



Air Time

UHPC clinch 3rd at Pilot Trophy 2002



By Dave Tweedy

It is only due to the modesty of two great pilots that most members of this club are unaware that a team made up from UHPC members and a few hang-ers-on crushed the opposition to carry off third place cup in this years Pilot Trophy at Piedrahita, Spain.

The Pilot Trophy is a fun competition run every year by, arguably the best paragliding instructor in the world, Jocky Sanderson. Teams of four pilots compete in a variety of tasks, open distance XC, speed to goal, spot landings and in the case of bad weather an assortment of other outdoor pursuits. The last time I took part I was on a climbing wall, a mountain bike, sailing boat, canoe as well as a paraglider. Anyone who has spent any time with Jocky will understand that his innate sense of fun and great organisational skills make the competition memorable for all those taking part. Sometimes the comp is in Britain sometimes abroad. This year it was at Piedrahita, one of the best known paragliding sites in Spain.

Graham McCormick and I travelled over by Easyjet on the 24th July. A day early to get some practise in after a lousy Irish summer. After picking up a



hire car at Madrid Airport, which incidentally we passed twice on the way to Piedrahita (even with the use of GPS), we arrived late in the evening to meet all the usual suspects. I've discovered that no matter where you go to fly abroad you nearly always meet the same British pilots. I reckon there are only about 20 pilots ever fly outside the UK but they go on an awful lot of holidays.

The next morning looked hopeful with clear blue skies early on. By the time Graham and I had reached take-off a short distance above the village of Piedrahita there were some cumulus forming and a very light wind. Jocky arrived soon after with Steve Senior and Ans Khan both well known British pilots who would be helping him with the competition the next day.

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Club Night 26th March

Fancy a quiz, like to watch videos. Come on down to **Corrs Corners, 7:30pm** Wednesday 26th March. Graham will be spinning the question cards.

Prizes Galore

A reserve Repack night has been booked in the Antrim Forum on Friday 21 March from 7pm to 10pm. Bring a few £ to help cover the cost of the hall. The more there, the cheaper the cost.

View from behind the desk....



One of our club members stumbled upon a web site that referred to a CAA proposal to change U.K. low flying regulations. This was issued to interested groups, including the BHPA, for comment and covered various aspects of low flying. It offered several different alternative courses of action for each aspect including leaving them in their present form. One of these was a proposal to change the minimum height rule from "not closer than 500 feet to any person, vessel, vehicle or structure" to "a height of 500' above the surface"

The following will be illegal irrespective of the terrain you fly over.

- Gliding, clear of hill lift, with less than 500' ground clearance. Flying between hills.
- Thermalling below 500' i.e. quite a few XC's in this country.
- Flying your Mosquito / paramotor along Murlough beach / over the Mournes / over the Antrim Plateau with less than 500' clearance from the surface.
- Electing to abort a landing approach and continue your flight to land somewhere else will be breaking the low flying regulations.

When the BHPA was asked for it's stance they said, "Except for the most remote of places in the UK (and living in the far north of Scotland I know how few such places there really are) the UK is covered in "structures". Therefore there is very little practical difference between what is being proposed as one of the three alternatives (no flying below 500ft unless...) to what is currently the law."

What about us here in remote N.Ireland? How many of us have floated over back at less than 500ft, trying to go up?

They go on to give an example of where the want exceptions of the rules to be made, should we press for an exception to be made for the unstructured parts of Ulster?

Pilot Trophy cont.

There was quite a crowd at take-off, possibly 60-70 pilots but the take-off area at Piedrahita is generous and the numbers posed no problems. We lay in the welcome sunshine and were entertained by other pilots taking-off as we waited for conditions to improve. We watched Jocky take-off around noon. He lost height gradually and was very low before he found a decent thermal which eventually lifted him well above take-off. He flew off parallel to the 6000ft ridge which stretches from take-off to a pass about 15km NE. From the pass, if you can manage to get over it, a flight to Avila (60km) or Segovia (120 km) is the classic XC flight from Piedrahita and today conditions made that possible. Even so lots of people were still bombing out and landing at Piedrahita.

I took off immediately after Graham and like Jocky we slowly but surely lost height. We lost 2000-2500ft and were both looking for somewhere to land when we picked up a weak thermal over a rocky knoll at the end of one of the rocky spines which stretched out from the main ridge. The thermal although very weak at first took us back up to around 8500ft before we decided to leave it and fly on to the pass.

