

The Dales Hang Gliding and Paragliding Club CLUB RADIO FREQUENCY 143.850Hz

www.dhpc.org.uk

over Photo: Oliver Sherratt

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July 2016

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Special

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No.



Martin Baxter CHAIRMAN'S CHAT – July 2016

Last week I was down in South Wales at the Inter-Service Paragliding Championships. I won't give you one of those boring day by day accounts of what we did: just a few of my reflections on returning home.

I nearly pulled out before it even started. The weather forecast didn't look at all promising and the prospect of a 4 hour drive each way; sharing a room with 3 other snoring blokes on rubber mattresses in bunk bed accommodation; with no WIFI (or even 3G); and little prospect of flying didn't fill me with enthusiasm. But 2 days before the start I gave myself a good talking to, and concluded that I would be letting people down if I didn't go. In the end we flew every day except 1, with 3 trips over the back. *Lesson 1: the forecast is only a forecast and sometimes you just have to go. The only certainty is that if you don't go you won't fly. Lesson 2: always pack ear plugs!*

On one of the less promising days we left the centre in drizzle on an optimistic 2 hour drive to the coast. We drove through torrential rain before popping out the other side into better conditions. In the end we all had several hours soaring about 8km up and down the coast in glorious sunshine. Lesson 3: I'd forgotten how much I like coastal soaring – must do more. Lesson 4: take sun cream, even if it's only Wales!

The Welsh valleys are not particularly friendly, especially in a strong cross wind. They are deep, steep sided and full of obstacles. Lesson 5: sometimes it's better to land safely on top of the hill and walk down, rather than risking that last downwind glide into an unknown valley full of potential hazards (one reason I didn't win!).

On the last day a promising forecast translated into scratchy conditions with the occasional thermal allowing people to get away. But if you got your timing wrong you ended up in neck deep bracken at the bottom. So when a thermal blew through it was carnage on the hill. Everyone launched. Some were soaring the ridge whilst others circled low in a desperate attempt to get away. And if you didn't get away in the first couple of minutes there was a scramble to top land in order to be ready to have a go at the next cycle. Similar to the conditions on the Long Mynd in 2009 when <u>2 pilots died</u> in a mid-air collision. Terrifying: I have never been so pleased to climb out in a thermal. *Lesson 6: beware the competition 'horns' – always maintain your own margin of safety.*

Fly safely,

Martin Baxter





CLUB COACHES



Dales H	ang Gl		Paraglid	ing Club - Coache	hes List	
Name	HG/PG	Location	Phone (+0)	Email address	Availability	
Trevor Birkbeck	HG	Ripon	1765658486	trev.birkbeck@gmail.com	Various	
Steve Mann	HG/PG	Kirkby Malzeard	1765650374	stev.andbex@btinternet.com	Weekends	
Kevin Gay	HG	Ripon	7794950856	krgay@talktalk.net	Various	
Ed Cleasby SC/ CC	PG	Ingleton	7808394895	xcflight@gmail.com	Various	
Rob Burtenshaw SC	PG	Oxenhope	7747721116	burtenshaw@fsmail.net	Sun and vari- ous	
Peter Balmforth	PG	Leeds	7714213339	peter.balmforth@ntlworld.com	Weekends	
David Brown	PG	Ingleton	7757333480	d.brown208@btinternet.com	Various	
Alex Colbeck	PG	Harrogate	7717707632	alexcolbeck@gmail.com	Weekends	
Kate Rawlinson	PG	Colne	7976510272	katerawlinson@hotmail.co.uk	W/e & school hols	
Kevin McLoughlin	PG	Lancaster	7767652233	kevin-mcloughlin@hotmail.com	Weekends	
Martin Baxter	PG	Wetherby	7775785479	mrbaxter@hotmail.co.uk	Weekdays	
Toby Briggs	PG	Pateley Bridge	7582156471	tobybriggs@btopenworld.com	Various	
Fred Winstanley	PG	Higher Bentham	7770741958	fredwinstanley@sky.com	Various	
Richard Shirt	PG	York	7786707424	rshirt@advaoptical.com	Weekends	
Simon Goodman	PG	Leeds	7720061200	simon.goodman@talktalk.net	Various	
Andy Byrom	PG	Skipton	7796421890	andy.active@unicombox.co.uk	Weekends	
Dave Coulthard	PG	Leeds	7595895149	d.coulthard2@ntlworld.com	Weekends	
Sean Hodgson	PG	Haworth	7999606084	<u>sean@ogi.me.uk</u>	Various	
David May	PG	llkley	7928318219	dav.may@gmail.com	W/e & various	
Chris Williams	PG	Spain/Preston	7973222713	stayhigh@btinternet.com	Occasional UK	

Club Coaches are pilots who have expressed a wish to help less experienced or new pilots find their feet in the Club environment. It could involve site information/briefings, developing and advising on practical flying skills, assisting on coaching days or helping pilots prepare for exams or invigilating exams. All coaches have been endorsed by the Club and undertaken some BHPA led training - they also need to do some coaching during the year to further develop their coaching skills and to retain their rating.

Please make use of their skills and experience to further your own skills and knowledge.

Ed Cleasby DHPC Chief Coach/Senior Coach January 2016

Anyone wishing to become a Club Coach should contact me directly for any advice or be proposed for training

There is more detail on coaching within the club on the website.

