





# Long John Silver

SKILL LEVEL 1

**HONORABLE MENTION  
DESIGN OF THE MONTH**  
By **KEVIN J. MOORE** Spencerport, N.Y.  
ESTES INDUSTRIES ROCKET PLAN NO. 82

**BUILD THE LONG JOHN SILVER WITH ESTES  
HIGH PERFORMANCE PARTS AND ACCESSORIES**

**PARTS LIST**

- 1 NOSE CONE - BNC-5W
- 1 BODY TUBE - BT-5
- 1 FIN STOCK - BFS-20
- 1 SCREW EYE - SE-3
- 1 PARACHUTE KIT - PK-8
- 1 SHOCK CORD - SC-1
- 2 WEIGHTS - NCW-4
- 1 ENGINE BLOCK - EB-5B
- 1 LAUNCH LUG - LL-2B
- 1 DECAL SHEET - KD-45
- 1 SPENT MINI-ENGINE CASING

**ADDITIONAL MATERIALS**

- Hobby Knife
- White Glue
- Ruler
- Sanding Material
- Sanding Sealer
- Enamel Paint (Spray)
- Sharp Pencil

**RECOMMENDED ENGINES**

- 1/2A3-2T    A3-4T    A10-3T

**1** Measure 3/16" from one end of an expended Mini-Engine. Apply glue to the inside of the BT-5 body tube approximately 1/12" from the end. Using the expended engine casing, push the engine block into the body tube until the 3/16" mark is even with the body tube end. Remove the engine casing immediately. Check to be sure engine block is positioned correctly, then set aside to dry.

**2** Cut out the fin marking guide and wrap it around the body tube. Mark the positions of the fins and connect lines with pencil.

**3** Cut out the fin pattern, trace 3 fins on the fin stock and cut out. Round the leading edges and leave root edge of each fin even and flat.

**4** Using the pattern provided, cut out small shock cord mount from thin typing paper or first-aid type gauze. Assemble as shown and glue to inside of BT-5 about 1" from the forward end.



**5** Press hard to compress shock cord mount as flat as possible against inside of BT-5 in order to provide as small an obstruction as possible.

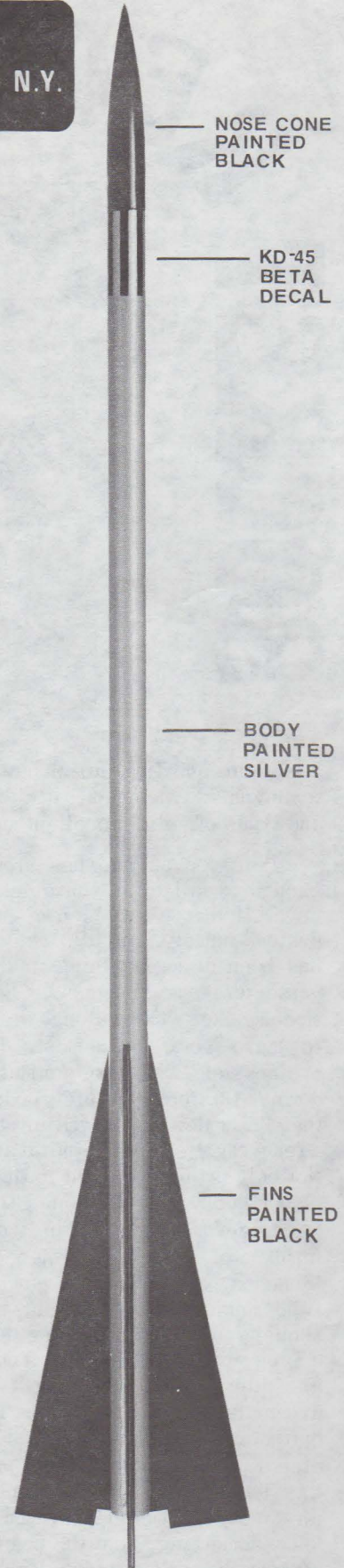
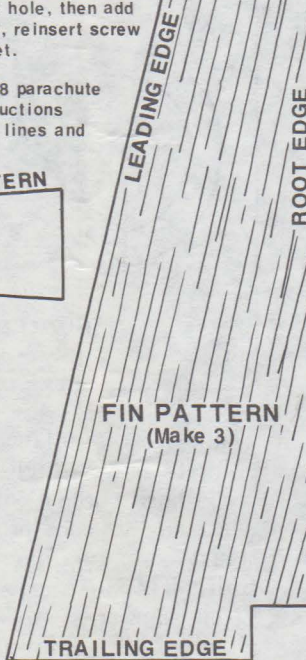
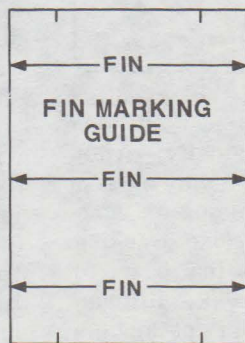
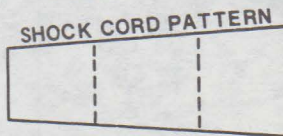
**6** Attach the fins and launching lug as shown. Be sure to align each fin properly. Allow fins and launch lug to dry completely.

**7** Insert screw eye into the base of the nose cone. Remove it and squirt glue into the hole, then add two NCW-4 weights, reinsert screw eye and allow to set.

**8** Assemble the PK-8 parachute according to its instructions. Gather all the shroud lines and tie together.

**9** Apply glue fillets to fins and launch lug, and allow to dry completely.

**10** Tie shock cord and shroud lines to screw eye.



**FINISHING PROCEDURE** Sand all balsa smooth, then apply sanding sealer. Repeat this procedure until balsa is smooth. Refer to photo for color scheme.