As we left the main ridge to glide across the last gap before the pass we both started to lose height quickly. I notice a cloud shadow moving over the ground ahead and remembering that this sometimes triggered thermals I headed towards it. Whether or not this theory is true I don't know but it worked for me and I was lifted back to 9000ft before things quietened down and I decided to try to cross the pass. Graham was about a mile away from me by this time. He had flown back over the village of Villafranca looking for lift but didn't seem to be having much luck and he looked quite low. The start of the pass was further away than it looked and I had soon lost most of the height I'd gained and was getting dangerously low. I had previously read an article by Steve Ham which mentioned a possible low save at a gully on the eastern side of the pass. I made the gully with only 50-100ft and immediately flew into an 8-10up. I had a rough ride to 10500ft but I was relieved to have enough height to fly through the pass. I looked back and saw that Graham was now also very high but still about a mile from the pass.

Another glider which had joined me in the thermal left to glide through the pass which was narrow broken ground for a mile before it entered the wide plain beyond. This glider was still rising as it flew through the pass so I quickly followed but the higher he climbed the

lower I went. I made it though the pass but was in 6-7 down when I entered the plain beyond.

I decided to turn to the west where a low line of hills lay to the far side of the main road to Avila. I made for a small village which nestled beside a spur which ran down from the hills to the road. I found enough patchy lift over the village to keep me up and watched as Graham flew past me many thousands of feet higher.

It looked like he was at cloudbase and following a cloud street but he told me later that the highest he reached was 12500ft still well below cloudbase. I waved goodbye to Graham as he flew on to Avila and spend the next 45minutes over the same village just trying to stay in the air. I was beginning to despair about getting any further when I spotted a single vulture circling about 500-600 yards further into the hills. I flew as fast as I could to get underneath it and found a decent thermal 3-4 up. This took me back to 8500 feet and over the top of the line of low hills which stretched nearly to Avila.

What followed was more of the same for the next 3 hours. I would gradually lose height, scrape around until I found some weak lift and return briefly to a safe height before I started a slow descent again.

I had been in the air over 5 hours when I rode a last rough thermal to 9000ft and reckoned I had enough height to glide to Avila. I was feeling extremely tired and had finished drinking all the water (2.5 litres) which I carried in my camelback.

I reached the outskirts of the town with still some height and caught a weak thermal which was drifting me to the West of the town along a minor road. This wasn't the way I wanted to go and I was glad when the thermal petered out and I turned back to look for a landing place. The land around the edge of Avila was quite rough with lots of power lines, a main road, major intersection and landing areas were limited.

I picked out a couple of landings and one fall back and circled a few times to confirm the wind direction. It confirmed the drift of the last thermal. I passed by the first landing as it sloped towards a main road. I soon realised I wasn't going to make the second site which was on the far side of a very deep road cutting and set up for a landing on the fall back which was a clear area on the side of a low rocky hill. I would be landing slightly upslope but the wind was light and smooth on approach. I was at about 25ft when I realised my ground speed was much higher than it should be. I was too low to do anything now so I took three wraps of the brakes and pulled as hard as I could as I came into land. It had no effect and I hit the ground very hard y ankle giving way as I did. Fortunately

I rolled onto my airbag and suffered no other damage. As I lay there I knew I had damaged my ankle badly but hoped it would support me to the road about 200yds away.

After a few attempts I was able to stand up and limp a few steps. I called Graham on the mobile to let him know I had landed. He had also made it to Avila but sensibly had returned to the flat plain beyond to land. He was about 5km away trying to hitch a lift back to Avila to collect our car which was still back at the Piedrahita launch. I told him I would try to get into Avila to the bus station as hitching was not allowed on the ring road that I had landed beside and we agreed to keep in touch.

In the end I had to limp 3-4km into Avila only to find the last bus had gone but I was fortunate enough to find a taxi which carried me back the 40 miles to Piedrahita for £30. Poor Graham arrived back after me. He had hitched a lift to Piedrahita fairly quickly but it took him a lot longer to hitch the 3 miles to take-off to pick up our car.

I was happy to have flown what was for me a great distance but as my ankle became more swollen I realised it was the end of my flying for some time.

We learned later that Ans Khan, one of the competition organisers had flown to Segovia and was on his way back when he hit some severe turbulence on his approach to landing short of Avila. His canopy collapsed and the resulting crash left him paralysed from the waist down. There was hope for a recovery but last months Skywings reported there had been no improvement. I can only hope he will recover in time.

