

Check the size of your receiver, servos and batteries. If they will not fit into the proposed pod, adjust the dimensions accordingly. Decide your preferred method of mounting the servos. Decide which boom (solid balsa or carbon tube) you will use.

- 1.1 Prepare (cut out) R1, R2, R3, 2 x R4, R5, R6 and R7
- 1.2 Glue R4 reinforcement onto R3, drill a hole for the antenna, sand the radius to allow for R16 to be screwed down.
- 1.3 Mark R1 for positioning the formers.
- 1.4 Glue R7, R2, R3, R5 and R6 vertically and horizontally onto R1.
- 1.5 Sand and shape 2 x R8 and glue to R1, R2, and R7
- 1.6 Sand smooth the fuselage sides only
- 1.7 Prepare sides R9, mark the position of R3
- 1.8 Glue the sides to R3 first, then stick to R6 and then to the nose block.
- 1.9 Glue 4x R10 sides into positions shown.
- 1.10 Sand the top of the pod to form shape illustrated.
- 1.11 Glue R11 and R12 to pod.
- 1.12 Repeat step 1.10.
- 1.13 Prepare R13, R14 and R15 (with some overlength)
- 1.14 Adjust R13 and glue to R15
- 1.15 Slot R13 beneath R11 and adjust the Length of R15 to suit.
- 1.16 Adjust R14 and glue to R15.
- 1.17 Mount the canopy and sand pod to correct shape.
- 1.18 Drill the holes for R16 and R17
- 1.19 Adjust R18, R19 and R20 to suit your specific Servo type and glue into pod.
- 1.20 Choose your desired boom and glue to pod.

2. Wing (KIS-JUNIOR, Micro-KIS)

For beginners I recommend to first build the KIS-Junior wing. Just shorten the outer panels after some flying to get the Micro-KIS wing. Prepare the center section and the 2 outer panels separately

- 2.1 Glue F2 to F1. Be careful not to glue the LE (F2) upside down !
- 2.2 Sand the Leading Edge and the underside of F1.
- 2.3 Glue F3 to F1. There are number of ways to achieve this task. I prefer the quickest way:
Place F1 upside down and hold down the trailing edge of F1 to the building board then add F3 and glue with thin CA.
- 2.4 Add the mounting reinforcements F5, F6, F7 and F8 to the center panel. Do not drill the mounting hole.
Prepare some additional F7 (0.5 mm material) to adjust the wings incidence for trimming. later on.
- 2.5 Build the outer panels. Keep in mind to get a left and a right one !
- 2.6 Glue F4 to tip and sand.
- 2.7 Cut the taper to the center sections, correctly sand the joints and glue together with the correct dihedral.
- 2.8 Glue the tips to the center sections, allow for correct dihedral of 25 mm.

2. Wing Micro-BoBo

I recommend to build this wing in one piece.

- 2.1 Prepare the main spar (F10) considering a 7 percent thickness.
- 2.2 Fix F9, F10 and F11 to the building board.
- 2.3 Prepare a number of F13 parts and glue them to correct position with thin CA
- 2.4 Prepare a number of F15 parts and glue them to correct position.
- 2.5 Add F12
- 2.6 Remove the wing from your Building board, sand bottom flat.
- 2.7 Adjust and add F14
- 2.8 Carve and form the top wing section shape with a knife.
- 2.9 Sand from the main spar to the TE (F9) a FLAT surface !.
- 2.10 Then sand from the main spar towards the LE. You can use a template. I do it by feeling. and by eye.....
- 2.11 Mark the positions of F16 (Turbulator spar), cut out the ribs and glue F16 in position.
- 2.12. Cut the wing into the 5 panels.
- 2.13 Sand and joint to the required dihedral.
- 2.14 Add the mounting parts F5, F17 and F18 to the center panel
- 2.15 Shape and sand the wing tips.
- 2.16 Glue together the panels, add F6, F7 and F8. Do not drill the mounting hole. yet

3. Conventional Stabilizer

- 3.1 Cut out L1, glue L2 to L1
- 3.2 Round/sand the leading edge and tip. Harden with thin CA
- 3.3 Cut the elevator, sand the hinge angle
- 3.4 Prepare L5 and glue to L1 note the offset.
- 3.5 Apply the hinge tape
- 3.6 Repeat 3.2 - 3.5 for the rudder

- 3.8 Glue the elevator to the boom , note the offset.Keep perpendicular to the boom in both directions.
4. Assembly
- 4.1 Insert the boom to the pod, level and square in both directions and glue with thin CA.
 - 4.2 Adjust R22 and glue with epoxy to the top of the boom.
 - 4.3 Glue the sides (R9) with Epoxy to the boom.
 - 4.4 Insert R16, position the wing square and drill the mounting hole (3 mm diameter, 50 mm distance to R16) into the boom
 - 4.5 Remove the wing. And drill again into the the boom with 4 mm diameter.Insert the plug and secure with thin CA.
 - 4.6 Insert the servos, elevator and rudder set for level "trimmed" flight.
5. Finish: I prefer 1 coat of sanding sealer mixed up with some color. Sand with grip 400 and add one coat of waterbased transparent varnish which is used for sealing wooden floors.
6. Trimming:
- 6.1 Start with a CG of 30 percent.If correctly aligned the built in incidence is 2 degrees.
 - 6.2 Try to get level flights by by adjusting (decreasing) the wings incidence.Place 0.1 mm packers for trimming steps.
 - 6.3 Then move back the CG in steps, keeping the level flight by steadily decreasing the incidence.Usually at a CG rearward of 45 percent the model becoming less stable.
 - 6.4 Of course you should use all your experience in trimming gliders up to the usage of turbulators and wing tip wash out.

BUILD.DOC 10.Feb.1999 Werner Stark wstark@ibm.net Translation German-English supported by Mark Benns U.K.