DH82A TIGER MOTH REBORN

18th May 2013 was not such a good day for flying, well for me anyway. We were attending the COMSOA scale rally at Maitland, a fine day but a rather stiff but steady westerly wind blowing.

Models were assembled and first up a flight with my then, trusty Avro Avian Monoplane which handled the wind ok so why not fly the Tiger. After starting, and a retune, we were ready to go. Can't have been too good as the engine quit as soon as the throttle was opened and it was back to the pits for another restart and another tune.

I should tell you at this point, the engine is a Magnum 180 (30cc) Four Stroke which has been fitted with an OS200 Carb for better reliability.

HaHa I hear you say! It also has an on-board glow that is on permanently while the engine is running. This is also to improve the reliability. Yep, I hear more HaHa's.

Well all was set, the motor restarted, engine tuned, raised the nose, the tune adjusted again, all set for take-off.

Clearance given , a smooth take-off and 25ft up a cough, back on the throttle and tried to nurse the model downwind and back to the field when late downwind that ever reliable!!! Magnum, yeh HaHa again!!

QUIT, yes **QUIT (##@**&#$@@*&%%)**

My first thought were to try to nurse it back to the field but the strong tailwind had me turning away for a landing in a clear area across the access road. We got too slow, tipped stalled and you can see from the photos that the result wasn't going to be pretty.

I'm smart enough to know this wasn't going to be my day and I would have some work in front of me.

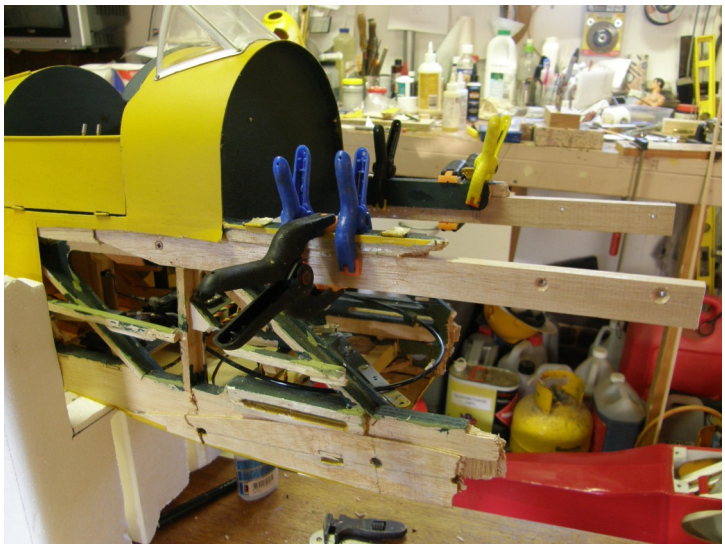
The Tiger cartwheeled on touching down and the wings because they are a braced unit came out of it fairly well. Upper left wing had damage to the root rib and some of the bracing wires and structure was damaged. Quite minor really. The fuse was another matter, broken in half at the front cockpit, this was going to take some serious work.

Incidentally, the fuse is the weakest part of the build with the front and rear sections being built in two pieces and grafted together It had broken here previously after not much more than a hard landing. This was the time to do a proper repair.

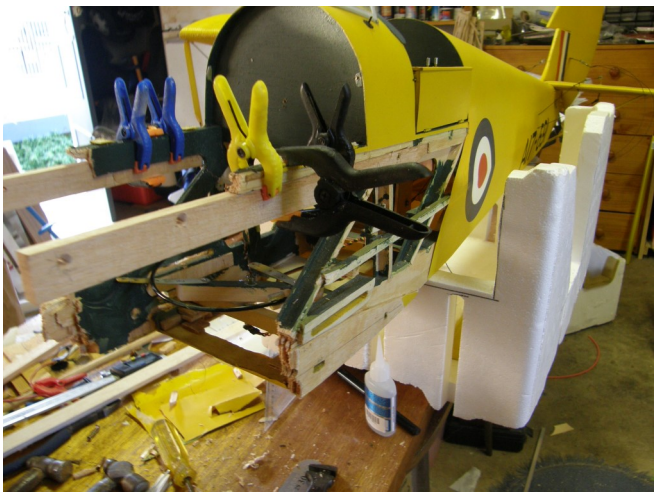
All the decorative bits were removed, along with covering, undercart, tank, rudder controls, batteries and motor. Do I stick with the motor? Or is it time for a change?

Well we have a OS200 carby so why not a full OS200 setup, WHY NOT indeed, so I purchased a used OS200 and with a few mimor mods it would fit ok.

