## flight test: Advance Xi DAVID SOUTHERN REPORTS

Many years ago (and too many to mention) I recall watching, and being impressed by, early paragliders descending from the hills around Kitsbuhel. As an aspirant (and subsequently bang-average) mountaineer, it seemed to me that this mode of travel eliminated the most dangerous part of Alpine climbing, namely the descents.



Fast-forward a few years into the early 'noughties' and I had become a Pilot-rated paraglider with ambitions to travel with my descent wing to the greater ranges. The trouble was, the pack on my back, without any climbing gear, weighed in at around 20kg. Not ideal for long Alpine walk-ins, let alone the ascents themselves. In those days my DHV2 wing weighed over 7.5kg and the early pod harness even more than that. And the bag, at 130 litres, was huge. Hardly ideal for shinning up gullies and front-pointing over bergschrunds. It seemed then that the two sports were incompatible.

Now many, years later, it is perfectly possible even for those pilots of more 'ample' proportions (me) to pack a glider with all the gear into a 75-litre rucksack (roughly equivalent to the size of my old Alpinist pack) and weighing less than 10kg – indeed 7kg is easily attainable for lighter pilots.

This trend can be put down to technological advancement in lighter materials for each and every component: reserve, harness, bag and glider. It would seem however that one of the principal drivers has been the X-Alps. Rather as

Formula 1 technology trickles down to saloon cars, the X-Alps had done likewise for paragliding. It has even spawned, or at least been a catalyst, for the thenembryonic sport of hike-and-fly.

15 years after the X-Alps started, a number of manufacturers now offer ultralightweight versions of their standard gliders. Until recently Advance had their highly-regarded Omega X-Alps 2 (EN D), the Pi 2 (EN A/B) and the Pi-Bi tandem. They did not, however, have an ultralight in the high B category.

In late 2017 Advance began to look at this gap in their range and, using the Iota 2 template (already a semi-light glider), tried manufacturing it in light cloth. After some testing the design team felt that the results were not optimal. Given their

meet those challenging goals. What then are the differences, apart from cloth, from the Iota 2? The answer is many! For a start, the glider has two fewer cells than the Iota 2 (reviewed in October 2018 Skywings). This is somewhat surprising as

Not surprisingly, a lot of thought has gone into where weight can be trimmed back without compromising longevity and security. In the field Advance have found that the uncovered Edelrid Magix-pro lines have a far better shrink resistance than



success in the X-Alps with the OXA they knew that their design goals could still be met, but by going back to the design stage. Crucially, Advance wanted to create a glider that would sit nicely between the Pi and the OXA; not quite as performant as the OXA but with even more comfort than the Iota 2. The market for the Xi was intended to be experienced EN B or above pilots who wanted a glider for everything: XC, hike-and-fly, soaring, travelling, etc.

Eventually, after exhaustive testing, Advance found the mix of design features they wanted and the Xi was deemed to the design team were pleasantly surprised to find that it would outperform, slightly, the Iota 2.

Cells apart, the key visual difference is the riser system. There are no C-handles, though pitch control when accelerated is facilitated by the pulley connecting the Cs to the As in the same way as the lota 2. A nice touch is that there are no maillons on the risers. These have been replaced by Dyneema soft links which have the added benefits of being lighter and stronger. It also has dynamic brake poppers and not magnets. I much prefer poppers.

the alternatives on the market, significantly reducing the likelihood of having to retrim. As an aside, I recall a well known local Pennine pilot who used to retrim his lines by stretching them from a gate post in Parlick landing field!

The line consumption has been slightly reduced, which you would expect with two fewer cells, and of course the fabric, which all in all means the Xi weighs around 1kg less than the Iota 2, depending upon the size – I flew the 29 size at 115kg all-up. The fabric is a mixture of 27 and 32g Porcher Skytex and the integrity of the all-



important internal structure is maintained by sliced diagonals. Also, critically, the C wires have been shortened by comparison; as a consequence the glider packs more compact than its 'semi-skimmed' stablemate, a big consideration for hike-and-fly.

Late last summer I was fortunate enough to meet with Valéry Chapuis of Team Advance, and a long time flying friend from the Pennines, in the stunning Swiss town of Interlaken in the Bernese Oberland. Valery had kindly brought one of the first production Xi models with him for me to try. Anyone who has ever flown there will know that the town has several take-offs and a huge landing area right in the centre, and probably one the busiest tandem operations I have ever seen. Valéry wanted to take us to a quieter take-off away from the throng and we headed up to the Niederhorn (1963m).

As we arrived at the top of the cable car, orographic clouds were beginning to form on the south side of the mountain between us and Interlaken. Of more concern however was the light tailwind coming over the back. We all set up quickly in case the cloud was going to envelop the hill, and I was first off.

It's some time since I flew an ultralight glider specifically designed for hike-and-fly and I immediately noticed the ease by which the glider came up on my forward launch despite the tailwind. At this time of the summer I had quite a lot of time on an lota 2 and I expected that the Xi would be very similar to fly. I was wrong. The feel is quite noticeably different. This glider is most definitely not a lightweight Iota 2.

As I flew through the wispy orographic cloud forming on the front of the hill, I found the band of lift in its lee and had 10

- 15 minutes just playing around, getting the feel of the Xi and trying to compare it to the Iota 2. I dialled in really quickly, probably because I particularly like the feel of ultralight gliders generally – because they have less inertia than heavier gliders they tend to be more responsive to turbulence and hence livelier, but settle down quicker. I found the glider playful and responsive to brake input. From the Niederhorn to the centre of Interlaken is quite a long glide, but I still came in high over the town and was able to do some quick wingovers and light spirals.

The wing is playful and responsive, dropping into spirals easily. Brake travel is as you would expect on a B glider, and brake pressure is quite light. Big ears are easy and come out without pumping. Landing was a cinch. As I bunched up to pack at the edge of the busy landing field, local pilots started to come over to have a









look at this new and hitherto unseen glider from Advance, from just down the road in Thun. The glider drew many envious glances, especially when I was able to show how compact it could be packed away.

The next flights we had were off Beatenberg, closer to Interlaken and the favoured tandem take-off. This time the afternoon thermals had started to work and I could get a feel of the Xi in more active, punchy air. I found that this was where the glider does excel, in that overall it feels quite mellow and gives a very pleasant ride. Advance say that they wanted a glider which was easy to control in difficult conditions; this is the DNA of the OXA coming through because these gliders are intended for adventures in the big mountains. The last thing an adventure pilot wants is to get sudden jolts through the risers, etc. The glider bites

into thermals and climbs really well in strong and weak thermals, indeed as well as any glider I have flown in recent times.

After returning to the UK from Switzerland I had a number of flights from local sites, in varied conditions from nil-wind thermic to borderline howling, chopped thermic. The glider performed really well in all conditions. Yes, you do have to be aware that it is ultralight, and on windy take offs more vigilance is needed. The same applies to rocky take-offs: care has to be taken with the ultralight cloth.

However for me, Nirvana in paragliding is to have a safe, performant glider capable of 100k flights, enjoyable to fly in all conditions, to take on great Alpine adventures. One that is compact and light  $\dots$  and keeps you out of the clutches of the chiropractor. The Xi is as good as it gets!

