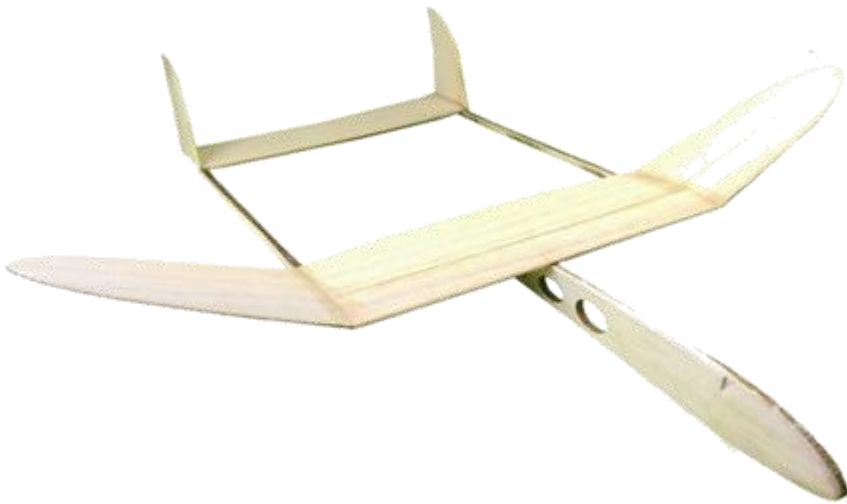


Glider Dual Fuse Swan



MicronWings.com

The Dual Fuse Swan is a truly beautiful design with rounded flight surfaces giving it a very “yesteryear” appearance. The main wing section has a split bend in it to give it an actual airfoil shape, and this is carried over to the wing tips. All this, along with the generous tailplane area give a very stable and slow glide performance. The Dual Fuse Swan not only looks great but has exceptional glide performance as well.

Your kit contains the following items

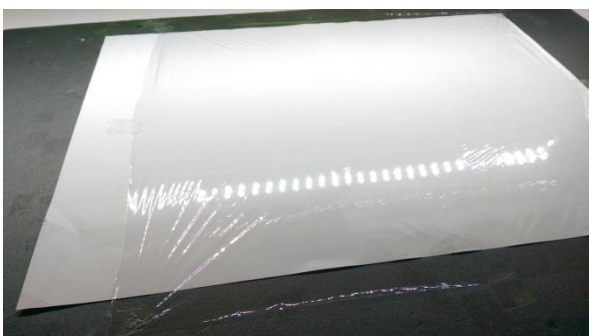
- * Pre- cut parts
- * Sandpaper sheets
- * Diagram sheet
- * Ballast weights
- * Glue

Additional Items You May Need

- * Cling Wrap
- * Flat board (working surface)
- * Hobby Knife
- * Wood glue
- * BlueTack or putty
- * Tape

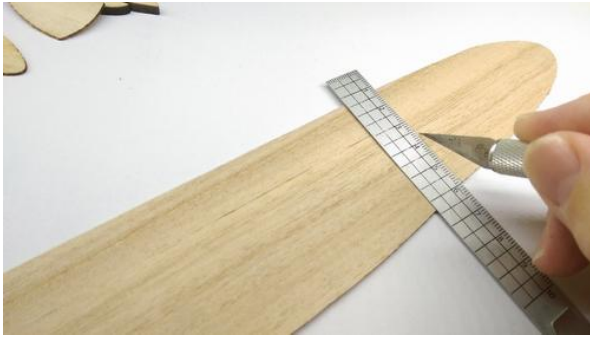


Build Procedure



Firstly it's a good idea to tape down a sheet of cling wrap over your work surface. This will stop the parts from becoming glued to the surface. It's easier to peel off cling wrap from any wooden parts.

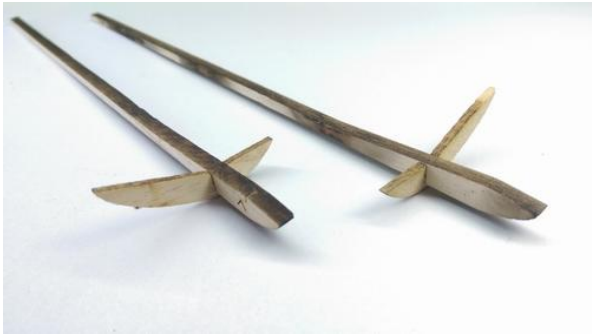
Note: although the kit is supplied with CA glue, we recommend using other glues which are suitable for balsa wood if available.



