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Dales Hang Gliding and Paragliding Club

COVER PHOTO taken at Nont Sarah's, courtesy of **Howard Wilkinson Photography** <u>http://howardwilkinsonphotography.co.uk</u> and on Facebook @HowardWilkinsonPhotography.

Chairman's Chat

The first committee meeting of the year took place in January. It's normally a face-to-face event so that new members can be properly introduced but, since there weren't any changes at the AGM, that wasn't quite so important. We'd still hoped to meet in person but, in the end, Omicron got the better of us. The secretary's wife had tested positive and several members of the committee were in voluntary isolation prior to flying to Columbia.

Not having met since September the agenda was pretty intimidating but, without introductions and handovers, we managed to get through it all in an unusually efficient manner; although we did carry forward a few of the less urgent actions.

It was agreed that the format of the AGM (keep it short) was about right. The action to review our minimum working capital was placed firmly upon the Treasurer's shoulders, and carried forward. We also agreed to keep committee travelling expenses at 25ppm despite the actual and predicted increase in inflation. I admit that I do feel slightly uneasy that the committee sets its own rates, but you can always object (or even stand) at the AGM if you feel strongly about it.

The club doesn't pay site fees (except for Nont Sarahs/Pule Hill which we share with the Pennine Soaring Club). Instead, we provide each farmer with a bottle of his favourite tipple at Christmas, and invite them all to a free dinner for 2. At the time of writing (23 Feb) we're not sure if the Farmers' Dinner will take place this year. Currently only one farmer has booked in. They tend to leave it until the last minute and we suspect that COVID-19 is making them more cautious than usual. We've set a deadline of 1 Mar, and the sites officers will be reminding them of this in the preceding week.

We normally present club trophies, to those that can make it, at the Farmers' Dinner; with the balance at the April club night. If there is no Farmers' Dinner, we'll do them all at the club night.

The projector failed at our last club night and, since nobody can remember how old it is, it's probably time to get a replacement. In addition, we're considering investing in a USB camera and a directional microphone to improve the quality of recordings and live streaming. That raises the interesting question of whether to live stream all club nights. I'm sure that would be better for those of you that don't live near Otley, but we have to balance that against welcoming new members to the club – something best done in person. I suspect that the compromise will be to have remote meetings when the presenter 'dials in', but just to record and publish all other presentations.

Two proposals are already in the pipeline for the next AGM. Firstly, that we discontinue joint memberships (but will they get 1 vote or 2?!), and secondly to modify our constitution to clarify that non-flying honorary members do not have to be members of the BHPA (for insurance purposes).

Elsewhere in this edition I hope that you will see a report on the Coaching Course that took place last weekend. Thanks must go to Pete Logan who organised the whole thing during uncertain times. In the end it was oversubscribed and hugely successful: a credit to the club.

Fly safely,

Columbia'22 by Joseph Edmonds



Late 2021 and in the depths of Covid lockdown despair, I started to hope and dream what I might be able to do in 2022 when surely the restrictions would be relaxed and we could all start enjoying life again. I'd heard many times that competitions were a great way to improve flying skills and also represented quite a cost effective alternative to the classic guided holiday - generally quite a lot less cash and still including a full retrieve service.

I started to look around and after taking some advice from those that know better, the **Ozone Open in Colombia** was settled upon as my first foray into the world of competitions. Colombia is famous for excellent, reliable and fairly benign flying conditions. The Ozone Open was set in Piedechinche which has even more of a reputation for easy going conditions. So that was that settled.

Not long after I'd started making preparations to go out for the Ozone, it turned out that the **British Open was also running - 2 weeks after the Ozone**. This was to be a much more serious competition, but had the advantage that as a Brit I would get priority acceptance on the comp. The downside was that it would mean negotiating over 3 weeks away, not only from work but also more importantly from the Mrs. Unexpectedly, my wishes were granted and so after a bit of messing about with American Airlines, I had now extended my trip into nothing short of a proper adventure to Colombia...

One of the great aspects of this trip was that there was already quite a contingent of Dales pilots attending. We had a Whatsapp group and it had 10 people on there. This group was invaluable and thanks must go to Richard Meek for organising some excellent accommodation that most of us took advantage of.

I flew out and back with Ziggy and our better halves shared the airport drive which saved us a load of hassle. The flight out included three separate flights and a total of around 24-30 hours of travel time. It was exhausting, but worth every bit of it.



