntary.

There are a multitude of sources of information and guidance for the new CP, including coaches, Skywings, pilot handbook, books, videos and the web, courses, commercial guides, SIV/pilotage, peer learning or the school of hard knocks. The Pilot rating does bring together a broad set of requirements for knowledge, skills and experience to confirm that pilots are "qualified" to fly XC and in competitions, but leaves it entirely up the individual as to how they get there. Some clubs have excellent initiatives to help pilots develop - e.g. new pilot coaching groups, lectures, breakfast briefings, etc. but perhaps the neighbouring club take a completely different approach. It is quite clear that post CP the "route" towards more advanced skills is quite vague. So from leaving school with rudimentary skills and knowledge, their future development depends on what club they join (if at all), who they meet on the hill, and what kind of experiences they have in their first few flights.

And what about club coaches? They provide ad hoc coaching on the hill with occasional theory lectures. There is some excellent practice in coaching, but each club has a different coaching culture. In many clubs, coaches attend the basic two day training course and are then left to work out for themselves how to assist pilots. There are few resources available which provide detailed guidance on how to support pilots - let alone resources readily available when they are needed on the hill!

Proposed Strategy and Principles for post-Club Pilot Development

The first principle is that, like the present system, it is entirely up to the pilot to do whatever bits they want, whenever they want - it is purely a structure to help each pilot with their own development. A key part of our proposed strategy is that the structure is based on pilots' thirst for knowledge .

We are proposing to create a web-based modular structure which identifies every single skill involved in Paragliding and for each one, create a skill page which contains a description of the skill, useful resources and then sets an exercise for the pilot to demonstrate that they have mastered that skill.

At present we are proposing 9 modules:

- Glider Control Skills
- Flight Planning, Decision Making and Psychology
- Site Conditions and Meteorology
- Equipment Understanding and Maintenance
- Airlaw
- XC Flying
- Emergencies and Accident Management
- Competition Flying
- Tow Launching
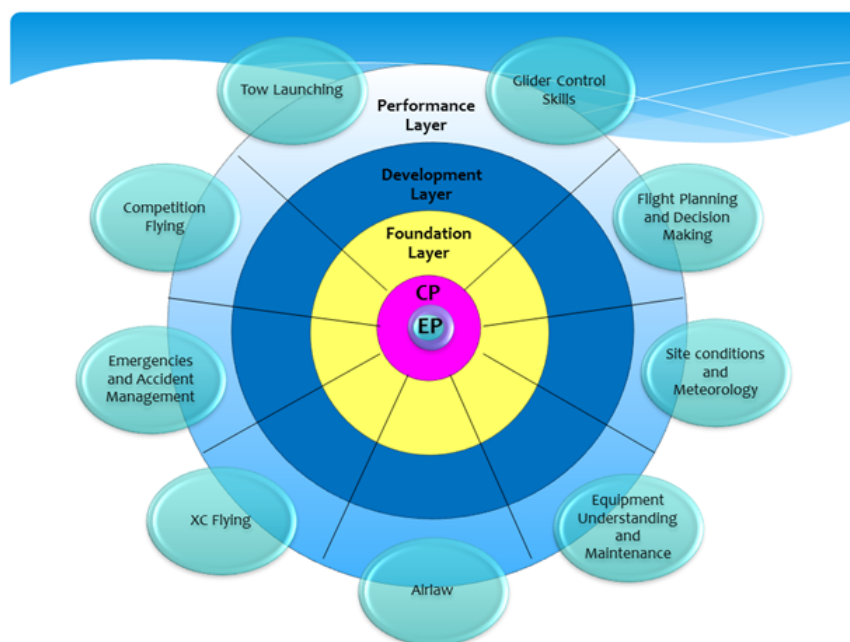
The structure is also divided into of 3 "layers":

- Foundation - aimed at pilots who have just completed CP and are in their first season in the club environment/in their first 30 hours of flying

- Development - for pilots who are beginning to develop and widen their experience

- Performance -   for pilots who want to develop further in their chosen areas of the sport (e.g. acro, comps)

The general idea is that a pilot will have a look at a skill page that is the next step in his development, and when it is suitable conditions they try the exercise (which will often involve repeating a number of times to show consistency) and if it is consistent success record it and move on to the next one.   If not, it presents the perfect opportunity for him to team up with a coach.

So how will the coaches deal with all these skill sheets and new pilot demands?

Parallel to the Pilot Development Structure is a Coach Support Structure which contains, for each skill page a guidance for coaches sheet with tips, advice, resources, exercises and games, etc. - all collated from the best practice of our club coaches.

