Building a 33% Scale Piper PA-22 Tri Pacer from the Wendell Hostetler Plans

Balancing Large Models

Before finally committing to painting this model I had to balance it, make the necessary adjustments to battery positions and then I was able to cover the underside of the fuselage.



In the past I have balanced my models on a custom made frame made from aluminium extrusions plugged into plastic corners and tees but this wasn't going to work balancing the Tri Pacer unless I balanced it upside down as the wing struts were in the way. I wasn't too keen about the upside down idea.

I remembered reading about a balancing rig called a Vanessa Rig in some giant scale article I had stumbled on in the past so I Googled RC Vanessa balancing and there was a heap of info and You tube demos on how to make and use this setup.



The guts of the rig is a block of wood bored and cut to pinch a piece of rod that is rotated after slings are wound around it to level the plane.

The pinch is adjusted by tightening a through bolt and has to be tight enough to hold the plane in the level position.

A plumb bob is dropped from the centre of the rod to the plane.

The plumb bob will then point to the balancing point.

Simple and accurate.

I had over compensated for the big Saito up front and was initially tail heavy so I repositioned two Lipos that I had under the stab to under the cabin and was then spot on





the 150mm from the LE as per Wendell's recommendation.

I found the Vanessa Rig was easy to use, cheap to make and accurate.

Another good thing is that the plane is secure at all time unlike trying to balance it on two points as you do with conventional balancing techniques.



Now I really have to paint the thing.

I can now categorically state that spraying house paint didn't work for me. I even followed all the instructions. I couldn't adjust the amount of paint to spray fine enough and ended up with a wing that looked like it had been painted at my grandsons pre-school, takes more paint skill than I've got. The only good part about the wasted day was that I was able to hose all the bloody stuff off. Oh well, take out a third mortgage and go see the car paint man to mix me up some colour matching lacquer.

Supercheap Auto are able to do custom car paint colour mixing so I had them mix me the Daytonna White and Cadillac Red from swatches I had selected from the huge range at Bunnings. It wasn't cheap but I now have 2ltrs of the white and 1ltr of the red so on with the show.

Not wanting a second stuff up I waited until my son made a visit and put the word on him to paint the thing for me. Ian is a shipwright and is continually painting boats at his boatshed at Palm Beach so spraying a little plane is a doddle for him.

Sure enough a couple of hours later she's all done. Thanks lan.

Now comes some pretty extensive masking so I can decorate the fuselage with all the red stripes of the original



Flying Scale Models magazine had a feature article all about Piper Tri Pacers. Its been a great help for scale detail reference all the time of the build. The colour schemes and colour options were detailed for the various models by year and as VH-RST was a 1957 model the scheme is the one second from the top with the Cadillac Red option rather than the Pasadena Pink as shown.

The picture above will give you some idea of the extent of the masking required



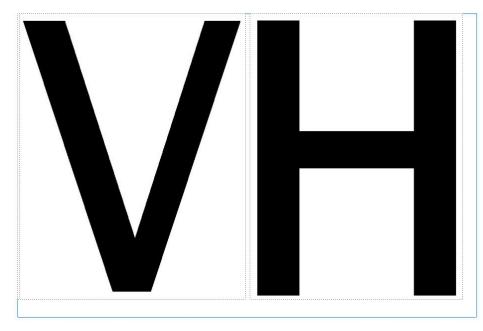
It took me nearly a day to mask it up ready for the Cadillac Red. I found the only good tape to use when cutting lines is the 1/2" Tamiya stuff, the cheap Bunnings stuff is asking for trouble as any red loves to bleed through and under poor prep.

In between all the painting hoo haa I rolled out MS Publisher and made up a set of decals that I'll transfer via laser printer to white and clear waterslide decal paper.



The Royal Aero Club of NSW badge goes on both sides after I trim off all the black background and the other decals are just mainly lettering with the exception of the prop makers decals.





Wing registration letters should be about as high as 1/3rd the chord of the wing and with this model that's about an A4 sheet in landscape



At last, a coat of Cadillac Red all round.





Removed most of the masking and all seems pretty good.

Now I'll apply the decals and spray wings and fuselage with a semi-gloss clear coat and then I can finally remove the last of the masking.



Registration letters are on top of the starboard wing and on the underside of the port wing. Pretty straight forward job using two sets of laser printed black lettering on clear waterslide paper.

I wash the area for the decals with a very weak solution of PVA glue and water and then I find that after the decal backing paper has been removed I can move the remaining decal on top of the water/ PVA film to get an accurate position, push down with a dry rag and squeegee out any excess and all done.

All the fuselage decals have now been applied and look OK, a bit disappointed that the winged RAC of NSW badge was so transparent but I haven't got an answer for that one. A coat of clear next..









Well that's a relief, painting finished...Hoobloodyray! Engine running and maiden flight to come. Cheers