Week One - Ozone Open at Piedechinche



When flying to Cali, Piedechinche is one of the closest sites, a relatively short drive from the airport. The town of Santa Elena is the main area to stay and the competition was being run out of the Siga la Vaca hotel just on the outskirts. There are regular jeeps running up to takeoff, and for the competition there were two buses to take us all up. It's actually a fairly long drive up, taking about an hour and including a proper 4x4 trail up to the actual takeoff. The takeoff itself is well maintained and provided plenty of room for us all. The first day in Piedechinche was before the competition and just a free flying day. This actually turned out to be one of the best days in terms of weather and involved a leisurely boat down the valley, push out into the flats and then landing back at the Siga la Vaca in very buoyant conditions. Unfortunately I was hit by a fairly strong wave of nausea which put a dampener on things and basically caused me to land much e arlier than I could have done - even so it was a great first day of flying, a 30km triangle achieved. I thought this week was going to be easy!

Discussing the nausea with other pilots, we agreed that it could well be dehydration - I had chosen to fly "UK style", effectively dehydrated and with no pee system. It turns out that really in Colombia you need to fly with water and be drinking regularly and of course you need the plumbing to be able to cope with that. It could also have been simply the long layoff and just not being used to motion - so I bought some motion sickness tablets that I took for the first few days. Whichever of those it was, the nausea was thankfully no longer a problem.

The next day was the competition practice day. This was a set task, but with no retrieval or scoring. Effectively a dry run for a real competition task. Unfortunately I didn't do anywhere near as well and bombed after only 12km. I continued to struggle in this comp, never really doing particularly well. One excuse seemed to be that my Chinese flying phone decided to become useless and it took me a few days to figure that out. I eventually retired the Chinese phone completely and just used my normal phone. The day I switched phones I made goal - wahey I thought, I've cracked it - but then the very next day I bombed again, proving that the root cause was in fact just me not being very good.!



The conditions for the Ozone were, whilst flyable, often very weak. This really rewarded gaggle flying - working together to find whatever lift there was. Generally hanging back with

the gaggle and taking as few risks as possible seemed to be a good strategy. I'm afraid though that I often found myself impatient, quickly followed by being on the floor. It was all too easy to get to base, set off on glide and then half way, realise that no one was following, they were all still circling and clearly watching to see what happened to me. Being alone and trying to find lift was very difficult, and also friendly looking landings were sometimes a bit scarce. I made good use of the retrieve service, that's for sure.

Final result in the Ozone Open - 26/45 in the B class, 85/112 overall. Not a great result but I think a lot of important lessons were learned and I had a great time which is really the most important metric.



Week Two - Free Flying Roldanillo

Following a long drive from Santa Elena to Roldnaillo, we arrived late on Saturday night. The contrast from my serene rural accommodation in Santa Elena to the noise and bustle of Roldanillo on a Saturday night was pretty extreme. *At first I wasn't sure if I liked Roldanillo, but I grew to love it.*

Free of competition tasks and gaggles I decided to really settle down and enjoy flying. Being on the radio with friends and generally flying as more of a team was a nice change of pace. I focussed on staying in the air for as long as possible and realised that one of my issues was that I was just running low on energy. I've always had some issues with blood sugar when



doing extended bouts of activity and generally accept that I need to snack regularly to keep firing on all cylinders. I started to fly with pockets full of snacks and bottles of gatorade to supplement the water from my camelback.

The difference was pronounced and I maxed out with a 6 hour flight. Another major lesson learned.

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The *flying in Roldanillo is definitely more exciting and bigger in scale*. I'm not sure how much this was due to generally more favourable weather conditions and how much due to the different location, but it seemed that Roldonillo was just a much stronger place.

One of the downsides of this week was the lack of organised retrieves. This turned out to be a non-issue as the locals provide an amazing service of moped based retrieves. Clearly they can see the opportunity to capitalise on relatively wealthy pilots dropping out of the sky and needing a ride. I was frankly ripped off a couple of times and learned that prices need to be clearly agreed beforehand, but on the other hand I had some very lengthy retrieves where no money was accepted at all.



