

WingBat+

Designed by Stan Yeo
1440mmspan Aerobatic Slope Soarer

All wood balsa unless otherwise stated

FUSELAGE BUILDING NOTES

1. Glue strip frame to fuselage sides ensuring there is a LEFT and RIGHT side. Trim wingseat.
2. Position fuselage sides over plan view of fuselage and fit F2 & F3 ensuring fuselage is straight and square. Fit F1.
3. Fit Fin and join fuselage at tail. Add 6mm rear top sheet. Check fin is square. Add forward top sheeting.
4. Glue F2A to F2 and fit rear fuselage underside.
5. Drill wing dowel holes and fit dowel tubes.
6. Fit underside of nose and noseblock. Shape fuselage and smooth using 180grit Wet & Dry.

ADHESIVES

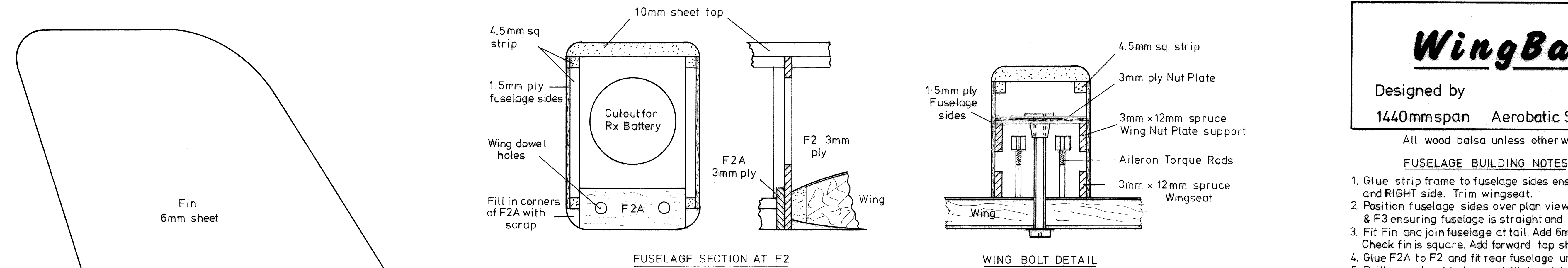
Wood to Wood - Resin W (PVA)
Wood to Foam - Epoxy
Wood to Plastic - Epoxy
Covering - Iron-on Plastic Film

DRILLING WING DOWEL HOLES

1. Fit finished wing, less fairing, securely to fuselage and mark wing dowel hole centres on the front face of F2A.
2. Using the piano wire drill, drill dowel holes through both F2 and wing L.E. Use wing dowel to hold wing in position for 2nd hole.
3. Fit 6swg (4.5mm I.D.) brass tubes to wing (back to aileron servo box). Epoxy in position.

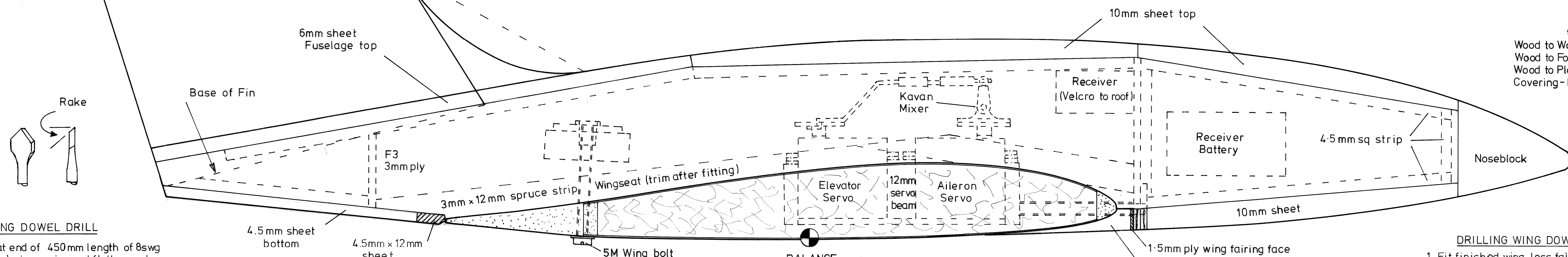
IMPERIAL EQUIVALENTS

1.5mm = 1/16 in
3.0mm = 1/8 in
4.5mm = 3/16 in
6.0mm = 1/4 in
10mm = 3/8 in
12mm = 1/2 in



