

Factory 'vue general' reveals the RF6B's all-wood airframe



# Taking stock...

**Fournier rebuild becomes Fournier saga, as EASA revokes the RF6B's type certificate, G-BLWH's records prove to be incomplete and the wider legitimacy of available spares comes into question**

**Words & photos: Bob Grimstead**



Fin, rudder and undercarriage – everything present and correct, as Bob discovered when he opened the boxes of parts that came with the wing and fuselage

I bought Fournier RF6B-100 G-BLWH from Tizy Hodson as part of Tiger Airways' bankrupt stock. Although completely dismantled and lacking engine, radios, some instruments and other, smaller bits, it nevertheless seems fairly simple to find an engine and reassemble the aeroplane myself.

First I unpacked the many scruffy and oil-stained cardboard boxes accompanying it. Their contents surprised me. Everything really is here, with bags of brand new metric nuts and bolts plus neatly bagged and tagged, and nicely yellow-painted components of all sizes and shapes, from numerous small fittings and controls, right up to the three heavy undercarriage legs.



Room for the RF6B fuselage (just) in Bob's home garage workshop. Job One was refitting and adjusting the 'up and over' canopy mechanism

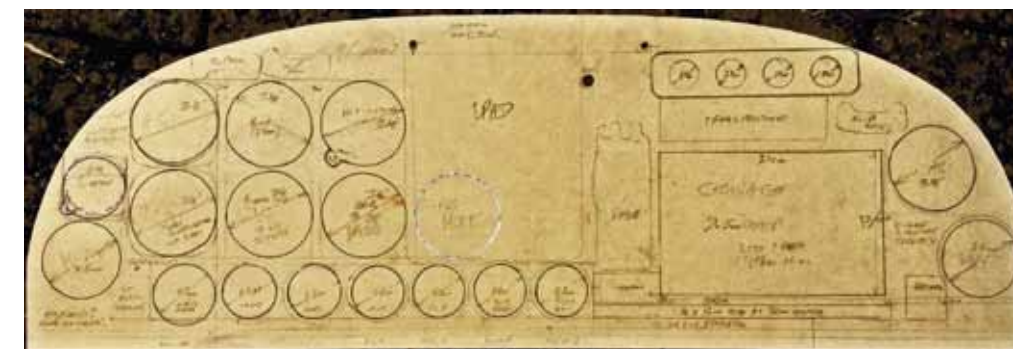
There are also a propeller, carburettor and fuel pump plus a complete exhaust system – although that needs welding. With nowhere convenient to store the bulky canopy, I started with that. It took time to work out and adjust the geometry of its hinges, linkages and complex latching system, plus the orientation of its many smaller components, but I soon had it swinging back and forth and locking as designed. Unfortunately it was clearly going to get in the way while I worked inside the fuselage, so I removed it and hoisted it up into my garage-workshop ceiling.

To assess the cockpit layout I placed a strong plank across the two main fuselage bulkheads, put the seats on that, and ensured I fitted comfortably and could easily reach everything. This worked, but I think more reclined seats will better resist the positive G of aerobatics.

As with my previous RF47, I want a new panel layout featuring only the most important VFR flight instruments on the left, with an iPad beside them for navigating – to be replaced by my sequence card when displaying. Engine instruments will go right of centre, while my wife, Karen's side can have a stowage compartment with fittings for an iPad on its lid. I think it's daft getting somebody in the right seat to fly without giving them



The original and rather basic instrument fit...



the important instruments, so I shall fit an ASI and a slip ball over there too. My hand-held Icom will slot in somewhere.

## Type Certificate revoked

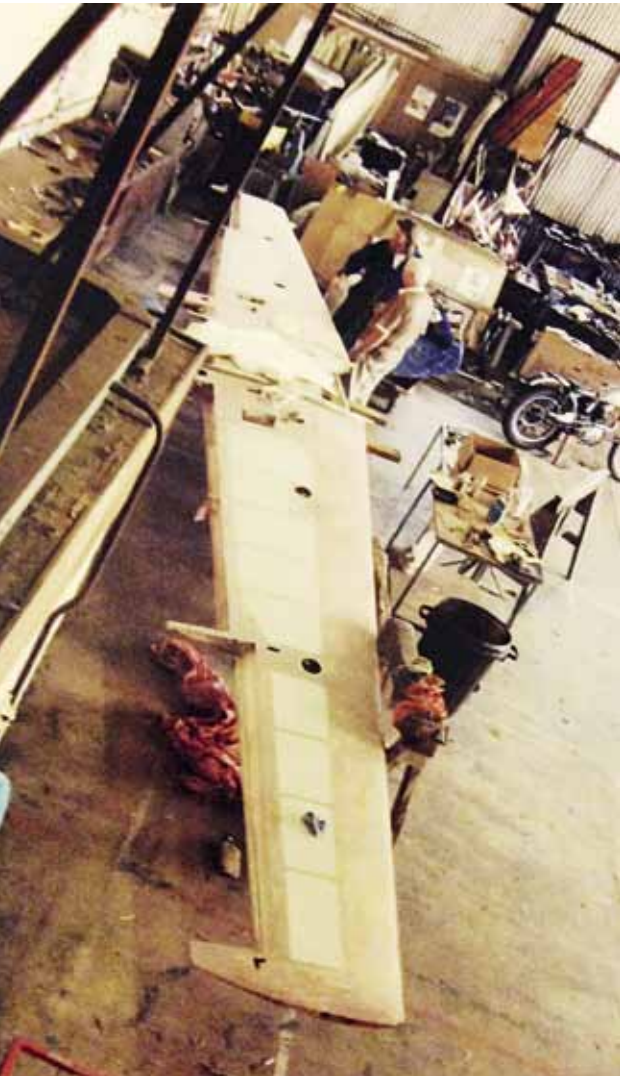
Unfortunately, just a few days after I bought Whisky Hotel, EASA grabbed the RF6B's Type Certificate from designer René Fournier and revoked it, declaring all of these aeroplanes only suitable henceforth for a Restricted Category EASA