Coaching days are always announced on the web site homepage and shoutbox





David May—Safety The Rush for Performance, and why it cant be quantified.

DM Comment: I found this article on the UP website and thought it an interesting explanation of the lack of published polar curves for paraglider wings. Although it makes reference to UP wings in particular the concepts apply to all paraglider wings and I am not promoting UP wings in any way.

The original article can be seen here: http://www.up-paragliders.com/en/content/item/409-the-rush-for-performance,-and-why-it-can-t-be-quantified

In the sailplane industry, each new plane is delivered with a comprehensive user handbook comprising, among very many other things, a speed polar curve for the particular model in question.



In paragliding there is no shortage of pilots calling for the same – on average we get one or two emails each week asking us to provide "the" speed polar curve for one model or the other. In each and every case the answer is the same; "sorry but no, there is no such thing, and there never will be".

But why can't we just go out there and get the number crunchers crunchin' so that all the tech-savvy UP pilots out there can have the data they crave for their advanced electronics? The answer, as it turns out, isn't as straight-forward as it may seem.

CALCULATING THE PERFORMANCE DATA THEORETICALLY

To begin with, the paraglider is already out of shape right from the word "go". The aerofoil which the designer chooses is the one sewn into the canopy as cell walls – but the cell walls are but an infinitesimal part of the whole wing, with the great majority of the wing being made up by the top and bottom surface panels, which are always billowing, and thus unpredictable, due to the soft nature of the paraglider canopy, and the extra pressure inside.

The actual billowing also means that the part of the canopy which we know the shape of, i.e. the cell walls, are recessed into de facto grooves made up by the billowing of the top and bottom surface panels around them. Down there, computer modelling of the air flow is not accurate – we have made several different simulations in which we have tried to model the billowing, and the results tend to vary wildly with just small variations in the amount of billowing that we add, meaning that not only are the simulations pretty inaccurate, the real-life values also change across the life span of the canopy, as the cloth ages.

This means that we have the rather paradoxical situation in which the parts of the aerofoil which we know well (the cell walls) are all but hidden territory in terms of air flow modelling and calculations, whereas the middle of the cells, where we can predict the airflow with some modicum of accuracy, are just about beyond accurate modelling in terms of actual inflated shape.

The more cells we add to the canopy design, the more accurately the inflated canopy corresponds to our desired aerofoil design – but more cells come at a premium in terms of manufacturing costs, weight and even post-collapse behaviour.

And all this was before we added turbulence to the equation. Paragliders, being "soft" aircraft made of cloth and inflated by an almost impossibly small pressure difference, aren't as susceptible to the laws of physics as other aircraftmaking materials. As a paraglider moves through the air it is constantly being buffeted about, and each little movement deforms the aerofoil in infinite small and big ways. This means that the aerofoil which the designer intended for his new paraglider model is almost never the one that is actually flying through the air.

Much of the paraglider design process is aimed at reducing, or at least controlling, the amount of deformation of the aerofoil taking place when the paraglider flies through real air (and not through a computer-modelled laminar airflow on the computer screen).

In some instances, the soft nature of the paraglider canopy can even be used to our advantage. An example is the leading edge area, which in lower-rated wings is actually designed to deform when the wing pitches forward, for instance on thermal exit. As it deforms it loses some of its aerodynamic efficiency and turns into an air brake more than an aerofoil, and this stops the wing from diving too far forward and perhaps collapsing.

But all these things are secondary to our initial concern, namely why we won't deliver accurate and usable performance data with our wings. Hopefully some of the technical challenges involved in generating such data using computer software have now been outlined, but there is more:

GENERATING PERFORMANCE DATA STATISTICALLY

Another way to collate data with at least some degree of accuracy, is to do lots of real-world flights in still air, and take lots of data point measurements. If a pilot is needing data for the final-glide calculator of their GPS-integrated variometer, this is the route we tend to recommend them to go. Basically, you take off from a high launch on a cloudy early morning with no wind, and compile a table where sink rates are marked as functions of glide speed. The more data points collated in this way, the more accurate the resulting speed polar* will be – FOR YOUR PAR-TICULAR WING/HARNESS CONFIGURATION, AND AT THE ALTITUDE WHERE YOU HAVE COLLATED THE DATA! The data is all but unusable for a friend flying the same wing with a different harness, or with the harness set up differently, and it is significantly different to a data set collated with the same rig but at different altitudes – this is one reason why we don't use this method to say anything absolute about our gliders' performance numbers, as the data gleaned is really only relevant for the particular wing we're measuring, at the altitude where the data was collated.

MARKET MECHANISMS

A paraglider model typically has a life span of two to four years. Any manufacturer trying to please the market by publishing performance data will very soon run into the problem that the market expects each new model to have significantly improved performance compared to the predecessor – something in the range of 0.5 on the L/D scale is probably expected, only it is very far from being realistic to reach such increases every two to four years. So with-in just 10-15 years such a manufacturer would be publishing WILDLY optimistic/inaccurate numbers, to the detriment of the overall credibility of the whole industry in general, and the affected manufacturer in particular. The manufacturer would be running on borrowed time since the market eventually will call the bluff, and then things could be anything from mildly embarrassing to very expensive. But due to the nature of paraglider design, a new model can be a huge step up in real-world performance without it showing on any computer-modelled or measured data graph, because it may be both safer and easier to fly in turbulence as well as better at converting energy from turbulence into altitude, and better at exploiting, say, weak lift. Such things can and will never be objectively measurable, yet experienced pilots will notice them shortly after takeoff and be able to exploit them far more than anyone has ever gotten out of an imaginary 0.5 increase in calculated glide ratio.

