

## Building a Mick Reeves 1/4.5 scale Hurricane. Instalment 1

### Research, Planning and Purchasing



A couple of years ago I made a 1/5 scale Vailly Hurricane but I have never been that happy with it due to the amount of ballast I had to add to the nose to get it to balance. The wing loading was consequently high which made high speed landings mandatory and difficult so it's spent most of it's time hanging from the roof in my workshop.

Scale model aircraft building is for me an evolutionary process so I thought I would build another Hurricane and try to avoid the traps that I had come across with its predecessor.

Because the Hurricane has a short nose and will probably need ballast to balance I wanted to build as large as practical so I can get as much hardware as possible in front of the C of G, this meant looking for a model about the 1/4 scale size, somewhere about 110" to 120" or 2.7m to 3m wingspan.

### Research

Looking for a plane to model was easy for me this time as I'm going to do the Hawker Hurricane Mk IIC Trop again. This will be a model of the Hurricane that was flown by Flight Lieutenant "Slim" Yarra DFM RAAF serving with the RAF 185 Squadron in Malta 1941-42 . "Slim" had 12 victories in the Malta theatre before he was KIA in Europe in 1942. Slim flew with the Squadron ID letters GL- A.

Hawker Hurricane Mk IIC, BE402, LE-S, of N° 242 Squadron which arrived at Malta for operations from the Island on October 4, 1941. This aircraft was slightly damaged on landing after its ferry flight from HMS Argus (Operation Perpetual) but was repaired and went back into service



## Plans and Parts.

Originally, I had two options and they were to scale up the 70" model from Brian Taylor to 1/4 scale and have to make spinner, canopy, cowl, etc or to have a go at a Richard Rawle model from Rawle Aviation.



This is a picture of the 120" Rawle Aviation Hurricane at Duxford in 1990.

Richard has a web site <http://rawleaviation.blogspot.com/> and advertises 1/4 scale Hurricane plans and bits. I ordered a set of plans to see what I was up for. The plans duly arrived and although a bit rough, looked to me accurate in outline and easy enough to build so I ordered Cowl, Canopy, Exhaust and Radiator and asked for a quote for the Spinner and other bits, this was back in July 2011 and I haven't heard from him since despite weekly requests from me. Scratch Rawle Aviation, just too hard.

I was about to forget the whole idea at this point but I thought I would see if Ross Woodcock could help. Ross had an immaculate Sea Hurricane at the first Bowlyie Rally and he must have made / sourced the plans and bits.



Ross replied to my email that his Hurricane was built from his own plans and that he had made all the accessories and details, he advised me to have a look at Mick Reeves website as he had just released a new Hurricane kit.

What did we do without Google? I found Mick's website <http://www.mickreevesmodels.co.uk/> and look what I found...



Not only is it the right size, 109" wingspan 15kg, but he is selling a laser cut kit and all the accessories as well.

