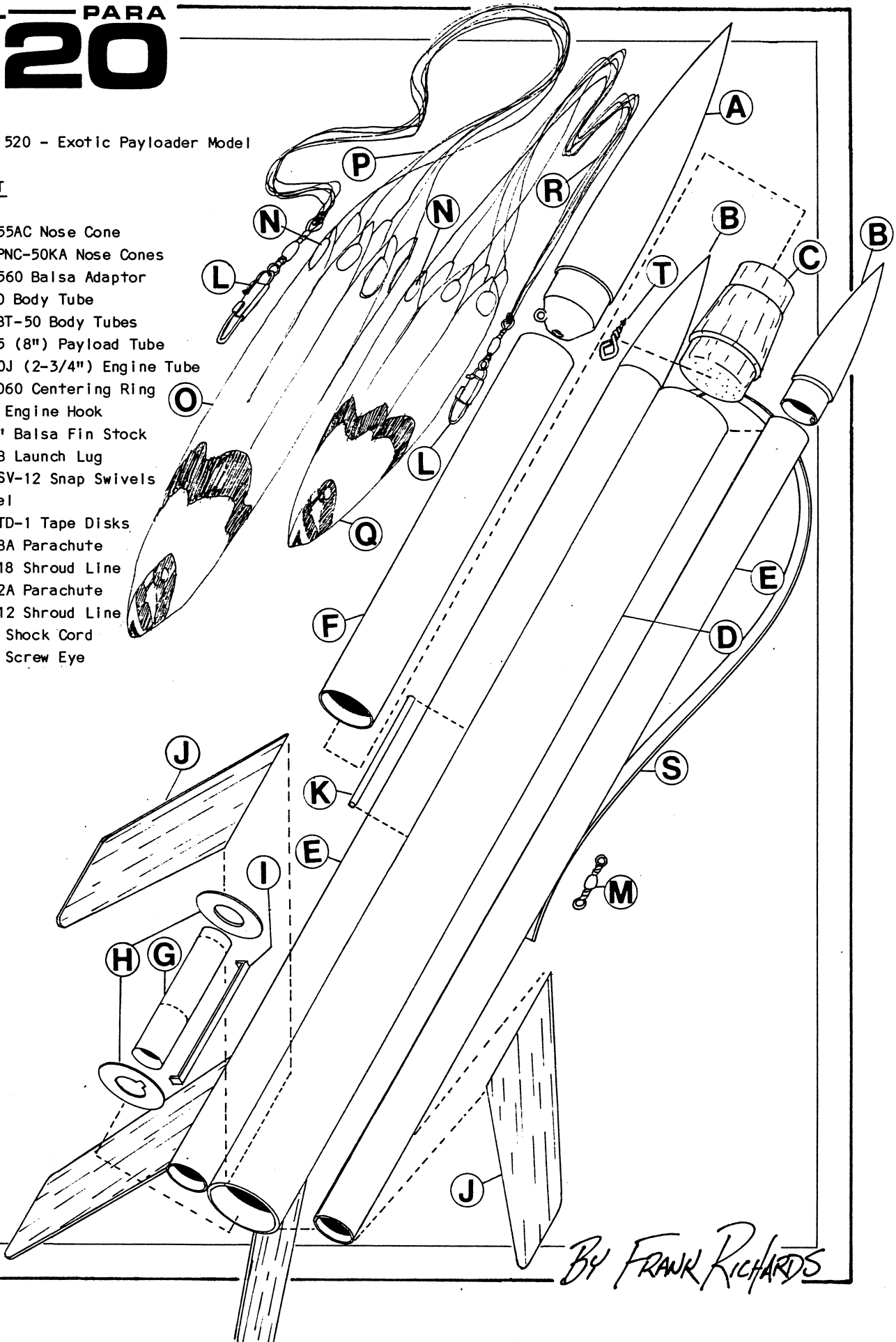


DUAL-PARA 520

DUAL-PARA 520 - Exotic Payloader Model

PARTS LIST

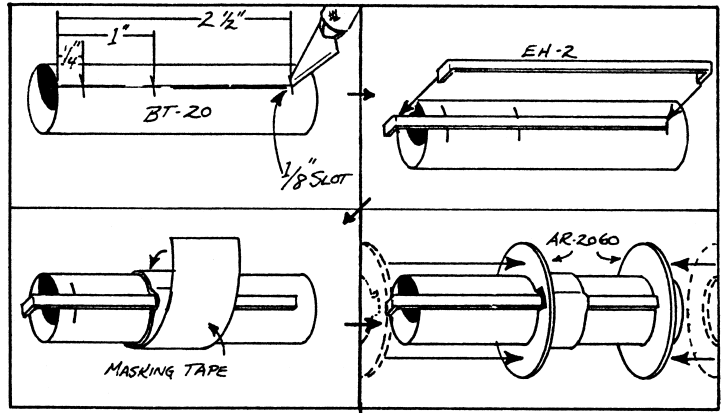
- A. PNC-55AC Nose Cone
- B. (2) PNC-50KA Nose Cones
- C. TA-5560 Balsa Adaptor
- D. BT-60 Body Tube
- E. (2) BT-50 Body Tubes
- F. BT-55 (8") Payload Tube
- G. BT-20J (2-3/4") Engine Tube
- H. RA-2060 Centering Ring
- I. EH-2 Engine Hook
- J. 3/32" Balsa Fin Stock
- K. LL-2B Launch Lug
- L. (2) SV-12 Snap Swivels
- M. Swivel
- N. (2) TD-1 Tape Disks
- O. PK-18A Parachute
- P. SLT-18 Shroud Line
- Q. PK-12A Parachute
- R. SLT-12 Shroud Line
- S. SC-2 Shock Cord
- T. SE-1 Screw Eye



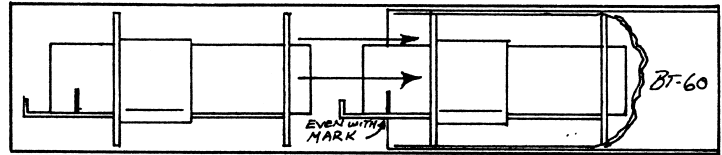
By FRANK RICHARDS

DUAL-PARA 520
By Frank Richards

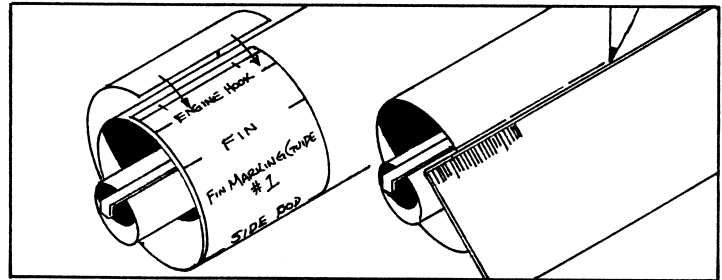
