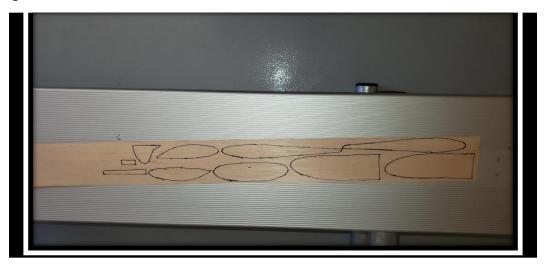
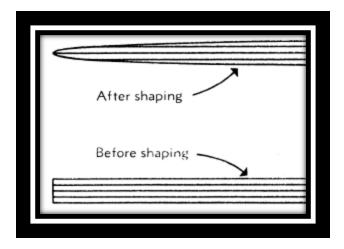
<u>Instructions for Constructing the Mark II Glider</u>

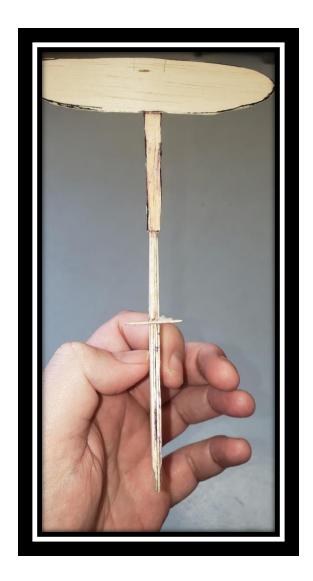
- 1) Print out the template provided (glider plans.pdf).
- 2) Take X-Acto knife and carefully carve out the individual templates. Do not mark notches yet. Touch up any errors.
- 3) Take the plank of balsa wood. For each piece, using the template trace the edges with the Sharpie. NOTE: If you have very steady hands and want to avoid black marks on your glider, you may carve the edges of the template directly with the X-Acto. However, it is easier to correct mistakes by using the Sharpie.



- 4) Take the two long fuselage pieces and glue them together with the Krazy glue. Make sure the tails match. Let dry (5 minutes)
- 5) Take the two shorter fuselage pieces. Each one is glued with Krazy glue on the two sides of the fuselage. Each fuselage matches the direction of the nose, and the angled end sweeps upwards. This will make a fuselage four layers thick. Let dry (5 minutes)
- 6) Lay the template of the fuselage on top of the assembled fuselage. Carve out the notch.
- 7) Shave away the outer fuselage from the nose of the airplane slightly.

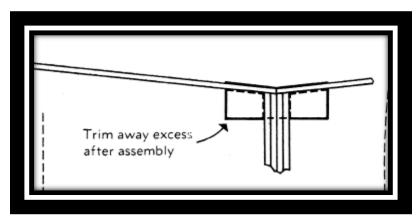


- 8) Insert the wing joiner into the notch of the fuselage. Use Elmer's glue and hold in place (it will act as a filler) and make sure it is balanced. Do not carve away the rest of the joiner yet. Wait until dry (10-15 minutes).
- 9) Glue the fuselage strengthener onto the top of the fuselage from where the secondary fuselage ends towards the tail with Krazy glue. Wait until dry (5 minutes).
- 10) Place the template of the stabilizer on the stabilizer. Slice the stabilizer where marked. Glue the stabilizer from the end of the tail towards the nose. The words "Stabilizer" on the template should be read upright.



- 11) Carefully glue the rudder, the sweeping end towards the nose, from the tail of the glider towards the nose with Krazy glue. Make certain it is centered as it dries (5 minutes).
- 12) Place the template on the left wing. Notch it with the X-Acto knife. Note which way is up. Do not accidentally flip it.
- 13) Place the template on the right wing. Notch it with the X-Acto knife. Note which way is up. Do not accidentally flip it.
- 14) Take the left wing. Notches are closer to the front than the rear. Check to see that the notch fits snugly. Apply Krazy glue to the upper part of the left joiner. Slide the wing in and raise it to a 10-15 degree angle above the

- fuselage. Wait until dry (5 minutes). Do not accidentally glue your fingers to the glider.
- 15) Once the left wing is set, carefully glue the rest of the edge of the wing to the fuselage, attaching it. Let dry for 5 minutes.
- 16) Take the right wing. Notches are closer to the front than the rear. Check to see that the notch fits snugly. Apply Krazy glue to the upper part of the right joiner. Slide the wing in and raise it to a 10-15 degree angle above the fuselage. Wait until dry (5 minutes). Do not accidentally glue your fingers to the glider.
- 17) Once the right wing is set, carefully glue the rest of the edge of the wing to the fuselage, attaching it. Let dry for 5 minutes.
- 18) Examine the glider from where it joins the wings from the top. If there are any gaps, fill in with Krazy glue. Let the glider dry for an additional 10 minutes or longer, just in case. If you find yourself in the next step sticking to the glider, allow more time to dry.
- 19) Take the X-Acto knife and carefully trim away the rest of the joiner. It is easier and safer to carve incrementally, rather than accidentally slice the glider.



20) Congratulations. Your glider is finished.

