

Flying Scenarios to Avoid (1)

I'm old enough to remember the first televised production of, The Hitch Hikers Guide to the Galaxy (1981) with the superb narration by Peter Jones. By miles the best version to date. If you're too young and had to be in bed by nine, then you'll have to contend with Corporal Jones in re-runs of, Dad's Army instead. What do they both have in common?



Yep, two simple words that could be usefully embroidered on all paraglider flightdecks.

Over forthcoming columns I'm going to deal with a number of fairly common iffy situations that we may find ourselves in, how to avoid them and ways to deal with them. This month I'll look at:

Getting blown back

If you fly a paraglider for long you will encounter this situation, so it's worth becoming aware of the signs, dangers and actions to best deal with it. Coming from hang gliders it's the single most worrying thing and one that used to have me feeling the most 'trapped'.

Paragliders have quite narrow flight parameters, in terms of airspeed it's often less than 20kph between trim (v/trim) and top speed (V/max) when accelerated (using lots of speedbar). Only balloons are below us in the food chain. Put another way top speed on an EN B will typically be round 48 - 50 kph at V/max, less on an EN A and more on an EN C or EN D. Much of the time we spend ridge soaring, which means pointing into wind and one field on your instruments should show ground speed in fact I feel it's so important to monitor ground speed that I have it on both my instruments and on several screens. Conditions change as weather changes come through, or a sea breeze encroaches; this mean groundspeed (into wind) needs to be constantly monitored because the implications for paraglider pilots can be profound.

Prevention is the best way to avoid such scenarios

If you think the wind is in the top 50% of you **and** your wing's limits then consider the following before launching.

- The shape and nature of the hill and the assessment of escape routes over the back and to each side. A concave shaped bowl (like Parlick - west) with ground dropping steeply away

behind offers less options than say Barkin Fell where you can fly off either end of the ridge to a broad flat valley and the back of the ridge is a more gentle drop off. Take advice from more experienced pilots.

- The take-off area is very likely to also be in the compression area in front of the ridge, hence it may feel and measure more strongly than it actually is out front of the ridge. If others are in the air, it is fairly easy to see how they are progressing (or not) against the wind. Every other glider whether in the air or on the ground (pilots) tells you something about conditions. If the wind has a lot of vertical component then you may progress forward better than you imagine – but it will test your strong wind take off technique. Wind tends to strengthen with height.
- If you choose to take off lower down a ridge or mountain – quite a usual practice in the mountains then you need to allow a big margin for the winds over the tops. The difference can be considerable!
- Know the weather forecast for the whole day so you have advance warning if things are likely to get more or less windy. If less, then it may be worth waiting; if more then be aware that you are flying in a time window and need to be extra vigilant.
- Check out the top landing area with a strong wind landing in mind. You are likely to find it prone to extra turbulence, and wind shears. Check also for physical objects like walls, fences, hollows etc., because a dragging could be a possibility. Check out also the bottom landing options – some are not good in strong winds and you need the third option.
- Plan C may be an out-landing some distance from the hill where you need both an escape route from the hill and a clean open and obstacle free place to land. I have used this option four times in the past year when both the usual top and bottom landings were ruled out by wave.

In the air

- Leave yourself a margin of safety, don't wait until your instruments read almost no ground (forward) speed. Simple traffic light system – consistently above 8 kph (Green) – I'm happy. 5 – 8 kph (Amber) – monitor closely. 2 – 5 kph (Red) – consider actions. These are speeds at trim where you still have speedbar reserves.
- The lower your groundspeed then the further forward you need to be as it buys you time and more options
- Speedbar will allow you to creep forward, but you are now eating into your 'extra' speed reserves. Avoid big ears – it is better to go up and forward then down and backwards unless there is a very marked wind speed increase with height. Personally, I would avoid speedbar when low and especially in strong winds.
- Different parts of the ridge can increase (funnel) or decrease (spill) the wind – consider whether you would be better placed on another part of the ridge.
- If you think you may have to escape the hill place yourself in the best place to do so.
- Seriously work through your pre-planned options for escape routes and landing options.
- Not all options are necessarily landing ones – see next

- If it is thermic then expect short spells of strong wind. Give it a few minutes and see how your groundspeed changes. If wave induced then the wind strength can vary a lot with your position in relation to the wave, but less with height.
- Don't leave it too late! Height gives you options – the lower you get the more restricted things become and the less freedom of manoeuvre you have.
- If you've never left the hill before, then flying way from it may feel the scariest option and it's easy when stressed to go for the known top or bottom options – however, it is often the safest and I've used it many times over the years as my get out of jail card.

Strong wind landing

- Probably the most important part is where you choose to land. Open and big is good. Avoid hilltops, narrow or tight valleys, obstacle infested areas. All pretty common sense.
- Have a properly considered approach, stay well upwind of your landing area and be prepared to have zero or negative groundspeed. Incidentally, your GPS doesn't know forward from backwards so use ground reference points as you get lower.
- Most times landing out, well away from the hill is quite straightforward as the wind speed can be a lot less than where you've come from. If it is windy then expect a shear layer at around 40 – 100' and some improvement in forward speed. Be careful through any shear layer and catch any tendency to surge.
- Know how to kill the energy in the wing fast! Using C risers (on a three or four liner) is best – avoid using brakes or A's. Not a bad idea when ground-handling to practice not just inflations, but quick, emergency deflations.
- Bundle and secure the wing as a priority before relaxing – they can re inflate in a second if you're not careful.

As with any situation where you get outside your comfort zone the important thing is to stay calm, think things through and

DON'T PANIC !

The **coaching days** will begin as soon as the weather relents. Following two weeks of decent flying weather in late Feb/early March we seem to have slipped back to huge snowdrifts and biting easterlies. I'm confident Spring will arrive by June, but I have a gut feeling this summer will be different to the last three – take that as positively as you will. Watch the shoutbox and forum for details and thank you to the 14 pilots who have registered.

Several people are taking **rating exams** at different levels. Congratulations to David Hedley who recently attained his Pilot rating.

Thanks to all those pilots (I think about 23 ish) who turned up for the **Joint Coaching Day** with the CSC, held recently at Staveley, Kendal. I expect a lot of xc activity to ensue this Spring judging by the

pent up aspirations that were evident. My Powerpoint presentation can be downloaded from the coaching section of the club website.