1. [] Draw a line the length of the BT-20 Engine Tube. Measure and mark along this line 1/4", 1" and 2-1/2". Cut a 1/8" slot centered on the 2-1/2" mark. Insert the engine hook into the slot. Twice wrap the engine hook to the engine tube with masking tape in front of the 1" mark. Run a bead of glue around the engine tube at the 1" mark. Slide the RA-2060 Centering Ring with a slot for the engine hook up the engine tube to the 1" mark. Fillet the back end of the Centering Ring. Run a bead of glue around the engine tube at the 2-1/2" mark. Slide the other Centering Ring down the engine tube to the 2-1/2" mark. Fillet the top end of the Centering Ring. Let dry.



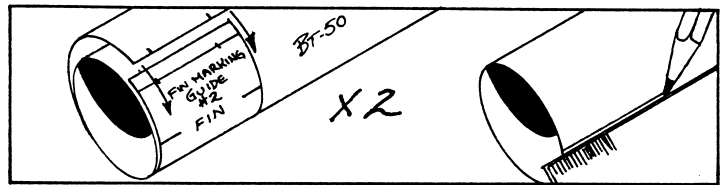
2. [] Run a bead of glue inside the BT-60 Body Tube. Slide the engine mount into the body tube until the 1/4" mark is even with the thrust end of the body tube. Fillet the bottom Centering Ring to the inside of the body tube. Let dry.



