

Instructor and Coach Newsletter

Dear Instructors, Coaches and Dual Pilots

Welcome to the latest edition of the BHPA Instructor and Coach newsletter.

In this issue:

Table of Contents

1. BHPA Pilot exams – The Online Papers option	2
2. Changes to the Paragliding (Hill) training syllabus	3
3. SIV for Paragliding Instructors	4
4. Flying and Safety Committee trials, (& how to apply for a trial)	4
5. 2023 Paragliding Trainer's conference. Nov 4 th 2023	6
6. Power Trainers' Conference May 2023 (Report)	7
7. Power Incidents	7
8. BHPA Speed Flying trial	10
9. BHPA Events and courses	10

Welcome.

Welcome to Edition 28 of the Instructor and Coach newsletter. Dual pilots are included in its distribution - it has been sent to the email addresses we hold on file for our dual licence holders.

The BHPA membership stands at well over 7,000 members which reflects the great work done by schools at bringing in new members, and by clubs in supporting their flyers - which encourages them to retain their membership.

We are excited to report on a number of initiatives undertaken by FSC and the Technical team, including the trial of online Pilot rating exams for powered and unpowered environments, the amendments that have been drafted for the revised PG Hill Student Training Record Book, and our recent Power Trainers' Conference – an initiative that we are keen to develop further.

The office continues to field many enquiries from people interested in powered hang gliding with wheels, from current and ex members, from flexwing microlight pilots wanting to save on hangarage and permit fees, and from prospective pilots who had always fancied hang gliding but didn't want to foot-launch. Powered HG (Sub 70) training is currently carried out by CAA

instructors on their dual flexwing microlights. However, this is a great opportunity for suitably licensed HG Power instructors at a BHPA school to deliver training on these aircraft.

The BHPA Instructor who has been granted an individual exemption from the CAA to conduct training flights for passengers on a powered dual paraglider with wheels continues to run the activity as an FSC trial. Although many things need to happen (including changes at national policy level) before this method of dual flight is available to other instructors, the trial may bring us a step closer to paramotor and powered hang-glider students being able to make their first flights on a wheeled dual aircraft with an instructor at the controls.

Articles & suggestions for I & C news can be mailed to: office@bhpa.co.uk

BHPA Technical department.

1. BHPA Pilot exams – The Online Papers option.

Members wishing to obtain their "Pilot" rating are required to demonstrate that they have acquired a reasonable standard of theoretical knowledge, in addition to achieving the standard of flying required.

The knowledge required to be a pilot is quite extensive, covering weather, human factors, understanding how their aircraft flies, and a working knowledge of applicable UK airlaw. A key goal is showing that they can effectively plan and navigate a cross country flight, ensuring they do not infringe any controlled airspace.

The BHPA current Pilot exam covers all these areas, and at 1hr and 45 minutes long it represents a significant challenge, and often requires lots of revision.

A helpful invigilator will often go through any questions that their candidate has questions about after the exam, but after taking 1 hour and 45 minutes to complete, a thorough debrief is not always practical.

When the traditional paper exam is completed, it is posted to head office and then marked, the candidate is informed of their score, but not which specific questions they did not answer correctly.

The online exam has some significant changes.

- It is divided into 5 separate papers which can be taken individually or in any order. This means that revision and de-briefing are less intensive tasks.
- Candidates know immediately what questions they have not answered correctly, which allows the invigilator to identify and de-brief these, and hopefully expand the knowledge of the candidate.
- If the pass mark is not reached in one of the papers, the candidate only needs to retake that subject (there are alternative papers available, and the answers are randomised so it won't be quite the same questions on a subsequent attempt.)

If a candidate failed the original written paper, there was a four month wait before it could be re-taken. Because the online version has alternative papers, this "pause' period has been reduced to seven days before a second attempt is allowed.

The aims of the new exam system are to make it more accessible, be an effective training tool, and it also makes it much easier for the BHPA to monitor the results and note what knowledge areas are causing the most issues.

As you may be aware, there are mock exams currently available on the BHPA website, which gives candidates a useful chance to test their readiness before taking the actual Pilot exam.

The PG (hill) exams have been "field tested" over the last year by senior coaches at two clubs and are now available for use by all clubs. The PG (Power) exam is still at the beta testing stage, and hopefully will be available by the end of 2023.

How does it work?

