

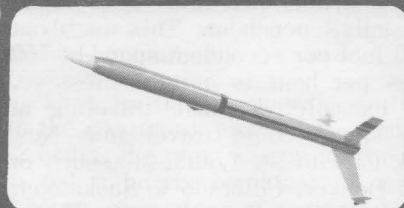
# Estes Industries Rocket Plan No. 69

# CONSTRUCTOR

NOV. '69

DESIGN OF THE MONTH WINNER

By Randy Gibson, Cottondale, Alabama



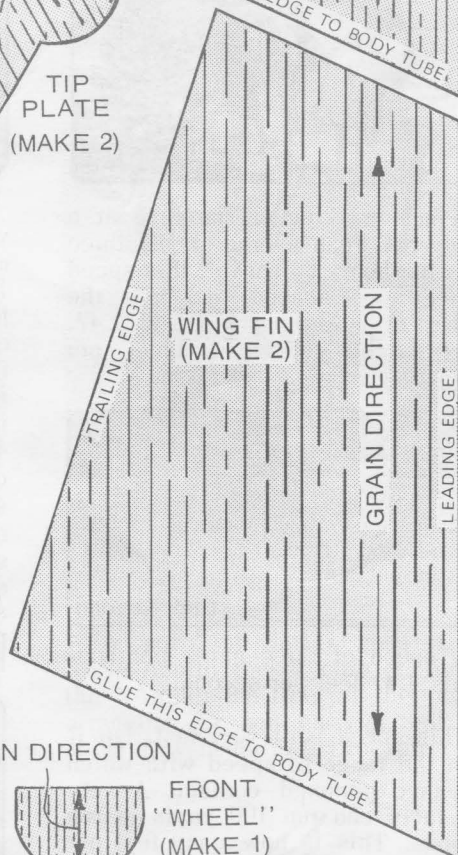
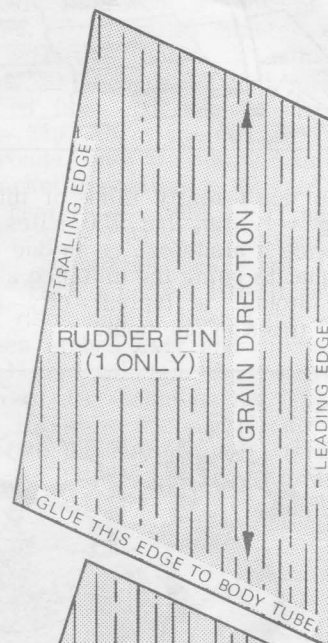
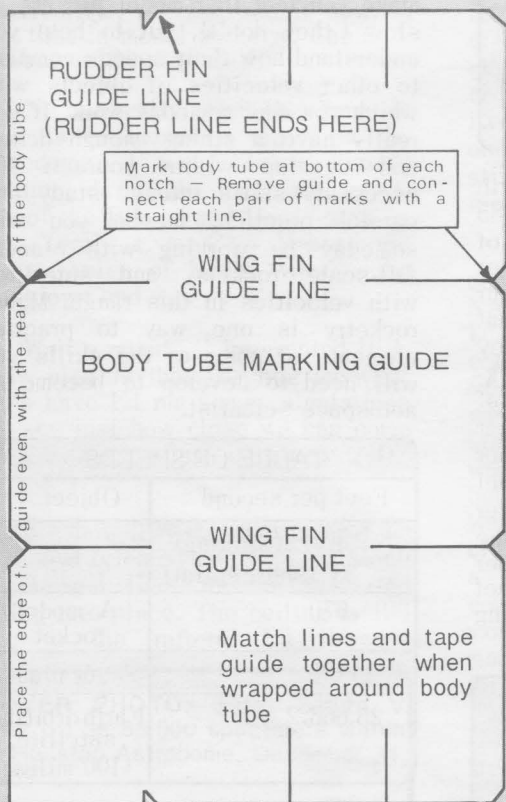
## PARTS LIST