Ans was a very accomplished pilot who had won the serial class in this years Real Minas Open in Brazil. We should all be aware that none of us are safe from these situations. Sometimes, as in this case it's a matter of meeting the wrong conditions at the wrong time, sometimes it's about making the wrong decision. We can only reduce any dangers to a minimum by flying within our own and our gliders capabilities. Only you can decide what these are.

Needless to say the competition was cancelled but it turned out that this was the only XC weather until we left for home four days later. The cup? Well, despite having to carry two Englishmen, Graham and I won this at a table quiz organised on the last night. I was also presented with a copy of Jockey's SIV video for doing such a good demolition job on my ankle. Do you think he was trying to take the piss?

STOP PRESS: The Pilot Trophy is again being held in Piedrahita from 26th – 28th July 2003. I'll probably be returning myself if anyone is interested in joining me.

Ulster Championship to Run again...

After last years back luck with the weather, when non of the listed Ulster Championship event were completed, we are holding the whole thing again. The rules are the same as last year. I.e. 12 events held on the 2nd and last Sunday of each month from March to September, with no events during July.

If more than 4 events are flown worst scores will be dropped. The first event will be held on 9th March, not long away.



Sites will be chosen early on the day and details will be posted on the voice-mail.

This is aimed at giving us all something to do on the day, rather than just fly up and down the ridge. New members and others who don't want to leave the hill will be set hill based tasks

Video Library

Tel: 028 9064 4267

Bob Dury	Out
Extreme Lives	In
Flamenco Dune	In
From Nowhere to Nowhere	Out
Instability	Missing
Mountains High	In
Otte Lithwithel	Out
Parasol	In
Red Bull Promo	In
Security in Flight	Missing
Sky Systems	In
Speed Gliding	Missing
Speed to fly	Out
Supermax	In
Touching Cloudbase	Out

If you have a missing video then return it for your £20. Missing videos not returned soon will lose the £20 deposit and new videos will be bought.

What new videos do you want ?



British Club Challenge

The club has been invited to the final of the British Club Challenge to be held on the 23-25th Aug in south Wales, so the leading pilots from the Ulster Championship will be asked to compete for the pride of the club.

Have a look at the web site :-

2003 UHPC Committee

The club's new committee was elected at the AGM and have all taken up their posts in the big castle. If there are any club or other gliding issues please let the committee know and we'll do our best. As you can see elsewhere in the newsletter. The committee has put together a full calendar for all to participate in.

Position	Officer
Chairman	Mark Piggott
HG Safety	Michael Knight
Air Liaison	David Ross
Coach Rep.	Maurice McBride
PG Safety	Graham McCormick
Secretary	Gavin Millington
Treasurer	Billy Reed
Sites Officer	Andy Niblock

The back side of the power curve is an arse of a place to be

Powered paragliding flight theory

By Jon Radford (Rad Aviation) Dec31 02.

In this article I hope to explain the effects and outline some safety issues of powered paragliding PPG. I will start with the most common question I get asked and then lead us deeper into the more technical areas.

Q: Will I need a bigger wing to go paramotoring?

A: If you are in the upper half of your wings weight range for free flight, it 'should' be safe for PPG.

If the wing is not certified for PPG then you should ask if it has any bad habits under power, this is a stronger case for changing wings as some respond badly under power.

The next question you should be asking but never do is

Q: What effects will flying too heavy or too light have.

A: Lots, so lets run through the pros and cons.

First lets consider flying heavy on a wing.

PPG pilots generally fly with considerably more weight under their wings than PG. Expect a wing rated for both PG & PPG to have two weight ranges, one being about 40Kg higher for PPG. Remember, most paragliders are tested to 7g or more so the extra weight does not damage them.

The main advantage of more weight is extra speed, and pilots like speed. Unfortunately extra speed also means faster take off and landing speeds, so in nil wind conditions you can expect a strenuous run & heavier landings with the added weight of a motor on your back. It's worth noting, most wings considered good for PPG have 'power risers' with trimmers to adjust speed.

The power required to achieve take off and climb increases with weight. You could reach a point where the weight exceeds the motors limits. Combine this with adverse conditions or an unsuitable wing and you might end with a long take off run and a poor climb rate!

Flying heavier and faster requires more thrust to maintain level flight. This increases fuel consumption, or put another way reduced flight duration. Where ever you fly, you get there quicker, but have to land sooner!

