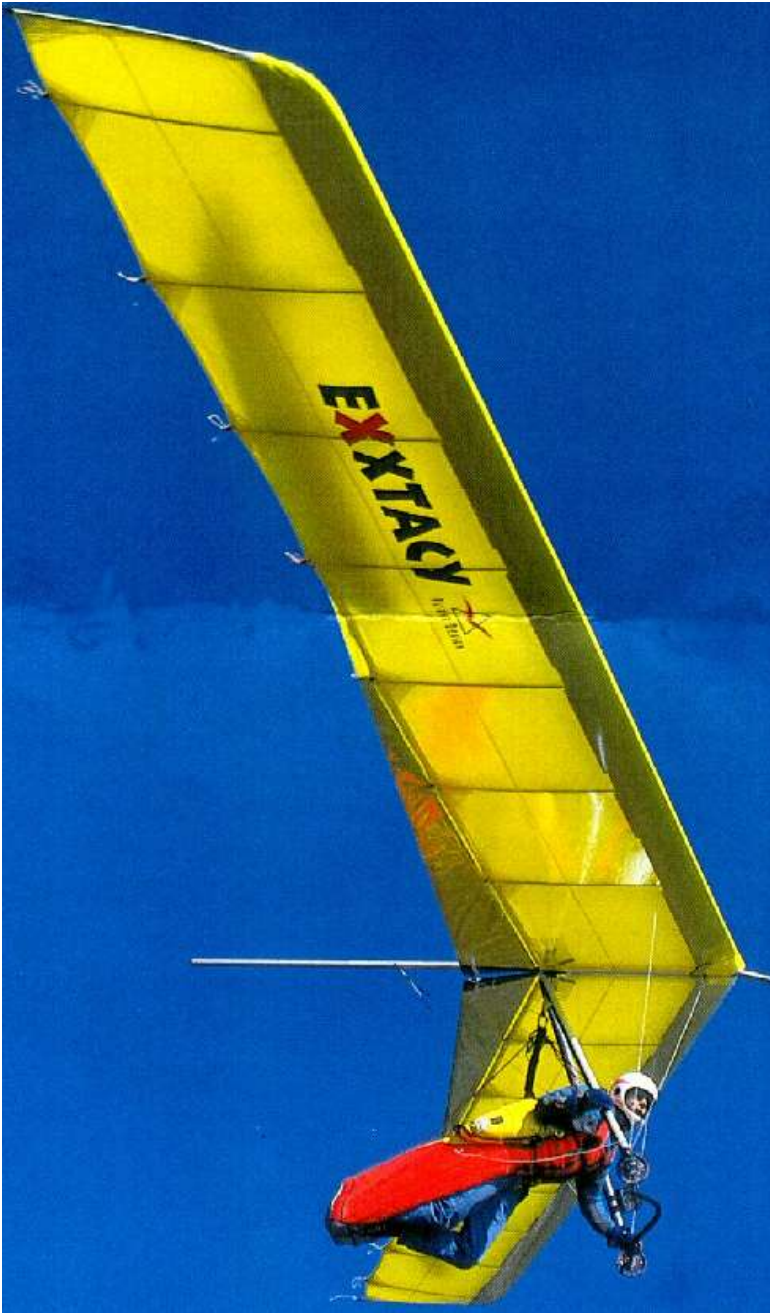


First Impressions of the Exxtacy Hang-glider from Flight Design

In case you aren't aware the Exxtacy is the new "rigid wing" from the German company Flight Design. It is based around a carbon composite cantilever wing. It is controlled in pitch by weight shift and in roll by spoilers attached to the top surface and activated by weight shifting a conventional A-frame. In addition to spoilers it has flaps on the inner trailing edge of the wing. This should allow for L/D ratios from 17.5:1 down to 5:1 with the flaps fully extended.



At first I was concerned that it would not be suited to the small sites we have in the UK. But I needn't have worried, it is well suited to our small windy hills and isn't the unturnable, unlaunchable, unlandable monster some where expecting.

For my first flight the day was far from epic, and the site was a small one that I would normally avoid flying - Milk Hill. The day was ridge soarable in about 10 - 18 mph of wind.

First up I flew my own glider whilst Christoph from Flight Design flew the Exxtacy. I was kind of disappointed that he didn't get any higher than me. I was hoping that a better sink rate would show up in the ridge lift. This earlier part of the day was good for a cloudy day on this site, with 400' feet above the hill on offer in ridge lift and weak thermal.

Where the Exxtacy did shine was on the glide, granted we didn't do much of it, but one incident stands out. I'd cored a weak blob to 550' (see I am talking weak here :-). Christoph flew in under me and took the thermal to the same height but about 100 yards downwind. By this time I was pulling forward out in front of the hill. I glanced back just to check that he

wasn't still climbing :-). and saw him gliding in my direction at about the same height as me. I continued to glide out. He flew over the top of me with about 100-150' of extra height. Quite impressive in the minimalist conditions we were flying in.