When a candidate feels they are ready and have completed all the flying tasks for "Pilot" they can ask their Chief coach or Instructor to arrange an exam. The designated invigilator will then be supplied with an individual log in code for the candidate. It is then a question of both (or all of them if it's a group exam) being in a room with an internet connection and attempting however many papers they are comfortable with.

If the connection is dropped, or the exam is otherwise interrupted, it will be saved, you can just log back in to continue. One question at a time is displayed and must be answered before the next is shown. Only one attempt is allowed.

The candidate knows the result immediately, including exactly what questions were answered incorrectly, which should be helpful to both the pilot and invigilator. The BHPA is informed automatically.

The original paper exam is still available for anyone who prefers that route.

The £10 fee to record the new rating and issue a new membership card is still payable.

At present the online exams are being administered by Ian Currer: ian-currer@bhpa.co.uk

If you have any candidates who would like to do their Pilot exam, please contact lan with their details (including their BHPA number).

2. Changes to the Paragliding (Hill) training syllabus.

As many of you will be aware, work on a revised syllabus began before the Covid pandemic, however following two of the three technical staff being on Furlough for a year, a few projects, including this one, were "parked" while the backlog of more pressing matters were addressed.

The new Paragliding (Hill) syllabus (edition 8) is now ready to be presented at the next trainers conference, where instructors will have an opportunity to make comments and suggestion before it is finalised and implemented. Edition 8 of The Student Training Record Books will be distributed to schools before the '24 flying season.

The most significant changes proposed are the introduction of an "Alpine" route to Club Pilot which addresses the type of training environment several BHPA schools are now working in, and the inclusion of a new exercise requiring all students to be familiar with an emergency parachute system. This will include practise deployments (a "dummy" or closed EP can be used whilst the student is suspended from a harness hanger or a zip wire). If your school does not have suitable equipment to conduct this exercise, you will need to arrange to build or obtain a suitable hanger and harness/EP arrangement that can be used for this exercise.

3. SIV for Paragliding Instructors.

SIV was first introduced to UK paraglider pilots back in the early to mid 90's. It would be fair to say that the standard of instruction varied considerably. It would also be fair to say that even the more professional of the operations were on a steep learning curve. A lot of UK pilots opted not to bother back then, choosing instead to focus on active piloting as a way of fending off instability. It is likely that there are a significant number of 'longer term' members who have never been on an SIV course and probably have no intention of ever going on one. But that's another issue.

These days SIV (or Advanced Glider Control) courses are much improved, to the point where it is recommended that all paraglider pilots attend one or more during their paragliding career. There can be no doubt that these courses are a fundamental element of becoming a rounded and safe pilot, with the pilot learning as much about their own abilities as they do about their glider.

The BHPA now require that applicants for a dual licence will have attended an SIV (AGC) course.

Elements of the BHPA paraglider training program require the instructor to either demonstrate or describe the recovery from unstable situations such as collapses, stalls, spins and spirals. Under the current system it is possible that the instructor may be describing something they have not themselves experienced.

The FSC is considering making attending an SIV course a prerequisite to becoming an instructor. Initially the intention is to encourage would be instructors to attend a course, but this may become compulsory in the future.

This issue will be a discussion topic at the November '23 Paragliding Trainer's conference.

4. Flying and Safety Committee trials, (& how to apply for a trial)

At present the FSC has several trials in progress. These are projects that have been requested by members and which the FSC have determined are worthwhile following up. By undertaking these FSC sanctioned trials of previously unapproved activities, and if they have been carried out in the manner approved by FSC, the participants will be covered by the BHPA's liability insurance.

Current trials include:

- Parallel (pulley) towing is another trial which has been very successful and is approaching a conclusion.
- Training using paramotor wings that do not hold EN flight test certification, a trial has been authorised at a BHPA power school.
- A limited trial of dual foot-launch paramotoring is under development.

So how do these come about? If a member or group of members has an idea of something they would like to try that is not already an approved activity, their first step should be to contact a member of the technical team to discuss it, and check that it has not been proposed in the past.

Here is the document that the FSC have created to help anyone considering proposing a trial.

BHPA Activity Trial Proposal

Lightweight flying is a dynamic sport, and the BHPA must be a flexible and forward-looking organisation to govern it effectively. Over the years many new elements of the sport have been successfully integrated, from aerotowing hang gliders to human-powered flight.