C of A or an equally-restrictive EASA Permit to Fly. But no-one seemed able to tell me what those restrictions were. Was commercial work prohibited? Could they be used for training? Nobody in England seemed to know and I'm certain that nobody cared in France, where there is a history of paying lip service to such regulations without following them as slavishly as the CAA would have us do. There's another snag too. In →

... and Bob's own custom design, with space in the centre for an iPad that can be removed and replaced with his display sequence card



Fuzzy snaps bear witness to previous minor repairs to Whisky Hotel's wing woodwork...



... and the single-piece wing being re-covered at Booker

off this work, although several experienced guys had witnessed it, and all were happy to tell me it had been done well. It was just that none seemed to want to deal with the bureaucracy.

My intention in buying this RF6B was to reassemble it to replace both my RF4D and our Champ, giving us a self-maintained two-seater in which I could fly with Karen to displays over the weekends rather than her having to stay at home as she does now. I have reassembled seven other aeroplanes, so I know this work to be within my capability under LAA supervision.

But I also know that if the aeroplane stays under EASA administration this reassembly should be either accomplished or supervised by EASA-licensed engineers, probably in approved premises. So when the job was finished this simple, if time-consuming, process would cost more than the aeroplane's value.

I wanted to make some minor modifications too: slightly increasing engine power, fitting a Hercules propeller, GoPro mounts, control surface gap seals and improved wing root fairings, wheel spats and undercarriage fairings, wingtip and maybe exhaust smoke systems, changing the instrument panel layout, and replacing the missing 720-channel radio with an 8.33 handheld. Although eminently and quickly feasible anywhere else in the English-speaking world where aeroplanes can easily be re-categorised onto an Experimental, Exhibition category C of A, this isn't possible in Europe.

With LAA oversight this work should be pretty straightforward, but under the heavy hand of EASA each minor modification would be both prohibitively expensive and dreadfully time-consuming, if not completely impossible. I have seen a massive document that was submitted merely to rearrange the instruments in a German RF4D's panel!

Could the LAA help out?

Long negotiations ensued with the LAA's Chief Engineer, Francis Donaldson and CEO Steve Slater and others about the continuing

demand by the owners of such 'orphaned' aeroplanes (like Bolkow Juniors, the later Jodels, all the Fournier family, Gardan Horizons and Beagle Pups) to go on to Permits to Fly, just as Austers, Chipmunks, Stampes, Slingsby Ventures, Yaks and others previously have, but apparently both EASA and ICAO are intransigent that, unless they are very old types, unique or ex-military factory-built aircraft must stay under EASA control.

For more than forty years it has been impossible to buy legitimate, new, type-specific components for an RF6B (like canopies and their worn operating mechanisms, control systems, cowlings, undercarriage legs, exhaust systems and so on). And yet those same components from a Slingsby T67A or B are identical, but it would be illegal to fit them under EASA regulations because the two families have different Type Certificates. Making parts oneself using the Fournier drawings also isn't on the cards, even if they are indistinguishable from the original components, because they wouldn't have a 'Form One' or similar release documentation.

In my big box of documentation accompanying this aeroplane were repeated letters written between 1985 and 1999 by former owner, Rod Ashforth to the PFA (the LAA's forerunner) on precisely this difficulty of getting spares and the need for 'WH and its brethren to go on to Permits to Fly. Despite the validity of his argument, the PFA couldn't help, as their approval from the CAA only lets them look after amateur built and vintage aircraft, and at that time the RF6B was only recently out of production.

To my pragmatic mind it just seems so daft, not to mention unwise, that these RF6Bs should be forced to be maintained under EASA control when it is clearly far more appropriate that they be administered under LAA Permits to Fly for which components need only be judged 'fit for purpose' by the qualified fellow enthusiasts working at LAA's HQ and one's inspector. In practical terms that would mean

an RF6B could use the identical wing, tailplane, elevator, fin, rudder, canopy, cowlings, undercarriage or any other component from a T67A rather than being scrapped for lack of spares.

