

This was written for the Bristol Microlight Aircraft Club's bulletin in 2003 after a Summer's experience flying G-MYJJ – one of the first Quiks to be built. I have added a few text updates as of September 2008 in *Italics*.

TON-UP in a **QUIK**.

John Sparks.

There it was and the GPS confirmed it. The hand on the ASI had wound round to 8 o'clock but crucially pointing to the magic three digits '100'. A ton-up in a weight-shift, something that would have been an impossible dream 15 years ago when I took to the skies in a gleaming XL which, with a lot of effort, could barely reach half that speed. Now I was in my silver **Quik G-MRJJ** on a glorious day 5000ft up just South of



Gloucester *en route* from Shobden to Kemble. Although Juliet-Juliet was quite stable at this speed, I saw no need to hurry, so I held 100 m.p.h. just long enough to focus the camera and record the moment (left taken on a Canon fish-eye lens, thus the bendy bar at the bottom!) before easing back to a more sedate 75. (*Of course there is now a genuine 100m.p.h. 'topless model – the £31,000 Quik R*)

With nearly 40 hours experience (*now well over 300*) on this latest product from the Pegasus team headed by Dr. Billy Brooks, I can now report that I am even more impressed with the model.

Since I took delivery of it, there have already been three mandatory mods (*and several others including the all important extra A frame rivets*) – a pair of new engine mounts to tip the prop back to give extra prop clearance from the wing (the engine wobbles drunkenly on start-up and shut down – *now partially cured with a slipper-clutch*), a shackle instead of a piece of looped wire to prevent the king post jumping off the wing keel (it allegedly happened although there is some doubt whether the pilot had located it properly when rigging) and Rotax issued a new dip stick with revised 'full' and 'empty' marks. Apart from these, P&M Aviation is selling as many as they can build, such is the reputation of the **Quik** (*the GT 450 is now heading the sales league*).

Right – May 2003 and a brand new **Quik** waiting for me at Kemble.

Broadly speaking, this weight-shift is a marvelous cross country machine, fast, effortless, economical,



and comfortable to fly. However, if you want to potter, then it is as docile as a lamb with one important proviso.

The chief challenge has been to master the landings (*and side-winds still give me grief!*). According to the manufacturer's web-site, it is these which give pilots flying the factory demonstrator the greatest difficulty because they touch down far too fast. Not that runways which go on forever are a problem, but at Kingston Seymour, we have a strip of fairly narrow grass 250 yards long – well 300 ditch to ditch – and to begin with I have found it er..... testing (*I am now at Doynnton with nearly 600 yards but that has its problems with rotor.....*) The small wing and slippery nature of the beast means that the *Quik* is reluctant to slow down, and any tendency to 'pull the bar in' to lose height results in a whistle in the wires with the runway streaking past at motorway speed. In the circuit, it is vital to trim back, not fully as this raises the stall speed (*but not with the newer electric trim*) and, by easing the bar forward to keep the nose up, the speed must be reduced to 55-60. This means that the final approach is at a shallower angle than other trikes, with the engine employed to check the rate of sink; by juggling the bar and throttle, I aim to kill to speed to 50- 55ish over the hedge. This technique feels strange to weight-shift pilots but second nature to three-axis ones. I found it difficult to relinquish my old habits and had more aborted attempts and 'antipodean' meetings with Mother Earth at Kingston Seymour during the first few months than I ever had in 9 years with my Quaser. Time and time again, a last minute pull on the bar to lose height (may be unconsciously) resulted in a sudden acceleration, *wheels touching too fast, bar forward – whoops – up in the air again – sh*t, half the runway gone, ground comes up with a jolt, hit the throttle*! One factor is the 27deg pitched Airplast prop which gives quite a lot of thrust even at tickover (1450 r.p.m.). Anyway, not before time, I have now tamed the approaches – or more accurately, I think that I am now controlling the *Quik* rather than it is controlling me! I suppose, like all aircraft, it is the situation when this weight-shift is likely to bite if you do not get it right. Enough of that.

Right: Juliet-Juliet in 2008, now with all the bells and whistles except the disc brakes and double silencers.