The BHPA Flying and Safety Committee (FSC) has evolved a process to evaluate new projects and activities, and then to devise a safe mechanism of bringing them under the organisation's umbrella (if deemed suitable). The first step is an initial assessment of the activity.

The proposer of a new project should provide answers to questions 1-12 (below) as fully as possible (supported by references and evidence where appropriate) to enable the FSC to consider the proposed project properly.

- 1. What is the proposed activity?
- 2. Who will the proposed activity benefit?
- 3. How many members will the proposed activity benefit?
- 4. What are the risks involved? (Detailed risk assessment required)
- 5. What are the costs involved and how would they be justified?
- 6. Is there a precedent? (Is this being done elsewhere, what can we learn, is it successful? Might we be "poaching" from another organisation?)
- 7. Are there any downsides to be considered? (e.g. insurance risks)
- 8. Are there any downsides to NOT pursuing the proposed activity?
- 9. What are the criteria for considering a trial of the proposed activity a success?
- 10. What will happen if we do nothing?
- 11. What is the priority of this project?
- 12. Is any BHPA policy change required? (This requires a reference to the BHPA Exec committee).

If the answers indicate that the activity is worthwhile pursuing, the FSC may decide to support a trial operation, where one or more operators gain practical experience and help with the generation of requirements and guidelines in order for the activity to be conducted in a safe manner. They will report on the prospects for successfully introducing the activity to the wider membership.

This will include considering personnel, equipment, site and weather issues, training and licensing.

The trial will be assessed, and the FSC will consider a report on it before deciding on the next step.

Not all Trial proposals are accepted, but the Flying and Safety Committee will carefully consider any proposal.

5. 2023 Paragliding Trainer's conference. Nov 4th 2023

In 2016 and again in 2018 the BHPA hosted a Trainer's Conference at Lilleshall national sports centre in Shropshire. A further conference was scheduled for 2021 but this was cancelled due to the pandemic.

Many of the more pressing points scheduled for discussion in 2021 were specific to the power environment, and so an invitation was extended to all BHPA power schools to attend a Power only conference. This was held at the BHPA head office in June this year, approximately 35% of the BHPA school training power pilots attended.

As you may be aware the BHPA is under some financial pressure at present, due primarily to the very significant increase in our insurance premium. In order to minimise costs to both the Association and the participants, the FSC is proposing to run the 2023 paragliding trainers conference in an online format.

Hopefully this will help make it easier and cost effective for more instructors, coaches and schools to take part.

The technical staff will host the Conference from BHPA head office, and all schools, and instructors will receive invitations and log in details so that they can "dial in" to the event.

The intention is to make this a 3-hour conference, the provisional date is Saturday 4rd November, and the Agenda will be arranged to allow time for delegates to put questions and give feedback on various issues. One topic will be the new paragliding training syllabus.

It is unlikely that much flying activity will be taking place in November, and as the evening is likely to clash with Bonfire night events, the proposal is to commence at 10.00 and finish by 13.00.

This will be your conference, and an opportunity to have your say on any issues that affect your school or club. An agenda will be circulated with the invitations.

What will be discussed? Reports on the FSC's and technical staff activities will be made, and useful information on trends, innovations, membership and accident statistics provided.

This is your opportunity to make any proposals or to request any areas that you would like to put to the Flying and Safety Committee or technical staff; and see them included on that agenda for discussion.

Please email any proposals or ideas that you would like to be considered for inclusion to: ian-currer@bhpa.co.uk. One of the technical team will get back in touch with you.

Please can you ensure that any proposals are received before Monday October 16th

6. Power Trainers' Conference May 2023 (Report)

Report on Power Trainers' Conference on 31st May 2023, held at BHPA Offices.

The FSC's Power Panel and the Technical staff held a one-day conference for paramotor schools at the BHPA head office. Invitations were sent out to all schools that conduct power training. In attendance on the day were representatives from seven schools, and some power instructors and a TI.

The session opened with an introduction from the Chairman of the FSC Angus Pinkerton, appearing online. There was a session about BHPA projects relevant to PPG, and a "S.W.O.T" analysis of PPG, including possible airspace restrictions arising from increasing drone activity, insurance costs and concerns about loss of sites, the issues around EC equipage, CAA concerns with a paramotor airprox in 2022 (evidently a non-BHPA member pilot); and opportunities such as advances in equipment and PPG in flight displays. Following that, a presentation on PPG incidents revealed that there is very likely to be significant underreporting of incidents by the power community.