SUMMARY

As you will have seen, there are many good reasons to NOT publish any absolute performance numbers; if you do them scientifically, i.e. with computer simulations they will be based on things that are not readily modelled, if you do them with real-life measurements they'll only be relevant for the particular wing/harness configuration you're testing, and either way they're wildly inaccurate. They will also lead to customer-confidence problems – so we don't publish them. Simple really. We'd also like to reiterate the oft-stated truth that if you want to know a paraglider there's just no way around actually flying it, and comparing it to the wings flying around you.

*) A curve in a coordinate system where the horisontal speed is marked out the X-axis and the sink values are marked down the Y-axis. See the image at the top of this article.

EAT POSPECAS



July 2016 : Unsettled Start, Dry/Warm then Storms

Issued : Apr 24 June 2016

Forecast

We are expecting an improvement to Summer 2016 throughout the course of July. However, the mid Atlantic ridge this year is a weak affair and apart from one notable warm period it is likely to allow further incursions from the Atlantic.

We expect the start of the month to continue with unsettled, wet and sometimes windy weather across much of the British Isles. A marked improvement towards the middle of the month with high pressure building across the country and introducing a warm, perhaps hot for a time period across parts of Southern England.

Towards the end of the month we are expecting further stagnating lows to approach from the Northwest bringing a thundery end to July.. Wet, windy start to month. Drier and milder mid month. Wet end to month with risk of gales.

> Unsettled start, turning drier and much warmer mid month. Thunderstorms expected for end of month

July 2016 Forecast

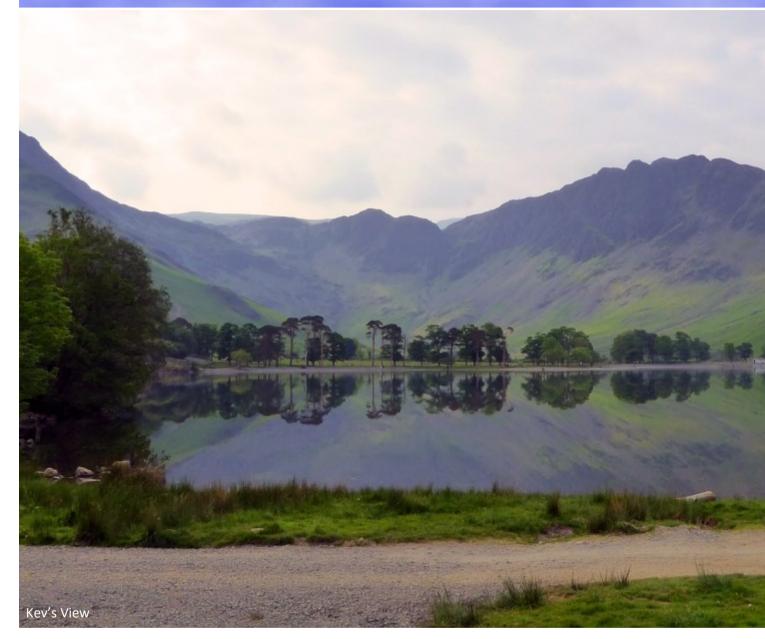


Chris and Lynn Williams of "High Sierras" are offering guided paragliding, mountain biking, bird watching and trekking holidays. Staying in the quiet mountain village of La Muela de Algodonales at the foot of Sierra de Lijar in Southern Spain. Come along for a paragliding holiday and if you wish take part in the other activities. We offer for these free if you are on a guided week. We specialise in small groups of around 4 to

metc

5 for a higher quality of service, XC guiding and retrieve, coaching including task setting, waypoints for circuit flights entering your flights into the UK league and all you need to set you up for the UK XC season. Discount for group bookings offer of £250 per person based on a minimum 4. With 15% off individual full price for club members only.

BETTTERMERE



Somehow I had managed to never go to the LCC/ Buttermere Bash when they were conjoined twins. Competing priorities I guess, and probably a fear of making a complete fool of myself in a competition environment. This year the Bash seemed to present itself as the natural place to be on the 1st weekend in June. In the couple of weeks before: it became apparent I would be home alone, someone pointed out there was still space in the B comp, and I had an offer of 2 different campervans to sleep in. Clearly it was going to be difficult to miss.

You should never need an excuse to visit this area of the

Lakes. The scenery is simply stunning. Knowing this, and with the promise of good flying weather, live music and an acro show launching from the hill on the opposite side of the lake, had me setting off on the Friday morning with great expectations of the week end.

I was not to be disappointed, the only fly in the ointment being that I missed the comp on the Friday, being too late to sign in. That and the fact that I didn't actually manage to fly anywhere from Burnbank! From the moment I got to the campsite though the week end took on a rolling progression of great fun. Looking for Richard's





van by checking all the registration numbers, it might have been easier if he'd just said "it'll easily be the biggest van, and has a huge satellite dish on top". With a huge G&T thrust into my hand almost before I was out of the car, the scene was set. Plenty there from the Dales— Tony and Zena, Richard, Kerim and Lena, Neil, Kev, Ed, Alex, Andy (probably more, sorry if I missed you out!). Top that up with pals from elsewhere, friends from flying holidays etc, and you get a whirlwind of socialising, great company and laughs. The A & B comps had tasks set on the Saturday from Carrock, with most getting away from **Situations Vacant**

Professor of the

DARK ARTS

required



Tony Pickering is hanging up his abacus at the end of this year. We therefore need someone to take up the role of Club Treasurer. So, if you feel that you can add up (mainly), subtract (a little), and pull the wool over the rest of the committees' eyes, you'll be a shoe in.

