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**THIS STUDENT TRAINING RECORD
IS THE PROPERTY OF THE BHPA AND
MUST BE RETAINED BY THE SCHOOL**

Student Training Record: Paragliding (Power) - SPHG
Edition 1
July 2008

Surname:

Forename:

Student Training Record Paragliding (Power)

(Foot Launched Self-Propelled Hang Glider – SPHG)

Student's personal details

Address:

Telephone:

Mobile:

Email:

Date of birth:

Age:

Weight:

Emergency contact:

Telephone:

British Hang Gliding
and Paragliding
Association



POWERED PARAGLIDERS (PPG) GENERAL INFORMATION

Legalities

In the UK a powered paraglider is legally classed as a glider and is subject to the same rules and regulations as all gliders, hang gliders and paragliders. To expand on this statement in more detail: under the Air Navigation Order 2005, aircraft that meet the self-propelled hang glider (including paraglider) definition in ANO Article 155 (reproduced below) are legally classed as Gliders.

'Self-propelled hang-glider' means an aircraft comprising an aerofoil wing and a mechanical propulsion device which:

- is foot launched;
- has a stall speed or minimum steady flight speed in the landing configuration not exceeding 35 knots calibrated airspeed;
- carries a maximum of two persons;
- has a maximum fuel capacity of 10 litres; and
- has a maximum unladen weight, including full fuel, of 60kg for single place aircraft and 70kg for two place aircraft.

NB: If your PPG does not meet the definition above then it cannot be legally operated as a glider and falls outside the BHPA PPG scheme.

When flying your PPG you will need to comply with all the laws and rules that apply to gliders (which is most of the ANO except the need to have a pilot's license and the need to register your aircraft with the CAA).

Qualification

BHPA 'Power' qualifications are for solo flight only. The BHPA Flying and Safety Committee does not regard dual PPG flights as sufficiently safe. Therefore no BHPA dual 'power' qualifications are available. To reiterate: as a BHPA 'power' rated or endorsed pilot you are not qualified, trained or insured to fly with passengers. Your qualification is for solo flight only.

Insurance

BHPA members who hold the BHPA 'power' rating or endorsement are covered by the master third party insurance policy. This insurance only covers solo flight performed in accordance with all BHPA rules and regulations and airlaw.

Airworthiness

DULV types apart, none of these complete aircraft carry Certificates of Airworthiness or other form of approval, and you fly them entirely at your own risk. You should be aware that wing certification only checks the behaviour of the wing in unpowered flight, and only when flown within the placarded weight limits. The addition of power takes you into uncharted territory, whilst the extra weight of the power unit may also take you outside the recommended weight limits of the wing, thus eroding safety margins. The engineering of the power unit may be inadequate – especially for maneuvering flight with increased load factors.

It is a rule of the Association that uncertified wings must be entered into the BHPA Airworthiness Register. A registration application form can be downloaded from the BHPA website or obtained from the BHPA office.

READ THIS

Paragliding is a form of aviation, with all of the inherent and potential dangers that are involved in aviation. No form of aviation is without risk, and injuries and death can and do occur in paragliding, even to trained pilots using proper equipment. No claim is made or implied that all sources of potential danger to the pilot have or can be identified. No one should participate in paragliding who does not recognise and wish to personally assume the associated risks.

What is this Student Training Record?

This book details all the exercises which make up the training programme that you are following. Your Instructor and you must use it to record your progress both in the main section and in the log section at the back. You should also use it to ensure that you fully understand each new exercise before it is attempted. Your Student Training Record will be retained by your School.

I have read, understood and accepted the information above and the Powered Paraglider General Information page opposite.

Signed: _____

Date _____

Student's BHPA membership record

Personal accident insurance taken out?: _____

Date Training Pack issued: _____

Membership type	Expiry date	Instructor's signature	Student's signature
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

CLUB PILOT (NOVICE) STAGE Paragliding (Power)

The exercises in Phases 1, 2, 3, 5 and 6 are arranged in sequential order and must be completed in that order – the exception being Phase 4 which can be completed at any time before Phase 5.

For students coming from paragliding hill or tow, exercises 1 to 7 inclusive should only require checking/refreshing as long as those students are of at least Paragliding Elementary Pilot (EP) skill level and show the required level of ground handling skill.

Ensure that each section is signed off before progressing to the next. The Instructor and student should read each objective carefully, and be certain that the exercise has been completed in full before signing that it has been achieved.