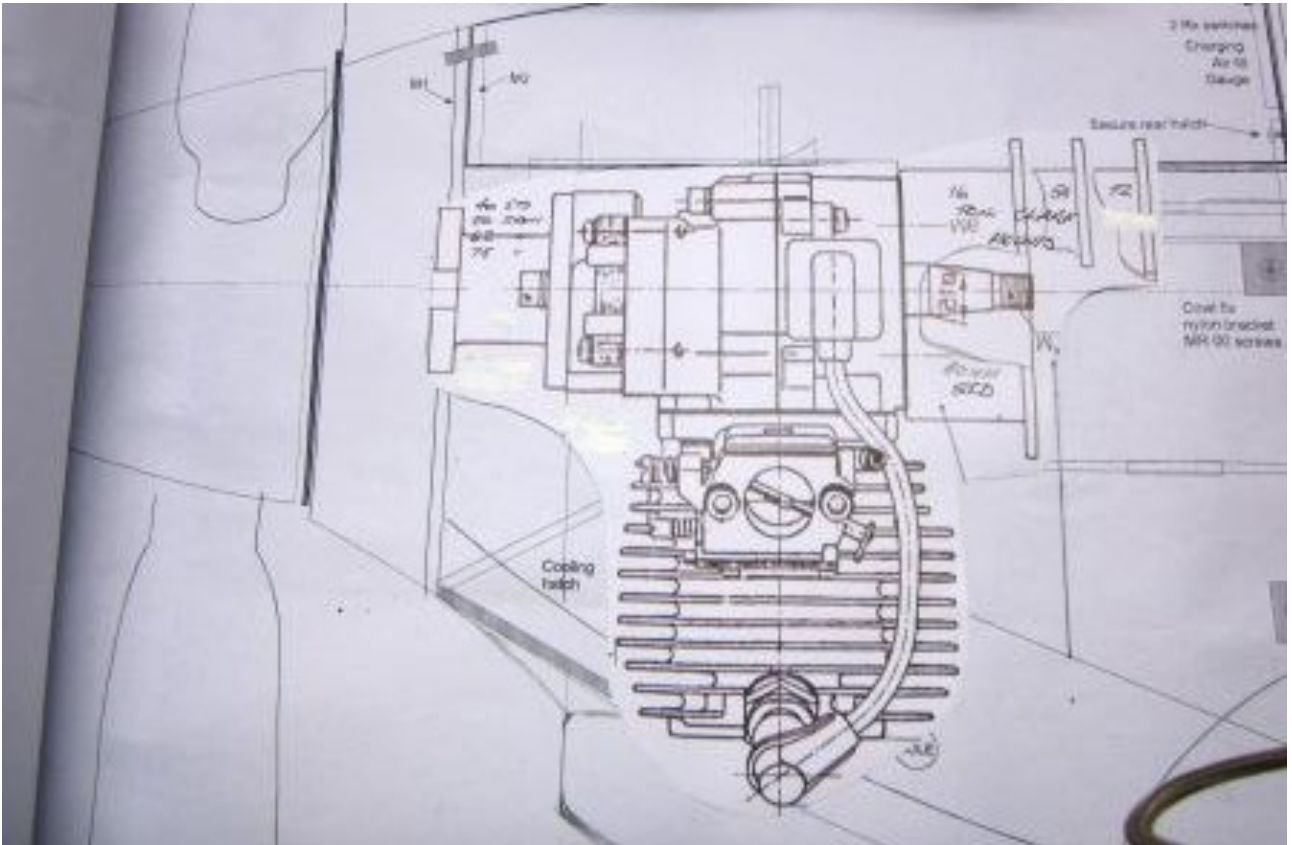
I ordered a set of plans and building instructions first, as again, I wanted to know what I was up against. The plans and instructions arrived promptly and all look good.



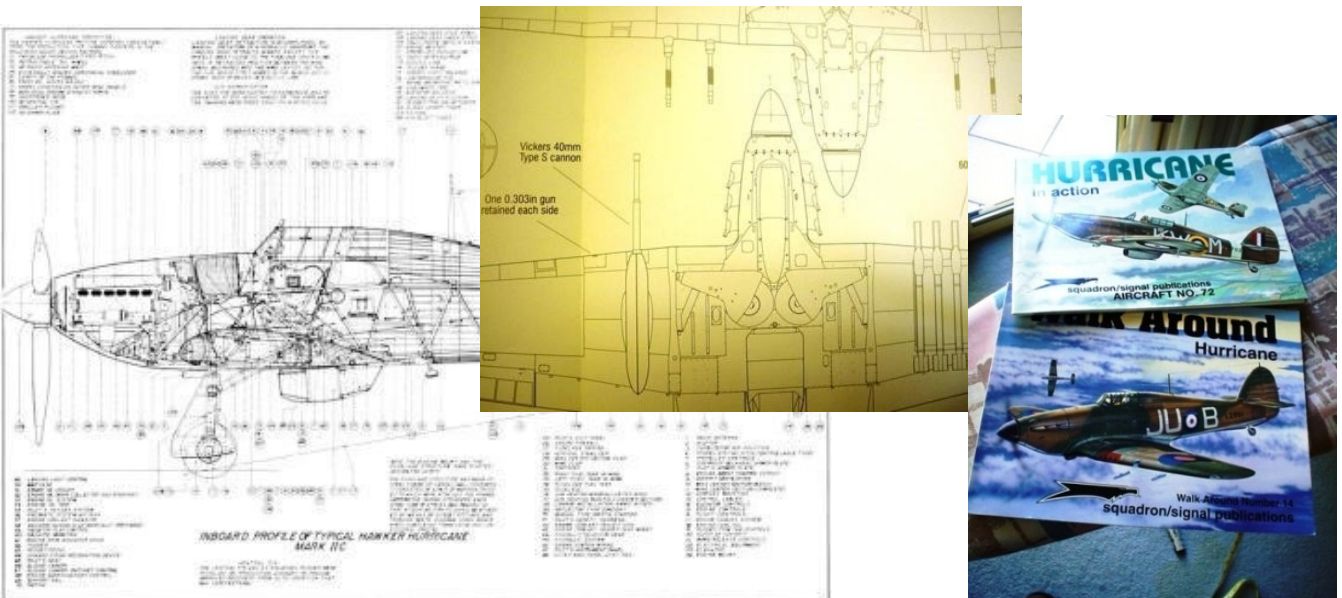
There are a few unusual features with this build such as the wings and front of the fuselage are skinned with 0.3mm thick fibreglass sheet and that the whole aircraft is made up from laser cut parts similar to current ARF practice

