



A real tour de force!

Berian Griffiths certainly had his work cut out – and then some – with his Wassmer WA81 G-BKOT (s/n 813)

In April 1977 *FLIGHT International* magazine published an article reviewing France's light aircraft industry. The article included a section on Wassmer Aviation at Issoire and, during a factory visit the author test flew the company's latest offering, the all composite WA81 *Piranha*. The test flight report was pretty positive, if a little grudging in praise for the use of gull wing doors.

In the same month WA81 (serial number 813) was registered as F-GAIP to Cercle Aeronautique Du Secreteriat General De L'Aviation Civile Ass., the flying club of the French Civil Aviation Secretariat based at St Cyr l'Ecole, near Versailles.

Despite the rosy outlook indicated in the *Flight International* article, Wassmer Aviation folded in September of the same year. Meanwhile F-GAIP continued to fly at St Cyr until it was written off in an incident on 1 September 1979. Details of the incident are sketchy at best, and an *Attestation* by Bureau Veritas made much later, in 1991, refers to a 'crash landing with breaking the nose gear', the aircraft having flown some 1,028 hours. My subsequent investigation suggests that

Above F-GAIP pictured at St Cyr in November 1987. She flew for less than two and a half years before being written off and put into storage. **Photo: Pierre Corny – Wassmer Archivist**

the nosewheel became detached from the engine frame on the ground – the same French Civil Aviation Secretariat issued an AD only 12 weeks later changing the design of the nosewheel retaining bolts – and introducing drilled bolts and wire locking!

So, where do I come in? In the winter of 2016/17 I relinquished the role of treasurer at Buckminster Gliding Club. Having retired early, I had spent a good part of the previous eight years mending administrative and financial systems and felt I had 'served my sentence'.

My time had not been purely consigned to administration, I had (finally) completed my Silver C, gained an NPPL SLMG followed by a LAPL (A), and was regularly towing gliders using the DR400 and Eurofox. I had also joined a Duo Discus syndicate and, together with a group of friends, had bought an SF25C motor glider which I was particularly enjoying.

In the previous eight years I had learned a lot about the regulatory and financial challenges of operating aircraft, and I felt I was ready for a project to fill the chasm in my diary. I had regularly helped out with the 50 hour checks and the annual on the SF25C – more



often than not assisting my good friend and mentor Ken Ballington. Ken was a BGA and LAA Inspector and a near neighbour, and we spoke a number of times of my desire for a project. I didn't feel that I had either the skills or the perseverance to build from scratch, so I started looking for unfinished projects or restorations.

I really enjoyed flying the DR400 and I had more or less made the decision to look for a Jodel, when I saw a Wassmer WA81 project for sale in Ireland on Afors. I had never heard of Wassmer, other than as a large-scale builder of high-quality Jodels and a smattering of gliders such as the Espadon and Javelot. I started digging and found the whole (sad) history of the company on the very comprehensive Wassmer Passion website (<http://wassmer-passion.org>).

Disappeared without trace...

My wife and I were due to travel to Limerick to meet up with an American friend, so I made contact with the vendor with a view to having a look at the WA81, registered EI-FKM. However, it had been sold and disappeared without trace. Undeterred, I kept

Top The aircraft as first viewed, nestled in a front garden near Newmarket. **Photo: Berian Griffiths**

Above left A major concern with an aircraft that has been dismantled for many years and moved to several locations – are all the bits there? **Photo: Berian Griffiths**

Above right Using a glider trailer, recovering the airframe was to take several trips. A crane made short work of the heavy fuselage. **Photo: Berian Griffiths**

researching – occasionally a WA50 four-seater popped up on Planecheck, but I wanted the two place WA81. G-INFO lists the only Wassmer WA81 on the UK register as G-BKOT (formerly F-GAIP), first registered in the UK in 1987. It had probably sat in the back of a hangar at St Cyr from 1979 until 1987, but now it was in the UK and destined for repair at Shoreham. For whatever reason the restoration was never completed and, in 1992, the project was acquired by new owners in Cambridgeshire and entrusted to Classic Aircraft at St Neots to complete. This was a good decision as Classic was (in part) operated by former LAA Inspector and experienced GRP repairer, Andy Crumpholt.

The GRP repairs were completed by Andy to the satisfaction of the CAA, but again the project was abandoned – probably due to a combination of regulatory frustration and cost overrun. This led to the aircraft being dismantled and stored in the back of a hangar at Bourn – a sad picture of the fuselage strapped to the main wheels appears on a number of aviation photo websites.

So, in the late summer of 2017, I contacted the



registered owner of G-BKOT and yes, he wanted to sell, and told me, "It's in the front garden under plastic sheeting, come and see it."

After an initial scouting visit, I was sufficiently enthused to ask Ken Ballington to join me for a second visit – I think he was as excited as I was. We spent a number of hours crawling over the dismantled aircraft, with the fuselage perched precariously on a rapidly decaying trailer in the front garden of a cottage in a village just south of Newmarket.