Phase 1: Ground training – unpowered

Objective: The student should have a basic understanding of the sport and its risks, a basic understanding of the equipment and the site environment, and understand how to avoid/minimise injury as a result of a mishap. The student must also complete the mandatory administration steps.

- 1. Introductory talk** - airfield briefing; introduction to canopy and equipment - parts and functions of canopy, harness, helmet; daily inspections explained.
- 2. Avoiding/minimising injury** - parachute landing falls (PLFs) explained, demonstrated and practised to a good degree of competence.
- 3. Pre-flight checks** - these checks should include: wind and weather, instruments (set, on), fuel (on and sufficient), helmet (on and fastened), straps and security (harness buckled and correctly adjusted, no loose items or open pockets), controls (trimmers set as required), power check, performance limitations, eventualities, all clear.

The three exercises above have been completed satisfactorily

Instructor's signature

Student's signature

Date

Phase 2: Ground handling – unpowered

Objective: Through ground-based activity the student should achieve a reasonable and consistent level of competence at preparing the equipment for flight; inflating the canopy; running with it whilst looking ahead; maintaining direction; flaring and collapsing the canopy.

- 4. Briefing** - importance of taking off and landing into wind - airspeed control - flare/stall - directional control.
- 5. Preparation** - putting on the helmet and harness - canopy layout - pre-flight checks.
- 6. Launch and landing procedures (i)**
NB: The power unit is not worn during this exercise.

Take-offs practised to stage of moving with an inflated canopy (forward/reverse inflation method as appropriate to the conditions) - canopy inflation - maintaining direction - flare - collapsing the canopy - post-flight control and moving of the canopy.

The three exercises above have been completed satisfactorily

Instructor's signature

Student's signature

Date

Phase 3: Unpowered hops

Objective: The student should combine the skills practised on the ground in Phase 2 to make straight ground-skimming flights, gaining familiarity with canopy handling and control.

The unpowered flights below may be completed using hand pushes, single person hand tows, from a slope* or using a winch*. It is expected that non paraglider pilot students will spend several days mastering and consolidating the skills acquired through exercises 6 and 7, which underpin all powered paragliding flight.

* Only if the Instructor is hill/tow qualified.

- 7. Launch and landing procedures (ii)**
NB: The power unit is not worn during this exercise.

Take-offs practised to stage of 'flights' across the field with an inflated canopy (forward/reverse inflation method as appropriate to the conditions) - canopy inflation - controlling direction and making turns - glide approach from 6m/20ft agl - flared landing on feet - collapsing the canopy - post-flight control and moving of the canopy.

Exercise 7 completed satisfactorily

Instructor's signature

Student's signature

Date

Continued

8. Launch and landing procedures (iii)

OPTIONAL: Due to the difficulties of getting a student, with power unit, airborne by hand towing this exercise may be omitted at the Instructor's discretion.

NB: The power unit is worn during this exercise - engine not running.

Take-offs practiced to stage of 'flights' across the field with an inflated canopy (forward/reverse inflation method as appropriate to the conditions) - canopy inflation - controlling direction and making turns - glide approach from 6m/20ft agl - flared landing on feet - collapsing the canopy - post-flight control and moving of the canopy.

Exercise 8 completed satisfactorily

Instructor's signature Student's signature Date

Phase 4: The power unit

Objective: The student should be fully familiarised with the power unit.

9. Safety

The pilot under training will gain an understanding of:

- Dangers to self and others: propellers (clutches), fuel.
- Kill switch and engine stopping.
- Procedures in the event of fire.
- Safety equipment: first aid kit, fire extinguisher, helmet, eye protection, ear defenders.
- In-flight dangers: engine failures, loose items, fire.

10. Introduction to the power unit and associated equipment

The pilot under training will gain a basic understanding of all the component parts of the motor unit and their inter-relationships. Particular emphasis will relate to:

- Power unit component parts.
- Assembly and packing away.
- Safety cages and the importance of maintaining them in good condition.
- Daily inspection of power unit.
- Controls - ignition switch, throttle(s), choke, starter mechanism, harness controls.
- Correctly rigging the motor to the glider with safety straps in accordance with the manufacturer's recommendations.
- Adjustments for different pilots (weight, thrust angle).
- Other equipment - windsock/streamers, tools, basic spares (plug, pull start spring), water trapping funnel, fuel catching tray.
- Suitability of chosen canopy - weight range, flying characteristics, control line lengths/trim position - and the effects of differing hang point positions.

