

Ramblings from the shed Part 1

It's the end of outdoor flying for this year for me (I fly indoor freeflight during the winter months) and I love to build during the dark evenings. Now I have a passion for vintage models and like traditional building, plus, my radio skills are still at the "beginners" stage. So bearing both of these things in mind, I wanted to build a model that was easy to fly and definitely vintage in appearance. I have had a Belair short kit of a 'VIKING' 62" span vintage cabin model in my stash of kits for some time and I thought this definitely fits the bill. It is a decent size at 62" span and although I love power models with i/c motors, particularly diesels, this kit has been designed for electric power and I do like the hassle free aspect of electric power.



First fuselage side laid out after soaking longerons in water / ammonia bath.

I follow standard procedure and build the Fuselage sides one on top of the other. I use PVA for airframe construction. I do not, as some do, put cling film or candle wax on top of the first side. I let them dry, lift from the board and separate with a razor blade. The fuselage was then built up inserting formers from F1 through to the rear wing seat ply former. I do not have a fuselage building jig (I keep promising myself I will build one) I use a number of engineers set squares I have acquired over the years in conjunction with graph paper on the building board and the precision tool most of us possess, the Mk 1 eyeball.

Fuselage sides from F1 back to the rear wing seat were sheeted with 1/16" balsa. The bottom was again 1/16" sheet with some 1/4" at the front to blend the contour. The fuselage is brought together in the normal way at the stern post. All longerons, uprights and cross pieces are 5/32" hard balsa. I found that there was a considerable amount of torsion at the rear of the fuselage. Since this is a fairly large model with relatively large stab and fin area, I deviated from the plan slightly and made the last three bays of the fuselage stiffer by adding warren trusses diagonally. I am always conscious of keeping the aft end as light as possible, so I used fairly light balsa for the diagonals

At the front below the cabin window there is some 1/16" balsa sheeting, which I built up with a small amount of car body filler (Isopon) This sands nicely and adds very little weight if used sparingly. There is a supplied ply box motor mount which was epoxied to F1 and the undercarriage wire is fixed to F1 using a method I came across when building a 36" Tomboy from a Derek Foxwell (Old School model aeroplane factory) kit. Prior to assembly I marked out the U/C wire on F1, then drilled a series of holes through which are pushed small (3mm) cable ties. The cable ties are abraded slightly before assembly, then pushed through and tightened around the U/C wire, finally a small amount of standard araldite (not the 5 minute stuff) is smeared around each tie. As I mentioned this method was used on my Mills.75 powered Tomboy, which has suffered quite a few 'heavy arrivals', in one case at Middle Wallop the fuselage was written off, but the U/C stayed intact. The result is a very firm fixing which is impact resistant.



Undercarriage fixing to F1 showing 3mm cable ties

I made the battery tray from 1/8 Lite ply which was drilled out with 15mm lightening holes. To facilitate access to the battery tray compartment I cut a hatch into the fuselage at the bottom to the rear of the battery tray. The hatch cover is located using a ply tongue and secured with 5mm neodymium magnets.



