



ICARO SITTA

An EN-D hike-and-fly wing – surely a contradiction in terms? Charlie King finds out...



Icaro Paragliders had something of a rebirth in Spring 2015. With the recent departure of Michael Nesler as their designer and a fifteenth anniversary to celebrate, they unveiled a bright and funky new look at the 2015 Thermik show. "It's all about style", their website proclaims. Their brand centres on their logo, a stylised edelweiss from which the wing patterns are taken, and they use bold, bright and contrasting colours.

The Sitta is a hike-and-fly and mountain wing. Icaro say it's for pilots who want a very safe but fun wing, with a small pack volume and low weight. It is based on their freestyle wing, the EN-D Aquila, and like the Aquila, is very agile and dynamic.

Because of this, the Sitta is not recommended for beginners, but it's OK for B and C class pilots, Icaro say. It is also not intended for full-on acro – it's a lightweight wing after all. Pilots should stick with the fully reinforced Aquila or Nikita 5 if they want to do that.

The Sitta is made in three sizes: 18, 20 and 22m². The two larger sizes are certified EN D, with the only D on the test report arising from its need to be flown out of a spiral dive, a trait that was noted on the report for the 20m² wing when it was flown at the top of the weight range, but not at the bottom.

The 18m² size is load tested for 65-90kg, and at 3.3kg it won't put you off a walk up a big hill. It's

▲ EN D?

"Look at the report" is the advice if you are concerned about the D classification. The wing gets a single D – because it needs to be steered out of a spiral dive. The rest of its behaviour is that of a classic intermediate, which is why it's a "B in the D class".

◀ HIKE-AND-FLY

The wing is based on a freestyle wing. Icaro wanted to make a lightweight wing that is also agile and dynamic. It's aimed at intermediate and above pilots.

All photos: Charlie King / Marcus King



▲BUCKLE UP

"Childishly colourful but totally serious about its purpose." The rucksack is well thought-out and incorporates a good padded carry system and hip belt. The buckles on the harness are simple to use and pass the "brainless at altitude" test

►BACK PROTECTION

Fit the airbag on the Apus harness in the comfort of your own home. The straps need threading and require a bit of patience

not the lightest wing out there – the Eiko 20 we tested in issue 167 is just 2.45kg and the smallest AirDesign UFO single-skiner is an even teenier 1.6kg. But there are choices and compromises to be made, and the Sitta is made with the slightly heavier and more resilient Skytex 32 on the top surface, with 27 on the under-surface, and they have chosen to use sheathed lines which are easier to sort and less prone to tangling or catching on plants and rocks, and more durable than unsheathed lines. All these things are useful attributes for a glider intended for wild mountain launches.

Icaro make their own harness range too, and they sent us an Apus, their reversible hike-and-fly harness, to test alongside the Sitta. So let's take a closer look at the kit and go try it out.

The Apus

The rucksack is bright purple and red with blue logos, childishly cheerful but totally serious about its purpose. It's a well thought-out 'sack, with a tall

slim shape that keeps the load close to the body, and a good padded carry system and comfortable hip belt.

It has plenty of adjustment in the usual places, so you can pull the load in close to your body and lengthen or shorten the shoulder straps to adapt to your height. The waist belt does up small enough for smaller people – not always the case with PG rucksacks – and the back is nice and long for tall people.

The good back length means the hip belt does up on the hips rather than squeezing your breakfast, which is a relief. Sliders on the chest strap mean you can position it to suit your morphology, and there's a built-in whistle on the clasp.

There's plenty of room for stowing all your stuff for a hike-and-fly. The Apus is designed to accommodate up to a 24m² wing, and the 18m² Sitta fitted inside with ample room for helmet, spare clothes, camera etc. If you do need extra room it has lightweight elastic bungees on the top of the pack to stash extra clothing, and comes with

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a detachable net that hooks onto the top of the sack for carrying a helmet externally. The hooks seemed quite open, and you need a full bag and a big enough helmet to keep it all under tension – with a floppy bag and my mountaineering helmet it seemed in danger of falling off.

There is no provision for carrying a rope, as there is no lid to stash one under and the elastic bungees are not designed for heavy items. But there are plenty of pockets – zipped and elasticated – for organising your small items, with elastic cords to keep tall items (eg walking poles) in place above the side pockets. There's a dedicated water-bottle holder on one side, and a drinks tube hole for drinks-pouch users, accessible in both rucksack and harness modes.