One of the major features of flying in Roldonillo are the ubiquitous power lines. Depending on where you take off, you are almost certain to find yourself flying over or next to big sets of powerlines. There are two sets that run down the range of hills. At first you might try to avoid these like the plague, however what I quickly realised was that they were very reliable thermal triggers and as long as you were nice and high over them, it actually made sense to follow them down ridge to enjoy the most lifty lines (sic). If you get low though, you need to plan ahead to avoid getting caught uphill of and behind the lines as if not, you might find yourself boxed in and forced into an unpleasant landing!

By the end of the free flying week I felt very current, I had sorted out my instrument woes and had learned the importance of keeping my blood sugar and energy levels up. I felt like I was flying well and felt pretty *ready for the final week, the British Open*.

Week Three - the British Open

This was a proper competition! and it was full of proper competition pilots flying proper competition wings. The imposter syndrome was real, and probably justified.

Despite this, there was a reasonable contingent of "sports class" pilots - on B and C wings. Not really enough of us to ever form a proper gaggle, but enough to at least be around each other and able to mark out climbs **as the Zenos and Enzos disappeared off into the distance**.

Having learned the error of my impatient ways in the Ozone, I had decided to adopt a much more cautious approach to this competition - generally hanging back and aiming to stay up rather than push out. The approach seemed to work quite well and whilst I never made goal, I got some respectable distances around the course.

The competition organisers were in constant negotiations with the local air traffic control and had agreed a height gain limit of 2700m. Ground level in the valley was around 1000m so this gave a nice big height range to play with. *Unfortunately despite this generous limit, I and others seemed to have some issues staying below the limit*.



In my first foray with the airspace limit, I was recorded as going over by the comp provided Flymaster tracker - however my own vario showed that I had stayed under and thankfully I was able to reverse a zero points penalty when I appealed. The second time I broke the limit was a different story - I was leaving the climb with 100m of clearance but stumbled into a blue and very strong climb that shot me up to 2844m, vario still howling despite full ears and bar. *It's amazing how quickly you can get hoovered up when you hit the strong stuff*. The views were magnificent but the moment was marred

by my realisation that I had screwed up the whole task - and it had been going really well.

Towards the end of this week, the conditions started to degrade and I went from achieving 60-70km flights down to bomb outs. Flying a B in head winds really does seem to be difficult if not impossible.



Final positions in this comp were 15/20 in the sports class and 133/141 in the overall.

Conclusions

I clearly am in no danger of podium positions in comps any time soon, but that was never really the point. What I did have was 2 weeks of flying preset tasks and with the reassurance of full tracking and retrieves and also a week of free flying in the middle to decompress and enjoy some pure flying fun.

I was able to fly with pilots who were generally much better than me and by doing so learn what I was doing wrong and find some ways to really improve my own flying.



Colombia as a destination is absolutely brilliant. I can totally see the logic in going to Piedchinche as a warm up before hitting Roldanillo, but it's hard to overstate what a perfect paragliding playground Roldanillo provides.

In terms of getting there - I chose to go through America as it was the cheapest option, but on the way home nearly missed the flight to the UK due to security taking well in excess of 2 hours. Others had much less stressful routes which I would definitely consider in future even if it costs a little more.

Now back in the UK and listening to storm Dudley trying to implode my windows, I have no regrets, not even when I check my credit card balance. *Starting off the year with more hours under my belt than I achieved all of last year in total is amazing* - and I really can't wait for spring!

Joseph Edmonds

Dales 10 t' 100 Academy (DXCA) by David May

Recently our Chief Coach Pete Logan and I were talking about the various programs and structures that have developed in our sport to help pilots progress from novice all the way up to world champion. Hopefully your first introduction to the sport will be a school. There are various syllabuses but they all cover the same material and skillset and the student graduates at more or less the same level.

In the UK that is CP. For a long time this was it – pilots left the school at CP level and found themselves on a hill with very little idea of what to do next. Clubs provided what support they could but it was disorganised and ad-hoc – the budding pilot was effectively left to their own devices to learn as best they could. To help fill this void the BHPA developed the Club Coaching program, the Pilot and Advanced Pilot ratings and more recently the Pilot Development Structure (<u>https://www.bhpa.co.uk/sport/bhpa/welcome.php</u>) to help the progression from CP to Pilot level and beyond.

At the other end of the spectrum, we have the British Paragliding Racing Academy (<u>https://pgcomps.org.uk/?page_id=2064</u>) with the aim to help develop top level competition pilots. Although only started a few years ago, judging from the recent World Championship results the BPRA certainly seems to be working – First Team and Overall Individual World Champion in Russ Ogden.

