

## PSS-Jet T1000

This construction manual shall be used as a guide for the assembling of the PSS-Jet T100. In addition to the wings, the fuselage and the T-tail you need the following things:

- 2x control horns
- CFRP Pipe (diameter 6mm; length 1.1m)
- 0.8mm bowden cable
- 3M 90 spray adhesive
- 3M 50mm strapping tape
- 5min Epoxy or hot glue
- coloured Monta tape
- 2mm wire as control rod
- 2x balsa wood 7x40x500mm
- 1mm thick plastic or CFRP plate)

The spray adhesive and the strapping tape are both available on our website ([www.epp-modelle.de](http://www.epp-modelle.de)) if go to accessories.

### Main wing:

Remove the foam cores from their beds. Use the sandpaper or a scrap piece of foam to clean off any melted foam debris.

Now apply epoxy or hot glue to bond the foam cores together. Use the bottom foam beds to align the cores. The wing should have a slight V-shape.

Use a sharp knife to cut a 6x6mm groove at the bottom side of the wing, which is 120mm displaced from the trailing edge and parallel to it. Put the CFRP pipe into the groove and apply 5min epoxy to bond it to the wing (Pay attention that the wing is not twisted or bended).

Trace the radio gears on the wing using a pen or marker. The positions for the components are as shown in the drawing. Use a sharp knife to do the cut-outs. The cut outs should be a bit smaller, as the radio gears won't be glued but pinched into the core. Spray a light cote of 3M 90 spray adhesive on the wing. Now you should wait about 5min to allow the adhesive to evaporate, before you start taping the model. In the meantime you can put the RC radio gears back in place. Make a cut about 6mm deep into the wing to run the cable to the middle of the wing. Apply the 50mm strapping tape as shown in the figure standing down. It is important that you tape the wing equally on the top and bottom side in order to avoid twisting of the wing.

Take the 7mm balsa wood and cut it as shown in the figure. The aileron should be 500mm long and 40mm deep. Before you attach them you will first need to bevel a 45-degree angle at the hinge edge of each elevon. Now you simply tape (strapping tape) the aileron to the trailing edge by leaving enough room so it doesn't bind. You should apply one stripe at the top and one at the bottom of the aileron. Install the control horns on the ailerons.

### Fuselage:

Trace the RC components on the fuselage foam core using a pen or marker. The positions for the components are as shown in the drawing. Pay attention to the position of the centre of gravity (110mm from the wing leading edge backwards). Use a sharp knife to do the cut-outs. The cut-outs should be a bit smaller, as the RC components won't be glued but pinched into the core.

In order to run the RC cables and the bowden cable for the elevator make cuts about 6mm deep and push the cables into it. Now reinforce the fuselage with one stripe of strapping side on each side.

### T-Tail:

Use a sharp knife to detach the elevator from the horizontal tail as shown in the drawing. Now bevel a 45 degree chamfer at the hinge edge of the elevator. The two elevator-half's are connected with a small piece of plywood. Now round-off all edges on the T-tail and tape them with strapping tape. Before you connect the elevator and ruder to the tail (Use the strapping tape as hinge), you should reinforce the horizontal tail at the hinge edge with a small CFRP pipe. Now use toothpicks and hot glue to attach vertical tail perpendicular on the horizontal tail. Push the toothpicks through the horizontal tail and approximately 30mm into the vertical tail. Then cut the remaining toothpick off. Manufacture control horns out of the 1mm CFRP plate and glue them to the elevator.

(Optional Tailerons: Use two radio gears to control the two elevator half's separately. Then the elevator half's can be used to support the ailerons by using the mixer function of you transmitter)

### Final Assembling:

Bond the T-tail, aligned with fuselage and at designated step, to fuselage. After adjusting the elevator and rudder, bond the wing, aligned and at the designated position, to the fuselage. Pay attention that the wing is parallel to the horizontal tail. You can either use hot glue or 5min epoxy for the bonding. Now you can cover the model completely with Monta tape and connect the all radio gears with the control horns.

Check the position of the centre of gravity again (110mm from the wing leading edge backwards). Use plump to adjust the CG.

For the first flight set all controls to neutral position.