Access hatch and battery tray



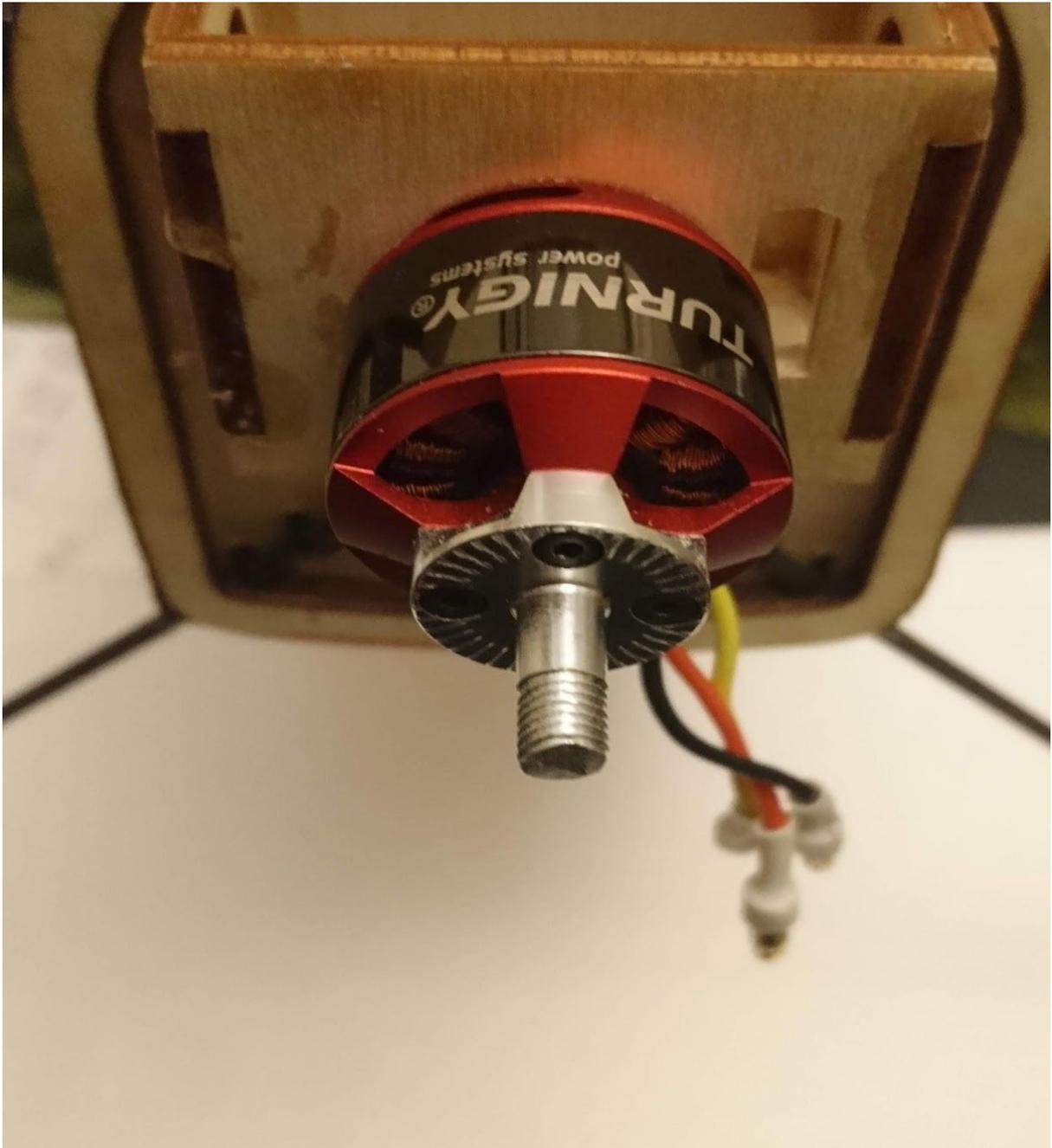
Inside of the hatch cover showing finger hole, magnets and ply locating tongue

The battery is a Turnigy 1800mAh 3s 40c lipo and is secured with polystyrene blocks and a velcro strap. The servo tray is again from Lite ply, this time 1/16 was used to hold the two TG9e servos. For this type of model I prefer to use pull/pull rudder control, however the plan shows 'Sullivan goldenrod' control snakes and I decided to go with this method for both rudder and elevator.

The Aerostar 30A ESC is mounted using self adhesive velcro onto the upper side of the battery tray and forward of the servo tray. As the fuselage is fairly wide I am able to mount the RX next to the ESC. The RX I am using is an "Orange R615x" which I have found to provide reliability at a very reasonable price.

The motor recommended for this model was a "Hacker A30 - 12M" which sells for a little over £70, now I have to watch the pennies, so I turned to good old Hobby King and since any radially mounted motor in the 200 to 300 watt range will power the beast, I opted for a "Turnigy D2826 1100Kv 265w brushless outrunner", a snip at the princely sum of £9 - 61p.

In fact the whole set up; Motor, ESC, Lipo, RX and Servos came out at approximately £58 - 00.



Turnigy brushless outrunner