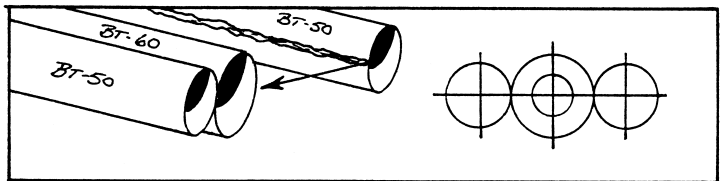
3. [] Lightly sand the BT-60 Body Tube with extra fine sandpaper. Cut out the #1 Fin Marking Guide. Wrap the guide around the tube, making sure that the engine hook mark is centered on the engine hook. Mark the body tube at the arrows (except at the engine hook mark). Remove the guide and extend the marks the length of the body tube. Have the two lines marked for the Outer Body Tubes wrap over the edges of the body tube.



4. [] Lightly sand the BT-50 Body Tubes. Cut out the #2 Fin Marking Guide. Wrap the guide around the tubes. Mark the tubes at the arrows. Remove the wrap and extend the marks the length of the tube. On one line, have the marks wrap over the edges of the tube. This will be the line that faces the Main Body Tube.

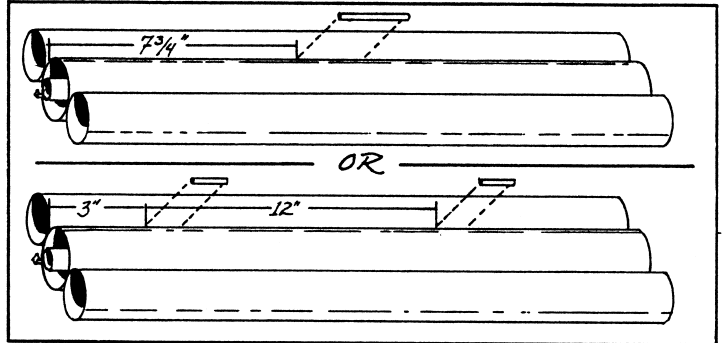


5. [] Run a bead of glue down the BT-50 Body tubes along the line designated as the inside line. Attach the Outer Body Tubes to the Main Body Tube, matching the end marks together. On a flat surface, make sure the Main Tube and the Outer Tubes are even and level. Let dry.



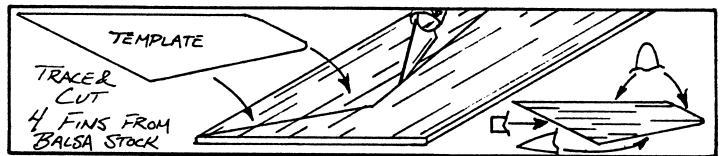
DUAL-PARA 520

6. [] Measure and mark 7-3/4" up from the thrust end between the Main Body Tube and an Outer Body Tube. Run a bead of glue the length of the launch lug. Mount the launch lug between the body tubes even with the top of the 7-3/4" mark.



OPTION: Measure and mark 3" and 12" between the Main Body Tube and an Outer Body Tube. Cut the launch lug into two equal pieces. Run beads of glue down the length of these pieces, and mount them above the marks. Let dry.

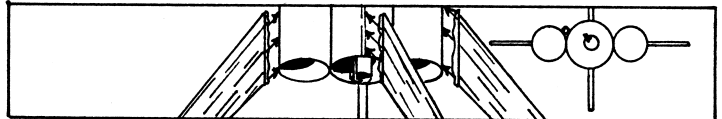
7. [] Cut out the Fin Template. Using the template as a guide, trace and cut out of the balsa fin stock 4 fins. Sand all edges smooth. If you wish, round the leading edges of the fins.



8. [] Rub glue into the root edge of the fins. Let dry. Sand roughness left by the glue smooth.