Tony is leaving the accounts in a healthy state. The duties are clearly important, though not massively onerous. If you would like to know more, or demonstrate some interest, contact either:

Martin Baxter (Chairman) mrbaxter@hotmail.co.uk , or

anthonypaulpickering@hotmail.com

for an informal chat about what will be required.





Photo: Oliver Sherratt

the hill under a low base and no one making goal. The Dales did well in the comps—Richard Meek 3rd in the B comp, Ed second in the A comp. As it said on the tin though , these were minor details, the emphasis being on safe competition flying in a fun environment.

The acro show on the Saturday evening launched from the opposite side of the lake with Jocky Sanderson on the PA in the landing field as commentator, also encouraging he pilots from the ground in some cases! We were treated to an hour or so of spectacular flying, SATs, tumbles, stalls, syncro, reserves being thrown, lake landings, a high 5 between the flyer and the guy on the water jet board. Special mention to Alex, who threw his cutaway reserve for the first time after his acro display, and which opened perfectly—leaving him flying his reserve for the first time, above a lake, in front of several thousand people!

A great day, and with it rounded off by a couple of local bands playing into the small hours, I was delighted to avoid about of extreme dad dancing.

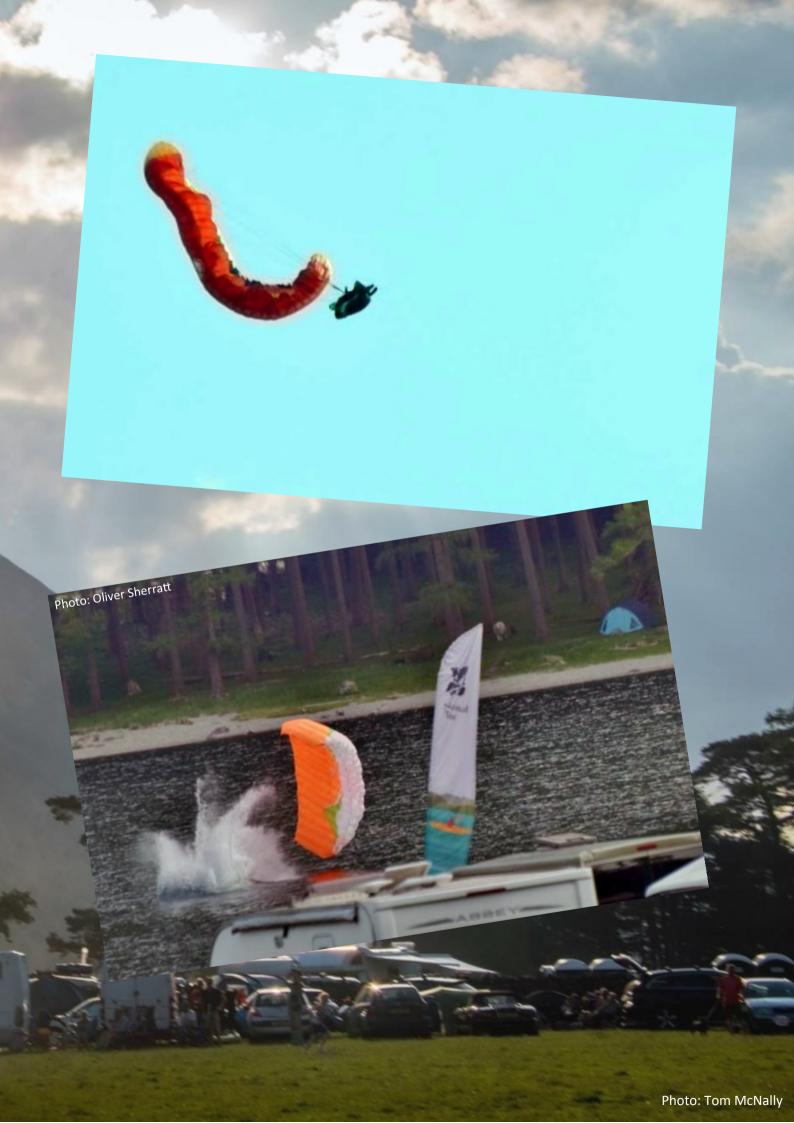
I was glad to get away before the crowds on the Sunday morning, and was rewarded with a flight on Whernside on my way home where there was a very good turn out of Dales pilots.

Would I go again? I don't plan to ever miss it again!



Tam



















Trevor Birkbeck The BOS2 hang gliding comp in the Dales



Last year as the Dales comp approached, pilots were saying "Here we go again, another comp rained off - we'll be sat in the pub for 5 days" Well, they were wrong and it was actually flyable for all 5 days although we only tasked for 3 of those days.

As the comp dates approached this year, I was filled with quite a lot of dread - it was going to be something of East to start with and then the last 2 days forecast as being blown out.

