

HAVE A GO AT BUILDING A SCALE AEROPLANE... Instalment 1:



I have been building scale model aeroplanes for over 50 years and have never seen such beautiful models as those being made and regularly flown today. The great change is that a lot of these are ARFs. How good is it that you can front up to a shop or shop online, fork over as much or less than it would cost you to build the same thing and end up with a beautiful model with a minimum amount of work putting it together. But what if your favourite plane is not available or the size of the ones that are available don't suit you? Why not have a go at building your favourite plane exactly the way you want it.

These days it has never been easier to build a scale plane. There are hundreds of plans available any of which can be scaled up or down by your friendly local graphics printer. Quality accessories are available on every aero modelling website so let's have a go.

I wrote off my old Kittyhawk recently and needed a new project to replace it.



Where do we start?

Probably everybody has a favourite era, from the fragile pioneers flying Bleriot's to WWI Camels, Pups and Spads to the Classic era, Mew Gulls, Staggerwings, Mr Mulligan's, Gee Bees to WWII Kittyhawks, Spitfires, Hurricanes, Mustangs, to early jets Vampires, Me262, Meteors to Cold war and Korean war jets Sabres, Javelins, Hunters, Lightnings, Vulcans to modern jets F111, F18, Raptor, Euro fighter etc etc. Pay your money and make your choice!

My favourite era is WWII heavy metal fighters flown by Australian pilots in the RAAF or RAF. I start with the choice of type, then find an Aussie pilot in a particular war theatre to give me the basic colour scheme and then search for fuselage decorations that are a bit individual. I search the web and libraries for as much info as I can about the pilot's war record, the nose art and markings that were painted on his plane and where he operated. This little dose of history will leave you in awe of what these young blokes achieved with so little support.

I had been reading a book about Australian pilots in the RAF defending Malta and this led me to wanting to build a Hawker Hurricane.

I have diarised making the thing, listing suppliers and costs in a hope that this info may tip someone over the edge and discover a new satisfaction from our fascinating hobby.

Research

The web has an enormous amount of info on scale subjects if you know where to look. Sites such as www.hyperscale.com, www.aircraftresourcecenter.com and



grubbyfingersshop.com will give you a free walk around the subject of your choice. Books such as the Signal/Squadron publications

www.squadronsignalpublications.com will give you vital three views, photos and dimensions of the full size. The books cost about \$20 and are available from online stores such as

www.hobbycentre.com.au

My latest search ended up with me selecting a Hurricane MKIIc Trop 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 the Mk IIc Trop with the Squadron identification letters **GL-A**.



ID Number: P00943.007
Maker: Unknown
Place made: United Kingdom: England
Date made: 1942
Physical description: Black & white
Summary: Brothers and members of 453 Squadron RAAF, 402823 Flight Lieutenant John William (Jack) "Slim" Yarra and 413707 Sergeant Robert Ernest (Bob) Yarra standing by the cockpit of Jack Yarra's Spitfire. The aircraft is decorated with the twelve victory markings of Jack's score over Malta in 1942, together with the name "NED V". Yarra's girlfriend in Australia was nicknamed "Ned" and all his Spitfires were named for her. Bob Yarra was presumed killed at sea of the coast of Holland whilst on operations on 10 December 1942. Pilot Officer Bob Yarra was also killed whilst on operations on 14 April 1944 when his aircraft was shot down whilst attacking the flying bomb base near Abbeville, France.
Credit line: Donor J Yarra
Copyright: Copyright expired - public domain
Related subject: Supermarine Spitfire
Related unit: 453 Squadron RAAF
Related place: Malta; United Kingdom: England
Related conflict: Second World War, 1939-1945

There were more pilots than aircraft in the defence of Malta in 1941-42 so no one aircraft was allocated to any one pilot. Nose art and cockpit victory marking were rare or non existent. The picture below is of an identical Hurricane , except for the ID letters, flown in the defence of Malta. This will be our colour scheme.



