

A Shot from Out of Left Field  
The MAXI SPRINT

By R. A. Stott - NAR 36510

Its BERTHA BASHING TIME AGAIN!

I consider the BIG BERTHA kit of Estes Industries as perhaps the best kit around to bash into different rockets and models (I keep a small stockpile of BERTHAS around for just such an occasion). With its 18" body tube and its basic design, it just calls for the designer's modification. Some modifications are quick and easy, as we'll see in this reprint of a plan I did for MIVARS APOGEE, December, 1988 edition.

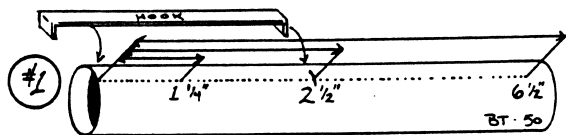
In this plan, I've scaled up an old Estes K-49 ASTRON SPRINT into the 'D' class MAXI SPRINT. The original Sprint was the "Dragster" of its day (See Page 14 for a review of the Dragster).

Since I did this set of plans though, I have found that the MAXI SPRINT also flies well when using a pair of streamers for recovery (in some cases, it is best to fly her with a streamer, that is if you REALLY want your model back. She will really disappear even if flown on a D12-7).

Parts Needed

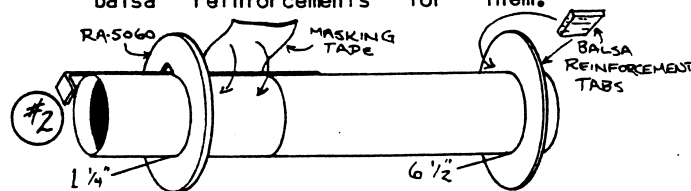
- A. Another BIG BERTHA Kit
- B. 7" section of BT-50 Tube
- C. 1/8" thick Balsa Fin Stock
- D. (2) RA-5060 Centering Rings or balsa copies

1.( ) Take the BT-50 and mark it at the 1 1/4", 2 1/2", and the 6 1/2" points. Cut a slot for the engine hook at the 2 1/2" mark. Install the hook.

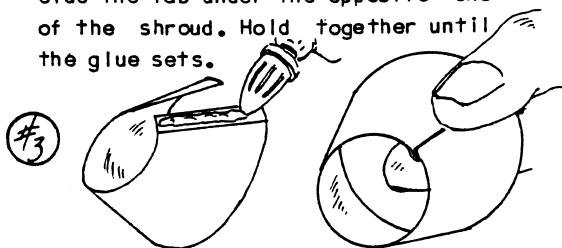


2.( ) Using 1/4" tape, strap the engine hook down BELOW the 1 1/4" mark. Run a bead of glue around the top of the tape, and slide a centering ring to it. Fillet the top side of the ring. run a bead of glue at the 6 1/2" mark, and slide a centering ring to it. Fillet the top side of this ring.

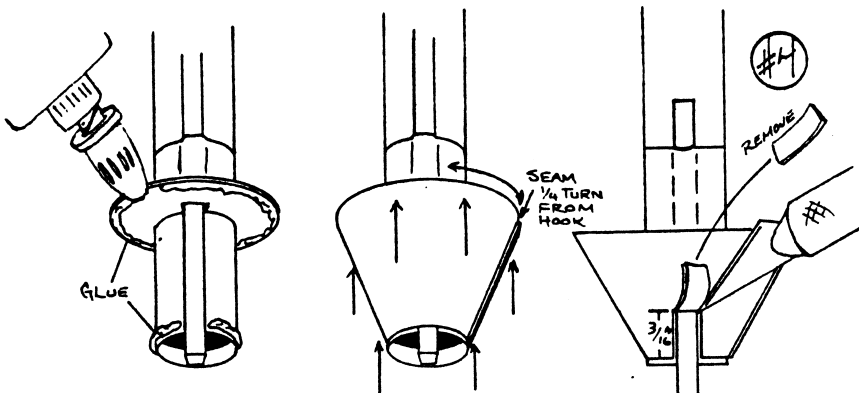
\* If you are using RA-5060 paper rings, you might want to make balsa reinforcements for them.



