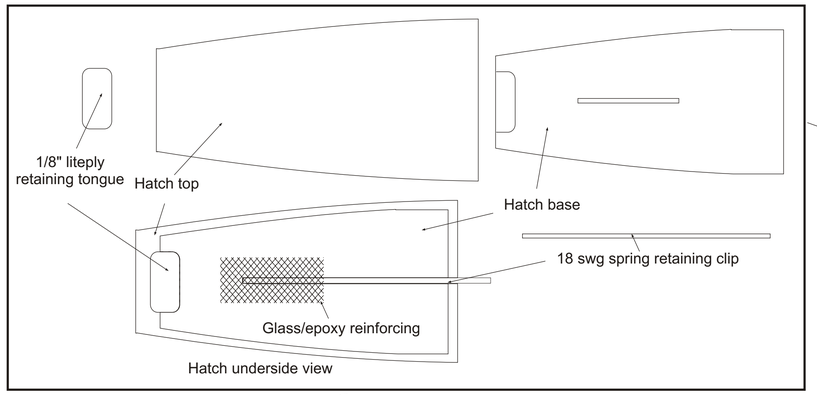
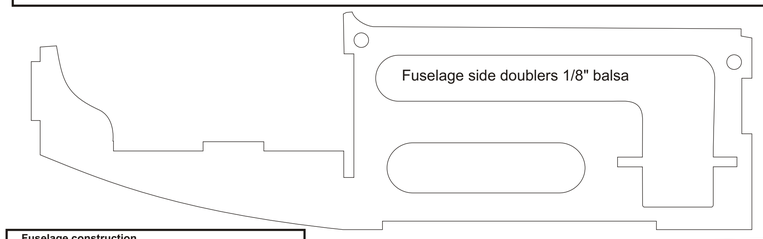
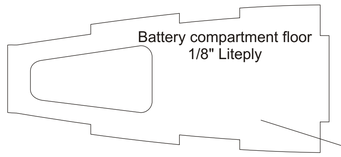
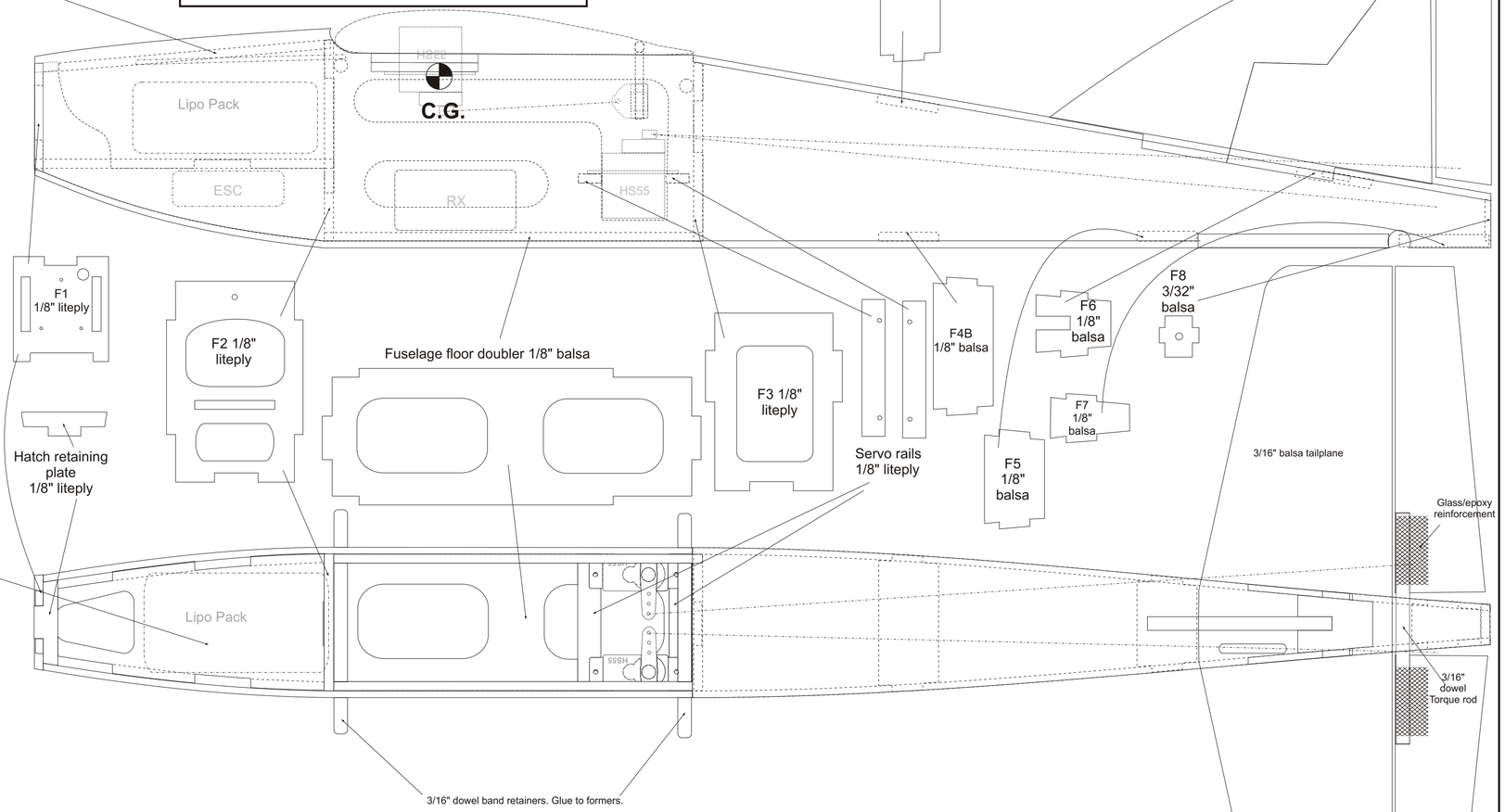
Sharkfish

