



## Throwing your reserve

Not many of us have had to throw a reserve and I hope that you never have to do this “in extremis”. However the need does occasionally arise and Rob Kingston has done this twice. His latest throw was earlier this year and he has very kindly written about his experience to share the details with us. I think that what he has written is very illuminating not only on the mechanics of it, but also on the effect on the mental side. Many thanks Rob for sharing this with us.

“I ended up throwing my reserve whilst flying XC from Malvern Kettle Sings on 26th May 2023, which fortunately ended well. I had previously thrown a reserve in Spain over ten years ago, which was traumatic, caused me to almost give up the sport, and which still troubles me to this day.

Here are the details of the current incident.

I was flying an Ozone Zeno ML (EN-D) at 107kg AUW (near the top of the weight range, certified upper weight range is 110kg). I was current on that wing having flown 35hr on it in the previous three months, and having flown over 500hr on it previously. The wing had been re-trimmed in October 2022 and had been fitted with new Baby-A risers (as the risers shrink, which can't then be accommodated by adjusting the lines). The line set was new 150hrs previously. Porosity of the wing was not known.

The reserve was bought new in September 2022, and was an Independance Ultra Cross 120 (120kg max pay load) square (non-steerable) fitted in to a Swing Race Connect Lite pod harness, which I had flown 70hr on. This has an integral RH reserve pocket. I generally choose my reserves a reasonable bit larger than my flying AUW. I had enlisted the help of Tim Bishop (qualified packer) back in the autumn to double-check that I was fitting the reserve in to the harness properly and to check that the soft shackle was correctly connected, as I had never used one previously.

So back to the flying. I was about 12km over the back of the hill, wind was about 10mph, and a reasonable number of wings had left the hill at a similar time, but we had to get across a reasonably large blue area. I was down to 1500ft, searching for some lift over the back of a large area of poly tunnels which I was confident would get me something! I went through a lot of heavy sink and was on half bar, and then hit some fairly ballistic lift, lost most of my wing on the LH side, which caused a full cravat, in that the LH half of the wing had gone right through the lines such that the tips were touching, and the cravat was pretty well inflated. I was now at about 1000ft above the ground, sat upright, legs bent, heavily leaning to the inflated side but couldn't stop a slow rotation to the left. Descent rate was about

3m/s. I tried pumping out the cravat and using the stabilo line, but it was stuck in solid. I knew that if I pulled much RH brake the wing would stall, which would have been my action if I was, say, 1000ft higher, but I made the decision that I wasn't high enough to mess about. Thought a bit longer about my options, couldn't see any power lines nearby, then pulled the reserve. RHS handle, threw it wide on the RHS, and it was very easy to avoid the open wing. Opening was very quick and once under the reserve there was absolutely no oscillation. Tried very hard to collapse the paraglider, but that was only partially successful - tried hand over hand pulling in the lines, but it is damn difficult, and at about 5m/s descent rate you only have a minute, from 1000ft, before you are on the ground, and that starts being your overriding consideration.

There's a lot of things you could hit, and I had no control over any of it! I always look on the positive side though; it's far more likely that you won't hit anything! So, nearby there was an orchard/hops with wires and poles, a farmhouse, a barn, but just when I thought I was going in to a tree or on to a 20ft high hedge, I just cleared it all and landed in a field of buttercups. I was ready and pulled off a pretty text book PLF, knees together and bent and elbows tucked right in, although annoyingly I clipped my knee on a dead tree trunk as I rolled. The reserve and wing landed nicely in the grass next to me. I got out of the harness, and ran around as there were wings above me and I wanted them to know I was ok. I bunched up the kit, and answered a Telegram message from Tim Penthreath 2000ft above me, asking how I was! Graham Richards was low on his paraglider and chose to land nearby, and then come over for a chat.

I posted my location on Telegram and that I had come down on my reserve and everything was fine. I phoned 101 (police non-emergency) to report that I was fine in case anyone had phoned it in to the emergency services, and then spent 10 minutes explaining things to the operator and giving them my What3words location (as that seemed to be the only thing that they understood). Stuart Mason came and gave us a lift back to the hill. So ended an eventful flight from Malvern. When I got home I filled in a BHPA incident report, and then had a lie down in a darkened room.

So what did I learn, or at least reacquaint myself with?

Firstly paragliding is a sport that has dangers, and every now and then it will bite you. Having said that, in 16 years of flying in the UK I've never got close to thinking about throwing a reserve before, but clearly it can happen!

My experience level and currency for the wing I was flying was probably ok (I fly typically over 100 hours per year, predominantly on XC flights). The wing was well serviced, I was flying it in the certified weight range, and I was flying 'sensibly'.

The reserve did the job, it was new, it was large enough and I knew that it had been fitted correctly in to the harness.

I felt I did the correct things when the wing collapsed, I didn't panic, I was rational and realised that it was probably not sensible to try to stall it out at a low altitude. Making the decision to deploy the reserve didn't need to be made in a hurry, but felt preferable than to come down under my collapsed wing. Reserve deployment was easy, in this case - it certainly will not always be like that.

Once under reserve, collapsing the main is hard and you may not have much time to do it. If I had a steerable reserve, which I don't, failure to collapse your main would nullify your ability to steer anyway. Having a main in tow also means that you have more material to catch on branches, or power lines. Possibly flying with 'quick outs' to kill the main wing (or carrying a hook knife) would be sensible especially if you are going near power lines.

A good PLF could save a broken ankle, dislocated elbow, or worse.

It always takes a while for my brain to fully make sense of things when something like this happens. I didn't fly for about a month, not that I was scared, it's just that I felt I needed to do something else to get away from it all. In that time I went over all the details of the incident to make sense of it all, decided everything was 'ok', and then got back to flying. I have subsequently changed my wing, which was something I was planning for the end of the flying season anyway.

Happy flying 😊”