

9. Cut parachute to desired size. Tie a knot in the end of each shroud line and attach it to a corner of the parachute with the parachute tabs provided. Repeat with remaining lines. Gather the lines and tie them to the snap swivel. Put a drop of glue on the knot to prevent it from coming untied. A full 16" parachute is recommended, however size of parachute can be varied depending on wt. of payload, wind conditions, and engine used.

10. Finish your model by giving it several coats of a good quality sanding sealer. Lightly sand between coats. For best visibility a flat black finish is recommended. Any high quality spray paint will give good results.

-FLYING INSTRUCTIONS-

1. Select an engine and wrap enough masking tape around the ends to make a fairly tight fit (about 10 lbs. force) in engine holder tube. Insert into rocket.
2. Push wadding into main body tube from front of rocket. Fold and insert the parachute. Fit payload section into place.
3. See engine instructions for details on launching.



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The National Association of Rocketry (NAR) is a non-profit group of dedicated hobbyist. As a member you will receive a monthly magazine, flight insurance, the right to compete in NAR sanctioned competition as well as a variety of valuable services for the model rocketry enthusiast. Write to: National Association of Rocketry, Dept. F, P.O. Box 725, New Providence, N.J. 07974



# MAVERICK!

HIGH Flying  
model 29" Long



Recommended Engines:

- E60-6
- F7-6
- F100-8
- with C-20 conversion kit
- D18-4
- D20-5

SPECIFICATIONS:

- Length -----28.75"
- Body Dia.
- Above Trans. - 1.34"
- Below Trans. -1.64"
- Aprox. takeoff wt.
- without engines: 3.25 oz.

FLIGHT SYSTEMS, INC.  
9300 East 68th Street  
Raytown, Missouri 64133

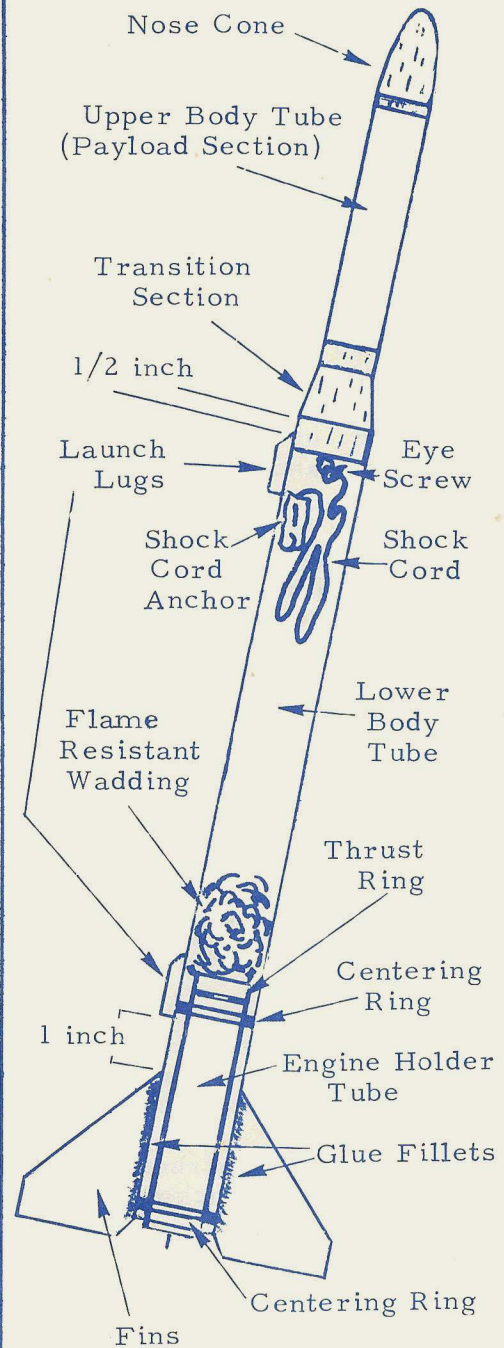


PARTS LIST

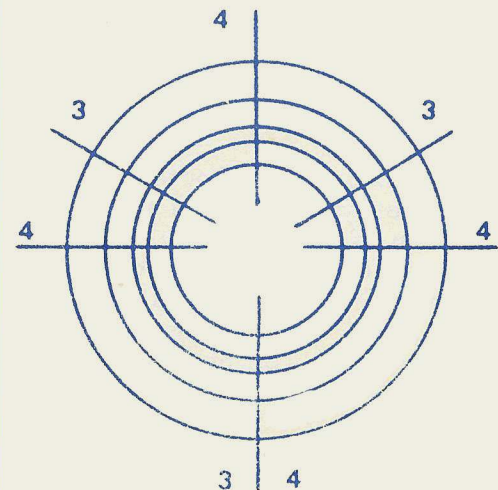
Qty	Description	Qty	Description
1	- Nose Cone	1	- Shock Cord Anchor
1	- Body Tube (1.6 x 18")	1	- Shock Cord (26")
1	- Body Tube (1.3 x 6")	1	- Eye Screw
1	- Transition Section	2	- Launch Lugs
4	- Fins	1	- Parachute Canopy
1	- Engine Tube (1.1 x 6")	8	- Shroud Lines
1	- Thrust Ring	8	- Parachute Tabs
2	- Centering Rings	1	- Snap Swivel
1	- Flame Resistant Wadding	1	- Decal Sheet