FUSELAGE SECTION AT F2

WING BOLT DETAIL



FUSELAGE PLAN WITH TOP REMOVED

WING DOWEL DRILL

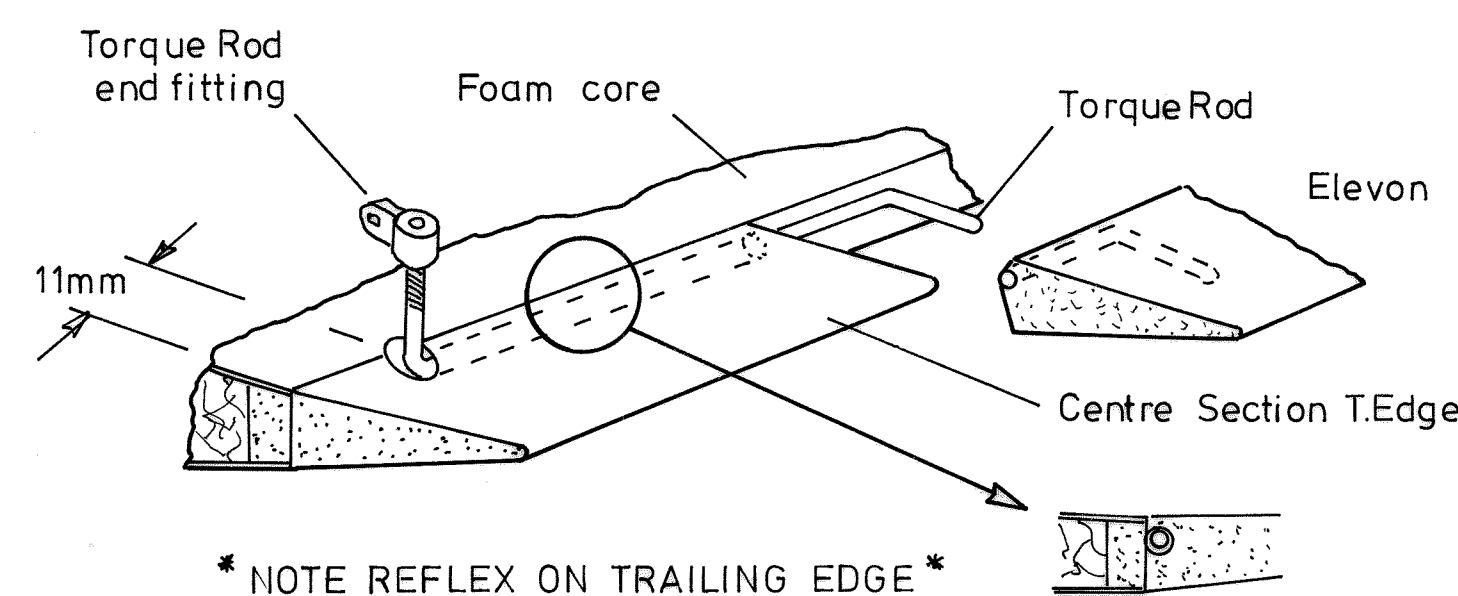
1. Heat end of 450mm length of 8swg (4mm) piano wire and flatten end
2. Shape to spear type point and grind in rake to assist cut.
3. Heat to cherry red and quench in water
4. Drill a test hole to check diameter and adjust as necessary.