Where to go? Well, years ago, I took the League up

Whernside but there is no way I would do that today - we are all too old and creaky to even contemplate such a task. And, years before that, I had them drag hang gliders up Cow Close Fell - that's too much like hard work as well so that was out. We local hangies were doing a lot of head scratch-

"Why can't we look at the East face of Dodd?"

ing and Kettlewell was suggested so, the day before the BOS, I walked up to the top to check it out. Mr Dibb had given permission (as per last year) to take 4WDs to the top of Windbank, so the walk would not be crippling.

Some of you will know that he has put a fence across Windbank which will make it difficult for early training of PGs – but, in our case, there was a gate in the fence so, no worries. But, when I got to the top, I felt it was not at all suitable for a hang gliding task. Not soarable at the top, the 2 big fields at the bottom were in meadow crop or full of sheep. So, a no go, in my view.

> Quite a few pilots chose not to come to the Dales BOS because of the forecast so we had diminished numbers. At the 1st day briefing, we went through the options - light-ish ENE wind, low cloudbase and it was raised "Why can't we look at the East face of Dodd". This is a site we have never flown but I could









couldn't argue that it was not worth a look. We all trooped up to the area of the Cam High Road and the Pennine Way and it was decided to send 4WDs along 2.5K to the area of a dip in the Dodd Fell range. Huh, it wasn't that bad and we could use the bottom landing fields of Wether Fell near Duerley Bottom if folk went down.

So, on Day 1 a task was set by the Meet Director, Martin Colclough, with a 50 odd k goal and pilots started to fly (not myself, as I had not felt it was particularly viable and hadn't brought my glider along). Conditions were light but a cloud formed in front of Dodd and the Atos's of Nev Almond and Paul Harvey got up and away, making it to the goal – unfortunately, Paul flew through a parachute drop zone (which he thought was inactive) and got DSQed!

Later on Tim Dotchin (Laminar) and Neil Atkinson (Atos) got up and went over the back with Neil just beating the 10K. All the other flexwings went down which created a few problems that I later had to apologise for.

On Day 2, the wind had gone round a little to NE so, once again, it was off to Dodd East face using the 4WDs to cart the gliders along. Again there was a good looking cloud forming in front of Dodd, this time with wave forming up

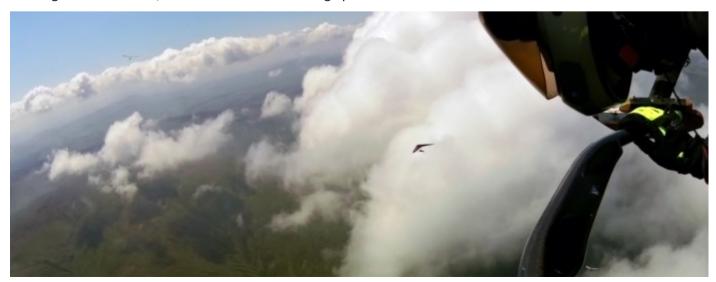
the face, not in a wave bar format but just in front of the cloud. Martin had set a goal of 65K and many pilots got up and away. Dave Matthews was best flexwing making 53.7K with Justin Needham and Luke Nicol not far behind.

On the rigid front, Paul Harvey stormed off to the goal distance, this time without breaking any airspace with Mike Armstrong not too far behind. Strangely, Nev Almond only achieved a short distance this day, just 5K!

So, a good day was had by many, especially those who got up in the wave out front – this sadly, didn't include me...I went over the back onto Snaizeholme where a cloud was formed that wouldn't keep me up. I ended down the bottom at the back of Dodd Fell!

We knew it was going to be blown out on Days 4 and 5 and on Day 3 the wind had gone round to NNE, making it difficult on Dodd. One may have thought that the Model Ridge on the North York moors was the obvious place to go but we knew that it was in very low cloud due to the low pressure in the North Sea. The north face of Semer was considered but we didn't think it would work well.

So on Day 3, it was back to Dodd we went and Martin set a goal near Blackburn at 53K. The only part of the hill



that was soarable was the main hill off to the right. Tony Fillingham flew onto this face and soon after set off on the task but did not make the activating distance of 15k.

Several flexwing pilots walked with their gliders over to the base of the main face (dedication or what!) and soared the main face for a couple of hours, eventually going over the back. Justin made the best distance but not quite far enough to activate the task. Overall, it was a duff day from a tasking point of view but pilots were pleased to have got in the air.

Day 4 was canned as it was way too windy. I set up a projector in the Community Centre and Nev Almond gave a talk on the Kobo and XC Soar software, which was attended by about 20 pilots.

Greg Emms, a BHPA parachute packer, repacked chutes for some folk and then, in the evening at the Fountain Hotel (where we were based) we had a really nice meal for the whole group. Music was provided by Dave Hume and his mate, Geoff which we enjoyed (I got him to play "Stairway to Heavan" which was well done) – Dave is a hang glider pilot in the NYSC (occasionally).

We all knew that Day 5 was going to be blown out so quite a few had set off for home. Those remaining met in the Ropemakers car park and final presentation of awards was carried out by Martin Colclough, our Meet Director (who had a difficult job in less than ideal conditions). I was just pleased that pilots had experienced reasonable flying in the less than ideal conditions.



TB

Simon Tomlinson flying with FlyItaly Paragliding info@flyitaly.com DO NOT TRY THIS AT HOME!

