

Bitten by the Shark

Pat Fenn goes on an, ahem, tough work trip to Slovakia, and falls in love. He'll now be starting a crowdfunding campaign

- 1 Lots of shiny toys waiting for their new homes
- 2 Well, even hotships have to start somewhere
- 3 You can see why it's called a Shark
- 4 The nosewheel – although you may have guessed that already
- 5 The instrument panel is as slick as the rest of the aircraft
- 6 Tidy-looking retractable main gear

IT'S rare these days to get a chance to combine business with pleasure, but when the opportunity presented itself to visit an aircraft manufacturer overseas, it was a chance not to be missed.

The country was Slovakia, and the manufacturer was Shark Aero, makers of the record-breaking Shark 600kg, now represented in the UK by The Light Aircraft Company at Little Snoring in Norfolk, which is expecting a demo aircraft later this year.

Much has already been written about this aircraft, mostly by test pilots concentrating on its technical capability and speed as a member of the newish category of light sport microlights.

Now, I'm not a test pilot, just a pilot, and responsible for the day-to-day running of the Mid Anglia Light Sport Aviation flying school based at Beccles Aerodrome on the Norfolk and Suffolk border.

With me on the trip was Bev Peake. We were at college together years ago, and he helps out with promoting Mid Anglia LSA.

Being used to flying C42s, flexwings and more recently gyros, my regular steed, the C42, is in my opinion the very best of the current group of LSMs.

Our most recently added 560kg C42C comprehensively outperforms anything in this and other higher price categories, not to mention the lumbering traditional Group A machines.

However, although the Shark's also an LSM, it's a world away from C42s, Skyrangers, EuroFoxes and others flown by NPPL holders – an aircraft capable of performance previously unachievable in this category, or many others.

Before I go into a mouthwatering description of the experience of flying it, there's a lot to be understood about the manufacturing process behind it.

My visit was a full day at the factory, courtesy of CEO Vlado Pekar, a qualified aeronautical engineer and a man with a rich background in production processes, making components for Diamond Aircraft.

In 2008-9, financial meltdown hit the world, and as the demand for components all but disappeared, Vlado decided his company needed to be reinvented to survive, and the Shark concept was born.

Form and function

Since my background is in industrial production and manufacturing with CNC machine tools, I was very interested in how the Shark was designed and made.

A design group using the latest in computer-aided design software is headed by a chief designer focused on style and aesthetics as well as safety and efficiency. The result is clear to see – a finished product honed with a shape slippery enough to set world speed records.

A walk through the factory reveals 3D printing, CNC routers and pattern jigs for the composite panels which characterise the Shark's aerodynamic fuselage.

A systematic sequence of inspection dictates a sign-off at each stage, followed by an independent final inspection of the complete manufactured component.

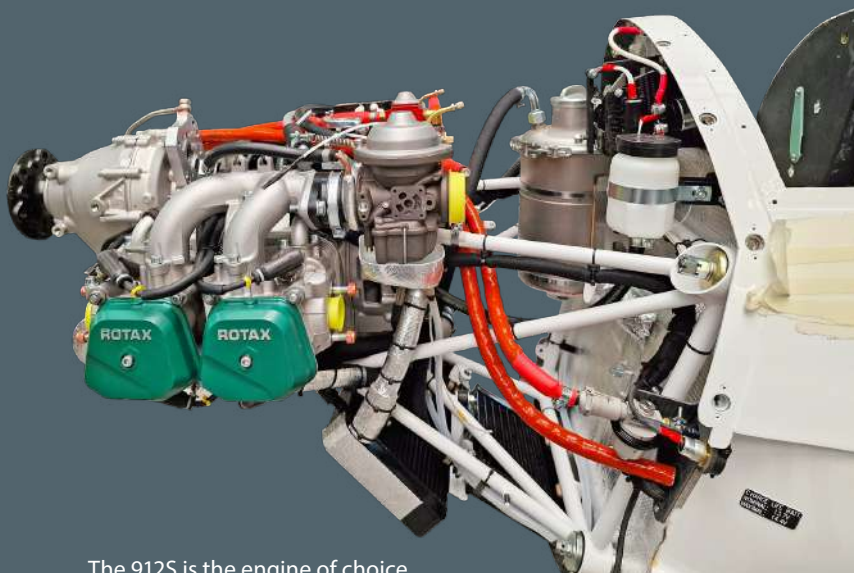
During final assembly, the same attention to detail and quality checks shines through.

This is clearly a well-managed production process, which inspires great confidence in both the performance and safety of this aircraft.