But we are missing a program for XC. Flying XC is still very much in the 'trial and error' school of learning. Compared to other sports, XC flying is particularly cruel in this regard. It's not like practicing a penalty kick for example where you can practice until your leg drops off, take a break then start again. It's more akin to that same kicking practice but blindfolded – you miss, the session is over, nobody has seen what you did wrong and you don't know when you can try again. Surely there is a better way to learn.

The Dales 10 t'100 Academy (DXCA)

With this in mind, we hope to put together a program to support pilots develop their XC skills with an emphasis on flying XC from the Dales and the surrounding sites. From the first 10km flight to the ultimate goal of achieving a 100km XC flight. It will be called the Dales 10- t'100 Academy or DXCA for short.

It's an experiment of sorts and we have yet to figure out the format. It needs to be more a collaboration of like-minded pilots than a classic classroom experience.

There are many factors that come into play to fly XC well and we will try to cover them all. The challenge is not a lack of information – there is no shortage of articles, videos and books written on the subject. And we also have a wealth of expertise in the club as there is a very active XC scene here. The challenge rather is to tap into this font of knowledge and simplify it out into usable chunks. For example, the Speed-of-the-day theory is perfectly valid but how much use is it to a pilot just starting out on their XC journey? From my own limited experience of flying XC and analysis of my flights, comparing them to others flying from the same site, on the same day and along similar lines, one factor eclipses all others: decision making. Your ability to get to base, the class of wing you fly, what instruments you use or even the conditions on the day come a far second. Short of strapping a motor to your back, if you can't make good decisions consistently you'll very quickly find yourself back on the ground. Which I do often...

I get to base without a clear idea of where to go next – no plan A, let alone B or C. It only takes 2 poor decisions to get from base to ground – the first leaves you out of position and low. Then under pressure, you miss a potential save and land. Personally, I hope to work on my decision making this year. Perhaps it's the same for you, perhaps not.

Although the DXCA will be open to everyone, given the focus on XC it would be best if you can satisfy the following pre-requisites. It might seem a lot, but you can practice all of these without leaving the hill – some without even leaving the ground:

- You should be Pilot rated or intending to be Pilot rated. The Pilot exam covers Meteorology, Airlaw and Flight Theory
- Can you launch and land safely (in tightish spots)? Do more Ground Handling and make each landing a spot landing practice.
- Some weather forecasting ability. At the very least be able to read conditions and terrain in flight so you can decide when and where it might be prudent to land.
- Are you comfortable under your wing and have you developed your active flying skills. Did you think it was a bit rough some days. What did others think? Does your wing collapse, even little tip collapses? Do you feel your wing moves around a lot where for others it seems solid overhead?
- How does your thermaling measure up? Can you consistently get into the top half of the stack when out soaring?
- Spend time hanging in your harness at home to make sure it is comfortable and set up as you like it.
- Do you understand how your instruments work and can you enter a task and navigate/avoid airspace? If you use apps such as XcSoar or XcTrack spend time to understand them. Try personalizing the display to suit your needs rather than just adopting the default setup. Of course the default setup might suit you fine, but make it a conscious decision. Even if you don't use much of what is available you can learn a lot just by understanding what it does.
- A great way to practice navigation is to attempt the NCT tasks (<u>https://www.xcflight.com/northern-challenge-series-2022/</u> thanks Ed)

Finally here's a rough outline of the topics we hope to cover, in no particular order. They are designed to be more discussion points than lecture topics.

Decision Making

- Conservation, height, speed, time.
- Speed to fly
- Leaving climbs
- Low saves
- Lines on glide
- Leaving the hill

Skills

• Thermalling

Observation

- Ground Speed
- Sources, triggers
- Instruments
- Visualising air
- Cloud shadows
 - Radio comms thermal calling,

- Team working/buddies: on the ground & in the air.
- Weather, aerology, energy of the day.
- Head / thoughts in the right place.
 - Confidence. Willing to leave guaranteed air and friends.

avoiding committee flying.

- Exploring out.
- Hunting as a pack for the climbs out.
- 2nd thermal en-route e.g. sitting above Park Rash.
- Consolidation at 3 or 4 thermals and planning for the day - airspace, coast, sea air.

Gear is irrelevant; they all glide similarly when heading downwind. Just be happy, trustful and comfortable in it / with it.