In flight every thing is more heavily loaded so in the unlikely event of a collapse it will be faster and harder. But, the advantage of being heavily loaded is the likely hood of getting a collapse in the first place is hugely reduced.

A PPG pilot sitting upright with a big round cage on his back adds considerably more drag to the total aircraft drag (pilot+wing), than an aerodynamic supine free flier. This can degrade the overall Lift Drag ratio by 0.5 or more

A heavier pilot is usually a 'bigger' pilot. A physically bigger motor or pilot adds more drag. This further degrades the LD ratio, so the steeper you glide down. So don't expect the same glide with the power off, as you did free flying your wing.

All things considered, the improved speed, maneuverability, response, and resistance to collapse from flying heavily loaded on a smaller wing more than compensates for the reduced efficiency (most of which can be offset by applying more power anyway.)

Now to look at the effects of flying lightly loaded on too large a wing, or too much power to weight ratio

The first annoying thing is, with less weight you fly more slowly. Applying more power will not make you fly faster, in fact as we have no elevator controls to control pitch the extra thrust will simply rotate the aircraft into a steeper climb. This hides a far more sinister effect of power on paraglider flight.

A simple analogy helps explain. Relative to the wing a PG pilot provides the same loads as if sitting on a garden swing. All his weight is carried by the line and so loads the wing.

If a person pushes our pilot forward on the swing, he starts to carry more of the pilots weight as he pushes him further round. If he pushes the pilot to a horizontal position he will now supports all the pilots weight. Subsequently no weight is on the lines.

We know that the speed of a wing is determined by the weight it carries.

If the weight reduces the speed reduces.

If the weight reduces to Nil the speed reduces to Nil.



The back side of the power curve is an arse of a place to

Now substitute the person pushing for a paramotor. Any alarm bells ringing yet?

It would take a lot of push to swing the pilot into this position. How much? Well if the combined motor & pilot weight were 80Kg and the motor pushed 80Kg we are there.

Let our pilot first take off on a heavily loaded wing, and moderate thrust; he will fly fast.

To climb out he applies full power. As he 'swings round', the resultant weight carried by the wing reduces causing his airspeed to decrease, but not by too much.

The BIG problem comes if our pilot takes off lightly loaded on a wing that is too big, and loads of thrust.

When he takes off he will be flying considerably more slowly. Things can only get worse. As he applies power he slows down even more and finds him self in an area known as the 'Back side of the power curve'.

Depending on our pilots weight, the wing size, and crucially how much thrust is available, our pilot is running a real risk, as he applies more power. As he swings further round, the weight on the wing reduces and his airspeed falls away. Additionally the wings own weight increasingly acts against its airspeed. As the weight approaches the minimum 'limit' required to keep it flying, it becomes unstable, and is reached before the pilot swings all the way up in front of the wing. He is flying closer and closer to the stall.

With enough thrust applied for level flight the pilot is pushed round, the resultant weight left to load the wing determines how much slower the aircraft will fly.

At full power the amount of excess thrust, which further reduces the weight on the wing, determines how close to the stall our aircraft is capable of getting.

Don't be too alarmed, this example demonstrates a problem at the real extreme limits. But it illustrates 2 very important factors that should be considered when flying PPG.

1 Don't fly light on a large wing with a big powerful motor, particularly if a lighter pilot.

2 Although most PPG don't fly at these extreme parameters This tendency towards the stall effects ALL PPG to varying degrees, and is dependent on the wing size, weight and thrust available.

Seek advice In paramotoring bigger is not always better, either for the wing or motor. If you are unsure talk to some one who can help recommend a motor suitable to your pilot weight, and match the total weight to a suitable wing.

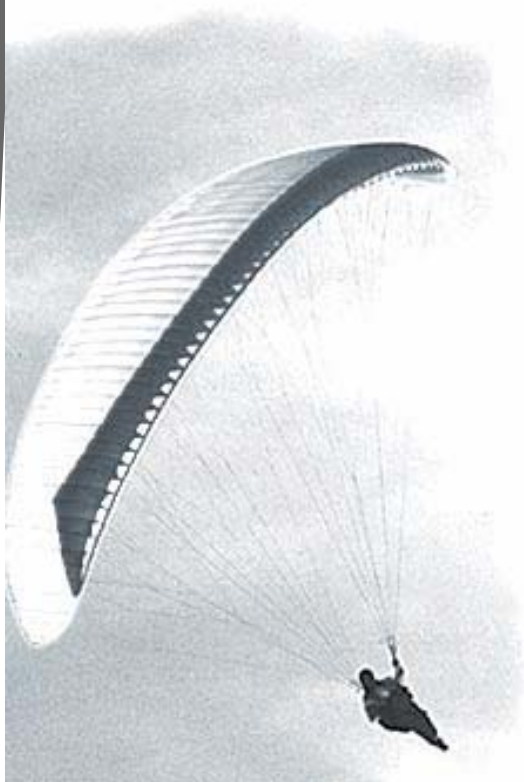
A safety issue worth considering is this.