What size??

I like my 'scalies' to be around the 2.5M span. I can usually completely hide the motor, accessories such as retracts, wheels etc are readily available and they fly more like the full size ones do. Smaller models never look right in flight to me as they have to fly too fast for scale speed just to stay in the air.

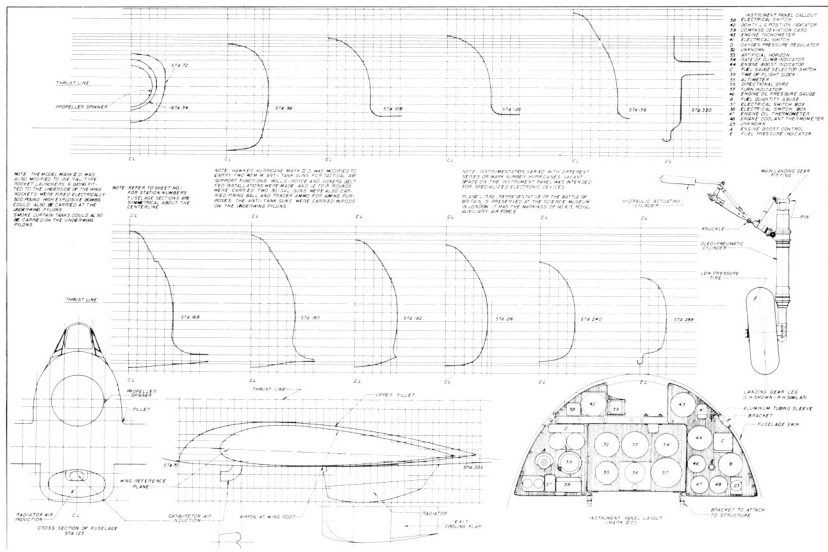
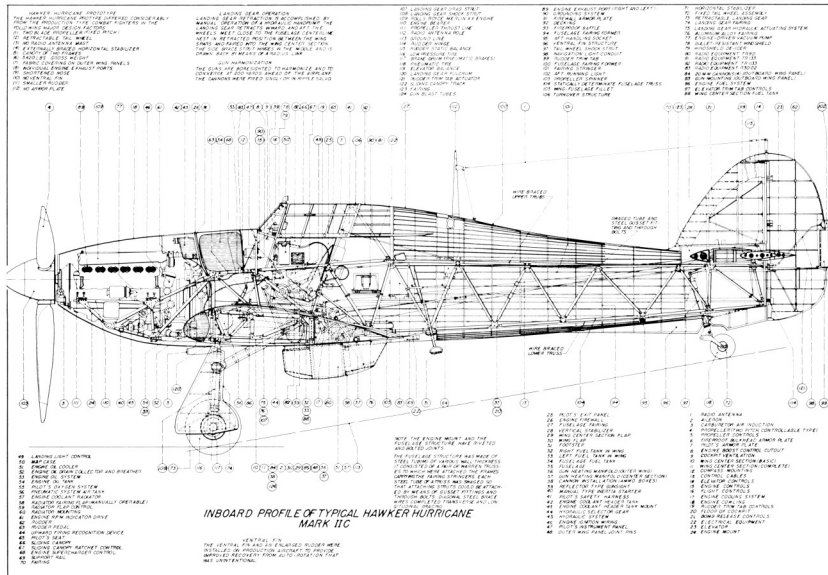
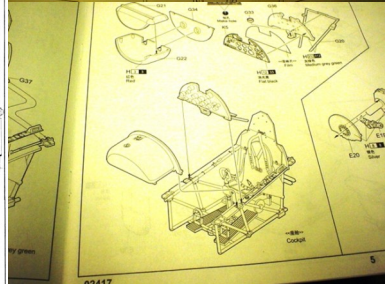
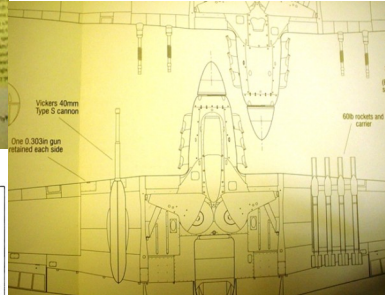
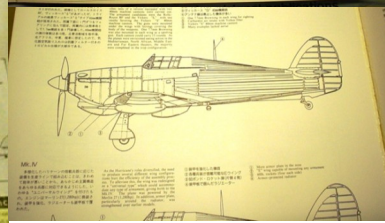
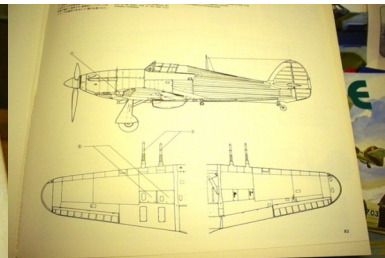
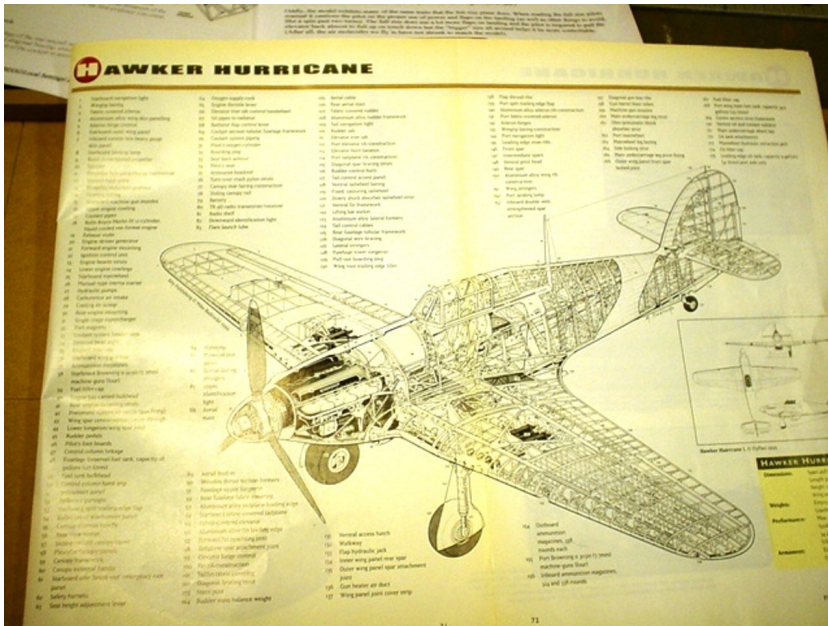
Plans and Parts.