11. Fuel

The pilot under training will gain an understanding of:

- Dangers from fuels.
- Petrol/oil mixtures - different mixtures/oils for running in, synthetic/semi-synthetic oils, etc.
- Water in fuel.
- Storage and transport.

Continued

12. Maintenance and repair

The pilot under training will gain an understanding of:

- Servicing.
- Use of manufacturer's parts whenever possible.
- Care of propellers - balance, repair limits (don't repair!).
- Vibration and fatigue life of parts.

13. Starting procedures

The pilot under training will gain an understanding of starting procedures, including:

- Daily Inspection of complete aircraft.
- Preparation before starting engine (i.e. fuel line bleeding), priming.
- Suitability of area.
- Pre engine start checks (fast - fuel, all clear, security, throttles shut).
- Bracing and starting sequence.
- Shutting down procedures - normal and emergency.
- Ground running considerations.

The five exercises above have been completed satisfactorily

Instructor's signature Student's signature Date

Phase 5: Power preparation

Objective: The student should be familiar with all the elements of his first powered take-off, without actually taking off.

14. Torque effects

With the power unit in position on the student's back, engine running, no wing, gain familiarity with primary propeller effects.

Exercise 14 completed satisfactorily

Instructor's signature Student's signature Date

15. Launch procedure and abort

With power unit (developing thrust) and wing, practice full launch procedure. All pre and post flight routines to be completed satisfactorily.

Exercise 15 completed satisfactorily

Instructor's signature Student's signature Date

Phase 6: Powered flights

Objective: The student should make his first powered flights.

These exercises MUST be completed in the order listed.

At this stage the Instructor should ideally test fly/demonstrate the actual machine combination that the student will fly. The Instructor must ensure that things like brake line lengths/hang points, climb rate and general suitability are checked.

16. Eventualities briefing

The need to prepare, before take-off, plans to deal with the unexpected.

17. Commands and communications briefing

This must include signal bats, radio, etc., as appropriate.

18. Responsibilities briefing

From this point the student becomes the 'pilot-in-command' and will be in a position to determine the course of the flight. The student must clearly understand their level of responsibility for the safe conduct of any flight and be confident of their ability to undertake this step. The radios may fail. The engine may fail. The student must be completely prepared to deal with both eventualities and to land safely.

The three briefings above have been completed and understood

Instructor's signature Student's signature Date

19. Flights (i) Local circuit

Complete a minimum of 3 powered 'local circuit' flights from a flat site with approximately 200m/600ft ground clearance, with unassisted take-off runs, gentle 90 degree turns including good airspeed and throttle control and finish with stand-up power-off (switched off) landings (including full deflation of the canopy between flights). Instructor must have one-way radio communication with the student.

(The environment must allow the student continuous opportunity to make a safe landing in the event of engine or radio failure at any point of the circuit.)

Exercise 19 completed satisfactorily

Instructor's signature Student's signature Date

20. Flights (ii) Out of circuit

Complete 2 satisfactory flights of at least 15 minutes each involving climbing to a minimum of 450m/1,500ft a.t.o. and making left and right turns under power before rejoining the circuit. The student should show good airspeed and throttle control and finish with stand-up power-off (switched off) landings (including full deflation of the canopy between flights). Instructor must have one-way radio communication with the student.

(The Instructor should take steps to minimise the danger of the student losing sight of the field and becoming lost during this flight.)

Exercise 20 completed satisfactorily

Instructor's signature Student's signature Date

Theory syllabus - Club Pilot (Novice) stage

The pilot under training must complete the Club Pilot (Novice) theory syllabus set out in 'Training Wings' (also in the 'BHPA Pilot Handbook') and in addition the following subjects.

Air law

The pilot under training will understand:

- The process for notifying an active site using the CANP.
- The process for reporting accidents.

Principles of flight and aircraft general

The pilot under training will understand:

- Engine basics.
- Forces on a powered aircraft in level flight, turning flight.
- Propellers.
- The effects of pressure, humidity and temperature on take-off performance.