The conference had a session on the written power exams. There was strong support for a CFI's proposition that power schools mark their pilots' Pilot rating exams (rather than the office), and this is now being considered by FSC. The conference undertook an in-depth look at the existing PPG student training record book, identifying a number of changes for when it is revised and re-issued in the future.

The conference then discussed dual training and had a review of the current situation concerning dual power trikes, including a briefing on the trike trial by a CFI specially authorised to carry out this activity. The delegates requested that FSC approach BHPA insurers to establish whether dual foot-launch paramotoring could be covered for appropriately licensed pilots working in schools.

The conference discussed the Alternative Entry procedure for pilots who had trained independently. A delegate proposed that Alternative Entry for paramotor pilots should require them to attend a BHPA school for an assessment in order to obtain a rating. There was unanimous support from the delegates for this proposal.

The conference was heralded as a success, and delegates expressed their support for a more regular Power Trainers' Conference. The FSC Power Panel and Tech team came away with a list of actions that are now being reviewed and attended to.

Post-conference update. A foot-launch dual paramotor trial has now been given the green light by the BHPA Exec, and FSC is currently drawing up the trial parameters. This trial is expected to be in a number of stages – firstly, instructors who are also specially licensed dual pilots will carry out PPG tandem flights in their schools. Secondly, the trial will explore the training programme and examination procedure for pilots seeking an Air Experience Instructor (Power) Licence. The trial will enable FSC to continually assess the activity and make a decision about whether foot launch power becomes a recognised dual environment, like hill and tow dual are.

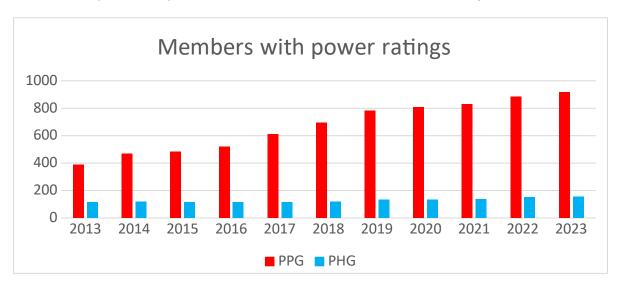
7. Power Incidents

At the recent Paramotor Trainers Conference a presentation was given discussing the incident statistics for PPG compared to unpowered paragliding over the period 2012 to 2022. There were some interesting comparisons, perhaps the most notable being the low reporting rate by PPG pilots. Direct comparisons between PPG and PG incident rates are difficult due to a significant proportion of the PPG community being outside the BHPA and therefore less likely

to report an incident. The only area where figures are likely to be accurate are the fatal incidents as they are all reported, irrespective of membership.

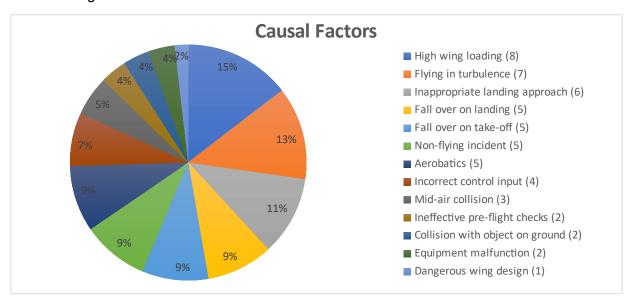
The presentation didn't go into the detail of the incidents and there was a call from the attendees to elaborate on the serious incidents. This paper will therefore focus on the detail of the reported 'serious' and 'fatal' incidents. All incidents will be looked at without differentiating between BHPA and non-BHPA. The table below is for information only.

The number of BHPA PPG pilots has increased gradually over the last ten years, at a rate of approximately 10% per year. The table below shows the numbers and growth mentioned.



Between 2012 (when the current database came online) and 2022, there were a total of 14 fatal and 35 serious PPG reported incidents.

The following chart shows the causal factors.



The most common factor among reported incidents related to "aircraft with high wing loading". Anything with a wing loading above 6 kg/sqm (total all up weight divided by wing area) is considered "high".

