

Newby Thoughts 2

When I last wrote about persuading my traditional friends to try electric it occurred to me that they may be over estimating the cost and lack of interchange ability with foam/electric flying. Some things only need to be bought once and may be used on all your future electric models, chargers & batteries come to mind. Others are model specific such as airframe, motor, ESC and receiver, though there is no reason why you should not use an Rx from another aircraft.

So what might the costs be, I've just bought and commissioned a Telink Toro 900 wing, this is what I spent.

Toro 900 kit including postage from UK seller	£40.45
CF spars not included in the kit	£ 6.60
CY glue & Kicker	£9.90
UHU Por	£3.25
2212/6 motor	£12.00
30 amp esc	£13.95
4 channel rx	£21.99
2 x towerpro mg90s servos	£9.52
6 x 5.5 prop	£1.85
Sub Total	£119.51

Do use metal gear servos, they take quite a beating, Motor/ESC/Prop/battery combinations, follow the makers recommendation or talk to your local model shop.

I already have an Overlander RC-6S AC pro balance charger, a similar charger is available for £45.98. I would recommend a mains/DC charger, much has been written about Lipo batteries and you are well advised to ensure you clearly understand their limits and dangers. Cheap chargers are in my view a waste of money.

I already own 3s 2200 batteries, they are widely available, the Toro 900 calls for 1800Mah batteries but the 2200 can be installed within the C of G limits. Expect to spend £18 for a 30C 3s 2200, I'm getting 18 minutes flying time out of my 3s 2200 25C batteries. If you do not have a soldering kit and connectors you will need them, or a good friend who might help you out.

For IC people batteries carry a lot of baggage, all I can tell you is I've found them robust and able to withstand normal use, it is important they are well secured (I use Velcro pads & straps), on the Toro the battery is carried in a foam pod that gives excellent protection. I've only lost batteries when I carelessly connected them to a multi-rotor circuit during assembly, I now double check EVERYTHING before connecting a battery for the first time.

I'm aware that soldering is considered a dark art, I have been fortunate to be coached by Clive from our club; there are also lots of Youtube videos that show you how. In fact there were only 6 bullets & a Deans to complete the circuit (8 joints with the shrink fit insulation). If you have not committed to a particular power plug talk to your fellow club members for advice, try & buy batteries with your preferred connector thus avoiding the need to fit sockets.

There are two issues that may be new to traditionalists; the first may be the elevon control set up using two horizontal control surfaces (no vertical rudder), controlled from the right hand stick on a Tx with appropriate mixing. If your Tx does not have this feature all is not lost, an on board mixer can be bought. The learning curve is interesting but having watched a number of Youtube videos I managed to master elevon set-up on my Tx.

The second issue is the C of G which has a particularly narrow range, less than 8mm when drawn out on the underside of the wing, the forward most position offers the least twitchy option. It is my practice to embed two craft pins with plastic spherical heads in the wing at the correct position and to balance the bird on two upright posts with screws protruding from the top. The posts are clamped in position in my trusty Black & Decker "Workmate" (Shows My age) you can also check your C of G by feel on site if needed but be aware "rule of thumb" positioning is risky due to the narrow range.

Once you have the C of G sorted and the "Up" neutral elevon deflection set (about 5mm raised at the trailing edge – all clearly laid out in the build instructions) I chuck glided the wing into the wind, trimmed the elevator control first and the aileron to keep it straight, a glide of 20 or 30 yards can be achieved. You are now ready for your maiden and fun, fun, fun.

I chose the Telink wing, there are many others, slightly smaller or larger. In good flying trim they are stable, track well and by repute manage quite strong winds. The winglets at the ends of the wing are a little fragile but can be stiffened with CF, I traced out the shape before fitting in case I needed to make replacements. So far I've repaired them but not needed to replace.

I know a foamy wing lacks the presence of a replica WW1 biplane with 100" wingspan and an engine that is a work of great beauty but once set up it will fly for you in most conditions. Your preparation will be a charged battery or three, sunglasses, hat, a bottle of water and a willingness to stand for an hour flying.