Airmanship and Navigation

The pilot under training will understand:

- The need to keep a logbook.
- That power governs climb – and pitch (control position) governs air speed.
- The importance of climbing from take-off with sufficient airspeed and the DANGER of climbing too steeply with power and NOT enough airspeed. (Emphasise that the pilot has to keep a safe, low angle climbing attitude by keeping the controls up.)
- The relationship between airspeed, wind-speed and the resultant groundspeed and be able to work given examples.
- Drift and the relationship between course and heading.
- Torque effects.
- The dangers of prop wash – in the air and on the ground.
- Selection of a safe flying field including climb-out clearance, ground conditions, turbulence generators, obstructions and overshoot areas.
- Safe areas for onlookers.
- Noise nuisance and congested areas.
- Techniques for avoiding and recovering from tucks, stalls and spins and sudden power loss.
- Emergency and safety procedures. (To include discussion of techniques for dealing with a fire in the air. Low turn recovery techniques. Out of wind landing techniques. Water and tree landing procedures. Use of emergency parachute systems. Uses and limitations of alternative control techniques such as weight-shift and rear riser steering in the event of a control line failure.
- Paraglider certification and BHPA requirements.
- The importance of keeping a safe landing field always within reach.

Phase 7: Club Pilot (Novice) examination

Objective: To ensure the student has reached the Club Pilot (Novice) Paragliding (Power) level of understanding in the relevant subject areas.

21. Club Pilot (Novice) Paragliding (Power) theory examination completed and all incorrect answers de-briefed and discussed. (The exam must be passed by all pilots regardless of their existing qualifications.).

Instructor's signature

Student's signature

Date

Final assessment for Club Pilot (Novice)

22. I have checked that the training detailed above has been completed and confirm that, to the best of my knowledge, this student has the right attitude to flying and has reached the standard of airmanship required to fly safely and competently as a Club Pilot (Novice) Paragliding (Power).

Senior Instructor's signature

Date

The Club Pilot is now qualified to fly unsupervised provided that he/she keeps within two miles of the take-off point and that a BHPA Instructor or Coach has checked the site airspace. (As with all new BHPA pilots, the pilot is encouraged to fly under the guidance of a Coach.)

Club Pilot (Novice) Paragliding (Power) examination - Answers

To be completed only during invigilated examination.
Place a 'X' in the box next to your chosen answer.

SECTION 1

1. ☆ a)
b)
c)

2. a)
b)
c)

3. ☆ a)
b)
c)

4. a)
b)
c)

5. a)
b)
c)

6. a)
b)
c)

7. a)
b)
c)

8. a)
b)
c)

9. a)
b)
c)

10. a)
b)
c)

11. a)
b)
c)

12. a)
b)
c)

13. a)
b)
c)

14. a)
b)
c)

15. a)
b)
c)

SECTION 2

16. a)
b)
c)

17. a)
b)
c)

18. a)
b)
c)

19. a)
b)
c)

20. a)
b)
c)

21. a)
b)
c)

22. a)
b)
c)

23. a)
b)
c)

24. a)
b)
c)

25. a)
b)
c)

26. a)
b)
c)

27. a)
b)
c)

28. a)
b)
c)

29. a)
b)
c)

30. a)
b)
c)

SECTION 3

31. a)
b)
c)

32. a)
b)
c)

33. a)
b)
c)

Continued

34. a) b) c)
35. a) b) c)
36. a) b) c)
37. a) b) c)
38. a) b) c)
39. a) b) c)
40. a) b) c)
41. a) b) c)
42. a) b) c)
43. a) b) c)
44. a) b) c)
45. a) b) c)
- SECTION 4**
46. a) b) c)
47. a) b) c)
48. a) b) c)
49. a) b) c)
50. a) b) c)
51. a) b) c)
52. a) b) c)
53. a) b) c)
54. a) b) c)
55. a) b) c)
56. a) b) c)
57. a) b) c)
58. a) b) c)
59. a) b) c)
60. a) b) c)

SCHOOL USE ONLY

Number correct:	Minimum mark required:	Essential questions failed (★):	Section result:	Overall result:
Section 1	10		Pass / Fail	PASS / FAIL
Section 2	10		Pass / Fail	
Section 3	10		Pass / Fail	
Section 4	10		Pass / Fail	
				Marked by:

PILOT STAGE Paragliding (Power)

These exercises may be completed in any order under the guidance of an Paragliding Instructor (Power), Paragliding Senior Power Coach or Paragliding Power Coach.

Phase 8: Improving skills (i)

23. Planned approaches and accurate landings
Reach a reasonable and consistent level of competence at planning and completing accurate landing approaches in various conditions. At least three accurate landings in a closely defined area should be achieved. Techniques should include the 'constant aspect approach' and 'S' turns. The engine should be killed at approx. 30m/100ft agl. The Instructor/Power Coach must have one-way radio communication with the pilot as an emergency back-up.

i) Complete 3 power-off landings within 20m/60ft of a defined spot in winds of less than 5mph.