Our vision is to have all these resources online and on an app – so both pilot and coach have access anywhere, anytime… at home, on the hill or in the debrief in the pub at the end of a flying day.

Below you will see an example of a pilot skill sheet and coaching guidance notes. Both are in **draft** form at present and are not complete. Resources, etc. are yet to be added. You will notice that while the style is very different, the format is largely the same.

PILOT SKILL SHEET

Module Name	Glider Control Skills
Skill (Title and Number?)	Ground handling (Wing Control)
Level (F,D,P)	Foundation
Recommended skills to complete first	
Effective from (date)	
Description of skill	You can fly the glider overhead for an extended period and control both its and your position.
Practice exercises and coaching advice	With the glider flying overhead: - experiment with the effect of brake inputs (left, right, both together) - induce gentle pitching movements and then steady the glider overhead - try the effect of twisting the harness (yaw) - try the effect of tilting the harness to one side (roll) - try the effect of moving slowly to one side to see if the glider will follow - practice exercises facing forwards and backwards - practice exercises with rear risers, brakes, brake lines above the pulleys
Exercise(s)/task(s) to demonstrate successful completion	• Glider overhead for 1 minute+, you stay within a 1metre radius. • Glider overhead whist you walk 10 meters and back to original spot.
Met/site conditions recommended	Steady breeze around 5 -15 mph at glider height Flat ground or gentle slope, obstacle free.
References	
Date	

COACHING GUIDANCE SHEET

Module Name	Glider Control Skills
Skill (Title and Number?)	Ground handling (Wing Control)
Level (F,D,P)	F
Recommended skills to complete first	
Effective from (date)	
Description of skill	Pilot can fly the glider overhead for an extended period and control both its and his/her position.
Guidance for Coaches	<u>General</u> This exercise is best done on top of a hill if wind is light or in a landing field if it is stronger. If there is any chance of the pilot being dragged then it is too strong – this needs to be an exercise which is relaxed and fun! For such a simple exercise, it may be surprising how many pilots aren't familiar with doing it. <u>Common Issues:</u> Difficulty in balancing the glider in a overhead position due to: 1. Turning before the glider is balanced overhead 2. Pulling it up too quickly (overshoots and front collapse) or with too much force (leading edge crumpled on way up) 3. Pulling up so glider is not pointing into wind 4. Too much brake input – normally leading to a lot of moving about to stay under glider. <u>Helpful exercises</u> For issues 1 and 2 – it is helpful to ask the pilot to pull up the glider only to 45 degrees, then lay it back down in a tidy "wall", then repeat. Once they've mastered that, try 60 degrees before moving on to pulling it up overhead. Sometimes it can be helpful to ask the pilot to pull the glider up without touching the A risers, i.e. from the hips (some gliders will do this, some won't) or perhaps with just a single

	finger in each A riser.

For issue 3 - checking that the initial set up is squarely into wind and if the wind is off across the slope, the importance of starting to pull up the lower wing slightly before the higher one. This may be useful one to demonstrate.

For issue 4 - often the problem is that pilots put in too much input one way then need a lot of opposite input to compensate. It can useful to demonstrate flying the glider above your head whilst lying on your back - because your body doesn't move around the glider control movements need to be smaller and more correctly timed. In general, the earlier the input, the smaller it needs to be – and this is demonstrated when you lie down with the glider above.

Once they have mastered getting the glider flying overhead, you could ask them to:

- experiment with the effect of brake inputs (left, right, both together)

- induce gentle pitching movements and then steady the glider overhead

- try the effect of twisting the harness (yaw)

- try the effect of tilting the harness to one side (roll)

- try the effect of moving slowly to one side to see if the glider will follow

- practice exercises facing forwards and backwards

- practice exercises with rear risers, brakes, brake lines above the pulleys

Even if you don't achieve complete success with this exercise – any amount of playing about with the glider in benign conditions is beneficial.

Everything about becoming proficient at this is related to the timing of the input and anticipation of what the glider is about to do so it is clearly one where practice makes perfect!

