

Slingshot by Peter Rake

The Slingshot is good for the novice builder. Not a 'tab and slot' but is still easy to assemble. The instructions for assembling the fuselage are on the plans.

I started by cutting the 1/8" sheet to length. Not that the sheet does not go all the way to the tail. Then mark a centerline on the sheet and where each former goes. Glue the formers and sides in place according to the instructions on the plans. Since many motors are different length, measure your motor to determine where the firewall is to be glued down. Do not glue the cowl piece in until after the motor is mounted. Once all is dry the 1/8" top sheet and 1/16" bottom sheeting can be trimmed and then sanded to the shape of the fuse sides. The extra 3/16" sticks in the cowl area allow you to sand the cowl to almost a round shape.

Build the wing. Make sure you get the right ribs in the right places. The inner ribs are undersize so that the 1/16" sheet will fit properly. Make sure the ribs are square to the spar. After all is glued up sand down the LE to shape and sand all parts smooth. The wing is then ready to cover. Test fit the wing to the fuse. You might have to sand the wing cutout in the fuse a little. Center the wing in the fuse and glue in place.

After installing the wing it is a good time to install the electrics. Cutout a section of the wing sheeting for the servos and fit in place. Make sure they are situated so that there is free movement of each of the control arms. Mount the motor, rcvr and ESC. The battery will fit between the servos and the LG former. A 2s or 3s 1320 Thunder Power battery fits perfectly, but, others will too.

Now glue in the cowl front and bottom pieces and finish sanding the cowl area. The fuse is ready to cover.

Assemble the ailerons, fin, rudder, stab and elevator. Use the 1/8x1/4 stick and cut lengths to fit each surface as shown on the plans. These pieces keep the surfaces from warping. Trim and sand smooth. If you are going to use CA or pin hinges, now is the time to cut the slots in all the control surfaces. Then sand a bevel so you have free movement. Cover all the surfaces. Leave covering off of the area where the fin glues to the stab and the stab will glue to the fuse.

Glue the fin to the stab. Make sure they are at 90 degrees. Then glue the assembly to the fuselage. Make sure the stab is level with the wing and the stab

fin is aligned with the fuse centerline. The easiest way to do this is to measure from one wingtip to the stab tip on both sides. When both measurements are equal, the assembly will be on straight.

Now fit all the control surfaces with the hinges of your choice. Make sure there is freedom of movement between the rudder and elevator. You may have to cut a clearance slot in the rudder for the elevator joiner wire. The ailerons are a bit more difficult since you need to install the torque rods at the same time. Bend the wires as show on the plans, making sure to install the short section of Al tubing before bending. Cut the ailerons to clear the tubing and drill a hole for the wire to fit in the aileron. Then you can glue the Al tubing to the wing. Make sure to keep the glue away from the end of the tube. The wire MUST be free to move. Now install the ailerons to the wings with your hinges and glue to the torque wire.

Now connect your linkages (not included in kit). You can use pushrods to the elevator and rudder or pull-pull, whatever you want. Same with the ailerons. You can also get setups from Dubro for the aileron connections as well as pull-pull or pushrod type controls. If you want install the optional canopy and cowl cheeks. Put the wheels on and do the radio setup.

You should be ready to fly!
Have fun.

Parts list:

1/8x4x24 sheet balsa 1
1/4x4x24 sheet balsa 1
1/16x4x24 sheet balsa 1

balsa sticks:

1/16x1/2 4
1/8x1/4 2
3/16 sq 1
1/4 sq 4
1/8" dowel 1
Al tube 3"
16 ga wire 1
18 ga wire 1
1/64 ply 2"x6"
Canopy 1