Of the 8 reported incidents where high wing loading was deemed to be a significant factor, 7 were fatal incidents. These incidents were also closely linked to the incidents involving flying in turbulent air. A typical example would be a pilot flying straight and level encounters

turbulent air and suffers a glider collapse. The pilot is then unable to effect a recovery to normal flight before hitting the ground. In extreme examples the loss of height can be considerable. When flying at a high wing loading any departure from normal flight is likely to be more dynamic than the same situation experienced with a lower wing loading. Consequently, more time, height and skill on behalf of the pilot will be required to recover the situation. It is worth noting that most of the incidents involving high wing loading occurred between 2015 and 2018.

Inappropriate landing approaches and falling over on landing or take off were often linked to the pilot failing to notice the weather or wind direction had changed. Occasionally, in the case of falling over, it was simply a result of having the weight of the paramotor on the back of the pilot and the uneven nature of the terrain under foot. Non-flying incidents were usually related to an item of person or equipment coming into contact with the prop. One of the fatal incidents involved a pilot attempting to start their engine on the ground rather than on their back or in a fixed clamp.

Aerobatics featured in 3 of the fatal incidents. Historically, in paragliding and hang gliding, aerobatics have always been an area where incidents occur. This is often because the pilot does not possess the required skill set, and/or the manoeuvre is being carried out at a height where any miscalculation on behalf of the pilot results in a coming together with the ground.

Incorrect control input, mid-air collisions, pre-flight checks, and the other factors mentioned are pretty self-explanatory.

The interesting thing with all the factors is that when you remove 'high wing loading' from the list, the rest pretty much mirror the factors involved in unpowered paragliding and hang gliding. In other words, they are exactly what one would expect to see in the analysis of the incident data.

The common theme among almost all incidents is a misjudgement on behalf of the pilot. Misjudging the wind strength, misjudging the wind direction, misjudging gustiness, misjudging the shape and nature of the site/location concerned, misjudging the height and/or distance from a solid object (ground, slope, tree, building etc.). In other words, misjudging the prevailing conditions and the interaction of those conditions with the surrounding area/terrain. And misjudging their own ability. These misjudgements invariably lead to making decisions that result in less than favourable outcomes.

Statistics are only as good as the source information. It is essential that we promote the reporting system and emphasise that it is there to promote safety. There is no shame in filing a report.

Please report an incident if any of the following apply:

- Involves injury, whether to participants or others.
- Involves damage to property, third party or not.
- Involves non-standard equipment or techniques.
- Involves failed or malfunctioned equipment.
- Highlights safety points or was unusual.
- Is something you feel the sport may learn from.
- If the emergency services were involved in the incident.
- May give rise to an insurance or legal claim.

If in any doubt, file an incident report.

8. BHPA Speed Flying trial.

At June's FSC meeting the data from the last eight years (the period was extended because of the pandemic) of the speed flying trial was reviewed and the FSC decided to formalise the activity as an environment under the "paragliding" discipline.

The trial originally started with the school Air Ventures in the Lake District who saw an opening to provide training to students and to pilots who had previously self-trained on small (<18sqm) paragliders. To separate speed flying activity from soaring on small paragliders, the trial adopted the description "non soaring – max wind speed 20mph" to denote that the activity was for top to bottom flights. A further six schools joined the trial and provided training information for the FSC to periodically review.

Speed flying training for beginners commences in similar manner to the PG Hill training. Initial flights are usually made on full size paragliders. The wing size is progressively reduced during subsequent flights until the student is flying on a wing of typical area 16sq. meters. Successful completion of the Speed Flying CP involves logging a minimum of twenty satisfactory training flights during the CP training, and passing a theory exam. If a pilot wishes to progress to soaring flight, they have to complete the standard PG CP Hill training, which of course includes soaring exercises.

The Tech team is now preparing the changes required to the Technical Manual to incorporate Speed Flying as a fully recognised BHPA activity. In due course there will be a speed flying Instructor and Senior Instructor licence.

9. BHPA Events and courses.

Oct 14th & 15th Club coach course. Derbyshire Soaring Club

November 1st&2nd Emergency parachute systems course. Lilleshall, Shropshire

November 4th Paragliding Trainers Conference Online

November 18th & 19th. Club Coach course Southern HG Club

December 2nd& 3rd Club Coach course SW Wales club

January 2024 13th & 14th Club Coach course Sir George Cayley Club

February 10th & 11th Club Coach course Jersey Club

February 24^{th.} BHPA AGM Loughborough

March 16th & 17th Club Coach course Peak Soaring Club

For contact information or further details of any of these courses or events, please contact the BHPA office. office@bhpa.co.uk