**ASSEMBLY INSTRUCTIONS**

**MARK THE BODY TUBE**

3. Cut out the body tube marking guide and wrap it around one end of the body tube so that the edge of the guide is even with the end of the tube. Draw a line all the way around the tube at each of the points indicated by arrows on the marking guide.

4. Using the notch on a ruler, extend the marks on the tube in the full length of the tube. Number the lines as shown on the marking guide. Lines 1, 3, 5 and 7 are fin line locations and also are the lines around the tube. Lines 2, 4, 6 and 8 are horizontal lines and extend to the rear of the tube.

**INSTALL ENGINE MOUNT**

5. Spread a layer of glue inside rear end tube and on inner surface of body tube. Insert the engine mount assembly at rear end first. Insert the body tube, push it into place without securing. Engine mount will be in place when 1/4" is protruding from the rear of the body tube.

6. Cut out the patterns for the fins, fairings, and rudder. Trace out one fin and one fairing on each of the sheets of BT-50 as illustrated in fig. 2. Make sure that the outlines are in the direction indicated on the pattern. Mark out four of the hexagonal window sheet of BT-50.

7. Using a straight edge as a guide, cut out the parts have been drawn on the blueprints. After all of the parts are cut out of four of the fins, fairings, and rudder, cut them all at the same size. Repeat this step with the remaining fairings and hexagonal windows.

8. Spread glue along the rear edge of a fin and align it as shown on the body tube. The trailing edge of the fin should be exactly on the 1/4" extension around the body tube. Line up the very carefully and make sure it is vertical when it aligns with the top of the tube. Repeat this step with the remaining fins, using a straight edge and carefully to make sure that all of the fins are right length and aligned with the tube so that each other.

9. Spread glue along the rear edge of one of the fairings as shown in fig. 9. The length of the fairings are the same as the fins, to form a continuation of the fairing. Position it so that it is as close as possible. Repeat this step with the remaining fairings.
10. Spread glue along the root edge of one of the hemispheres. Position this part on a line between the fins with the rear of the hemisphere even with the rear of the body tube. Repeat this step with the other hemisphere.

11. Apply a filler of glue to the root edges of the fins, finarcs and hemispheres. This is best accomplished by running a small amount of glue on the inside and then smoothing it out with the tip of your little finger. When the fillets have been applied to all of the parts, set the model aside to dry. While drying, the model should be held on its side. Do not, however, press it on its finarc.

12. Cut out the shock cord mount and pre-drill on the dotted lines. Lay the mount out flat. Apply glue to section 1 and lay the shock cord into the glue. Fold this section over as shown in the illustration. Spread glue over the back of the first section and the exposed part of the second section. Lay the shock cord as shown and fold over again.

13. Apply glue to the inside of the front end of the body tube, about 3/4" from the end. Lay the shock cord mount on the glue and press to the shape of the tube.

14. Find the center of the nose cone and turn the screw eye into it. Remove the screw eye and force a small amount of white glue into the hole, then replace the screw eye and wipe away any excess glue around the hole.

15. Drill one of the RT-70 rings around the hemispheres at the rear of the nose. Do not force the ring. It may be necessary to sand the edges of the rings to make a slip fit. Repeat this step with the forward ring. Thus rings should rest lightly against the finarcs, leaving a 1/16" shaped gap between the ring and finarc. Cut four small wedges from scraps of BPS-30 and glue them to the finarcs, under the ring, but do not glue the rings in place at this time.

16. The original model was painted silver and transparent blue. The engine was wooden and standard, the motor was given 2 coats of white silver and 1 coat of chrome. After the base is sandpapered and sanded, the model is given 2 coats of silver and 2 coats of chrome. After the base has dried, transparent blue paint is applied over a metallic base coat to give the finishing effects.

17. Cut the LL-2A launch lug in half. This will give you two launching lugs 5/8" long. Glue one launching lug to the inside of each of the nose cone sections as shown in the illustration. After the glue has set, make sure that the lugs are right angles to the edge of the nose cone. It is also necessary to make sure that the lugs are right angles to the edge of the nose cone.

18. Cut out the parachute as indicated. The nose cone should be painted white. Cut an 18" length of stranded cable cord on each end of the parachute. Attach one stranded cord to each end of the parachute with a small screw as shown in the illustration. Pass the ends of the stranded cord through the eye of the nose cone and tie them to a line.

19. For the free end of the shock cord into the screw eye at the base of the nose cone. Clip the nose cone to the nose cone when the bird is finished.

20. The model engine recommended for use in this model is 85-13, 14-1 or 8-1. For the first test flight, the 85-13 engine should be used. The rocket should be flown on 6 gram guns, as it will drift a considerable distance in a light breeze. Launch the rocket using a standard electrical launching system with a 1" diameter guide rod at least 36" long.

**COUNTDOWN CHECK LIST**

- 11. Pack flame proof packet into the base of the rocket.
- 12. Place fins three times and set the body tube on top of the rocket. Roll up the shock cord and screw eye and stuff them into the base of the parachute. Slide the nose cone into place.
- 9. Install an electrical igniter in the engine of your choice using the instructions that came with the engine. Insert engine into place.
- 10. Place the rockets on the launching rod. Check to see that the panel is disassembled. Clean the micro-cups and attach them to the igniter leads.
- 8. Launch the rocket and begin your final course under control check for low flying aircraft.
- 7. Launch the rocket and begin your final course under control check for low flying aircraft.
- 6. Launch the rocket and begin your final course under control check for low flying aircraft.
- 5. Launch the rocket and begin your final course under control check for low flying aircraft.
- 4. Launch the rocket and begin your final course under control check for low flying aircraft.
- 3. Launch the rocket and begin your final course under control check for low flying aircraft.
- 2. Launch the rocket and begin your final course under control check for low flying aircraft.
- 1. Launch the rocket and begin your final course under control check for low flying aircraft.