Kry 1





Thunderstorm over Cartagena, Columbia

Courtesy: Severe Weather Europe

DHPC	Site Officers	
David Brown d.brown208@btinternet.com 07757 333480 01524 242192	Northern Sites Addleborough Bishopdale Brant Side Dodd Fell & Grove Hd Nappa Scar	Semer Water Stags Fell Tailbridge Wether Fell Whernside
Toby Briggs	Southern Sites	Handaniah
tobybriggs@btopenworld.com 07582 156471	Addingham Baildon Cow Close Fell Cowling and Sutton Great Whernside	Hawkswick Ilkley Moor Kettlewell Kilnsey Windbank



Club Nights take place on the first Thursday of the month. These nights are great for meeting up with the rest of the club, getting to know your fellow pilots a bit better, finding out what's been going on, and making plans etc. For this reason, this year the club nights WILL CONTINUE THROUGHOUT THE SUMMER. Same time, same place.

Next meeting: July 7th 7.30 for 8pm.

This will simply be a social meeting. Time to catch up with people, have a chat and a pint, and of course, hatching plans for the coming weeks of fantastic flying weather!

Our current home for Club Nights is the Horse and Farrier, in Otley, with a 7.30pm for 8pm start. Quite few members like to meet for a sociable meal beforehand (6.30pm), all welcome.



7 Bridge Street Otley LS21 1BQ Telephone : 01943 468400

Jan Tempest The Grand Tour

Last month I had a great week in Greifenburg and when I checked my log discovered that I'd flown a 24km triangle which I felt was respectable for a first time. Apparently I also flew 101 km with speeds of up to 188 kph which was remarkable. Computer error possibly?

Moved down to Gemona hoping to join a group doing comp preparation with Brett

Janaway and was hit by a monsoon of biblical proportions. We travelled 3 hrs each way to Bassano for a short and unrewarding flight but did meet up with some friends. The take off at Gemona is pretty easy but I had no idea where the landing was so it was a bit interesting for the first flight although there are plenty of options. Brits and other nationalities arrived in force for the British Open and I joined in practice day. At one point I was flying above Jake Herbert and felt quite cocky. My bubble was well and truly burst when he informed me he had a problem and was trying to top land!!!

Day 1 was threatening rain but everyone took off.

However the front had other ideas and the task had to be stopped before they even went through the start. At this point I learned my mother had died and it was back to the UK for a couple of weeks -- missing nothing except more monsoons. Both the British Open and the PWC managed only 2 tasks each.

Hit the road for St Jean de Montclar with Andy Smart who's a pretty knowledgeable guide having spent a lot of time on the road and wind dummying for comps. Twice we were on take off gliders laid out when rain stopped play so the week yielded a grand total of 20 minutes air time.

Flew Cornizzolo which is beautiful - the sun eventually shone and views over several lakes are worth even a short flight.

Tomorrow is registration for the Gin Wide Open which kicks off on Sunday. Hoping to give a decent account of myself but with almost no airtime in the past month I'm not optimistic

Skywords Index—Jan 2012—Present

Safety

Flying with other aircraft	July 2013
Collision Avoidance on the ridge. Nigel Page	Jan 2014
Second Chance, Toby Colombe	Feb 2014
Dales Emergency Action Card	Feb 2014
Following on the ridge. Nigel Page	Mar 2014
Crowding. NP	Apr 2014
Venturi, Rotor and turbulence behind the ridge. NP	May 2014
Thermalling with others - joining thermals. NP	Jun 2014
Strong Winds Up top. NP	July 2014
Thermal Wind mixing. NP	Sept 2014
Cool landings in hot places. NP	Oct 2014
Deep Stall. NP	Nov 2014
Slope Crosswinds. NP	Dec 2014
Throwing your washing. Judith Mole	Jan 2015
Skills – why keep a log book? JM	Feb 2015
Reserves. Kate Rawlinson	Feb 2015
Skills – flying with others. JM	Mar 2015
NOTAMs. KR	Mar 2015
Accidents and how to avoid them (1). JM	Apr 2015
CAN Procedure	Apr 2015
Accidents and how to avoid them (2). JM	May 2015
GA Alliance calls for new airspace policy	May 2015
Flying with RC models	May 2015
Speed Bars. KR	June 2015
Happy Landings. NP	July 2015
Safety Reminders (especially) for experienced pilots	Oct 2015
UK Airprox Board – Have Wings, will travel	Jan 2016
Role of the Safety Officer. David May	Feb 2016
Gasco safety night write up	Mar 2016
Airprox board – Craven Herald Paraglider airprox report	Apr 2016

Spring Thermals – Beware	Apr 2016
Stance (Flybubble article)	Apr 2016
Active Flying	May 2016

Sites News

Lambing Season	May 2012
Stags Fell Sign system	Sept 2012
Windbank / Hawkswick access and restrictions	Dec 2012
"The glorious 12 th "	Aug 2013
Pen y ghent	Aug 2013
Fremington Edge	Sept 2013
Barbon Low Fell (Johnny Barns)	Oct 2013
Windbank new stile	Oct 2013
Stags Fell	Feb 2014
Stags Fell	May 2014
Windbank – rebuilding the wall	
Stags / Brant side	Jan 2015
Addleborough, Nappa Scar, Semer Water (North Face)	Feb 2015
	160 2015
Nappa Scar	Apr 2015
Nappa Scar	Apr 2015
Nappa Scar Bishopdale	Apr 2015 July 2015

Coaching (All Ed!)