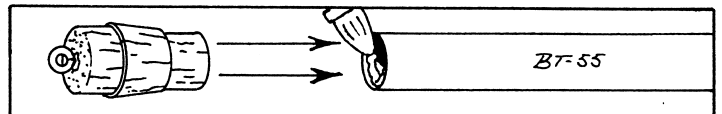
9. [] Run a bead of glue down the root edge of the fins. Mount the fins along their guide lines on the body tubes, making sure the trailing edge of the fins are even with the thrust end of the body tubes.



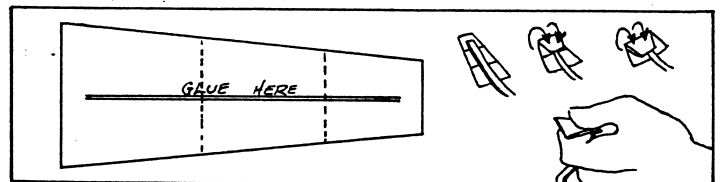
10. [] Insert the screw eye into the center of the wide end of the balsa adaptor. Remove the screw eye and inject glue into the hole. Reinsert the screw eye.



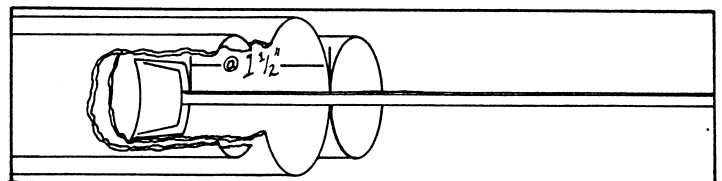
11. [] Run a bead of glue inside the BT-55 Payload Tube. Insert the balsa adaptor into the payload tube. Let dry.



12. [] Cut out the shock cord mount. Crease the paper along the dotted lines. Run a bead of glue down the middle of the mount. Lay the shock cord down the center of the of the mount. Run a bead of glue over the shock cord on the mount. Fold the mount as shown. Hold together until the glue starts to set.



13. [] Apply glue to the back of the shock cord mount. Install the mount inside the front of the body tube, @ 1-1/2" from the front edge. Press firmly against the body tube. Let dry.