CONTROL SURFACE MOVEMENT

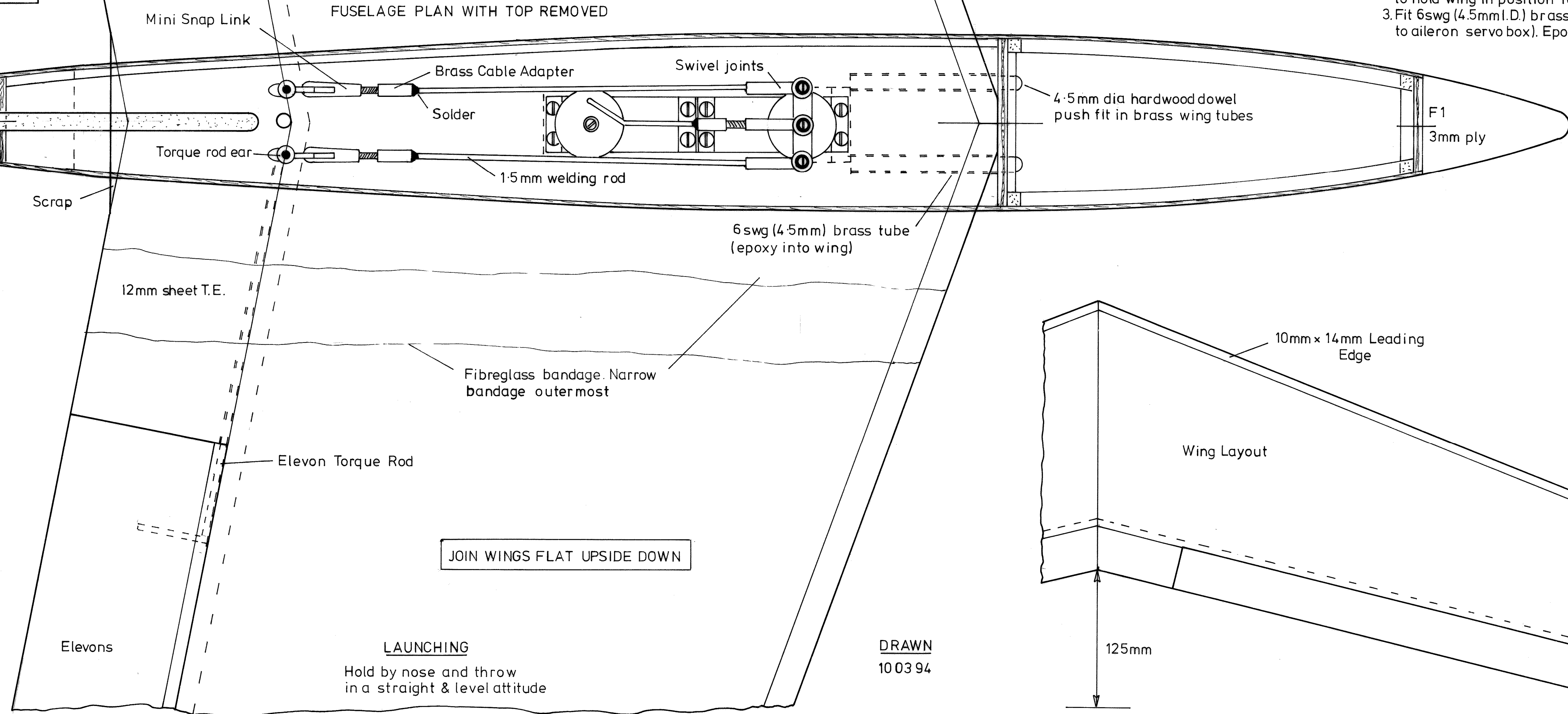
Elevator (Ailerons neutral) ± 14 mm
Aileron (Elevator neutral) ± 18 mm

WING BUILDING NOTES

1. Sand L. Edge to provide a good gluing surface and attach L.E. using epoxy. Hold in place with masking tape.
2. Sand L.E. to shape using 180 grit Wet & Dry sanding block.
3. Fit aileron torque rods to T.Edge centre section and epoxy in position. Grease torque rod to prevent sticking.
4. Sand T.Edge to shape and join wings using epoxy.
5. Construct servo boxes in wing and epoxy in position. Check wing joint is sealed with epoxy to prevent polyester resin damage.
6. Support wing vertically on trailing edge and attach fibreglass bandages using polyester resin. Extend resin 12mm past bandage.
7. Sand wing bandage using 80grit Wet & Dry taking not to sand veneer. Add tips.



* NOTE REFLEX ON TRAILING EDGE *



JOIN WINGS FLAT UPSIDE DOWN

LAUNCHING

Hold by nose and throw in a straight & level attitude

DRAWN 100394