I have read of 'barn find' classic cars but this was definitely more Reliant Scimitar than Bentley. Were all the bits there? Well they seemed to be. Was there any corrosion? Being all GRP (including the spars) it all looked pretty sound and the metal bits had been well waxed up before mothballing, though the painted GRP surfaces looked like they'd been sprayed in a hailstorm.

Above The GRP undercarriage 'spring' stripped of paint for inspection. **Photo: Berian Griffiths**

Below The undercarriage, wheels and brakes fully restored and ready to refit. **Photo: Berian Griffiths**

I decided to bite the bullet and closed a deal and Ken and I left for home with several boxes and a briefcase full of documents – mainly in French – plus two propellers and a number of key components. We left Ross Skingley, the owner, searching his garage for the trim wheel assembly, which fortunately he eventually found!

Regrettably this was Ken's only visit to Newmarket as he was taken seriously ill a few weeks later. Over the next month or so I was kept very busy securing workspace, building transport jigs and recovering the aircraft to Staffordshire – in all, it took about four trips.

At a crossroads

Making sense of all the historic documentation took up the autumn of 2017. There were stacks of invoices from Isoire Aviation (which had risen from the ashes of Wassmer), as the two previous restoration attempts had been meticulous in sourcing genuine parts, including those required to address the few published ADs. I had all the bits, and I became more confident that this might all turn out OK. Sadly however, in December 2017 Ken, my mentor, passed away and the project was very much at a crossroads – I had to ask myself, do I cut my losses or carry on?

At a chance meeting with Ken Craigie he suggested that I contact Neil France, an LAA Inspector and very experienced GRP fabricator/repairer to see if he'd take on the project. Both Neil and I were out of the country at different times, which meant it took until the spring of 2018 before we could meet up.

Having surveyed the aircraft, now resident in a farm building close to my home, Neil pulled no punches as to



the amount of work involved, but he concluded that the aircraft was salvageable – and what else was I going to do with my time?

I had spent the first quarter of 2018 finding out everything I could about the aircraft and, with help from the owners' association, I tried to track down the other 24 WA80 series aircraft that had been manufactured. This proved time consuming and frustrating – the aircraft in Ireland still eluded me... In fact I discovered that there were actually two in Ireland – neither flying and neither owner contactable. A father and son restoring an aircraft at Pau responded to email but quickly evaporated again.

Finally, I got a phone call from an owner in northern France – how could he help? He was very patient and helpful as I bombarded him with emailed questions.

Neil's survey and restoration proposal was submitted to Turweston, except now I found that I had a different and unexpected problem. The previous restoration works, in particular the GRP work, had been undertaken while the aircraft was certified and thereafter painted over. I had all the invoices detailing the work, but I needed evidence of the work undertaken and to what specification.

The CAA (blue) file had been consigned to archive and Classic Aircraft had long ceased trading. After a good deal of nagging by me, and significantly less (but more effective) inquiring by Francis Donaldson, the CAA file was found and evidenced the repair.

For my part – the same American friend whom I met in Limerick at the beginning of the saga, tracked down Andy Crumpholt in Boston, Massachusetts and he supplied a very helpful statement. Finally, the show was on the road.

In the 20 months or so since that eureka moment, the aircraft has been totally dismantled, every sub assembly, nut and bolt taken off bagged and catalogued and, in many cases, cross-referenced to the original construction drawings or parts supply invoices. I've spent close to 500 hours sanding off every square centimetre of paint, which entailed burning out two

domestic duty sanders before I invested in a professional quality machine. With unfailing support from Neil, I have learned a lot about GRP and making small peel ply repairs and, at the end of 2019, just about the whole lot was ready to be painted.

The engine has been rebuilt by Aerstone in Somerset and is ready to test when restrictions are lifted.

Panel challenge

I have used the lockdown period to complete restoration of the undercarriage, refurbish a number of more tired components and finally to complete translation of the Flight Manual – though I've still got a couple of bits of more arcane French that I'm finding challenging. At the time of writing I'm about to make a start on some of the simpler wiring, but the challenge of the panel and installing the engine remains outstanding.

Working on this project has left me hugely impressed by the quality of Wassmer's engineering – Wassmer was the first in the world to manufacture a Certified GRP aircraft and, in line with others like Grob who followed, the GRP sections are hugely over designed. The aircraft has a dry weight (designed) of 495kg and max take-off of 800kg.

The metal bits are of similar high quality (and weight) but a real effort has been made to use standardised componentry. The aircraft makes extensive use of the Simloc gang channel fastening system manufactured by Arconic St Cosme, whereas the nosewheel has Robin provenance. However, every so often I encounter a sub assembly where Wassmer just wanted to do its own thing – I guess that's one of the joys of owning an oddball aircraft.

Hopefully all the big plastic bits will get put together this summer – so 90% finished, only 90% to go...

I eventually found the two aircraft in Ireland, and EI-FKM is further along than mine – and we are in regular contact. F-GAIF remains listed on AFORS.

For more information or to follow progress see tatenhillpiranha.co.uk ■

Below Mid-August this year and finally back on its undercarriage after 41 years. Just 90% left to do! Photo: Berian Griffiths

