

# VIKING V

## FLYING MODEL ROCKET

*Easy to  
Assemble*

*45.75" Long*

To use Flight Systems D20-3 engines, order Engine Mount C-10.

**Specifications:**

Length—45.75"

Body Dia.

above transition—1.60"

below transition—1.30"

Takeoff weight without

engine: 5.89 oz. (165 g)

Recommended F.S.I. Engines:  
D20-3, E60-6, F100-8

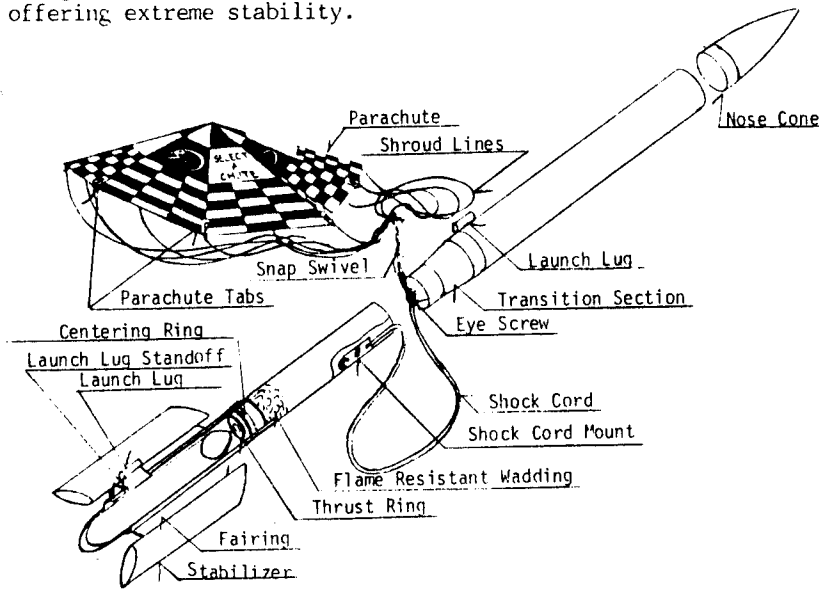
**Skill Level 3**

This kit requires assembly. Launch systems, engines, glue, and finishing supplies are not included.



# VIKING V

The Viking V is the command ship of the Viking series. It stands 45 3/4" tall and features a transition section. The advanced designed stabilizers make this kit unique in appearance as well as offering extreme stability.



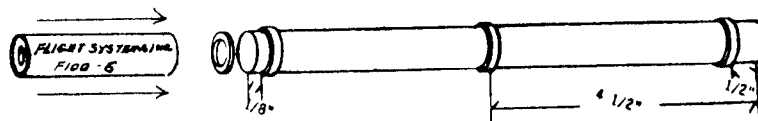
## PARTS LIST:

1 18" X 1.30ID Lower Body Tube	1 Shock Cord Mount
1 18" X 1.60ID Lower Body Tube	1 Eyescrew
1 NC-152 Nose cone	1 Snap Swivel
1 T5-1215 Transition Section	8 Shroud Lines
4 Stabilizers	8 Glue Tabs
4 Fairings	1 Parachute Canopy
1 9" X 1.15ID Engine Holder Tube	2 Launch Lugs
3 Centering Rings (13F)	1 Launch Lug Standoff
1 TR-2 Thrust Rings	1 Wadding
1 Shock Cord 32"	1 Decal

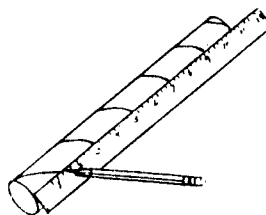
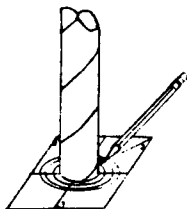
## ASSEMBLY INSTRUCTIONS:

### Important:

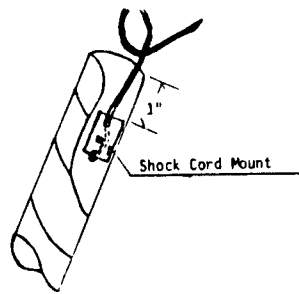
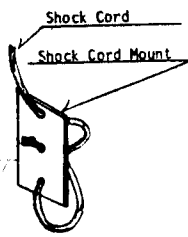
Read through entire instructions before starting assembly. Check to be sure all parts are included. Test fit the parts together before applying any glue. If a part does not fit properly, sand or build up for precision fit. Please read each step before starting that step. Check off each completed step.