A tribute to Eric Clutton's
1965 S/C "Sharkface" design
Updated for 4 channel & bell outrunner power
by "Vintage 1"
2007









Tailplane assemblies
1/. Glue two fin pieces together over plan.
2/.Join elevators with 3/16" dowel over plan.
Use epoxy and some fine glass cloth..
3/. Sand a bevel in each side of moving parts and hinge with adhesive tape.

Fuselage construction
1/. Flue F2 and F3 to the fuselage floor doubler.
2/. Glue fuselage side doublers to the resultant assembly, and use bands or pins to retain while glue sets.
3/. Glue battery compartment floor to F2, and the side doublers, and draw the doublers together at the front and fit F1
4/. Fit the hatch retaining plate.
5/. Fit the servo rails.
6/. Sand the asembly to remove any high spots and fit fuselage sides using dowels to help align - remove before glue sets though! Note the sides are not the same..
7/. Add cross pieces F4A & B to F8 using bands and pins to draw fuselage sides together and align.
8/. Fit ESC into space provided and ensure the leads all reach to where they should go.
If it is desired to make it removable open up the hole in the battery plate.
9/. Fit lower sheeting.
10/. Fit upper rear sheeting.
13/ Make battery hatch as shown.
14. Fit hatch temporarily and sand fuselage & hatch to desired shape.
15/.Fit fin and rudder assembly and tailplane assembly checking for squareness
16/. Finsih sand the model and cover.
17/. Fit servos as shown.
18. Fit horns to elevator and ridder, and fit clevises to the horns.
19/ Cut oversize 1.5mm CF rod and insert through rear slots into servo end clevises and glue with CA
20/. With servos in neutral postion, cut CF rods to length and glue into rear clevises.
.21/ Add velcro type mounting for battery and receiver.
22/. fit motor to F1 and connect to ESC wires.
Tuck any surplus under battery tray.
23/. Fit wing retaining bands.