How does all of this get simplified to be usable in the air?

- In the UK stay in the air! You'll get blown there in the end.
- Take every climb to the top.
- Do not give up because of lack of patience.
- Be ready and flying early in the day.
- Have intent about your day a goal in mind.
- Reliable thermal triggers at hills / house thermals.

From our sites, what is the minimum height you can leave at? Can we create a set of simplified rules for this? Climbing multiple times to jack up to base?

What are the main routes out of each site – for example from Windbank/Hawkswick this would be to Buckden or to Gt Whernside. Can we map these routes out further -3^{rd} , 4^{th} thermal?

We hope to run a number of face-to-face sessions, most likely in The Red Lion in Burley-in-Wharfedale. If you attended the Pilot Exam sessions last year then you'll know where it is.

It's a work in progress so keep watching this space, if interested please text Pete 07795 426 748 to get added to the DXCA Telegram group and look out for Zoom session links being published on the normal channels for those that can't make the Red Lion.

Regards *David May* DHPC Safety Officer

Coaching Course "Debrief"

(19th-20th Feb) by Carl Maughan

As a "newby" to the idea of coaching someone, I really didn't know what to expect or what the course would cover, but as I'd been helped through from CP to Pilot by a few of the Dales Club coaches (thanks to all, past and present), I thought I should be giving something back, as well as knowing what not to say on the hill when asked, or even how to approach people who are struggling (been there!). So with a willing heart, pen and pad (and one eye on the weather) I was off to the outskirts of Settle to Knight Stainforth Hall, Camping and Caravan Park.

The course was **run by lan Currier and Mark Shaw, both Technical officers for the BHPA**, I believe from Pete Logan from a ropy start it ended up being oversubscribed, and 26 people attended in the end from clubs across the northern region, with roughly equal numbers from the Dales, Cumbria, Pennine and North Yorks Clubs, along with a few others from Cayley and Northern Skys. Around 1/3 being renewals the rest of us newby's, mainly Paraglider Pilots but with a few hangies in the mix as well.



A packed agenda followed covering legalities, how to conduct briefings & debriefings, the right way to set goals, some learning theory and touching on pilot physiology. Nothing too heavy, but a lot of (amazingly useful) ground was covered, mainly in a class room setting, but with some roleplay and group work, the roleplay at one point even provoked a hug to comfort a miserable pilot!

At some point during the two days Mark joked about picking a few unflyable days, well the weekend started with howling winds, yellow weather warnings and a (right) decision not to go the night before...! Then around lunchtime on the Saturday it started snowing, turning the local hills into a spectacular landscape, and a number of people worrying about getting home. So no



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worrying about flying then, or so we thought, as it turns out a few people did fly late that day..



The venue was excellent, and can thus thoroughly recommend both as a venue for events and camping (I was in a campervan), with good food, tea & coffee, and a bar for the obligatory debrief at the end of the day!

It was a great group event, and well worth a weekend, with some interesting discussions, a lot of learning (about my own attitude to flying as well), and good to meet some new and old friends in the (hopefully) post covid times.

Many thanks for Pete Logan for organising, and Chris for the Venue.



Carl Maughan



Pete was having a bad day saving his documents to the cloud...

By S & L Craven

DHPC Annual Repack

February is here again, and David's excellent repack event was here again, gathering at Ilkley's Grammar School. The event was well attended with 30 of us, mainly from the Dales club, but with members for a few neighbouring clubs present at well

Remember this was us repacking ourselves with experts on hand, following some reinforcement on why (not that we needed much following that youTube video



about the collision in Columbia - <u>https://www.youtube.com/watch?v=8Mcm5QvYsds</u>, incident is 2:30 in), and a couple of packing demonstrations, it was time to throw our reserve and repack. I always find it reassuring to know that it would have worked, had I needed it in anger!



https://gingernomad.co.uk/





Many thanks to Guy Richardson and Bernard (unfortunately I didn't catch your surname) from **Ginger Nomad** for the demonstrations, and being on hand for advice and missing parts. Both are licenced BHPC repackers. And thanks to David May for organising

Carl Maughan

The "Big Ears" technique

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Big ears is a simple and stable descent technique, it is easy to do it and should be learnt by beginners along with their first big flights.

How to do big ears

Look at **the outside A-line**. It's usually attached to a separate riser and often both the line and its risers have different colour than other lines and risers.