I considered three plans, a 70" model from Brian Taylor, 90" model from Jim Pepino and a 92" model from Roy Vaillancourt. The Brian Taylor plans were probably the most accurate but neither the Pepino or Taylor plans had accessories for sale like cowls, canopies etc, besides the 70" model would need enlarging. I went with the 92" Vaillyaviation plan.

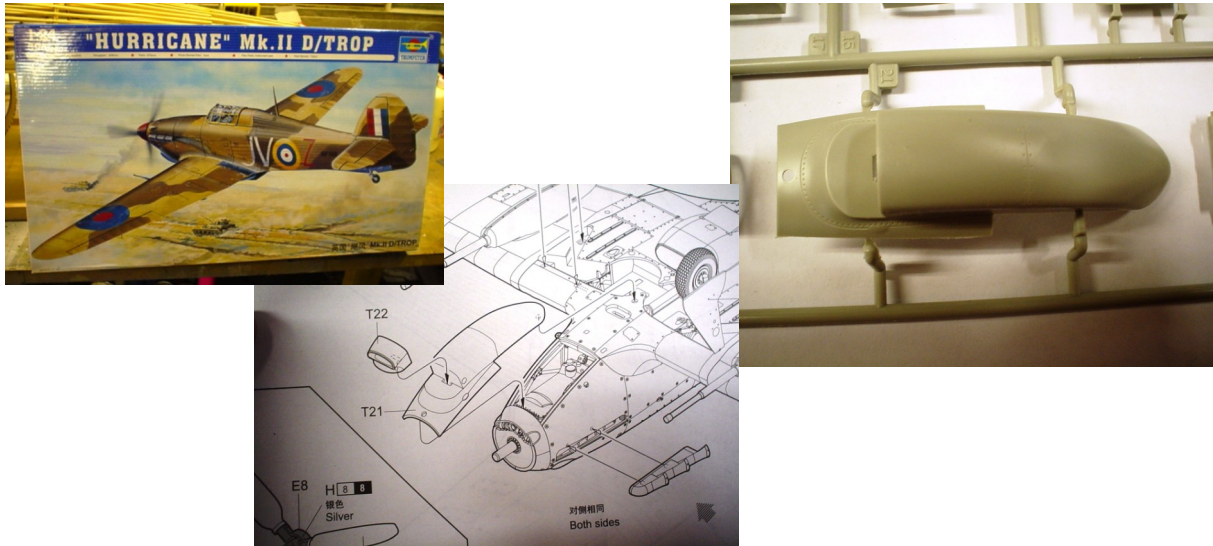
I purchased full size plans (\$44), wheels with aluminium hubs (\$38 ea), f/glass cowl (\$42), exhaust stacks (\$16), canopy (\$24), scale aluminium spinner (\$44), f/g radiator fairing (\$26) and a (\$22) step by step building photo pack. All items with the exception of the canopy are good value. The canopy is just fair as it has the canopy frame moulded into it, this results in the frame being too big and not crisp or clearly defined. I will use it to create a pattern and then blow a canopy and a separate frame later on.

All the bits came from www.vaillyaviation.com





The Vailly plans are for a MkIIb and do not have the tropical dust filter that is needed to make the tropical Hurricanes that were in Malta. I had to buy a plastic kit to see the shape of the Vokes filter that I had to make and fit under the engine cowl to make it a MkIIc Trop. The plastic kit will also be a great help later when we are defining panel lines. The previous page has some pictures of other drawings and books that I thought would assist with the build..



Next on the shopping list is the motor and the retracts, these are the big dollar items so a bit of effort went into getting the best deal.

The retracts are a bit special as they swivel 15 degrees when retracting to lie flat in the wheel wells. I bought them from Darrell at Sierra Giant, they cost USD500 so I waited until the Aussie dollar was strong before purchasing. They are just superb.

Now that Al Zuger has bought Custom Retracts maybe we can get similar a bit closer to home, nudge, nudge..

Sierra Precision Products
 11941 Abbey Rd., Unit E
 North Royalton, OH 44133
 Attn: Darrell Tenny
 PH: 1-440-476-4885
 FAX: 1-440-230-2318
 E-mail: darrellcnc@aol.com
www.sierragiant.com