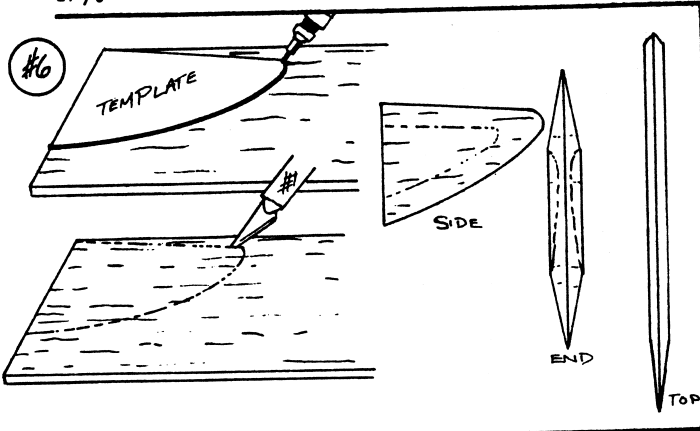
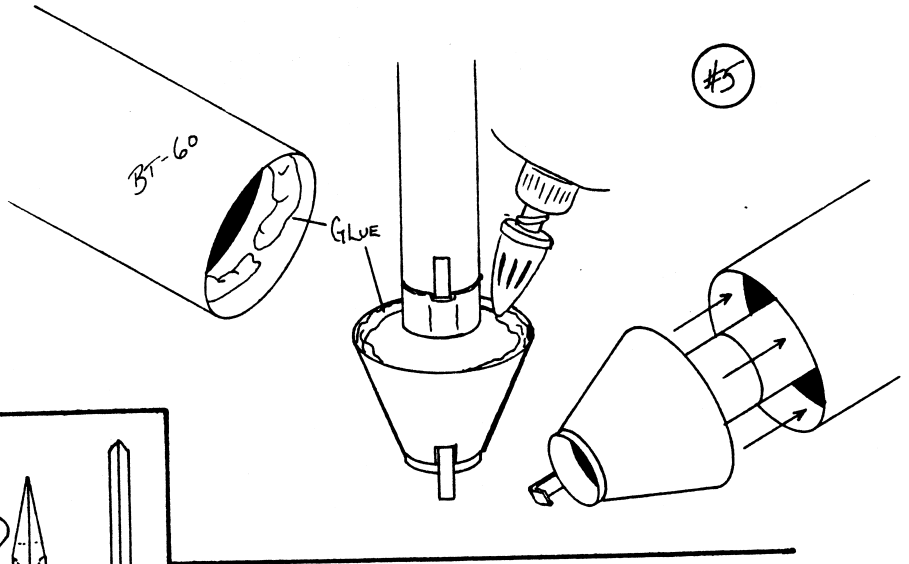
3.( ) Cut out the paper shroud. Glue the tab under the opposite end of the shroud. Hold together until the glue sets.



4.( ) Run a bead of glue around the hook end of the tube. DO NOT GET GLUE ON THE ENGINE HOOK. Run another bead of glue on the BOTTOM edge of the lower centering ring. Slide the shroud over the end of the tube with the shroud seam 1/4 turn away from the engine hook. Set aside to dry. Once dry, and using a sharp blade, cut a slot out around the hook.