Still, it's better to follow visually the line and check if it's really the outside A-line. Sometimes beginners mistake the outside A-line with the outermost line of the paraglider – the stabilo line, which is usually a different colour, but this is used to clear cravats, not to do big ears. A deep pull of the stabilo line is dangerous as it can stall the wing.

After locating the outside left and right A-lines **grab them** as high as possible and **pull down** as low as your arms allow. The highest grab of A-lines may require stretching upward and even standing up your body in the harness. Wide range of pull is needed to collapse the wing tips properly and bring them in the stable "big ear" position. Too shy and insufficient downward pull of A-lines may just deform the wing and still keep the wingtips flying and give an odd feeling.

Don't be afraid, but confidently pull and fold the wingtips down. Even without watching, you can easily recognize the "big ears" by the sudden reduction of pulling force. It's considerable in the beginning (it's needed to reduce the angle of attack), but after the collapse point, below zero degree angle of attack, the airflow helps to fold the wingtips down and backwards. *As with many other paragliding manoeuvres, it takes more efforts to achieve them and less to maintain them*.

Symmetry or Asymmetry Big ears can be pulled both symmetrically or asymmetrically. The symmetrical pull is slightly harder as you have to overcome the internal pressure of the wing on both sides. The asymmetrical pull can be more elegant by collapsing one wing tip first and using the light roll motion and the momentary decrease of internal pressure to collapse the other wingtip about a second later.

For beginners an ASYMMETRICAL pull is recommended - in case the pilot is pulling the wrong line he can recognize the mistake early and additionally the glider experiences lesser drop in speed than with the symmetrical pull

With or without brakes The wide range of pull for proper big ears should be done without holding the brakes, as their pull may stall the wing. So, identify the outside A-lines, release the brakes, grab the A-lines as high as possible, then pull them

down one by one and hold them down. Many paragliders don't need too wide range of pull of the A-lines to collapse the wingtips, so your brakes can stay in pilot's hands while grabbing, pulling and holding the A-lines.

This allows quick recovery of collapsed wingtips (when landing for example) or preventing tucks (frontal collapses) in turbulent conditions. In the case of an aggressive forward surge of the wing, the quick pull of brakes is combined with the simultaneous release of the outside A-lines. This may open the collapsed wingtips and after a brake pull, the outside A-lines can be re-grabbed and pulled again to keep the big ears.

Increasing the big ears The size of big ears depends on the range of Aline pull, especially how high we grab them initially. Just after the collapsing moment the Alines will become slightly loose for a while and then it's possible to grab them higher up and pull them lower. An extreme version of big ears is pulling the outer two A-lines and letting the inner A-line and the central part of the canopy maintain the flight.

Controlling direction During big ears this is done mostly by energetic weigh-shifting but it's quite slow. Increasing the wingtip collapse on one or another side for higher drag helps but doesn't increase manoeuvrability much. High aspect ratio wings are much easier for directional control by weight shifting, compared with beginner's wings and tandems. Increasing the big ears (the folding of the collapsed wingtips) improves the weight-shift control.

Exiting of big ears is easy Just release the outside A-lines and the

wingtips should unfold and recover by themselves. The symmetrical release is slower as it needs more internal pressure in the canopy to fill each wingtip. So it's best to release one side first and a second later the other. Some paragliders may keep the wingtips collapsed even when A-lines are entirely free. Then, "pumping" with the brake on that side, with one or two pulls should be enough to re-open the wingtip/

Usage of big ears Big ears is a safe descending technique used by beginners and experienced pilots. The classic use of big ears is for **escaping cloud suck**.

The descent rate is 2-3 m/s but can be increased to 4-5 m/s when speed system is fully applied as well.

Big ears and the speed system technique is even safer as the lowered angle of attack keeps the wing away from stall. In normal flight, the application of speed system increases the chance of collapses and their severity. That's why we should first do the big ears and then fully apply the speed system.

For exit of this technique – first release the speed system and then release the big ears, but **be ready to re-apply the speed system** again if the wing stalls due to flying in rain or due to "pumping" the brakes for quicker reopening of collapsed wingtips.

It's not a problem to do the opposite – first release the big ears and then release the speed system. The higher airspeed when using speed system keeps the wing away from the stall and also keeps the internal pressure higher, which helps to re-open the collapsed wingtips.