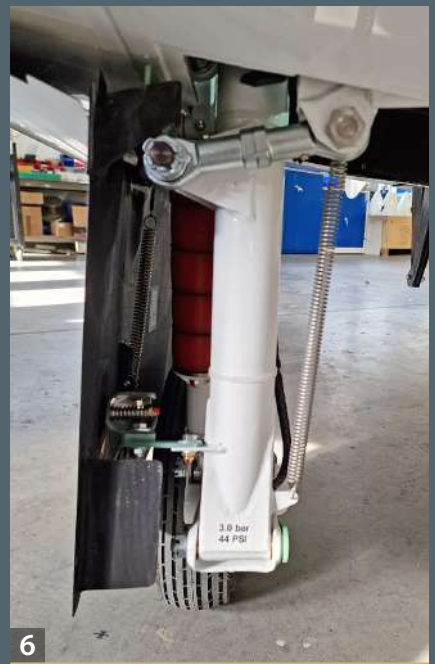
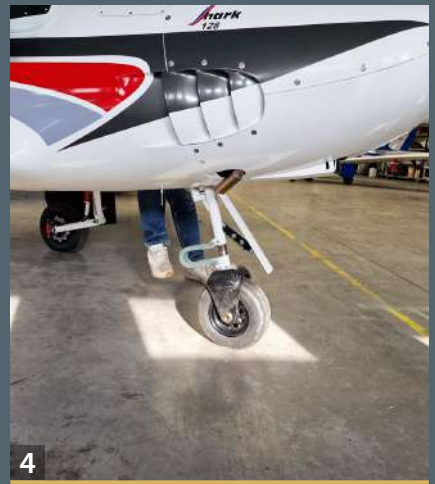
A ton of power's enough

The aircraft moves through the assembly process step by step, a particular area of interest being when the engine is attached.

In common with the vast majority of LSMs either currently available or planned, the venerable normally aspirated 100hp Rotax 912S is the engine of choice, since it provides more than enough power for the slick aerodynamic shape. ▶



The 912S is the engine of choice





This is a fighter aircraft in all but size and price



Final checks of the finished aircraft before a test flight



Shark CEO Vlado Pekar in the front seat, and Pat's colleague Bev Peake ready for some fun



The Shark used by Zara Rutherford for her record-breaking round-the-world flight

▷ There will, no doubt, be a demand from some quarters for even more power to provide even more speed, but Vlado doesn't see the need for it, and after flying in the Shark, I'd be inclined to agree – although that doesn't mean there won't be another powerplant on offer at some point.

Simplicity is a consideration for anyone operating one of these machines, and in order to keep within the spirit of the permit to fly category, it makes sense to retain a deal of familiarity. Imagine landing at your destination and seeing an alarm indicating an injector or turbo fault. Where are you going to find an operator with diagnostic equipment in a hurry? It's much easier to get your tools out, or seek help from the many folks usually happy to help.

Safety first

There are many examples of how safety has been put at the forefront of the package.

As you'd expect, a ballistic parachute is fitted. There's also a weight balance adjustment pack for dual or solo flying.

And as well as the usual three green lights to confirm that the retractable undercarriage is down, there's a viewing window for each of the wheels, allowing the pilot to see alignment indicators when the gear is down – very comforting. There's also a mechanical means of getting the wheels down if all the tech stuff fails.

Not so fast, Thruster jockeys

Anyone who imagines they can get out of their Thruster, jump in the Shark and go flying – think again. Flight differences training is mandatory and included with

the purchase. This is a fighter aircraft in all but size and price, down to the stick on the right and throttle on the left.

There's an autopilot option, a recommendable fitment in my opinion, as the time to take in ground reference points familiar to those used to flying at 80-90kt will easily be halved in the Shark.

The instrument panel, with an optional smaller screen for the rear seat, has many familiar features, but the capability to go way beyond what a current NPPL holder will be used to.

Back to my point again about training. Hours of it will be needed to learn all there is to know about the Dynon display, although that's true of the computer-based programmes most of us use daily. Hands up how many of you know all the capabilities of Microsoft Word, but can all still write letters!

On the right of the main Dynon display is the Flybox, which gives you the basics of airspeed, height and compass direction, all taken from an independent source to the Dynon, so if that does fail you still have the basic information to fly. Again, safety first.

I have control? Whahey!

Flying it was an incredible experience. Vlado was in the front, and after he'd demonstrated some steep turns, climbs and descents, he said: "You have control".

Yes, of course I do, ha!

I quickly came to realise how responsive the aircraft is, and how it needs surprisingly little rudder input. If I was buying one, I'd order the autopilot as a matter of course.

Turning back towards the airfield, I handed control back to Vlado and saw 175mph on the ASI as he did a flypast. We touched down with full flap right at the other end of the speed range, for a debrief, tea and biscuits.

Credit cards, scramble!

Price, you ask? Well, it's more than a C42, but then it's twice as fast. *(In the UK, the base model is expected to be about £198,000; with all the niceties, such as glass front and rear, autopilot, back-up system etc, it will total around £249,600 – Ed).*

If you're seriously interested, give UK importer Paul Hendry-Smith a call at TLAC.

Aspiring to a Shark would be in the dreams of many, but we all have to dream a little.

On a fairly frequent basis, I'm heard to utter a couple of phrases.

One is: "Flying is 10% flying and 90% talking about it."

The other is: "I fly for fun, and if it doesn't look like fun – I don't fly."

It would certainly be proper fun in a Shark! □