

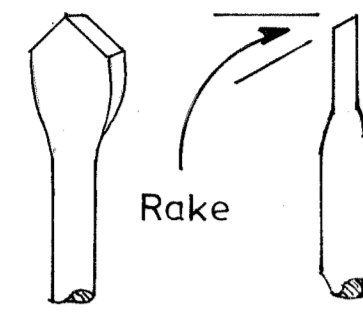
# Turbo-ESPRIIT

Designed by Stan Yeo  
1750mm Adv. Aerobatic Slope Soarer

All wood balsa unless otherwise stated

## PIANO WIRE DRILL

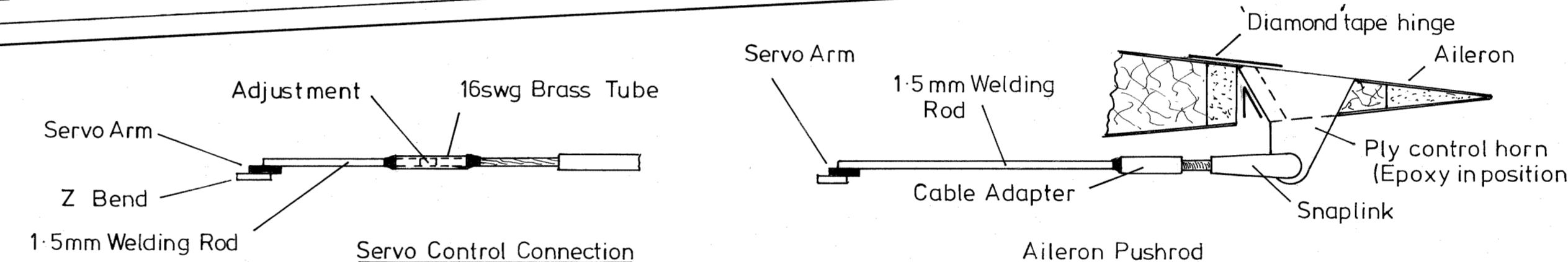
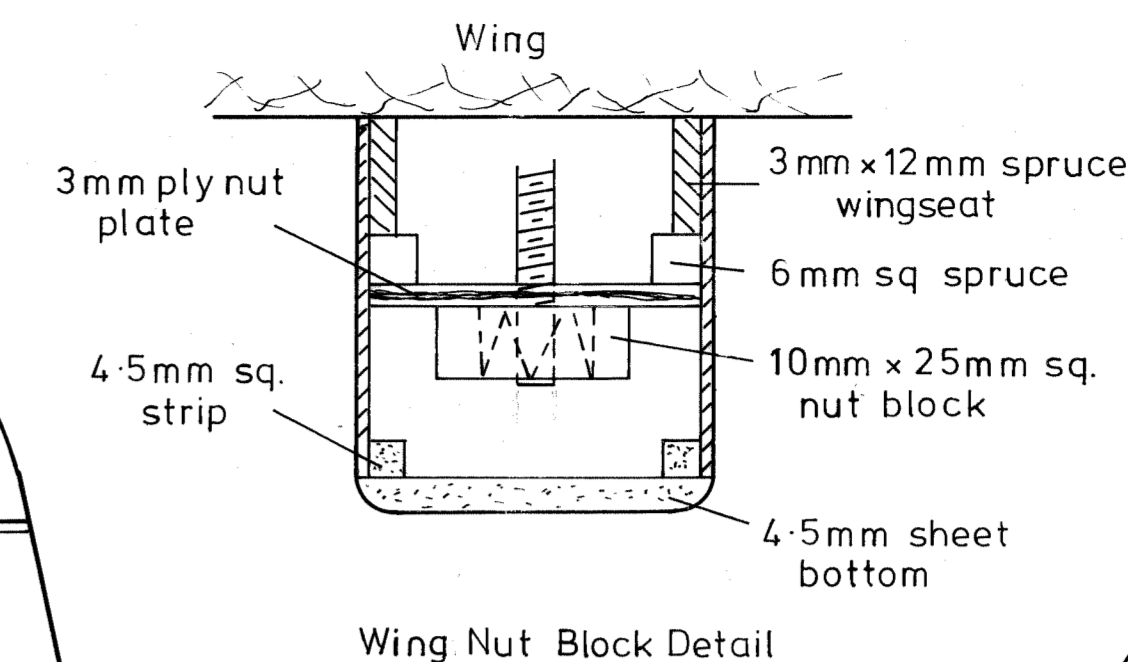
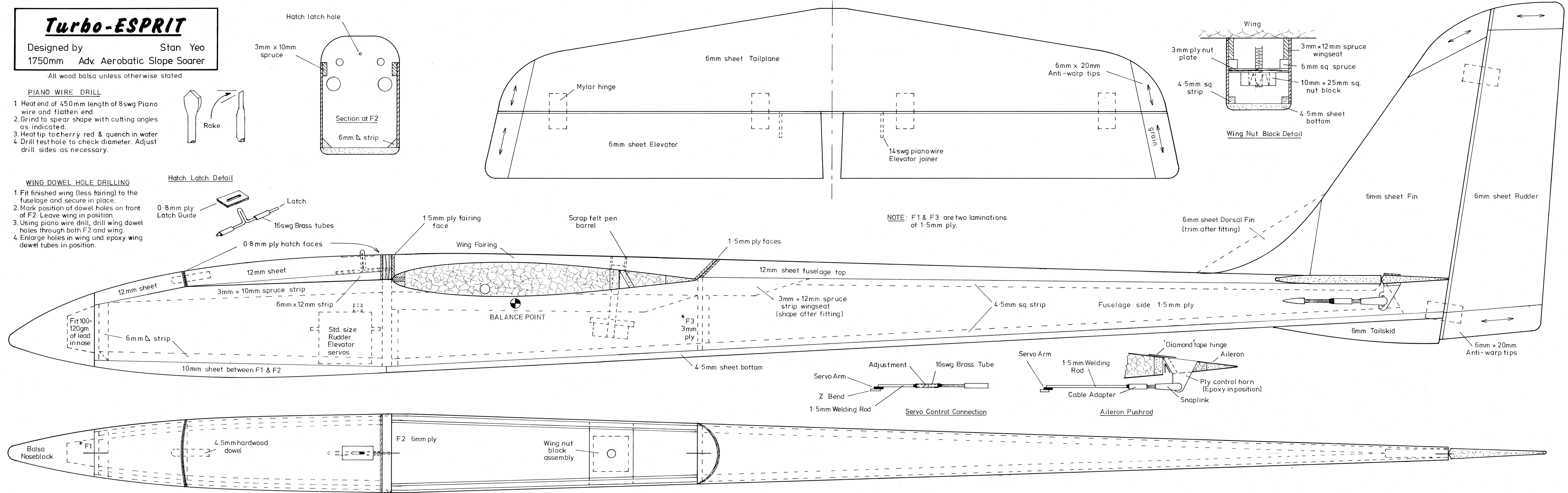
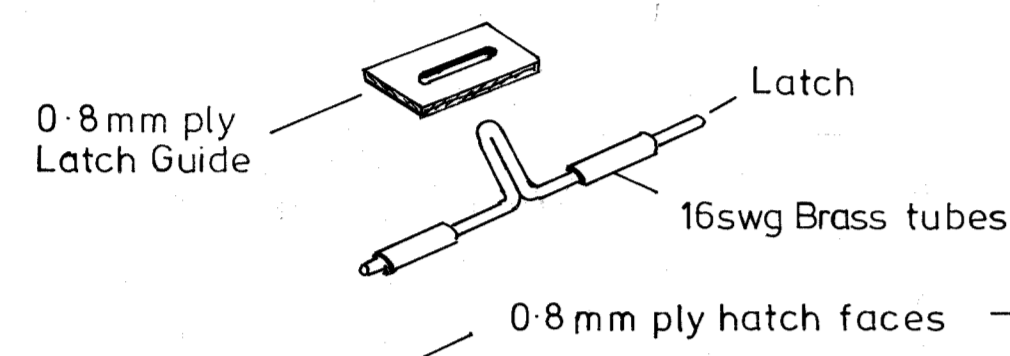
- Heat end of 450mm length of 8swg Piano wire and flatten end.
- Grind to spear shape with cutting angles as indicated.
- Heat tip to cherry red & quench in water
- Drill test hole to check diameter. Adjust drill sides as necessary.