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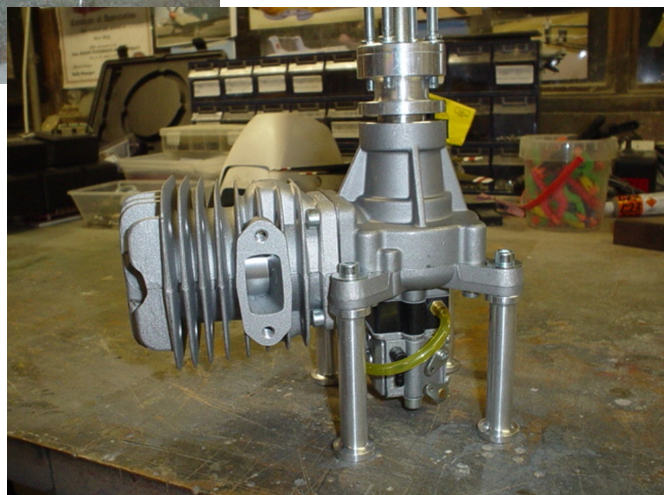
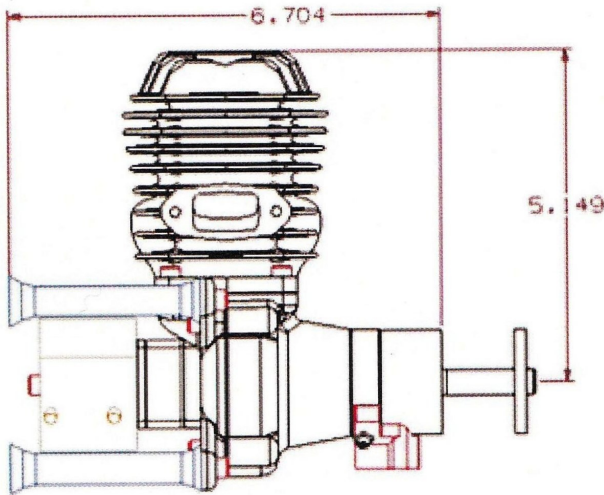
FOR ALL INQUIRIES AND ORDERS
 CLICK BELOW TO EMAIL US NOW.