- |   |               |          |   |                     |          |
|---|---------------|----------|---|---------------------|----------|
| 1 | Nose Cone     | #BNC-20B | 1 | Engine Mount Kit    | #EH-2055 |
| 1 | Tail Cone     | #BTC-55Z | 5 | Centering Ring      | #RA-2055 |
| 2 | Sheet Balsa   | #BFS-30  | 2 | Launching Lug       | #LL-2A   |
| 1 | Body Tube     | #BT-55   | 1 | Shock Cord          | #SC-1    |
| 1 | Body Tube     | #BT-20B  | 2 | Short Engine Holder | #EH-3    |
| 1 | Parachute Kit | #PK-12   | 2 | Tape Hinges         | #TH-1    |

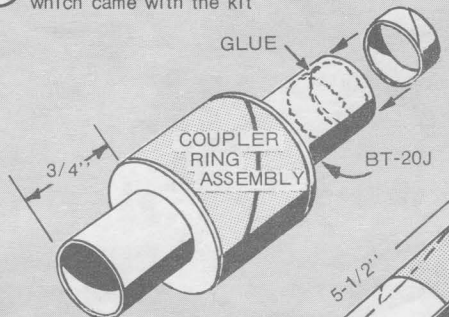
In addition to the parts above you will need a bottle of white glue, ruler, scissors, model knife, ballpoint pen, piece of cardboard (for patterns). Also needed is medium and fine sandpaper, sanding sealer, paint or dope and decals of your choice.

Trace rudder and wing fin patterns; tip plate and front wheel patterns onto stiff paper and cut them out. Trace the tube marking guide onto typing paper and cut out.

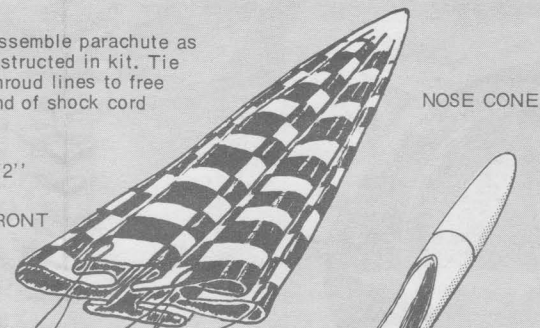
A non-symmetrical fin layout and external shock cord mounting is the first clue that this bird is different. . . You examine that special nose cone set up and it becomes clear that this bird has a new type of 'chute release. You may find the flat recovery technique a real fin-saver for a bird of your own design.



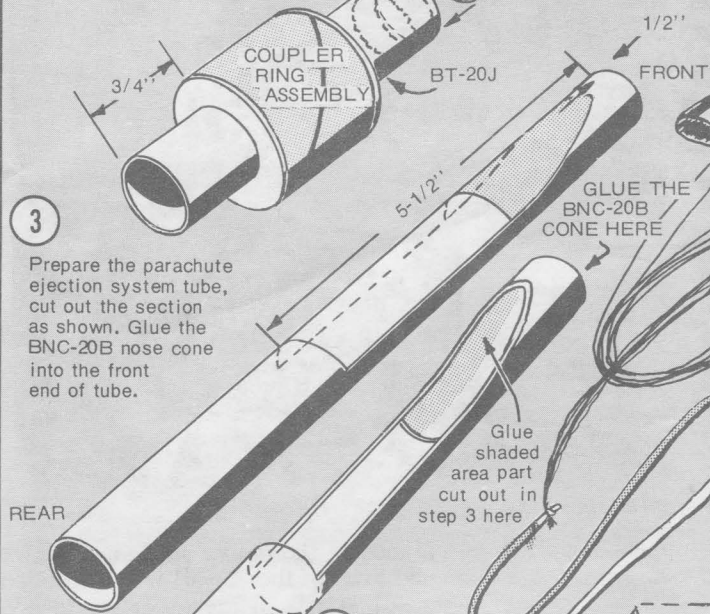
**1** Assemble engine mount kit according to the instructions which came with the kit