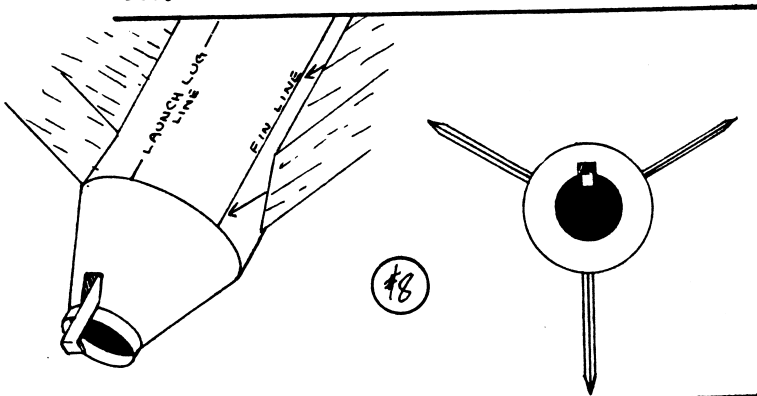
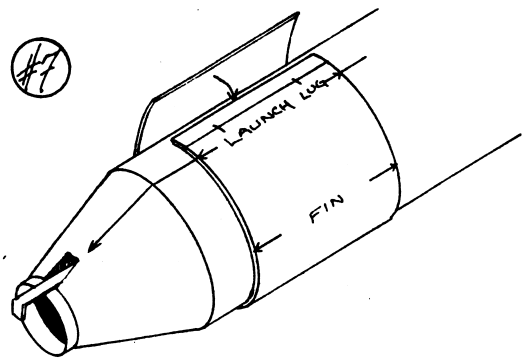


5.( ) Run a heavy bead of glue inside the end of the BT-60 tube. Run another bead of glue around the inside edge of the shroud. Slide the engine mount into the body tube until the shroud is against the tube's base. Set aside UPRIGHT to dry.



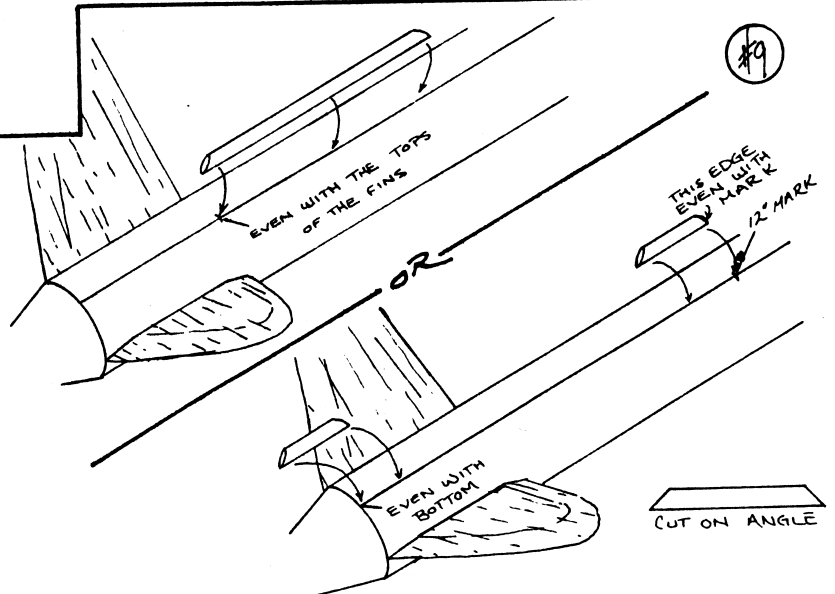
6.( ) Cut out the fin template. Trace and cut out THREE fins. Sand all but the root edge to a foil as shown.

7.( ) Cut out the tube marking guide. Wrap it around the body tube, with the launch lug mark even with the engine hook. Mark the tube, and extend the lines up the tube.