I called Francis Donaldson for advice several times, and wrote to him for clarification to try and get this confusing bureaucratic situation clear in my mind. He suggested one possibility. In a fit of pragmatism, EASA had recently allowed a couple of factory built types to transition to national control in Britain where it was clear that this wouldn't disadvantage any other owners of that type throughout Europe. So, if I could get hold of all the Europe-wide owners of RF6Bs and persuade them to agree that they would like their future maintenance certification to be under oversight of their national authority rather than EASA, then we might be able to achieve that together.

I started by contacting the other two British RF6B owners. One was in favour and the other wasn't sure, although he had recently spent quite a lot of money on annual maintenance so I didn't think he would need much persuading when his next ARC renewal came around. That might cost him up to £5,000 compared with the £200 or so of an annual Permit validity renewal. So far, so good. I knew there was at least one private German owner who kept his aeroplane registered in France and I established that all other RF6Bs were also French registered.

But France does not have Britain's G-INFO that makes contacting owners so straightforward here (despite my disapproval of such personal information being so easily accessible to the public) so I had no means even of establishing which of the original 44 aeroplanes were still airworthy.

Alan Brown is *Pilot's* registration guru. I asked him if he could unearth this information. To my delight, he was soon able to tell me there were still 25 RF6Bs flying in France, along with the names of their owners or operators.

Regrettably, there were no addresses and, worse for my purposes, a full seventeen seemed to be operated by various clubs and schools. I felt it was unlikely these would want to change the status quo in any way, given that they had all clearly found a means of skirting the issue of lacking factory support for more than forty years.

An alternative way forward

Sighing again, I contacted Francis for further advice. Eventually he suggested he inspected my new acquisition to perhaps suggest an alternative way forward. A couple of weeks later he again visited my garage workshop, where now the RF6B's fuselage had replaced the earlier RF47's on my bench.

Glossy and beautiful though it was, Francis didn't like the fabric's black finish. He was concerned that the structure could become hot if parked in strong sunshine (hah!) for any length of time. Although not of composite construction, and epoxy glue hadn't been used anywhere within it (composites and epoxies can soften with heat, which is why most composite light aircraft and gliders are white) he strongly favoured the RF6B being finished in a lighter colour, asserting that a lot of wooden gliders built in Europe in the same era have suffered serious problems with glue failure. "That wooden fuselage is going to get jolly hot in the sun, which isn't going to help the adhesive's life".

Then he explained that my only possible option to put an RF6B on an LAA Permit to Fly would be to get hold of the drawings and build one myself, as a homebuilt. I needed to build at least 51 per cent of the aircraft, including a new fuselage, because traditionally, if obscurely, an aircraft's identity resides in its fuselage. I could register my new project as a 'Replica Fournier RF6B'. If I were to cancel G-BLWH's registration, thus bringing that EASA RF6B's flying life to an end, I could perhaps use some of its components in my replica, provided I didn't compromise →

Components from a Slingsby T67A or B are identical, but it would be illegal to fit them

## I even paid extra for G-RFGB to give my 'RF6B replica' a little more credibility

BELOW: LAA Inspector Dave Bland tries 'WH's cockpit for size in Bob's garage workshop

that 51 per cent rule. As a homebuilt eligible for a Permit to Fly, I could apply to the LAA for approval of my desired modifications and, if they were happy, incorporate and test them myself.

And "No, absolutely not!" I couldn't just knock up a look-alike fuselage and later swap their identities. And I can't have paid help (not that I could afford it) although amateur assistance might be permissible.

In a fever of renewed enthusiasm, I registered my project with the LAA, received their documentation, opened my work package and submitted the CAA's registration fee. I even paid extra for G-RFGB to give my 'RF6B replica' a little more credibility when I came to fly it.

I also asked Paul Hendry-Smith of The Light Aeroplane Company and Britain's agent for pre-

painted Oratex fabric, if he would be kind enough to send me an offcut of yellow Oratex so that I could see how closely it matched the existing yellow paint used on Whisky Hotel. To my absolute delight it was an exact match. Almost as good, I discovered the shade of yellow in Hammerite's smooth paint range was very similar—close enough for my purposes anyway.

So I ordered two big, six-metre rolls of yellow and black Oratex UL 600 to cover the new fuselage's top and bottom respectively, reasoning that, despite my aerobatics, I wasn't going to be spending enough time inverted for the underside to be at risk, so that could still be black. Paul arranged for me to attend TLAC's excellent one-day course in using Oratex. Its application is different to that of the old-fashioned fabrics and, although I

had covered my RF4D in it some time ago, this day of instruction was definitely worthwhile.

Meanwhile, Francis and LAA Chief Inspector Ken Craigie investigated the work that had been completed on Whisky Hotel during the previous two decades, to ensure the absence of worksheets or other 'paper trail' wasn't an indicator of anything sinister in its past, but merely seemed to have been an administrative omission on the part of the craftsmen concerned. The LAA could allow my fellow Fournier enthusiast and repairer Dave Bland to oversee the new build—and although not licensed, Dave Bland was already an LAA Inspector, so his own comprehensive worksheets would be acceptable for an LAA Permit aircraft.

Now, at last, I am making progress. But I still need an engine.