**Planning:**

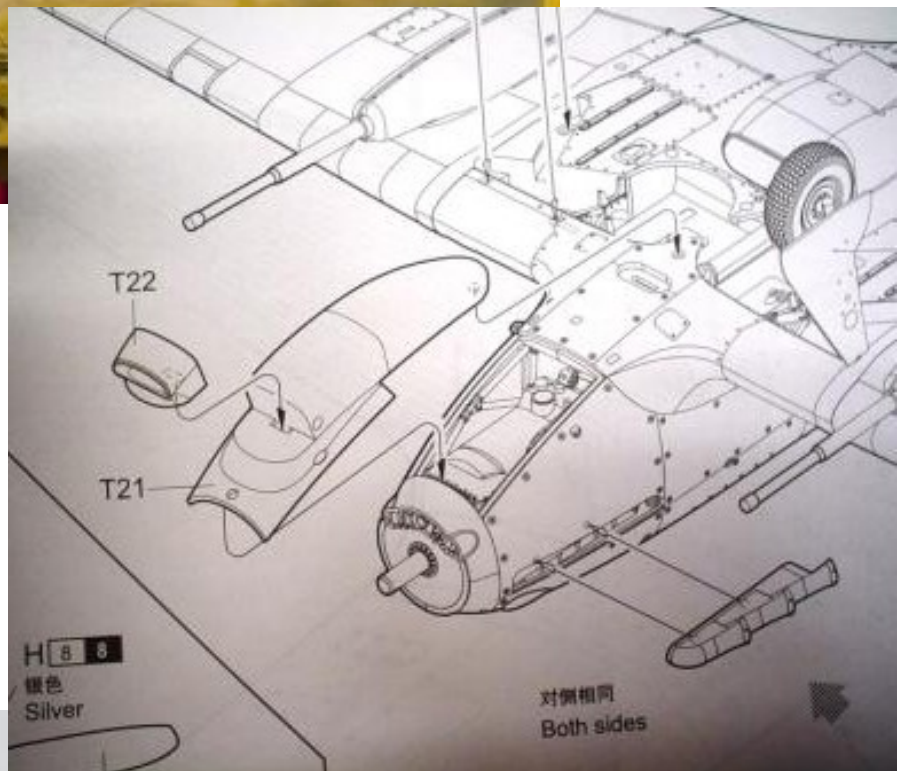
**Motor:** Mick powered the prototype with a Laser 360 but I wanted to use a Zenoah G62 that I have had for awhile now. I needed to be sure it would fit entirely within the cowl so I went to Toni Clark's web site [http://www.toni-clark.com/index\\_en.htm](http://www.toni-clark.com/index_en.htm) where I was able to download a drawing of the motors profile with dimensions. After scaling the drawing up on a photocopier to the correct size I positioned it over the plans and it looks like it will fit although it will be close as the Zenoah is very wide even with a 90 degree carburetor manifold. I will need a 75mm Zirol prop shaft extender as I'm going to have to set the motor as far back as possible. The Zenoah is a big lump of a motor but the Hurricane will need all the weight it can get up in the nose, the motor is strong and reliable so it's a goer.