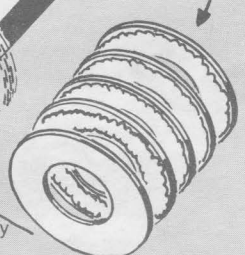
**2** Assemble parachute as instructed in kit. Tie shroud lines to free end of shock cord



**3** Prepare the parachute ejection system tube, cut out the section as shown. Glue the BNC-20B nose cone into the front end of tube.



**4** Glue 5 RA-2055 centering rings together as shown



Mount this assembly onto the rear end of the tube. Allow a 1/16 inch length of the tube to stick through for a glue fillet to be applied.

**5** Shock cord mount glues to outside of body tube at point of C/G (check your model for exact C/G as construction differs). Align the mount directly ahead of the rudder fin.

**RECOMMENDED ENGINES**  
A8-3, B6-4, C6-5

SEE "WHEEL" DETAIL BELOW

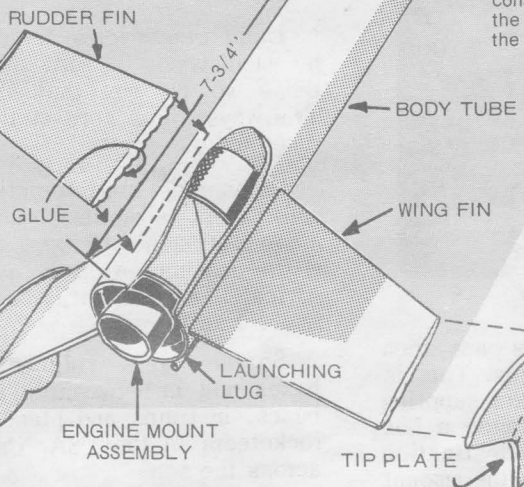
**5A**

1/2" x 2-1/2" piece of tape hinge or PRM-1 serves to cover and hold engine hooks in place in this function



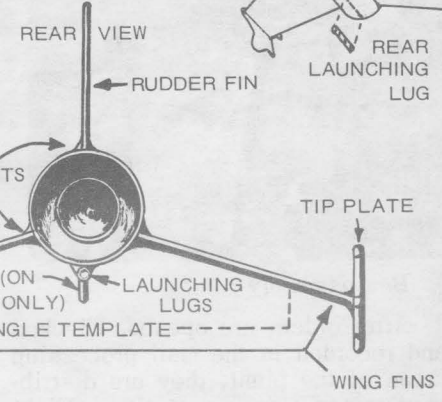
Trace this template onto typing paper and cut out. Place template on BT-20 chute tube 1/2" from one end - tapered end to front. Mark around template and cut this portion from tube. Now cut off the tapered end (mark cut line) of the piece just removed from the tube and glue this piece in the chute tube to act as ejection ramp. (See step 3.)

PLEASE READ INSTRUCTIONS



**8**

Fully extend chute tube. Pack 1 square of wadding into tube. Form a "spike" with chute, fold into 'S' shape and slip into tube until 3/4 of it is out of view within the nose section. Gather shroud lines and lay them back and forth in the remaining ejection tube area - do the same with the slack in the shock cord. Remove any twist in the shock cord so it lays smooth on this body tube and over the adapter cone. Carefully push the ejection tube in until it seats against the bottom stop.



**7**

Dotted line shows resting position of body tube in the fin angle template (before tip plates, launch lugs and front wheel are added) to get the correct angle to the wing fins. Align fin guide lines as directed on the angle template. Apply a line of glue to the root edge of a wing fin - place this edge against the body tube over a guide line and allow the flat side of the fin to rest on the angle template. Repeat with the other wing fin... make sure both root edges are parallel to the centerline of the body tube. Allow to dry completely before moving assembly from template.

