## First impressions: Avian Puma

A WEEKEND IN WALES WITH FORMER RN PILOTS TURNS INTO A NEW-GLIDER WORKOUT. ROB SCHWAB REPORTS

After many years of excellent Inter Services hang gliding competitions in South Wales, run by the maestro Dave Fenwick, it was decided to organise a reunion over the long weekend of August 4th - 8th. Rob Dowdell had the unenviable task of organising a bunch of retired RN pilots; he came up trumps with both the accommodation and the weather.

To relive the memories of past years we stayed in a bunkroom at the Dragons Back near Talgarth, an awesome location close to Hay Bluff with great views and an excellent breakfast. We couldn't believe our luck – with north-westerlies forecast for the entire period we were in for some Hay Bluff magic.

The team comprised Rob Dowdell (Blobby), Rob Schwab (Schwabby), Mark Scott (Scotty), Wayne Holmes (Wayne), Rob Quick (Quickboy) and Dave Moy (Smiler); we hadn't met together for probably over 20 years. We were missing Steve Blackler, who had to work, however honorary member FlameHairedFlyer (Trigger) joined us for the weekend.

Once we had our ships, cats and parrots in one sock, we set off to Gospel Pass where it was simply perfect. A paragliding comp at the Bluff that weekend offered the prospect of large gaggles of thermal indicators to help us get away.

The flying that weekend was some of the best South Wales has to offer. Soarable winds at the start gradually lightened as the weekend progressed, but the cool north-westerly brought some really strong thermals in the early August sunshine. Epic!

Blobby, as usual, won the event on his RX with a stonking 155km hop over the back to Popham airfield, and the next day a 2hr 50min anti-clockwise cruise around the Black Mountains. Sadly he was just one thermal short of closing what would have been a 150km triangle.

Quickboy did well on his borrowed Laminar EZ with a 50km flight to Coleford. Trig had some good flights as usual and Scotty and Wayne, who hadn't flown for nearly 20 years, had a blast refreshing their skills on a borrowed Wills Wing Alpha 235 floater.

Smiler was on his old-but-tidy U2 and I was flying my new Avian Puma. He and I shared the skies together most days, floating around together at cloudbase over the Bluff, Talgarth and Hay-on-Wye.

It was time to put the Puma through its paces. I have had this glider for over a year, but haven't flown it much due to other commitments. I've flown a few coastal days at Ringstead and Woolacombe, but this weekend was the real test. I'll keep it short, but this account is effectively a flight test report.

Tim Swait has designed the Puma with a few features never seen before, as far as I know. The rakedforward kingpost, meant to reduce form drag, is unique. I had chosen all the options from the Carrier Wing project; the outer leading edges are removed to shortpack the glider and limit

pack the gilder and limit catching the breeze on a carry-up. It works! It is a gorgeous looking glider and got a lot of attention on the hill. The hardware and fittings are exceptionally high quality and the sail is superb. The best feature is the weight: at 27kg it is the lightest high-performance flexwing I have seen.

These were my first few flights in strong thermals on a flexwing for ages. Having been crippled by rigids for some years, I decided to return to my roots for many reasons. Rigids are great, but would be even better if someone else carried and rigged them for you! The Puma is a revelation – light enough to lift and carry up, easy to rig on a breezy hillside and lovely to fly. I was initially sceptical, thinking I'd made a mistake selling my VR for this. But after the weekend I knew I had made the right decision. I have fallen back in love with flexies in general, and I absolutely rate the Puma.

Take-off is easy, although like any flexwing, you have to work at levelling the wings, unlike rigids that look after themselves. I'd forgotten how much effort was needed. However, once lined up into wind it was easy to handle and felt good. A few steps into the breeze, a quick right turn and I was off to join the gaggle of paragliders that were neatly marking a growing bubble of a thermal. The Puma climbed through the paragliders in no time, and within a few turns I had reached the top of the bubble and was on my way towards cloudbase. I was impressed!

Thermalling the Puma was delightful. The climb rate is excellent, easily getting up above the paragliders and other hang gliders on the hill. Once high enough I pushed out past Lord Hereford's Knob and

down the ridge to Talgarth gliding club, and for the next hour or so I got comfortable with the different techniques of flying a flexi over a rigid.

After several trips to cloudbase
I decided to pop down and land on
the common near the ice cream van.
Wayne and Scotty were down there, and it
made sense to join them and set off in
search of Quickboy and Blobby, hopefully
getting back to the pub before midnight!

The landing was a dream. It was evident that this is a high-performance glider, and although easy to fly it requires careful circuit planning. The glide performance at speed is very much like a topless: pulling in doesn't get you down quickly like an intermediate. The circuit and approach were as expected, accelerating through the last 40ft or so of windshear. A small preflare and float followed by a lovely slow landing. Easy!