The rest is pure pleasure. Rigging is easier than the Quaser. As the *Quik* is a squat little craft, everything is easily reachable – even the hang bolt. Once checked and ready, the great Rotax 912SP has always started on the button. One drawback of carrying around 2 litres of oil is that it takes an eternity to heat up to 50degs C. before take-off (10+ minutes on a cold winter's day so I am told). Take off is about the same as the Quaser, with brisk

acceleration. A definite forward nudge is needed on the bar to coax the front wheels off the ground. Thereafter, climb (solo) at full chat of 4350 r.p.m. is at 1000- 1200 ft/min. with 55-60 on the clock. Roll to 5000ft is achieved in 5 minutes. For the cruise, trim for whatever speed you feel like. The trimming wheel – now fitted with a handle to reduce the effort of winding - is extremely effective (and essential) and determines the speed between 60+ and 80+ in level flight. I tend to trim to 70-75 at which the engine is turning over at leisurely 3400. 80+ bumps the rpm up to 3700. (*In 2007, I had the electric trim fitted – and it is magic*).

I did say that I would never fly with one of these great lumps of highly plumbed metal behind me. However, I have to admit that the Rotax 912SP is indeed a very impressive piece of engineering, capable of great surges of power should you need it, and as smooth as it is economical. The latter is aided by an ability to lean the mixture in the cruising mode. I made one flight from Kingston Seymour to Sandown on the Isle of Wight via Henstridge and back which involved just over 3hrs in the air, and at the end of the day, topped up with 26 litres of fuel, thus returning a consumption of between 8 and 9 litres an hour (*I reckon that the consumption is about 10.5 litres an hour solo and depends on how much climbing is involved*). My Quaser guzzled between 13 and 14 an hour at 60-65m.p.h.



Above: The view of the current cockpit layout with the electric trim indicator on the left and fuel gauge on the right. The large screen is much better and keeps your head out of the breeze.

On that particular flight which involved going over the New Forest at low level, the turbulence was certainly moderate and occasionally severe – it was even worse over the

Isle of Wight, but the *Quik* seemed much better at cutting through switchbacks of disturbed air. There is nothing of that wallowing which is bound to happen with large, relatively low loaded wings. The ride in these conditions is firmer but the *Quik* holds its course better. However, if you need to maneuver, then it is amazingly light in roll – much lighter than the previous weight-shifts I have flown, and to begin with, gave me the impression – quite wrongly – that the aircraft was unstable. Pitching down is also easy, whereas pitching steeply upwards with the bar hard up against the front strut, without winding up the trimmer, you need arms like a gorilla (and long ones at that as the front strut is way for'ward because of its slope). If you want to emulate Douglas Bader in a dog-fight with a Me 109, you can certainly do it in the *Quik*.

So what about the magic 100? In my view, is not a practical speed to hold for any length of time and I have only pushed the ASI this far up the scale twice. The bar with the wing trimmed fast needs to be pressed into the chest and the loud pedal opened. The *Quik* accelerates purposively to the magic maximum, in the case of G-MRJJ, of 100 (I believe someone has achieved 105m.p.h. in level flight). A ton-up can easily be achieved in a dive. There is a little high speed buffet but one is very aware of rushing air. It is also likely that the fuel consumption flat out is nearer 20 litres/hr. 75-80 m.p.h. is just fine. So, after an exhilarating flight from Shobden and with Kemble on the nose, another landing is only a few minutes away. Acres of runway there. No worries.....!

My Quik 912S is one of the first to be built (or last to be built at Marlborough) and since 2003, I have had it updated with nearly all of the modifications – the major exception being the brakes which are still the old drums.. It would be nice to have the discs fitted – and a retrofitted Quik R wing!!! But Juliet-Juliet is fast enough, economical enough, and the brakes are fit for purpose. This aircraft has been utterly reliable until recently when a still yet to be diagnosed ignition circuit has failed. Otherwise it has never let me down in 350 or so hours. But this slippery little microlight has given me a few anxious moments when landing – usually in side-winds (and not very strong ones at that). On one occasion, rotor smacked me down onto the runway at Doynton but luckily without damage. Now there is the GT 450 as an added choice. However, I would still recommend the Quik 912S as a fine machine but if you are coming from one of the larger winged weigh-shifts, initially watch the landings.