Hiking up

The rucksack is very comfortable to carry. It's compact and slim, with good structure in the back that keeps its shape perfectly and allows no awful load sagging. You can adjust it to your shape, and the back padding has an air channel which helps aerate sweaty backs. There are no compression straps, but its narrow cut, which is designed to accommodate the Sitta in its specially designed stuff sack, means no compression is necessary.

On launch

On launch you simply flip the rucksack inside out, and there's the harness – ta da! It has no seat plate, but two shaped leg-pads offer good support and the back is lightly padded and very supportive. The lightweight aluminium buckles thread through each other, and there is a strap to stop your legs from straying too far apart. It's all very obvious and straightforward to use – I think I'd trust myself to get into it correctly with high-altitude brainlessness – and is very much a 'proper' harness, as opposed to a lightweight budgie-strangler. Its spec includes a magnetic speedbar keeper, a front-mount reserve pouch, back protection and an optional airbag which attaches via a clip and four straps. With the airbag in place, the Apus harness is EN certified for loads up to 100kg.

The back protection comprises a shaped 3cm-thick foam pad and a separate Lexan penetration protection plate. They run the full length of the back of the harness, and continue under the seat, and are protected in a separate zipped compartment. They can be removed very easily if you are really paring things down, though they are very light, something like 300g together according to my dubious-quality kitchen scales.

A word of advice about fitting the airbag: better to do so in the comfort of your home the

Manufacturer's specifications

What Icaro Say: "The Sitta is aimed at climbers, mountaineers and just regular pilots who enjoy hike and fly, or simply want a very safe but fun wing which is light and has a very small packing volume. They all will love flying the Sitta."

Use: hike-and-fly

Pilot level: Suitable for category B pilots and up

Flat area (m²): 18, 20 22

Take-off weight (kg): 65-90, 75-95, 80-105

Cells: 36

Flat aspect ratio: 5.1

Weight (kg): 3.3, 3.5, 3.7

Certification: load test, EN D, EN D

icaro-paragliders.com



30-SECONDS WITH TEAM ICARO



Who makes up the design team at Icaro now?

The main development team consists of Benni Hörburger (Head of R&D / Test Team Boss), Xandi Meschuh, Peter Grammanitsch and not least our leader Wolfgang Kaiser.

Manufacturers often base their hike-and-fly wings on an EN-A model. What made you base the Sitta on a freestyle wing?

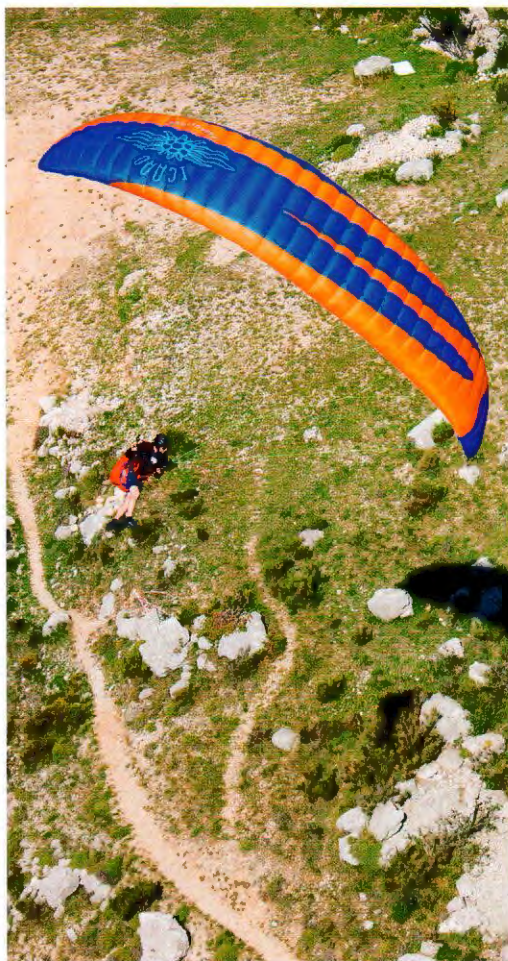
We wanted to achieve certain characteristics: a lively, agile glider with high passive safety with a small area and low weight. The D-classification has followed simply because of the direct handling and primarily at the steep spiral manoeuvre, since it rotates three times.

Why is the size 18 not EN-D certified like the larger sizes?