Still, remember that staying long on speed system makes you more vulnerable to collapse – especially when you're playing with the A-lines and the leading edge of the wing.

Quick big ears may save lives by **preventing paragliders being lifted up and blown back** after takeoff. Some flying sites and conditions have strong wind gradient, which is invisible and difficult to predict. It's classic scenario to be catapulted upwards by strong lift and then blown backward by the strong winds aloft. Applying the speed system after takeoff, when still low over terrain, can be very risky because of collapse, but quick big ears can keep you low in weaker winds.

There is often plenty of lift when **top landing** and big ears is a useful descending tool together with descending in front of the hill or slightly behind. Mind that the use of big ears reduces your speed and penetration against the wind. Using big ears for top landings requires good practice of pulling and releasing them. The pilot should be familiar with pulling and releasing times and keep in mind that they may vary in different conditions.

Spiral with big ears is one of the best descending techniques, better than classic spiral because of lower G-force due to reduced surface. After pulling big ears, the pilot enters a spiral by massive weight shifting. It takes time to enter, but once in there is a plenty of spiral control by weight shift. Not all paragliders can enter a spiral by weight shift, high aspect ratio wings are easier and they're the one which mostly need it. In the case of spiral lock, your brakes will work just fine. Note that pulling a steep spiral dive with big ears puts more stress on your glider - in emergency cases it is the best descent manoeuvre, however bare in mind it could cause irreversible internal damage to the glider in the long term. Lightweight gliders are especially susceptible to internal deformations from increased loads.

Big ears is also a safety manoeuvre, especially for beginners, who don't know how **to cope with very strong turbulence**. Reduced wing span, aspect ratio and surface area make the wing less responsive to gusts and vortexes and make it more pitch, roll and yaw stable.

The increased wing loading makes collapses unlikely, but even if they occur the wing just drops and starts flying itself driven by its inductive ability. In case of an aggressive surge of the wing forwards, the pilot can release the A-lines and pull the brakes to prevent a collapse. This is easier if big ears are made together with the hands holding the brakes, but even with released brakes it is still possible to grab them or the last risers and stop the surge.

If the collapse has already happened, the delayed brake pull is still useful to push air inside the canopy and to re-open the collapse quicker. During the work with brakes, big ears may remain or may re-open and after stopping the surge or opening the collapse, the pilot can pull them again. Big ears may help in turbulence, but remember that they reduce speed and glide ratio, which might be needed to leave the turbulent zone and to reach a landing field.

Requiring big ears is also a sign to go down and land.

Big ear problems

AVOID BIG EARS IN RAIN, even if it's light. Rain drops build up on wing's surface, change its profile and turbolize the air flow. This may stall the wing without any notice. Especially modern wings with shark nose profiles, but it happened on old classic profiles too. The stall descent rate is significant, about 8 m/s, enough to break your back. The stall is quite stable, even releasing the big ears will not help to exit it. Applying FULL speed system should help,

but it takes surprisingly long time to make the wing flying forward again. If the pilot still decides to use big ears in rain, he should do them together with full speed bar and may need to keep it until the landing on the ground (*stalling from 10 meters over the ground can be worse than stalling from 500 meters*). Remember that rain is having an accumulative effect toward profile and airflow degradation. Prevention is the best cure. Don't be greedy and land before the rain.

Avoid big ears in clouds for the reasons above. Even the tiniest raindrops can accumulate and "distort" the profile. Spiral to avoid cloud if you must, but much better to fly straight to find sink. Again prevention is the key. Don't be greedy. It's not good for your health and your equipment.

Flapping of big ears can occur with or without speed system and is specific to each wing. It's just annoying and consumes your energy and concentration.

In Summary, big ears is an easy safety technique with many applications. A must for every paragliding pilot.

Nikiolay Yotov

General Notices

FOR SALE

Skywalk Spice XS 75-95kg 90 hours

EN C. Lightweight - 3.9 kg, cross country or hike and fly machine. https://xcmag.com/news/skywalk-spice-lightweight-en-c/

Lovely direct handling and brilliant ground handling behaviour. Plenty of life left in it and will not give much, if any, performance away to other gliders in the class.





Full Aerofix test done in May 2019 when the glider was at 70 hours. Porosity was at 190 seconds in the middle section. Well cared for stored dry & unpacked in the dark. £700. Test fly possible. Contact Pete 07795 426 748 or pete@logans.me.uk