In a situation flying with lots of power and not enough weight you could be closer to a stall than you think. The amount of brake you are used to for a quick tight turn when free flying, could now be enough to stall parts of your wing. A stalled wing tip could induce a flat spin under power. And when do we often find ourselves liberally applying large brake inputs?... During take off and landing.

SO, IF YOU FLY PG AND PPG AND ARE LIGHT ON THE SAME LARGE WING BE AWARE THIS CONCERNS YOU.

DON'T GET CAUGHT OUT





Mountain Rescue Course

It's a couple of years since the club held a first aid course. The last one was well attended and everyone enjoyed it. Graham will organize one with the Mountain Rescue Team if there is any interest.

**So, are U interested ?
Especially new club members. ?**

If he gets a good number of people expressing their interest he will work out a venue and a date. It would most likely be a weekend day, so a firm commitment to turn up is requested.

In other words be prepared to miss a flying day if the weather is good.

email graham@gmcc69.freeserve.co.uk
or phone 028 44821216
or text me on 07801 543213

**UHPC Newsletter needs you. Send articles to ;
Email: ed.uhpc@btopenworld.com
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Were on the web

<http://www.uhpc.f9.co.uk/>

Thanks for the help.

The club would like to thank:-

**MODERN OFFICE SUPPLIES
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For their very generous donation of a flip chart easel plus 5 flip charts. Modern Office Supplies also sell pens, stationary, office equipment and office furniture. If you need any of these I'm sure they would be happy to supply you.
(not free of course but at a very competitive price)

Club Night

April 15th

The Elk Bar, Toomebridge, on April 15th at 7.30 for 8.00pm for an informal club night.

Practical flying topics will be on the agenda with priority given to answering questions about YOUR flying (e.g.. do I fly with too much brake?, why do I always land in the wrong field in strong winds/on XC/in nil wind? etc), your kit, buying kit, weather conditions and so on. All the top HG and PG brains will be on hand to pick information from.

This central location has been chosen to make attendance possible for all, especially the newest members who will have the opportunity to meet everyone including the club coaches. However members of all experience levels are needed to make the night a success so please make a mental note of your questions and suggestions, disasters or tips for Tuesday 15th of April.

Directions: The Elk Bar is on the main road a few miles from Toomebridge on the left when travelling towards Dungiven. Please contact me if you require further details.
Maurice McBride (ph 90226075)



Club Events 2003

Date	Event	Contact
Sun 9th March	Ulster Championship Round	Gavin Millington
Fri 21st March	Repack Night. See detail on front page.	Graham McCormick
Wens 26th March	Club Night. Quiz Videos etc	Graham McCormick
Sun 30th March	Ulster Championship Round	Gavin Millington
Sat 12th April	Christmas Dinner	Ian Hazlett
Sun 13th April	Ulster Championship Round	Gavin Millington
Tue 15th April	Club Night. Practical flying topics	Maurice McBride
Sun 27th April	Ulster Championship Round	Gavin Millington
3rd May	Fermanagh Weekend	Michael Knight
Sun 11th May	Ulster Championship Round	Gavin Millington
Sat 24th-25th May	Celtic Cup. Inc Ulster Championship Round	
Sun 8th June	Ulster Championship Round	Gavin Millington
TBD June	Repack Night	
28-29 June	Ulster Open Inc. Ulster Championship Round	
12 July	Achill Weekend	Michael Knight
26-28 July	International Pilot Trophy (Piedrahita)	Graham McCormick
10 Aug	Ulster Championship Round	
23-25 Aug	British Club Challenge 2003 South Wales	
25 Aug	Holiday Weekend—Magligain BBQ	Michael Knight
31 Aug	Ulster Championship Round	Gavin Millington
14 Sept	Ulster Championship Round	Gavin Millington
28 Sept	Ulster Championship Round	Gavin Millington