(((((((((((((((( ASSEMBLY INSTRUCTIONS ))))))))))))))))

1. Glue smaller end of transition section into one end of 1.3 x 6" body tube. (Payload Section) Fit nose cone into other end of this tube. Wrap base of cone with masking tape for snug fit. Do not glue cone in if you plan to use payload section.
2. Slide the centering rings over the engine holder tube and glue in place 3/8" from each end of tube. Use enough glue to obtain a secure bond. Set this assembly aside to dry.
3. Sand the fins lightly. Round the leading and trailing edges. Do not sand the root (red) edge of the fins. Using the fin placement guide mark one end of the main body tube (1.6 x 18") with 4 fin marks. Do this by setting the tube on the fin placement guide inside the appropriate circle and marking on the tube next to the lines marked "4". Extend this mark up the tube two inches or so, perpendicular to the bottom of the tube. Run a line of good quality white glue along the root (red) edge of a fin and press it in place along an alignment mark, checking to be sure that the fin is straight and parallel with the body tube lengthwise. A stronger bond can be made by removing the fin, adding a bit more glue to it (Let this glue "set" slightly) and re-installing it. Repeat this procedure with the other three fins. After all fins are installed and are dry, run glue fillets along root of fins as shown at right.
4. Select an engine of the size you plan to use, and mark it 1/2" from the nozzle end. Run a line of glue around the inside of one end of the engine holder tube. Insert the thrust ring. Use the engine you have just marked to push the thrust ring into position. Be sure that at least 1/2" of the engine protrudes from the end of the tube with thrust ring in place.
5. Once the fins have dried completely, run a fairly thick line of glue inside the main body tube at the end where the fins have been attached. Push the engine holder assembly into this end of the tube, being sure that the end which the thrust ring is closest to, is forward toward the front of the rocket. Leave 1/8" of the engine holder tube projecting from the end of the main body tube.
6. Thread the shock cord through the shock cord anchor. Tie small knot in end. Glue this assembly into upper end of main body tube as illustrated.
7. Attach the eye screw to the base of the transition section. Remove it, squirt glue into the hole left, and reinsert. This will hold the eye screw firmly in place. Tie the loose end of the shock cord to the eye screw. Apply a small amount of glue to this knot to be sure that it does not come undone.
8. Install launch lugs in positions shown at right.



**FIN PLACEMENT GUIDE**





MRK-18

**MODEL ROCKETRY**  
PROFESSIONALISM IN ROCKETRY

*SPACEMODELING - A Hobby for ages 10 to adult*



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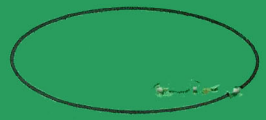


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*SPACEMODELING - A Hobby for ages 10 to adult*

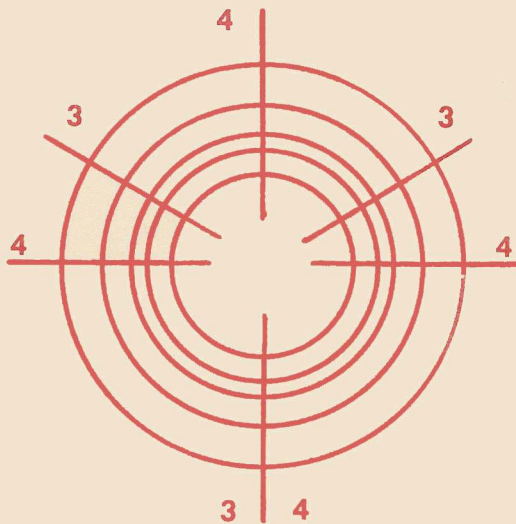
**MODEL ROCKETRY**  
PROFESSIONALISM IN ROCKETRY

MRK-18





## FIN PLACEMENT GUIDE



1. Center end of tube in the proper circle.
2. Mark (4) lines for four fin models and (3) lines for three fin models.



# FSI MRK-18 Maverick

## Fin Patterns

Material:	3/32 inch birch plywood (3-ply)
Number:	4
Root Edge:	67 mm
Total Fin Height:	76 mm
Semi-Span:	54 mm
Trailing Edge:	48 mm
Fin Tip Edge:	19-20 mm



| < 1 inch > |

| < 1 inch > |

| < 1 inch > |