**Scale Detail:** I've got tons of detail for the Hurricane from my previous build so I can tick that box.



Mick's plans don't include the Vokes tropical dust filter that is needed to make the tropical Hurricanes that were in Malta so, once again, I will refer to a plastic kit to see the shape of the filter to make and fit under the engine cowl. The plastic kit will also be a great help later for defining panel lines and hatches..



## Purchasing:

I've got the motor, the plane is the right size, I even have the paint left over from the Vailly model and I have all the scale references I need so bite the bullet and order the following:

- 1 x laser cut balsa and ply parts for fuselage, wings, tail, fin and rudder
- 10 x vac forms
- 12 x epoxy mouldings
- 1 x balsa pack
- 1 x Hardware packet
- 1 x Canopy
- 1 x set canopy rails
- 4 x sheets Proskin 0.3mm
- 1 x set wing tubes
- 1 x Super dash
- 1 x spinner
- 1 x pair wheels
- 1 x electric retract set
- 5 x packs of ¼ scale rivets
- 1 x 500ml Probond glue for Proskin

Santa has arrived.....



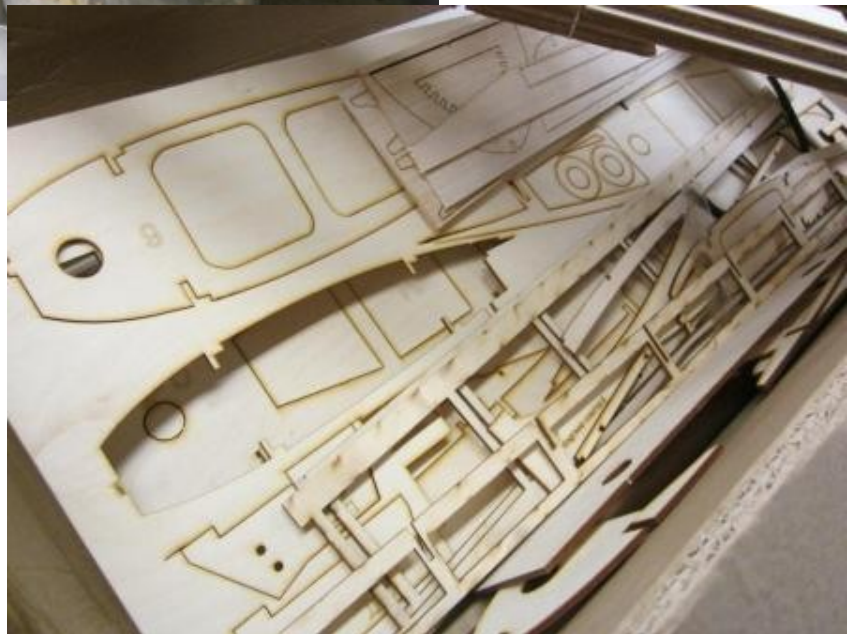
But he only just made it as the box had got wet somewhere between the UK and Oz. The tape had let go and the carton was about to burst.





There is a lot of bits with this kit, a real lot of bits...for someone who might like to make an aeroplane with a small parts count this is not the kit for you.

The construction of the complete model is as current ARF practice with laser cut plywood formers with a fibreglass cowl.



All other bits with compound curves such as wing and tail fillets, wing tips, gun blisters are fibreglass mouldings or are vac formed PET.



I am really pleased with the quality and clever designing that has gone into this kit and I am sure an accurate and good flying model will result.



One small glitch in my purchasing is that Mick supplies a Mk1 spinner which is more pointed and does not have the long parabolic shape of the Mk2c that I am going to make so I will have to get a 5" three blade spinner from somewhere or make one.



To break the hundreds of parts into a digestible amount I separated the fuselage parts from the rest as I am going to start this build with the fuselage.

Next instalment I'll start making the thing.

Cheers

Stan