

Icaro Paragliders was founded ten years ago by German Icaro 2000 hang glider importers Wolfgang and Vera Kaiser. Their aim was to keep the new company small and cost-effective and to develop top-quality gliders, harnesses and emergency parachutes. Icaro continues to develop and build distinctive gliders at their Alpine base at Flintsbach near Munich. Their range, designed by Michael Nesler, includes the Cyber 4 beginner wing (and the Oxygen lightweight version), Wildcat LTF/EN B, Maverick LTF2, Twice tandem, Nikita acro wing and GTO competition wing. Their products are at the top end of the market, being very well made with more expensive materials than some. Despite their original links with the Italian hang glider manufacturer Icaro 2000, they now have no connection with them.

The Wildcat is Icaro's latest offering in the hotly contested LTF/EN B market and replaces the Incanto. It is available in four sizes covering a weight range of 57 - 125kg. The glider is supplied with a rucksack, inner bag and riser bag, compression strap, a comprehensive manual, speed bar and a nice T-shirt.

Construction uses Porcher Marine 9092/9017 E85a and E77a on the top surface, 9017 E77a on the bottom surface and a mix of 9017 E77a and E29a on the ribs and internal construction. Main suspension lines are 2mm Edelrid Aramid on the As and Bs with 1.5mm on the C and D lines, thinning to 1.5 and 1.3mm respectively for the mid lines and 0.8mm unsheathed Liros Dyneema for the upper lines.

Main brake lines are 2.1mm Dyneema thinning to 1.1mm Aramid. The brake lines across the whole trailing edge pass through small rings attached to the trailing edge about 2cm away from the line anchor point, which Icaro call the Brakeline Tensioning System (BTS). When any brake is applied it has the action of squeezing the trailing edge as well as deflecting it down, increasing brake effectiveness.

The underside of the leading edge has in effect a double layer of material, the outer one slightly less tensioned and open at both the front and back. I think it works a little like a leading edge slat on a conventional aircraft, but whereas slats work to prevent stalls at high angles of attack, the Performance Airintake Flap (PAF) system is activated when the angle of attack gets way too low such as during an asymmetric collapse. This improved airflow into the leading edge has allowed Icaro to reduce the size of the cell openings beyond that normally found on an EN B glider, which of course cuts down the overall drag and improves performance.

The bag is well designed and light and rolls up nice and small. It's very comfortable and takes a large volume; I flew the glider with a Woody Valley Peak harness which packs up fairly small and the bag would easily take a lot more volume. The only negative is that the inner bag is a little on the small side, forcing you to fold the glider quite small or use a concertina bag.

The ground handling is very good. Using just the main As is the most effective launch method; there's a slight tendency for the glider to horseshoe if all the As are used. The wing tends to come up at a progressive rate and the glider remains well damped and controllable even in a strong breeze, unlike some high-end EN B gliders which can come up very dynamically with enough energy to lift you off the deck if your ground handling is not up to scratch.

My first flights on the Wildcat were made early one spring morning on a very grey and dull day when it was forecast to be blown out later and for a few days to come. This gave me the chance to test the glider in smooth conditions and I was impressed with the accurate feel. It's a glider that any reasonably experienced pilot should feel very comfortable with almost instantly.

Interestingly, a few days later I got to fly the Wildcat for the first time in thermic conditions and I found my feeling for the glider was no longer so clear cut. The glider didn't do anything it wasn't supposed to, and now I have a few more hours on it in thermic conditions I struggle to recall what my misgivings were. All I can say is that if you get the chance to demo the glider, don't make snap decisions based on one short thermic flight but give it a chance. The handling is subtly different to what I am used to, but let me emphasise that it's not in any way bad. Later I found myself flying in strong, rough conditions which kept many on the ground, but the Wildcat gave me the confidence to just get on with the flying - just as this class of glider should!

The brake travel is surprisingly short for an EN B wing, and stalling the glider while ground handling is easily done without the need to take a wrap. The glider falls back quickly and cleanly - the BTS clearly works well!

When top landing and mushing in with lots of brake I found the Wildcat would fall back into a full stall, however there is plenty of warning and it shouldn't catch any one out. Brake pressure is average in normal flight, building up progressively; when thermalling it is reassuringly positive without being too heavy.

Trim speed is stated at 36 to 40km/h depending on size and loading, and maximum speed is simply quoted as 50+km/h. Measuring the airspeed with a speed probe I achieved a consistent 39km/h at trim and 50km/h accelerated, all while flying the Medium Wildcat at close to the top of the weight range.

It's been a while since I have flown a glider with magnetic poppers for the brake handles. The Wildcat uses bigger magnets than I have seen used before and I was impressed at how well they work - letting go of the brakes in flight normally sees them snapping back in place, a small but nice touch.

Big ears have their own separate riser and work well. The ears come out on their own within a second or two of release, and very little pressure is needed to keep them in. The stabilo line is a different colour to the rest of the lines but its dark hue doesn't help it stand out against the brightly-

specification

Model	XS	S	M	L
No of cells	52	52	52	52
Span (projected, m)	9.14	9.74	10.15	10.66
Area (flat, m ²)	22.60	25.71	27.90	30.76
Aspect ratio	5.5:1	5.5:1	5.5:1	5.5:1
Line diameters (mm)	2/1.5/1.3/0.8			
Glider weight (kg)	5.6	6.2	6.5	6.9
All-up weight range (kg)	57 - 75	65 - 90	80 - 110	100 - 125
LTF/EN certification	B	B	B	B
Guarantee	Three years			
Price	£2,499	£2,499	£2,549	£2,579

UK importer

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ALL PHOTOS: ICARO

coloured main lines. I can't help but feel that having the main lines darker and stabilo brighter in colour would be a more helpful contrast. Admittedly it's a small point, but perhaps a important one when everything hits the fan.

Initiating an asymmetric collapse by pulling down the full A riser on one side had minimal results, with just a slight roll and very little change in direction. Doing the same while pushing full speedbar resulted in a little more roll initially towards the collapsed side but still very little rotation. The Wildcat reopens at a moderate rate with no big dramas. It drops into a spiral dive at a moderate rate, but exits easily just by releasing the brake without too big a surge or any real need to damp it.

Although the Wildcat is not rated for powered flight I thought it would be interesting to try it with my little RAD paramotor. Suffice to say there were no problems, and although not as quick as a Reflex-type paramotor wing it was very useable and pleasant to fly with the motor. The motor's extra weight further crispens the handling and I had a lot of fun on the descent, throwing in nice big wingovers and spirals.

Measuring glide ratio and even sink rate is notoriously difficult to do accurately. Compared to a few other high-end EN B gliders I feel the Wildcat possibly loses out just a touch on both counts, but certainly not by much. However it more than makes up for this in its accuracy and agility. The best sink rate in the world is of no use if you can't stay in the thermal and climb!

Interestingly this observation ties in with a brief exchange of e-mails with I had with Wildcat designer Michael Nesler. He puts great emphasis on the fact that one of Icaro's design goals for the Wildcat was to make an easy-flying performance machine with great thermalling ability. I would say they easily achieved their goal. Summing up, I'd describe the Wildcat as a very good representation of the state of the art in EN B gliders. It's perhaps just short of the very top of the class, but more than makes up for it by being a solid and practical XC machine which won't scare the willies out of any one flying it.

importer's comment

It's always good to hear the reviewer echo what we've heard from other pilots. I especially like a really good, agile XC wing that doesn't scare you; it makes flying so much more fun.

STEVE ELKINS, AVIAN LTD