Dates and number of flights:

Flights attempted / / / / / /

Successful flights / / / / / /

ii) Complete 3 power-off landings within 20m/60ft of a defined spot in winds of more than 5mph.

Dates and number of flights:

Flights attempted / / / / / /

Successful flights / / / / / /

Exercise 23 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

24. Forward launch technique
Show consistently good forward launch technique.

Exercise 24 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

25. Reverse launch technique
Show consistently good reverse launch technique.

Exercise 25 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

Continued

26. 360 degree turns

Fly co-ordinated 360 degree turns under power in both directions (avoiding over-banking tendency).

Exercise 26 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

27. Engine failure practice

Carry out an accurate power-off landing to the satisfaction of the Instructor from at least 500ft. Instructor must have one-way radio communication with the pilot for emergency back-up use.

Exercise 27 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

28. Weightshift and pitch/roll co-ordination in turns

Show a reasonable and consistent level of competence at making smooth co-ordinated turns in both directions using weightshift and pitch/roll co-ordination. NB: Weightshift is difficult to achieve on solid hang-point paramotors.

Exercise 28 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

29. 'Big Ears'

Show safe and effective use of the 'Big Ears' rapid descent technique. (NB: If the equipment does not allow 'Big Ears' then the technique should be discussed.)

Exercise 29 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

30. Exploring the speed range

Be competent and confident at using the powered paraglider's normally used speed range. The pilot should also understand the hazards associated with fast and slow flight and be familiar with recognising the symptoms of a stall. Approaching the stall and deliberate stalls must be avoided (other than during ground handling).

Exercise 30 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

Continued

31. Trimmers and accelerator systems

Understand the uses and limitations of accelerator systems (and trim setting devices) and be proficient and confident at using an accelerator system.

Exercise 31 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

32. Active flying

Have a good understanding of the concepts of active flying and coping with turbulence.

Exercise 32 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

33. Airmanship

Display the ability to fly safety with others, maintaining a good look out, complying with the Rules of the Air and exhibiting good airmanship. Demonstrate an ability to manoeuvre safely, considerably and in accordance with air traffic rules.

Exercise 33 completed satisfactorily

Instructor/Power Coach signature Pilot's signature Date

Phase 9: Improving skills (ii)

Each exercise from 34 to 39 should be initialled by the Instructor/Power Coach when satisfied.

34. Weather assessment

Show a consistent ability to accurately assess suitable and unsuitable flying weather.

Initials

35. Total PPG flight time

Have a minimum of 5 hours logged airtime as pilot-in-command on powered paragliders, paragliders or microlights of which at least 3 hours must be on powered paragliders.

36. Total PPG flights

Either non Pilot-rated trainees:

Have a minimum of 25 flights total logged as pilot-in-command on powered paragliders. (Including full deflation of the canopy between flights.)

Or Pilot-rated trainees:

Have a minimum of 10 flights total logged as pilot-in-command on powered paragliders. (Including full deflation of the canopy between flights.)

37. Consolidation

Must have successfully flown paragliders or powered paragliders or microlights as pilot-in-command on at least 8 separate days within the previous 9 months.

38. Navigation

Complete a 30km (total) aeronautical chart based navigation flight with a pre-declared turn point or as a flight to a declared goal or a triangle. (Holders of BHPA Advanced Pilot rating and/or PPL are exempt this requirement.)

39. In-flight engine stop and restart

This exercise is optional.

Exercises 34 to 39 completed satisfactorily

Instructor/Power Coach signature

Pilot's signature

Date

Phase 10: Pilot (Power) examination

Objective: Through lectures, lessons, talks and personal study the pilot should achieve the required knowledge level in the subject areas.

In addition to all the subjects listed in the 'Theory - Club Pilot (Novice) stage' on page 7, the pilot under training needs to complete the syllabus set out for the Pilot examination in the 'BHPA Pilot Handbook'.

40. Pilot (Power) examination completed. (The exam must be passed by all pilots regardless of their existing qualifications.)

Instructor/Power Coach signature

Pilot's signature

Date

Final assessment for Pilot (Power)

41. Attitude and airmanship

I have checked that the tasks detailed above have been completed and confirm that, to the best of my knowledge, this pilot has the right attitude to flying and has reached the 'Pilot' standard of airmanship in this discipline.

Instructor/Power Coach signature

Date