Sizes 20 and 22 are relevant for a larger group of pilots. For the size 18 we therefore expected smaller sales numbers and deferred from certifying this size.

Is there a reason why the weight range for the 18m² size does not start lower than 65kg? It seems a shame, as it appears to be more docile flown lightly, and this will exclude lighter pilots from enjoying it!

For all of our gliders, safety is an important subject. The weight range is therefore not laid out under 65kg since none of our pilots comply with this weight range, so we couldn't test the glider sufficiently – that's why we fixed the weight range as it is.



night before, rather than on launch in a rush with worsening conditions. The straps need to be threaded, climbing-harness style, but they're quite a tight fit and require some patience. The airbag can be left on the harness when you pack your kit up though, so you only have to fit it occasionally, and you can relax knowing it won't be sneakily undoing itself in the air.

Meet the wing

As mentioned above, the Sitta's stuff sack is specially designed to fit the Apus harness. It's longer and narrower than a standard stuff sack, and you have to fold the wing neatly and carefully to get it in. There's a Velcro glider strap to help package it up. We wondered whether some sort of side-zip system on the stuff sack, à la Advance Compressbag, would make it easier to pack, in which case you could ditch the glider strap and wouldn't have affected the weight much overall.

Our test wing was bright orange and blue, top and bottom, and to my eyes very lovely-looking. It's available in a slightly calmer white and blue too. The Skytex cloth has a water-repellent and



UV-stable coating. The wing has just 36 cells, and a flat aspect ratio of 5.1.

There are three, 6mm Dyneema risers, with split As and an acceleration system. The inner As have a red sheath for easy identification, and all the others have black sheaths. The lines are attached with weight-saving soft shackles, and there are protective neoprene socks to keep them in place.

Getting in the air

Icaro recommend launching the Sitta using the inner-As only, though I discovered this after my first flights during which I used both (one little line doesn't feel much in the hand) and this worked fine too. Like all very light canopies it easily catches the wind on breezier launches. Give the A a pull, and it rises smoothly and manageably slowly into the air. It does need some steering on the way up as it has a tendency to wander left or right, though it isn't inclined to overfly you.

The reason for the left or right wandering becomes clear as soon as you are airborne – this is a fun little wing, with a lot of roll tendency. It's very responsive to brake inputs, initiating a turn at the slightest touch and building up energy




quickly. In fact you have to be careful when making your first landing approach, to keep your brake movements small and relaxed so you don't end up wingovering your way in unintentionally, and I was flying at the bottom of the weight range – this is likely to be exaggerated for higher wing loadings. The canopy feels small and super-taut across its span, nice and solid. It's like a little sky go-kart, small and nippy with hard suspension and sensitive handling, made purely for fun.

It's a delight to thermal, too. Because it's small, and because it's so responsive and bites into turns, you can get it round in narrow thermals and it climbs really nicely. The feedback was good and clear, delivered through the harness more than the brakes – they were attached to something that just felt rock solid. I loved thermalling it, and loved the fact that it felt so small. I didn't experience any collapses on it or ever feel like it was going to collapse, but I was aware the 20m² size scored some Cs on its test report. The only C for its bottom-of-the-weight-range test was for accelerated asymmetrics, but it's more of a handful at the top of the weight range, and prospective pilots should be aware of this.

Landing

Its manoeuvrability means it's easy to get the Sitta into smallish spaces, despite its speed. In nil wind it does come in fast, but at the lighter wing loading I felt I had lots of room in the brakes to progressively slow it down or give it a good flare. On their 'characteristics wheel', Icaro give the Sitta top marks for agility, dynamics, speed and handling, but it gets its lowest score for landing. Icaro say it's because of its small area, short brake range and short flare, all of these things being exaggerated with higher wing loadings.

In conclusion, this little wing is small, light and fun to fly – exactly what Icaro say it is. At the bottom of the weight range it is not particularly demanding, although it's very responsive and I'd agree that it is not for beginners, as even flown light it would be easy to over-cook the steering. It appears to be more of a handful when flown heavily weighted, which will appeal to experienced EN-C pilots who know how to steer out of a spiral dive, and who love throwing a wing around. Choose your size accordingly, and you're guaranteed bags of fun. 

Charlie King flew the Sitta 18 with the Apus harness, at an all-up weight of 65kg

▲ NEW BENCHMARK

This is a fun little wing, very responsive to brake inputs, with a quick turn and a fast build-up of energy. It's a delight to thermal, like a little go-kart in the sky