## WING DOWEL HOLE DRILLING

- Fit finished wing (less fairing) to the fuselage and secure in place.
- Mark position of dowel holes on front of F2. Leave wing in position.
- Using piano wire drill, drill wing dowel holes through both F2 and wing.
- Enlarge holes in wing and epoxy wing dowel tubes in position.

### Hatch Latch Detail



## WING BUILDING NOTES

- Prepare 180 grade Wet & Dry sanding block and laminate wing leading edges as shown and smooth gluing edge.
- Sand wing leading & trailing edges smooth to provide a good gluing area.
- Epoxy wing leading & trailing edges plus aileron L.E. in position and sand to shape.
- Epoxy wing tips and aileron ends in place. Sand to shape.
- Construct aileron servo boxes by locating centre of cutout and using 50mm dia. hole cutter, remove wing core. TAKE CARE.
- Line walls of servo box with end grain 0.8mm ply and 1.5mm balsa sheet. Top of balsa should be 2mm below surface of wing. Epoxy in position.
- Using 3mm balsa sheet line bottom of servo box and construct hatches.
- Fit aileron servo. Glue hardwood blocks either side of the lugs to hold in position.
- Drill hole for servo cable conduit and fit conduit in position. Allow for cable exit!
- Fit trailing edge and join wings. Attach wing bandages using polyester resin and sand to contour.

## FUSELAGE BUILDING NOTES

- Glue strip frame to fuselage sides ensuring there is a LEFT and RIGHT side. Trim wingseat to shape.
- Drill control rod/cable holes in F2 & F3.
- Position fuselage sides over plan view of fuselage and fit F2 & F3 ensuring the fuselage is square and straight. Fit F1.
- Install control cables and anchor to fuselage sides every 100mm.
- Insert a dummy 6mm tailpost and mark position of tailplane leading edge on fuselage.
- Add 12mm top sheeting after tapering to 6mm at rear. Fit fin to tailplane and tailplane to fuselage ensuring it is square.
- Sheet underside of fuselage and fit 12mm sheet in front of hatch.
- Carve out inside of noseblock and fit nose lead before gluing in position.
- Glue 6mm x 12mm strip to underside of hatch and taper. Fit hatch using extra (thickness 0.8mm ply to 'jam' hatch in position until glue dry and to allow for thickness of covering material.
- Shape fuselage, add tailskid and fit hatch latch and hatch retaining dowel.

## SUGGESTED CONTROL SETTINGS

The setup below is a recommended starting point. Adjust as necessary in the light of experience and personal preference.

**AILERONS**  
Up 30mm Down 20mm  
Exponential 30%

**ELEVATOR**  
Up / Down 10mm  
Exponential 30%

**RUDDER**  
Left / Right 35mm (at base)

**FLAPPERONS**  
Coupled  $\pm$  10mm  
Landing - Down 10mm