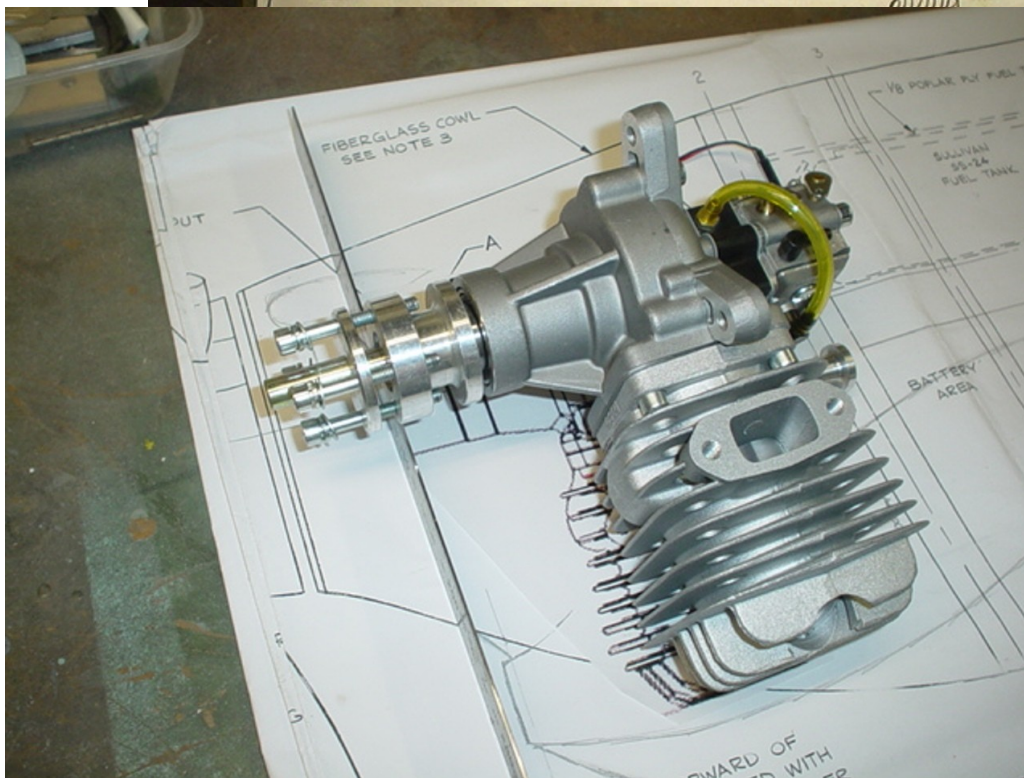
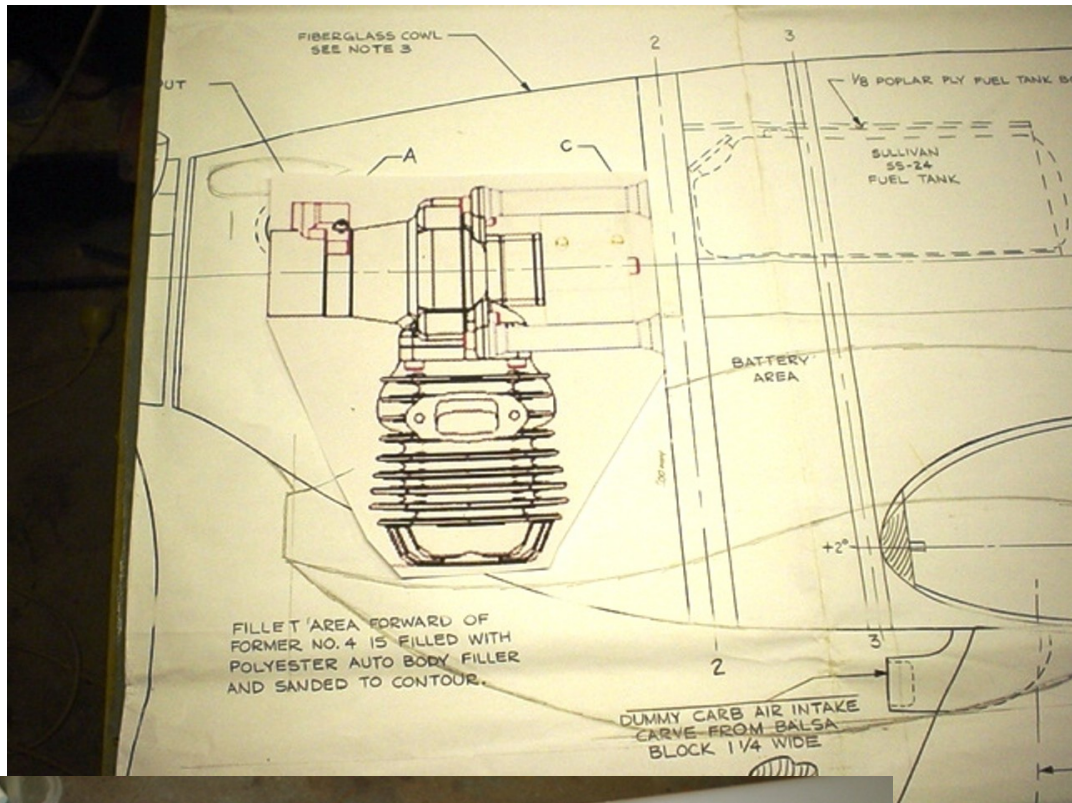
ALTERNATIVELY YOU CAN PHONE / FAX / MAIL
 YOUR ORDER TO:

CUSTOM RETRACTS
 P.O. Box 151
 NORTH RYDE NSW 1670
 AUSTRALIA
 MOB: 0400 812 717
 TEL: 02 9888 7384

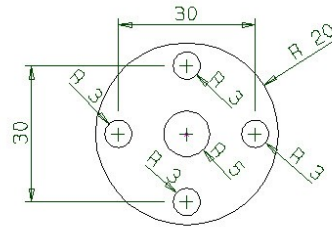
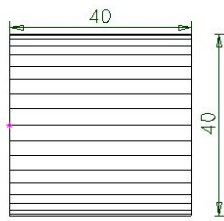
As I had lost my Zenoah G62 in the Kittyhawk crash I needed a new motor. I looked at MVVS 45, G62, DA50, Fuji 50, CRRC50 and the DL50. To cut a long story short I got online and bought the DL50 from <http://www.cyclonetoys.com> It cost USD 273 plus I had to pay USD 45 for freight. You can buy these motors from an Australian agent now with warranty <http://www.dlenginesaustralia.com> but they cost \$AUS578



To make sure the motor would fit inside the cowl I used a photo copier to scale up a line drawing to the dimensions of the full size. I then laid the drawing of the motor over the plan for a reality test. It will fit but would not have fitted without the Vokes filter to hide the spark plug and high tension lead.



