New glider design for 2019 indoor chuck glider comp.

The principle was to design a new glider with a longer wingspan than the standard which everybody now uses. The wood which will be supplied will still be $9^{"}x3^{"}$ and be $1/16^{th}$ thick balsa.

The plan layout is included as a guide and can be modified however one likes.

The idea of the vee tail was to reduce drag and lighten the back end.

The fuzzy starts life as 15mm deep but has been split to 2 pieces 7.5mm and glued together, the thought being that a thickness of $1/16^{th}$ even though its 15mm deep is always a bit thin and tends to snap just behind the wing if the plane lands heavily. The weight even though it's doubled still remains the same.

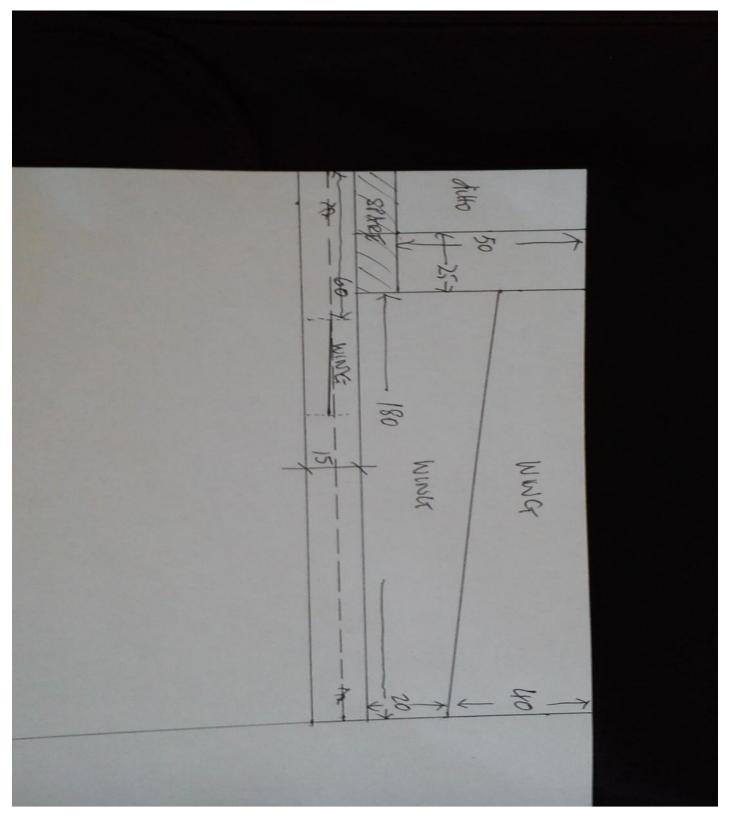
The nose moment has been increased to 60mm so that less weight is needed to balance.

As there is no tail to twist to aid left hand turn this is achieved by producing a significant wash out on the left wing only, this achieved by "wetting" the trailing edge to gain the right amount of turn when trimming, do not cut!! The wing as always has positive incidence.

As with all surfaces they benefit for a little time spent in profiling, not too much as they warp.

The profile has been tested and flies. A tip when fixing the vee tails, my first ones failed, glue together and glue to the "top" of the fuzzy with shaped edges to allow more glue, the splay angle should be 110degs.





Plan arrangement on the 9"x3" balsa.

HAPPY FLYING