It is worth pointing out to the pilot that the skills required to do this exercise well are exactly the same as those required to fly a glider in the air. |
| Pilot's exercise(s)/task(s) to demonstrate | • Glider overhead for 1 minute+, they stay within a 1metre radius.
• Glider overhead whist they walk 10 meters and back to original spot |

successful completion	
Met/site conditions recommended	Steady breeze around 5 -15 mph at glider height Flat ground or gentle slope, obstacle free.
References	
Date	

We have a few additional sheets completed and if you would like to see more examples, please let us know at PDP@bhpa.co.uk

In terms of the content of the overall structure, we have so far divided the modules into skills and proposed layers - everything is draft! There is a need for further discussion on which layer which skill needs to be placed in and we are certain we are missing lots of skills. Please let us know any glaring omissions! Proposed content to date can be seen here:

http://tinyurl.com/p7ryttk

Please use the tabs at the bottom of the spreadsheet to navigate the different modules. You will notice that the section on Tow Launching is empty. We are still looking for tow experts to assist us on this. We hope it gives you a flavour of how a pilot might see progression, with essential skills in foundation layer, next steps in development layer and if the pilot wants to progress on to higher levels of the sport, they can complete the performance layer modules. You will notice that some modules do not contain skill sheets in either foundation or performance layer.

Some of the performance level skill sheets will have to be coached professionally and the advice will be to contact, for example, a pilotage/SIV instructor who can teach these skills over water. Club coaches will obviously not be expected to teach these skills in the rolling hills of the UK.

Summary

Clearly, what we are trying to achieve is some changes in our culture so it won't happen overnight, but once its in place we hope it will be the standard way pilots progress.

We hope that you agree that the potential gains of this structure are enormous. By implementing a Pilot Development Structure which would also improve the effectiveness of our coaches, we will provide a much better environment to better develop our pilots. We hope the benefits will include:

- Reduced number of accidents
- Less pilots giving up due to safety scares / lack of progress
- Pilots have a clearer idea of how to progress in the sport
- Pilots will have a clearer idea of where to find the resources or people who can help them
- Pilots learn to assess their own skills and experience better
- Pilots become self-reliant and make better decisions
- Pilots become part of a community
- Coaches are better supported and have better resources
- Pilot to coach progression will be easier as they already know the system
- Clearer way to define pilot skills (e.g. for guides, comp organisers, etc.)

- Easy to update with new resources/techniques/ideas on the web

What's next?

At present we are still in the consultation period, but feedback so far has encouraged us to try to take the initiative forward. We would still, however, value your input and feedback. Specifically on:

1) The structure
2) Module and layer titles
3) Missing skillsheet areas (please list module title and layer with your suggestion)

And more importantly, we need your help:

The Panel has taken the idea so far, but if it is to be a success, we need more hands on deck. There is also such variation in club and coaching culture, good practice, terrain, number of pilots, etc. that it is essential we get a good geographical spread of contributors. We have divided the jobs into categories and are looking for the following:

1) Module co-ordinators

   Module co-ordinators will take a whole slice of the PDS cake (i.e. the entire module with all three layers) and co-ordinate the skillsheets, coaching guidance sheets and check the content is appropriate, the prerequisite modules are listed on the next level, resources are good, etc. They will sign off the whole module once all the content has been collated from the writers. If you would like to volunteer for this role, please email us at PDP@bhpa.co.uk and let us know which module you would like to look after. We on the panel will be on hand to assist you.

2) Writers

   We need people to volunteer to write the pilot skill sheets and coaching guidance notes. We have more guidance available and also sample sheets ready to fill in the blanks. We will also send you more detailed writing guidance. If you would like to volunteer for this role, please email us at PDP@bhpa.co.uk and let us know which skillsheet(s)/guidance sheet(s) you would like to complete (please also state module name and layer).

3) Testers

   We need to try the skillsheets out to see if they work. To this end, we will need pilots and coaches who will try the exercises alone and together and then give us feedback whether it was useful or not. If you would like to volunteer for this role, please email PDP@bhpa.co.uk stating which skill/guidance sheet(s) you would like to test. This is one of the later roles, so if you don't hear from us for a while, we won't have forgotten you!

4) Technology people

   We urgently need a group of technology experts who can guide us on making this initiative happen on the web. We have lots of ideas, but are unsure about the correct way to implement it on the web (will it be database driven? How interactive can we make it? CMS has to be easy to work, etc.). We would like to form a sub-committee with a group of advisers. If you can help, please email us at PDP@bhpa.co.uk and we can have an initial chat

about our vision.

The timescales for this project are very fluid and date for rollout will depend largely on how many people volunteer to help. We hope you can contribute to make this a success and to help to make pilot progression clearer and pilots generally safer.

For all comments, queries, offers of help, please use PDP@bhpa.co.uk

Many thanks,

David, Toby, Pat, Judith and Jocky
(The Pilot Development Panel)