Cut the wing tip sections to completely remove them from the main wing. Sand the edges of both pieces to smooth them off.



There are markings on top of the main wing section to line it up on the main fuselage. Glue the main wing in place flush with the back of the main fuselage piece. Use some tape to hold the front and back down and make sure the pieces are perpendicular (form a perfect T shape when viewed from the front).



Glue in the wing tip supports into the body spars.

Note: it is possible to accidentally make two left or right hand sides, so make sure you have symmetrical pieces as shown here.



Glue only one side of the nose tip protectors on. This will allow us to add ballast to the nose cavity later. The last thing we will do after test flying is to glue on the opposite side nose tip protector.

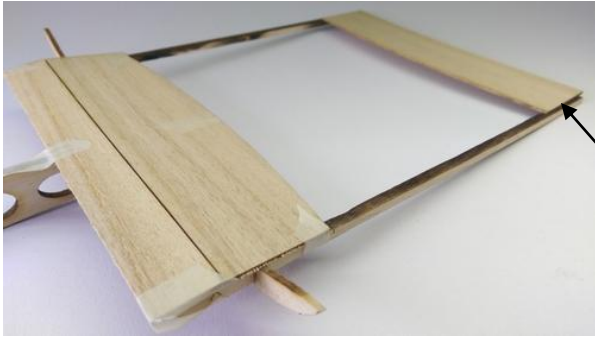


The next part is to glue in place the body spars to the main wings. This part requires some care because you also need to glue on the tailplane at the same time to ensure it is properly aligned.



First glue the body spars under the main wing and tape them on with masking tape to hold them firm. There is a V on the body spars which must be line up with the crease in the main wing. Before they dry, also complete the following 2 steps.

Make sure that they are flush with the end of the wing at the front and rear edge.



While the body spars are still able to be moved, glue on the tailplane. You may need to adjust the spars to fit.

Make sure that when the tailplane is glued on, there is a 1mm gap (ledge) here which the fins will be glued into later. Wipe any excess glue out of this gap before it dries. Check the frame is straight and level by viewing it from different angles and set it down somewhere to dry.

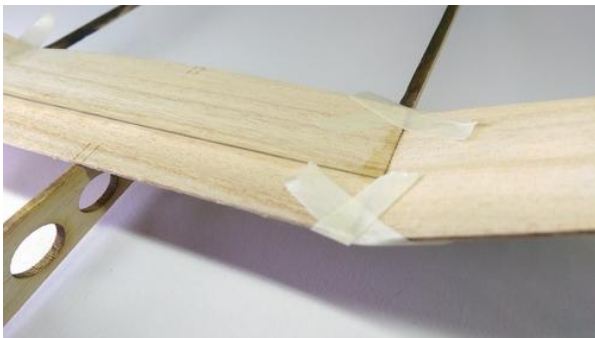


Soak the wing tips in water for 15 minutes to soften them up.



Put a rubber band or tape around them and insert something which is about 5 – 8mm thick toward the leading edge of the wing.

Allow to dry and the wing tips should now have a slight curve in them to match the main wing.



Use the sand paper and sand the main wing ends as well as the wing tips to get them to fit nicely together. Then glue the wing tips in place.

Use masking tape on the leading and trailing edge to make sure they are lined up as they dry. Also check that the upward angle on both wingtips is the same.



After the wing tips are dry, add some more glue along the joint to add extra strength. This can also be done to the join in the main wing as well.



Add the ballast weight to the nose cavity and put a piece of tape over it to hold it all in place while you test fly the glider. Start with all the ballast added to the nose cavity.

Test fly and add or subtract ballast as needed to achieve a good flight path.

Once the plane is balanced properly, glue on the other side of the nose tip protector.

Finally, carefully give the plane a sand all over. The wings and tailplane can be sanded on the top surface on the leading and trailing edge to form a slight airfoil shape. Your care and attention here will give better flight performance.



See a test glide on YouTube ([Link](#))



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