Flying equipment thoughts for the new season	Feb 2012
Spring Deserves special respect	Mar 2012
Flying with crowds	May 2012
Develop your flying	Jun 2012
The Art of Out landing	Aug 2012
Reviewing the year	Sept 2012
Thank You Mr Kagayama (packing /caring for your wing!)	Nov 2012
Guide to Wave flying	Dec 2012
Pilot Ratings / Club Membership	Jan 2013
Various / Website Coaching Section / DEFINED FLYING CHALLENGES	Feb 2013
Early Season Rustiness	Mar 2013

Skywords Index—Jan 2012—Present

Flying Scenarios to Avoid (1)	Apr 2013
Flying Scenarios to Avoid (2)	May 2013
Flying in turbulence	July 2013
Flying by numbers	Aug 2013
Anatomy of an XC	Sept 2013
From CP to AP	Oct 2013
When the wind blows	Nov 2013
Holding your own (brakes grips)	Dec 2013
Crossed (cross wind/slope launch)	Jan 2014
Retrieval (the art of getting back)	Feb 2014
Coaching and the DHPC coaching structure	Mar 2014
Response to FSC on proposed changes to training syllabus	Apr 2014
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When? (to take off)	June 2014
Reflecting on your season	Oct 2014
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Transitions	Feb 2015
A new season beckons	Mar 2015
Big Brother (Live tracking)	Apr 2015
The need for speed	Oct 2015
How to avoid Skidmarks	Jan 2016
Pilot Development – Achieving Ratings	Feb 2016
Loose Ends	Apr 2016
Stags Fell—A site for all seasons and tastes	Jun 2016

Foreign Trips Reports

Destination	Author	Date
Ager	David Hedley	Jan 2012
La Palma, Canary Islands	Dawn Westrum	Apr 2012
Algodonales	Kate Rawlinson	May 2012
Zillertal, Austria	Simon Goodman	June 2012
Pennine Parafest Report	Simon Goodman	Aug 2012
The Dolomites Flying Circus	Simon Goodman	Jan 2013

Dales Do Bassano – Italy with Kelly Farin	a Kate Rawlinson	Oct 2013
Algodonales	Kate Rawlinson	Dec 2013
Last of the Summer vino (Alicante)	Sean Hodgson (Ogi)	Jan 2014
Coupe Icare write up	Jan Tempest	Nov 2014
Morocco (1)	Tam	Dec 2014
Morocco (2)	Tam	Jan 2015
Chile in November	Ian Brindle	Feb 2015
Sierras Sortie	Tim Rogers	Mar 2015
Flying in the land down under	Rosie and Pete Darwood	Apr 2015
50 shades of Dales	David May	May 2015
XC in GV	Andy Smith	June 2015
Escape to Brazil	Pete Darwood	Sep 2015
No passport required. Slovenia	David May	Oct 2015
Escape to Al Andalus (Algo)	Minhaj	Dec 2015
Chile	Richard Meek	Jan 2016
Flying Around Roldanillo, Colombia	Rosie Darwood	Apr 2016
Bir	Minhaj	May 2016

UK Flying reports

God Given Day	Kevin Gay	Mar 2014
Valentine's Day	Kevin Gay	Apr 2014
LCC write up	Jan Tempest	July 2014
Pennine Parafest write up	Jan Tempest	Oct 2014
Saltburn to Whitby	Kerim Jaspersen	Nov 2015

Photos

Clouds	
Lenticulars over Oxenhope	Jan 2012
Condo Wave Clouds	Mar 2012
Wow! Ancona, Italy	Aug 2012
Pyrocumulus	Feb 2015
Chamonix	Apr 2015
Cumulous Upyours	May 2015
Lenticular clouds, Chamonix	Nov 2015
Kelvin Helmholtz, Breckenridge	Dec 2015
Lenticular, Chamonix. Pyrocumulous Mt Etna	Jan 2016
Sunrise, Col de Miage	Feb 2016

Skywords Index—Jan 2012—Present	
Mammatus, York	May 2016
? Dunno, but beautiful!	Mar 2016
Everyone one's a fluffy one	Jun 2016
North South Cup Dales Photos	Jun 2016

Library (Book/Video) review

Security in Flight, Jocky Sanderson.	DVD	Jan 2012
Performance Flying, Jocky Sanderson.	DVD	Feb 2012
Dynamic Decisions International, NOVA.	DVD	Mar 2012
EN Certification.	DVD	Apr 2012
The Spirit of Flying, Gregor Subic	DVD	May 2012
Flying the Holy Land	DVD	Jun 2012
And The World Could Fly, Noel Whittal	Book	Jul 2012
The Cloudspotter's Guide	Book	Aug 2012
The Race	DVD	Sept 2012
Scottish Paragliding	Book	Sept 2012
Red Bull X Alps 2005	DVD	Nov 2012
The Journey, Greg Hamerton	DVD	Dec 2012
Manilla Sky (2007 World Champs)	DVD	Jan 2013
Security in Flight 2, Jocky Sanderson	DVD	Feb 2013
Weather Watching	Book	Mar 2013
From Beginner to Cross Country	Book	Apr 2013
Wide Boyz (Rock Climbing)	DVD	May 2013
Hanging in there, Jon Chambers	Book	July 2013
Flying with Eagles	DVD	Sept 2013
Ozone Future Style	DVD	Nov 2013
Never Ending Thermal, Sean White	DVD	Dec 2013
Understanding flying weather	Book	Feb 2014
Instant Wind Forecasting	Book	Mar 2014
Clouds and weather	Book	Apr 2014
The Friend from Mexico	Book	May 2014