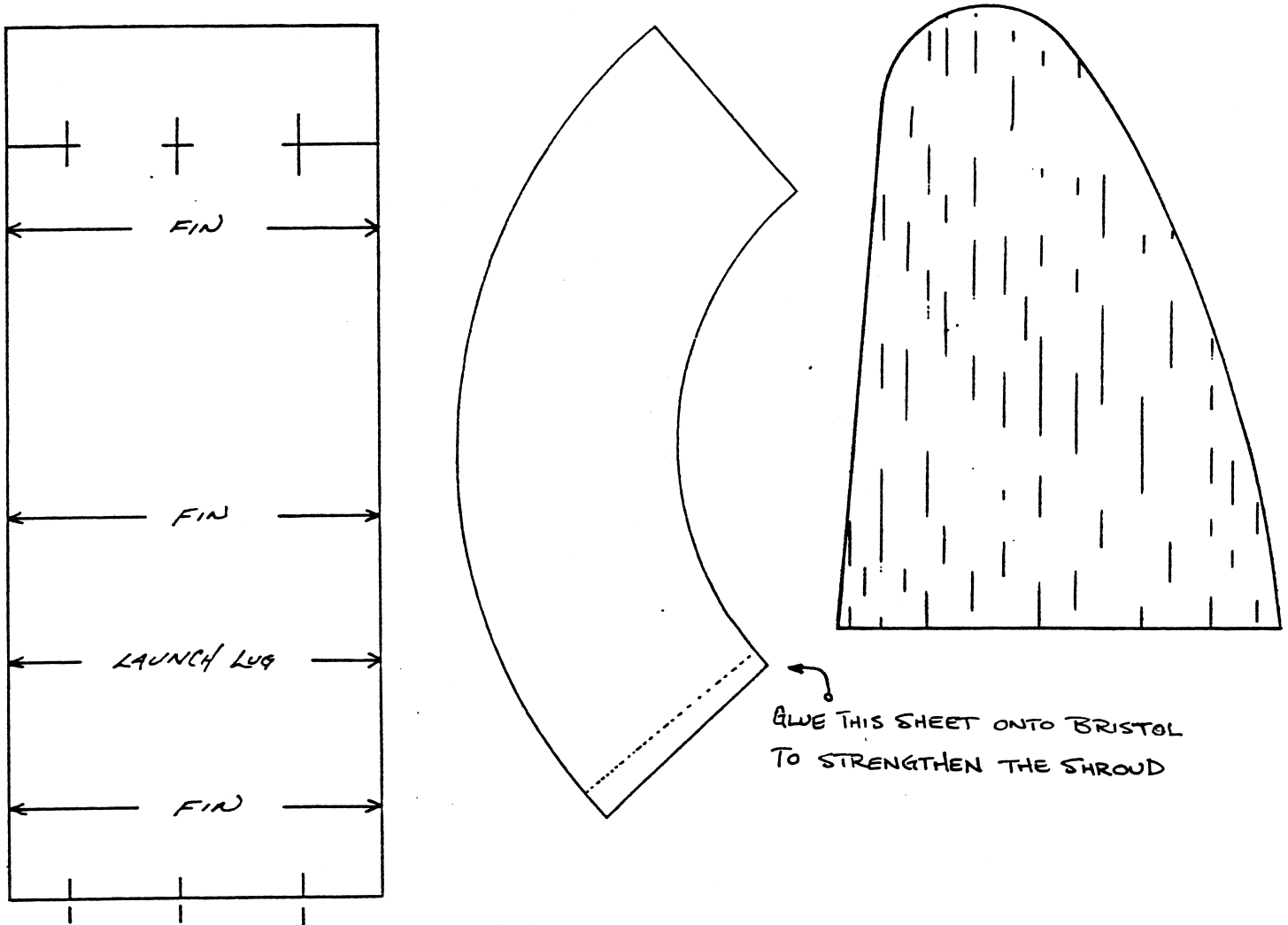
8.( ) Glue the fins to the body tube. Once fully set and dry, fillet the fins with glue.

9.( ) The BERTHA kit's launch lug is just a slight bit long. I suggest you do one of two things. Either glue the entire lug to the body, even with the top of the fins, or cut two 1 1/4" lugs from the long lug. Glue the first one even with the top of the shroud. Glue the second lug 12" from the top of the shroud. Both ways, to remind us of the original version of this rocket, I suggest you ANGLE the ends of the lugs as shown.



- 10.( ) Cut out and assemble the shock cord mount as we all should know how to by now!  
Glue it into the body tube.
- 11.( ) Do the same with the parachute kit (assemble it, that is!)
- 12.( ) The rocket is now ready for finishing. Seal and sand the fins.

To follow an Estes catalog prototype, the paint scheme should be Gloss Yellow over a Gloss White body with a black band between the yellow and the white.



# MAXI SPRINT

TYPEFACE USED ON PROTOTYPE  
72 PT. AVANT GARDE BOLD  
CHARTPAK #M15272  
LETRASET #131-72C