Over the next couple of days I fell in love with the Puma. I had returned to my roots and was enjoying flying more than I have for a while. By the end of the weekend I had dialled into this beautiful glider, and it felt like part of me again. The weather held out and winds were lighter each day, but after the first day at Gospel Pass the rest were short, brutal carry-ups. As a team we helped each other carry gliders, harnesses, etc. Honourable mention goes to Scotty, who carried more than anyone else – thanks, pal. He is super-fit, and as I write has just swum the channel from the UK to France!

I don't have tales of hundreds of miles flown, but would like to recount my memories of those flights. I decided to forgo the hassle of retrieves, stay local and get totally dialled in to the Puma. On days 2 and 3 I decided to see how far I could press into wind, preparing for upwind slogs on triangles, etc. The Puma was simply great.

The VG is like most topless gliders and just keeps on pulling. It is effortless to deploy, pre-marked by Tim at the quarters, and locks off nicely with a well-made cleat. With full VG the glider is stiffer but still fully controllable, albeit with a slower roll rate. With a third to two-thirds VG the Puma can be trimmed to the conditions for optimum thermal coring. There is a fair bit of high-siding involved, which actually makes it easier and more comfortable to hold in those strong thermals.



## **Specification**

Sail area (m²)	13.6
Span (m) (inc. tip fairings)	10.0
Nose angle	130°
Aspect ratio	7.4:1
Packed length (m)	5.3
Short-packed length (m)	4.15
% double surface	90
No. of battens	21 + 4
Airframe material	7075 T6 alu/carbon composite
Flying weight (kg)	27.5 – 29.0 depending on spec
Clip-in weight range (kg)	75 - 105
Optimum pilot weight (kg)	80*
Maximum clip in weight (kg)	120 **
Certification	BHPA No. 1809182
Price inc. VAT	£5,995 ***

Manufacturer: Avian Hang Gliders, Stretfield Mill, Bradwell, Sheffield S33 9JT, tel: 01433 621753, e-mail: avian@hanggliding.co.uk, website: www.avianonline.co.uk.

- \* Assumes clothing, kit & harness at 15kg
- \*\* The Puma is fully load tested to a higher maximum load than recommended for free flight to enable its use with power units and trikes
- \*\*\* Carrier Wing folding, and carbon outer leading edges and washout rods, are now standard. The full range of options Technora composite top and lightweight laminate lower surface, extra colour options, carbon stinger, wingtip fairings, keel-pocket fairing and the Speed ultra-low-drag control frame will bring the price to £8,045.





Low down I encountered some vicious climbs, but as these became smoother higher up, adjusting the VG to suit made staying in the cores a delight. In the dying lift as the thermals began to decay, I tried floating about at min. sink with zero VG; it felt like I could stay up there forever.

Then it was time to push out front. With full VG again the Puma was a delight: no vices, no surprises and no adverse yaw/Dutch rolling at all. I carved my way through the sink, and once clear flew at what seemed like a good into-wind best glide. Bar pressure is light, yet there is always plenty of feedback. Roll rate was fast and light and I can't fault it. Everything is exactly right – the Puma's weight, easy handling, performance, looks and superb engineering all add up to a glider that is a joy to fly and own.

The bags, packing protection and straps fit nicely in my harness; everything is well made and fits perfectly. The batten bag, unlike any I have seen, is meant to carry everything. The outers, battens, keel stinger and base bar all fit neatly inside, and then it rolls up and secures with Velcro. With its integral carry handle it's a neat solution to not having all those parts inside the main glider bag.

The glider itself then weighs not much more than 20kg in its bag. Best of all, the handles are placed at the right spot and it balances perfectly, unlike most other gliders I've used. The other bag with all the bits weighs 6 or 7kg, making lifting and carrying relatively easy.

Overall, the Puma is a stunning bit of kit with performance close to that of a topless. With its incredible sink rate, fast climbs in light lift, great glide at speed, easy and effective VG, effortless vice-free handling, easy launches and landings, and that oh-solight weight, it's my dream come true! Thank you, Tim, I salute you, Sir!

## **Rob Schwab**

Rob, a longtime Skywings hang gliders since 1979. A 20+ year career in the Royal Navy began in 1982 and hours on the fabled Sea Harrier, latterly as an instructor and test pilot. He has spent the last 20 years as an A340 Captain with Virgin Atlantic, In 2005 Rob became involved in ballooning and now manages – and flies for – the Somerset-based has competed many times in the annual inter-service championships on South East Wales sites, and has won the event several times. He currently admits to over 25,000 hours of flight time.