Competitions

How to register flights on XC league

Feb 2012

LCC/Buttermere Bash Report	Jul 2012
Inter county cup report	Aug 2012
The BOS Club Class	Sept 2012
Around the Dales Three Peaks – Dave Smart	Jan 2013
Competition Report, War of the Roses	
Competition – Photo comp results	June 2013
Competition – new PG distance record 412km	July 2013
Chabre Open report	Aug 2013
Baildon Sod report	Aug 2013
Pennine Triangle completed	Sep 2013
Competition Round up	Dec 2013
PWC scandal!	Mar 2014
Competitions – Dodd Fell Challenge	Mar 2014
Trophy night!	May 2014
Photo comp results	June 2014
Mike Cav, Uks 1 st 100k declared triangle (facebook post!)	June 2014
North South Cup	June 2014
Dean Crosby 216km flight	Sept 2014
Competition round up	Dec 2014
Competitions – the 3 Peaks Challenge	Feb 2015
Copetitions – a valuable learning environment	Feb 2015
Club Trophy Board 2014	Apr 2015
Club Mugs 2014	Apr 2015
Competitons – DeanCrosby 206km declared triangle	Jun 2015
Competitions – Dales round of British Open Series (HG)	July 2015
Preparing for the X Alps in the Himalaya. Nick Neynen	Sept 2015
Competitions – Jake Herbert and Dave Smart success in BP Champs	Oct 2015
Competition. How we nearly made it to Manaco (Steve Nash XAlps review)	Mar 2016
Club Mugs 2015	Apr 2016
Club Trophies 2015	Apr 2016
The 3 Peaks Challenge—Hang Glider. Tony Fillingham	Jun 2016

Other

EN D development stopped. "No one knows what they should be flying"	Jan 2012
Test and certification EN D wings	Feb 2012
Farmers Dinner report	Apr 2012

Skywords Index—Jan 2012—Present

Wendy Problems	Apr 2012
National Park Consultation (DHPC Response)	May 2012
Wendy Overhaul, Wether Fell	May 2012
"It's Dodd, stupid!"	June 2012
POD Harnesses Questioned by DHV	Jul 2012
Stunning Wave on Wether Fell	Sept 2012
The Economist, on Hang Gliding	Dec 2012
Ratho Repack Report	Feb 2013
lain Fairbrother Cross found	Sep 3013
Brummel Hooks (poem!)	June 2014
Tour de France NOTAM	June 2014
Ed Cleasby – Royal Aero Club award	July 2014
Hughie McGovern – a great loss	Jan 2015
Paradiction Crossword	Sept 2015
Pat Dower review of 2015	Oct 2015
Hang Gliding Sites in the UK – 1970s	Oct 2015
Dales Sites word search	Dec 2015
Individual member memories of 2015	Dec 2015
My paragliding addiction – Toby Briggs	Jan 2016
Back Flying after 30 years!	Apr 2016
Mystery of Missing Hen Harriers	Feb 2015
Honorary Life Membership for Noel Whittal	Mar 2015
Improve your flying with individual goal setting	Mar 2015
Upper Wharfedale Fell Rescue Association	May 2015
The Pennine Posse – Barny Woodhead club night talk	Apr 2016
Flying Twisted—Intro to acro—Alex Colbeck	May 2016

Trophies

Cockcroft Trophy	Feb 2016
lain Fairbrother trophy	Mar 2016
The Mark Sellen Trophy	Apr 2016

If you spot any errors or ommissions, please just let me know: markanddpat@sky.com



Jul 2 –Jul 8th	Ozone Chabre Open, France, Laragne	http://www.flylaragne.com/
July 2—9	Paragliding World Cup, Portugal	http://pwca.org/view/tour
July 9 –16th	British Paragliding Championship Round 2. Manteigas, Portugal	British Paragliding Championship Round 1. Gemona, Italy
July 15—18th	Lakes Charity Classic, Grasmere	http://www.cumbriasoaringclub.co.uk/lcc/ CSC_LCCMain.php
Jul 16—30th	European Hang Gliding Champs, Krushevo	http://www.fai.org/events/events-calendar- and-results?id=34877&% 3BEventCalendarId=10520#fragment-1
Jul 30th	Ingleton Overground Underground festival (includes best of Kendal Film Festival 2015)	http://www.ogug.co.uk/about/
Aug 7th—Aug 13th	BP Cup, 2nd Round, Peak District	https://www.bpcup.co.uk/cms/
Aug 19—23rd	BOS Round 3, Mid Wales	http://www.bos.bhgcomps.uk/content/bos3 -mid-wales
Sept 2—4th	Penninefest	https://www.facebook.com/ events/1558912111088294/
Sept 3rd—10th	Paragliding World Cup, France. St Andre	http://pwca.org/view/tour
Jan 17—28 2017	Paragliding World Cup Superfinal, Brazil. GV	http://pwca.org/view/tour
Nov 17 –20	Kendal Mountain Festival	http://www.mountainfest.co.uk/

Articles Required

There will be no Skywords next month due to the entire production staff taking a well earned break. Well, a break anyway. Those of you going away, and flying, consider yourself a roving Dales reporter, and let us all know how your holiday went. Just the flying bits, not the family arguments!