The wind then switched slightly and 100' at 100 feet was a good height, also the pg's started to fly making things very restrictive indeed. I waited hoping I'd not lost my chance of a flight.

Eventually things started to lift a bit and I nervously launched hoping it all worked as advertised. My first mistake was not flying with my own vario. The seemingly random beeping of Christophs told me nothing in my tense state. But it flew, and it flew well, I 360 under a Kiss that appeared to be thermalling but neither of us went up, but the turn co-ordinated easily. It was a short flight as the lift soon died and I was keen to try the landing. I top landed into an easy 10 mph with full flaps - no bother. I was relieved. It hadn't been much of a flight but I was looking forward to going up again, this time with my own trusty Lindsay vario.

30 minutes later I was off again and soon was above the four other gliders scratching the hill. Maybe it does have a better sink rate. This time I was relaxed and found it really fun to fly. On occasion I'd over bank a turn but it soon came back. I was pleased to see that I could turn just as tight as on my RamAir (admittedly not the easiest glider to roll). Rain soon put an end to my second brief flight but I was impressed, very impressed.

The next time I got to fly it was in Wales on Merthyr Common, a much bigger site with a mile of ridge and lots of sky to play with. It was quite a thermic day, typically rowdy for Merthyr. A good test.

It was blowing 20+mph on launch but the Exxtacy was easy to ground handle, which is good as there are no side-wires for a ground-crew to grab. The spoilers auto-magically correct any wing-lift with minimum input from the pilot. Weird from a British view point was that glider must for all practical purposes be rigged on the A-frame. This kind of thing doesn't come easily to us Brits. But unlike a conventional HG there is little flex in the wing, so being turned edge-on to the wind doesn't stress the sail to the same degree as a "normal" HG. Once rigged, with a harness weighting the upwind tip slightly, the glider sat calmly in the 20 mph wind.



Launch was again easy and once in the air I soon lost any thought that I was flying anything strange, it was all so familiar and easy. Shift your weight and it turns, just like hang-gliders should but often don't! Pitch was light with a slightly vague feel to it at speed.

I couldn't say that it climbs better than anything else in thermals but that may just be down to my technique, time will tell. With only 30 minutes air-time on it I was climbing as well as I would have on my Ram on which I have 150 hours.

I was first to cloud-base at 2400 ato by taking the thermals back behind the hill and easily gliding forward. I've no ASI so I've no idea at what speed I was gliding, but the straps on my Keller Hi-Tech harness were vibrating annoyingly, something they have never done before. Must get an ASI.

Flying was stress free, very little effort was required to initiate a turn but a little high-siding was needed on occasion to maintain the correct bank angle. There was an almost complete absence of yaw.

On top-landing I used full flaps but found I had to adjust them on approach as I was in danger of undershooting. Adjusting the flaps required flying one-handed but this wasn't much of a problem as the glider continued to fly straight. Try that on a Kiss!

I'd be interested to here how Exxtacys land in nil wind. The stall is "deep" rather than the usual - nose down type. My guess is this reduces the tendency to nose-whack, but that's just a guess. I'm not keen to try a nil winder just yet.

In all I had about three hours air-time, the final flight a simple ridge soar in 15 mph evening winds. It was easy to stay 100' above the three other hang-gliders in the air so maybe the sink rate is slightly better. Usually me and the Ram are somewhere near the middle of the pack.

Comments from other pilots later was that the glide looked fantastic and that the were left standing for speed. Maybe the manufacturers 17.5:1 figure is accurate, I'm normally sceptical of such claims but I think it can't be far off. They also commented that it look so smooth when turning in thermals, and I must say it was real easy to maintain a nice flat circle.

Everybody on the hill that day had a good flight but I had the biggest grin. The worst part is that the glider isn't mine and I have to give it back soon. The waiting list is two to three months.

There is a downside, the weight - about 40 Kg and - the bulk in the bag. When rigged the weight is not a problem, but it is very awkward to man-handle in its bag by yourself. Folded it is about the size of two conventional hang-gliders side-by-side. I have managed to get it on and off my Trooper by myself, and onto the rack in my garage, so with a bit more muscle and better technique it shouldn't prove too much of a hassle.



Then there is the possibility of damage. It has to be treated with much more care than your average HG pilot is used to giving his/her wing. The carbon loops at the nose could easily be fatigued if the glider was banged on the ground whilst still in the bag. And those leading edges...Umm a new ball game I think.

The sail work looked good, helped by the very simple cut required by the design, but whoever cut out the stick-on logo and lettering should be given a new pair of scissors and some reading glasses! Overall the quality is well up to scratch, though it doesn't quite have the WW or Airwave level of detailing.

Pilots interested in a demo flight should contact Paravion on 01672 861380. Chris Jones