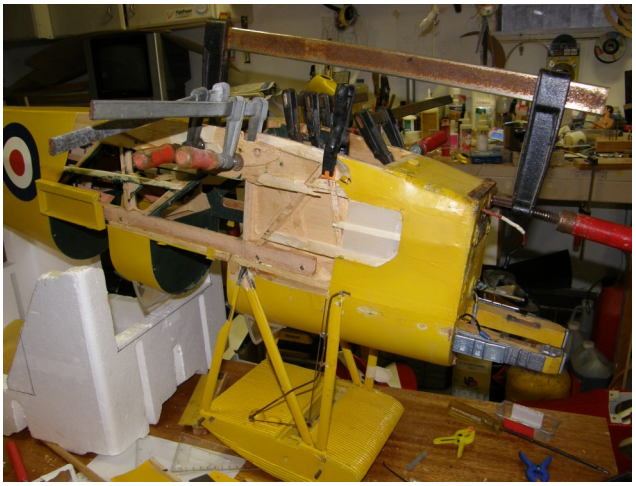
After a bit of trial fitting it became apparent that a bit of glue wouldn't do the job so of to the local Bunnings for some Tassie Oak hardwood for bracing. I chose 18 x 8mm and 4 pieces would be installed from forward of the front cockpit to aft of the rear. Each piece would be approximately 400mm long.

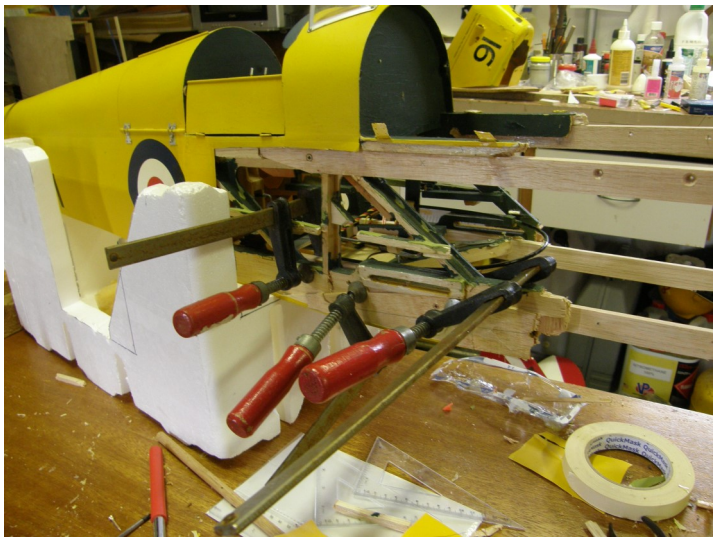


I started by grafting the new upper longerons into the rear portion of the fuse using epoxy, clamps and screws.

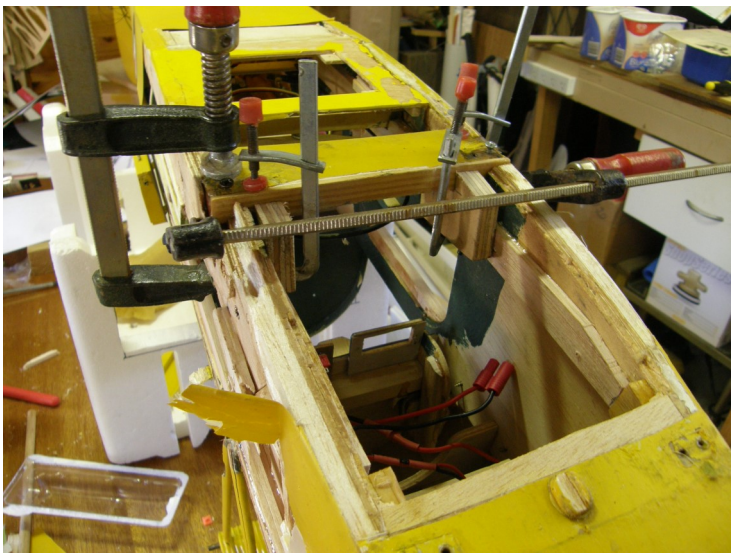


More clamps, just as well I am a frustrated cabinet maker! Once all 4 new longeron sections are in then the two halves will be brought together





Clamps everywhere, fore and aft holding the front and rear together and clamps on both sides holding the original frame to the new longeron sections, When the two haves were brought together and alignment was established, screws were inserted through the existing frame and into the 4 longerons. This allowed me to check everything before the glue was applied. Liberal amounts of 24hr Epoxy was then applied to the frame and longerons and with clamps and screws it was held together to allow the glue to dry for a minimum of 48hrs. Now the fun started, adding in the gear mounting blocks and re-building the undercarriage, changing the engine mounts to accept a new OS200 four stroke, re-plumbing the fuel system, repairing the fibreglass cowl, sorting the throttle linkage and on-board glow system. And to finish off, ordering some moulded parts from Flair UK.



It was also time to think about whether I would retain the original colour scheme. This scheme was taken from VH-UVZ , the first Tiger Moth registered in Australia on 12th August 1936. It too crashed into Sydney Harbour, was rebuilt and spent the war years as a trainer in the RAAF at the Temora base. Fittingly it is now part of the Temora Air Museum and flies regularly on their flying days. This would all be dependant on matching the colour allowing there is a clear, which in itself has yellowed, over the original yellow.

To be continued.