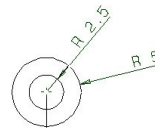
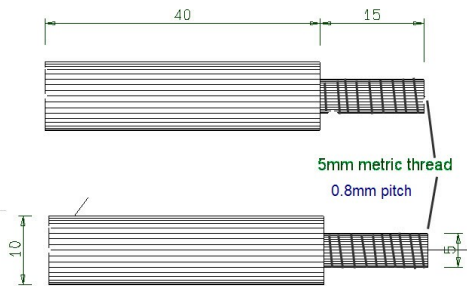
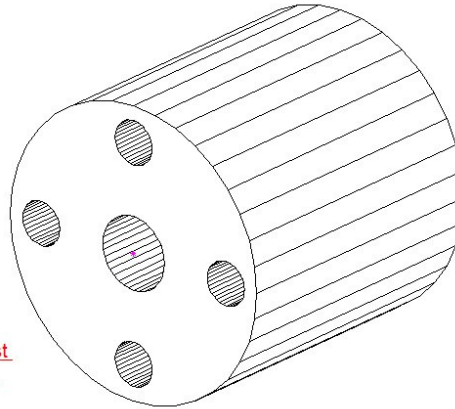
You can see from the above picture that I will need a propeller shaft extender. I drew up an inner and outer extender and sent the drawing off to 'patchcat@oze-mail.com.au'. I cant remember the guys name but he was quick and accurate.



Aluminium hub extender

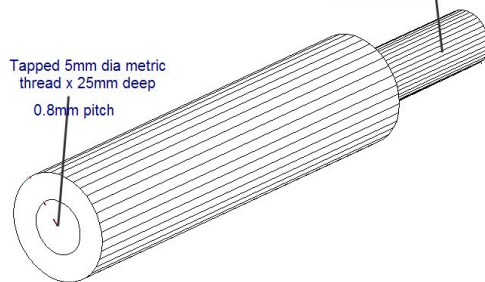
4 x 6mm dia through holes and 1 x 10mm dia through hole.

Note. The steel c/shaft extender must be a clearance fit in the 10mm dia hole.

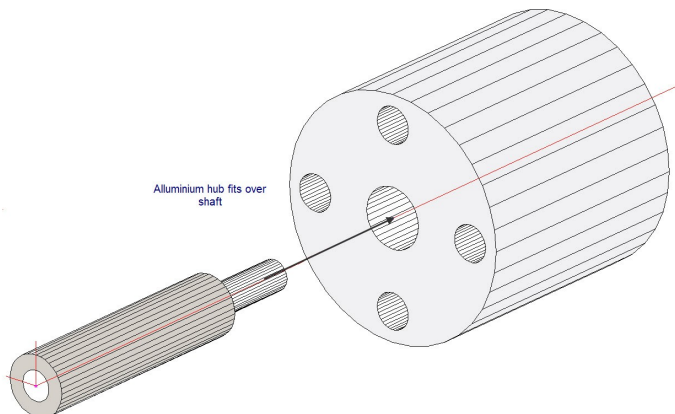


Stub to have 5mm dia metric thread 0.8mm pitch

Tapped 5mm dia metric thread x 25mm deep 0.8mm pitch



Steel crankshaft extension for DA50



Alluminium hub fits over shaft

After studying the plans I was concerned that as the fuze formers were so intricate I might not be able to cut them accurately enough on a scroll saw to get a straight fuze. This was a job for Brownny at Model Draughting Services and his laser cutter. daveb@ix.net.au. Brownny supplied the material and cut me the fuze and wing ribs for about \$180, most were 1/8" ply and they were spot on..



Well, that just about completes all the main purchases. Next instalment we will start to make the thing.

Cheers
Stan