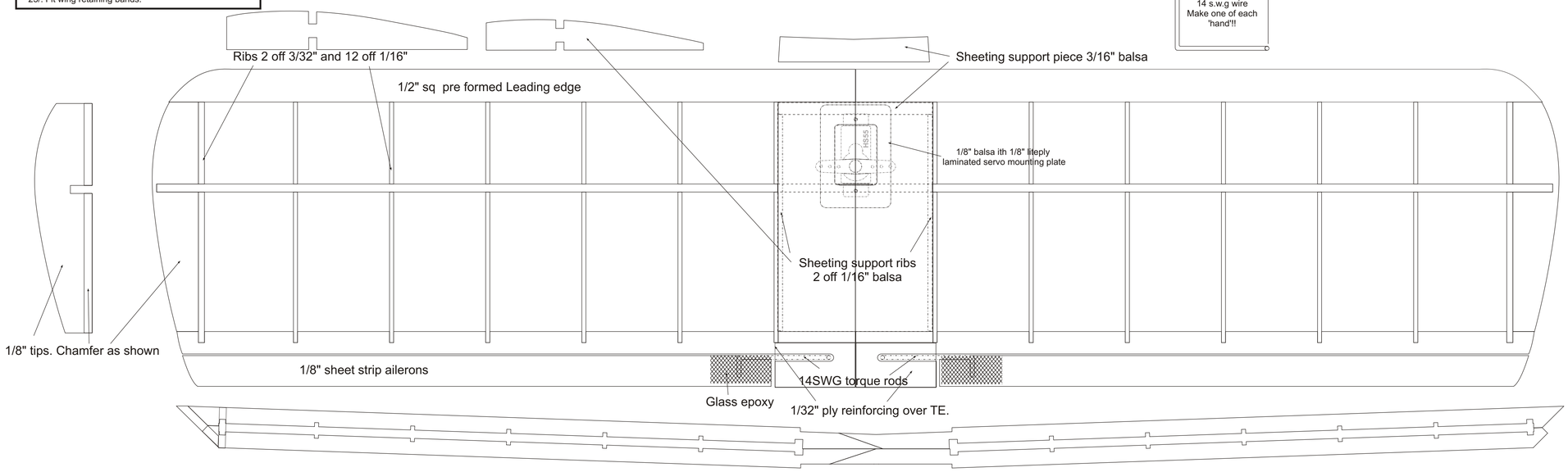
Assembly and flying
After plugging in the aileron servo, the wings are simply banded onto the diowels, and the model is ready to go! The battery fits in te compartment provided and it is a simple matter to engage the spring wire in the hole in F2, slide the hatch back, engage the front lug and snap the cover into position.

The protype weighed in at 13oz and flew well on an APC 6x4 E prop and a Tower hobbies BP2408-21, on a 3s LIPO 1100 pack.

The elevator is quite sensitive, but the ailerons are not as they are quite small. So no more han +-10 degrees on the elevatro to start with,and 30 degrees or so on ailerons and rudder

Make sure the model balances somewhere near the indicated CG. with the recommended components it should.

There is enough power to take the model from a firm hand launch into full control authority (about 23mph) quickly. It is a fast, but not devastatingly fast, model, so quick reactions and sensitive thumbs are needed.



Main sparts general arrangement

Wing Assembly
1/. Build each wing half separately.
2/. Identify and pin down lower spar half and TE over plan
3/. Fit ribs noting thicker rib goes on the outside, and the spar support rib to the innermost side of the innermost main rib.
4/. Fit top spar gluing to lower spar. Be sure to select the correct one!
5/. Cut and fit LE to rib fronts.
6/. Chamfer tip piece, and fit.
7/. Plane and sand TE to section.
8/. Make other half of wing as above.
9/. Carefully chamfer TE and LE as necessary to achieve a decent butt joint, and glue halves together ensuring no warps
10/. Fit the front sheeting support piece.
11/. Fit the lower sheeting.
12/. Fit the upper sheeting halves. These extend OVER the TE.
13/. Fit te two 1/32" ply reinforcing plates.
14/. Sand the LE and TE undersides flush with the lower sheeting
15/. Sand and shape the tip areas of the LE and TE to the tip angles..
16/. Fit the servo mounting plate to the underside of the C/S sheeting..
17/ Bend up torque rods and fit to ailerons with light glass and epoxy.
18/. Chamfer ailerons to allow downward movement and top hinge with adhesive tape.
19/. Cover wing and ailerons.
20/. Carfully fit servo as shown, and fit arms with clevises
21/. Fit torque rod horns to torque rod, and with servo in neutral position fit clevises and CF rods to set ailerons at neutral.