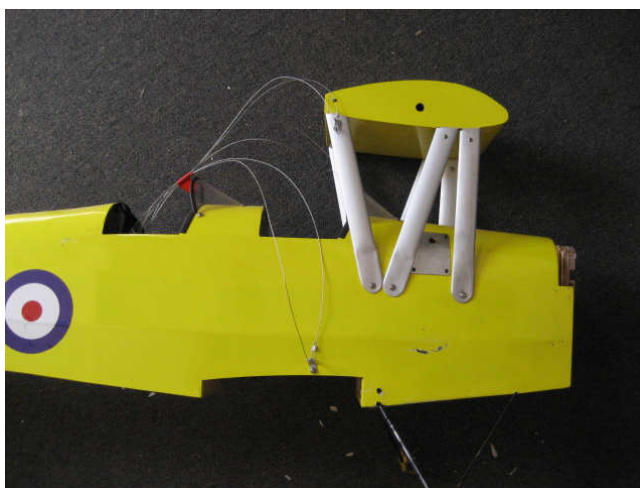


Tiger Moth re-born

I've always like biplanes, and the saying "real aeroplanes have round engines and two wings", and although a Tiger Moth doesn't have a round engine it has the right number of wings. Steve McMahon had an ARF one that he was not happy with because it refused to fly properly so, for a modest sum, it changed hands and I became the new owner. It was semi-scale and covered in a gloss yellow film so I decided I would improve it's scaleness by covering it in fabric and adding a lot of scale details so the first job was to strip it down to the bare bones (which would also allow me to check the structure).

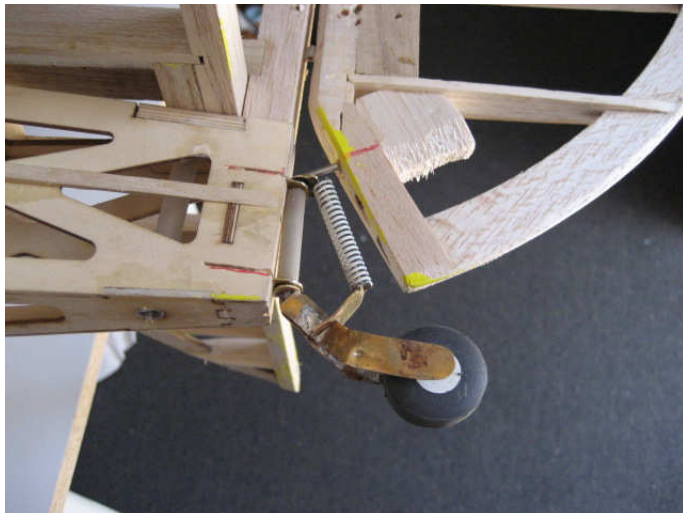
Here it is and I have to say it was pretty strongly built. There is a curious mixture of dodgy ply, hardwood and balsa but the result is light and strong. There were a few repairs and strengthening bits to add and also extra pieces to allow the scale rigging and control cables to be attached or exit the frame. That done I was faced with the cabane struts. I didn't like the aluminium struts, far too big to look like the real ones (and I suspected the wrong incidence angles) so job #1 was to make new ones. Here are the originals. This raised the interesting question - what should the incidence angles be? Now common rumour is the top wing incidence should be greater than the bottom wing so it stalls first and you still have aileron control on the bottom wing so on to Google. I searched on "Tiger Moth wing incidence" to find lots of sites and lots of theories but the general consensus seemed to be 0 to +2° on the bottom, +2 to +4° on the top and zero on the tailplane. One strange guy said +2 bottom, -4 top (!) as it improved the inverted flying!! I opted for tail 0, bottom 0 and top +2° after discussion with various people including Brian Winch. But how to set it up when everything is disassembled? I made the cabane struts so that the top wing would pivot on its rear mount and the front could be fixed when all back together.



The undercarriage needed some work to make it more scale so that was next. That's better, new spreader bars and fairings on all of the main legs, new wheels too. Luckily I had a pair of wheels the right size though the hub caps would pose a problem when I got to scale finishing. Notice the front passenger seat, I had to cut the sides out as VH-DHK that I was modelling has the doors removed so the joy-riders can get a better view.



Now down at the other end the tail wheel was a classic sport model type and I wanted more than a piece of bent wire. Luckily VH-DHK has a tail wheel so I cobbled together some wire, a bit of brass, an old spring to produce



something that isn't super scale but looks a lot more like the real one. While on the tail I noticed something that all TM fans will spot straight away look at this.



Yes, there are too many ribs in the rudder! So balsa knife, scrap box, glue and an hour of work produced this!

It was about this time I started muttering and decided I only wanted semi scale and that this was going a bit too far!

It was time to get on with more important stuff.

That's in the next exciting episode!