DUAL-PARA 520

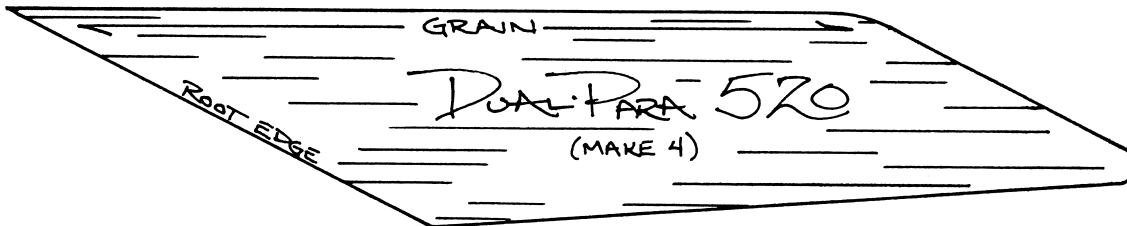
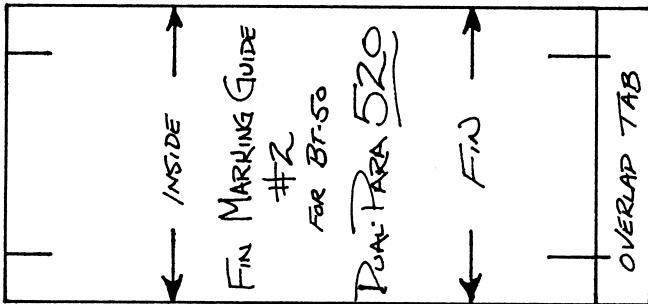
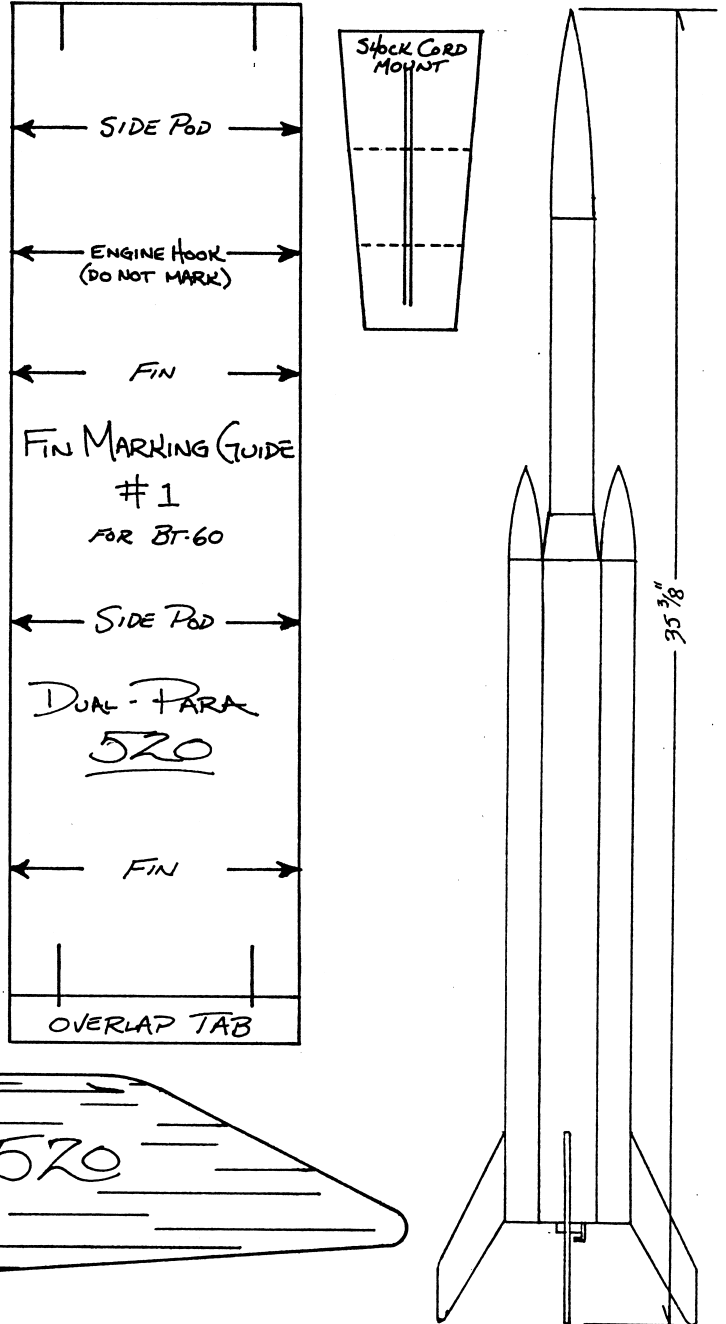
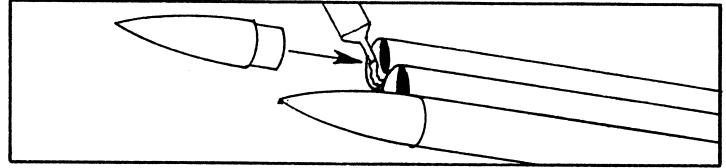
14. [] Run a bead of plastic glue inside the forward end of the Outer Body Tubes. Insert the PNC-50KA Nose Cones.

15. [] Cut out the parachute shrouds from their sheets.

16. [] Cut the shroud lines into three even sections. Using the tape disks apply the shroud lines to the parachute shrouds.

17. [] Optional. Draw the shroud lines to a point. Feed the lines through the eye of the snap swivels. Loop over the swivels and pull tight. Also optional, tie a swivel to the end of the shock cord.

The model is now ready for finishing.



PHOTOCOPY THIS PAGE
 USE PHOTOCOPIES FOR TEMPLATES
 AND MOUNTS