1. First determine which size F.S.I. engine you intend to use in your Viking V Rocket (E60-6 or F100-6 is recommended). Locate the TR-2 thrust ring (1.1300 cardboard ring) and the 9" X 1.13ID engine holder tube. Next, put a ring of glue inside of one end of the engine holder tube. Now, using a F.S.I. 27mm engine, push the thrust ring into the engine holding tube until the engine projects out of the end of the tube 1/2". Remove the engine. Install rings as pictured and glue in place. Apply a fillet of glue on each side of ring as shown. Set aside and allow to dry.

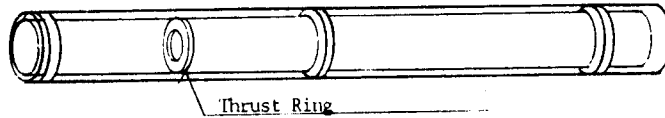


2. Using fin alignment guide mark lines on the small diameter body tube for 4 fin alignment as shown. Using a straight edge extend lines parallel to the body tube about 6".

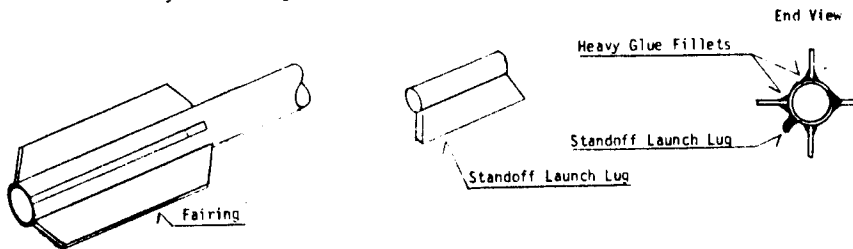


3. Install shock cord mount as shown. Spread a heavy layer of glue over the side opposite the shock cord knot. Curve shock cord and insert into the end opposite fin alignment marks. Drawing shows the proper position in the body tube.

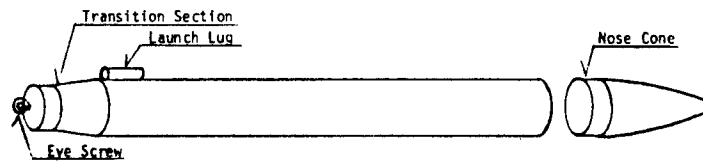
Rear Of Body Tube



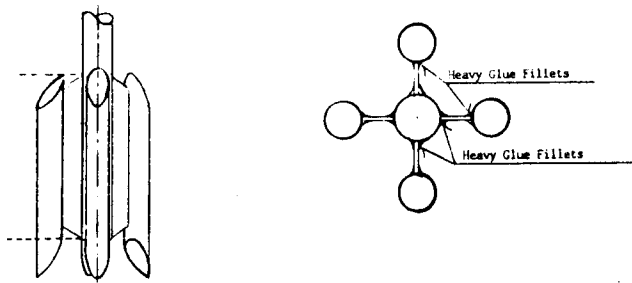
4. Install engine mount unit. Be sure the engine mount will slide easily into the small body tube. If it is too tight sand the rings until a precision fit is obtained. Apply a ring of glue inside the body tube. Insert the engine mount unit using one smooth motion until it is flush with the back of the body tube. **DO NOT** stop pushing engine mount until it is in position or it will stick in the position in which you stopped. Also be sure to insert engine mount in end of tube that you have previously marked for fin alignment.



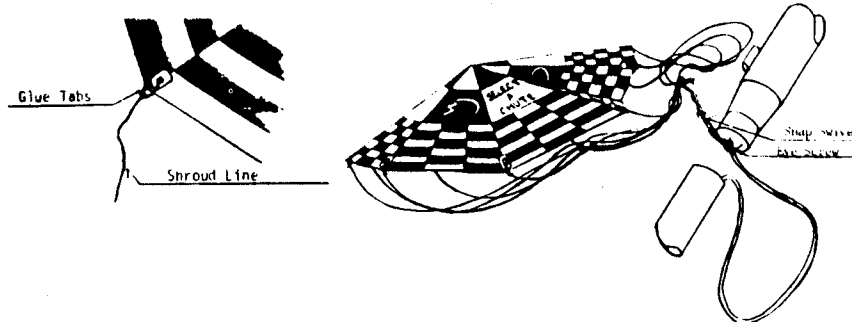
5. Round leading and trailing edges of 4 fairings (**DO NOT** round root or tip of fairing). Attach the red (long) edge of the fairings to the body tube. Fairings should stick straight out from the body tube and be carefully aligned with lines marked on body tube. Allow to dry. Run 2 or 3 glue fillets on each side of each fairing. Apply a line of glue to the launch lug standoff and attach launch lug to it. When dry, glue this assembly to the body tube 1/2 way between 2 fairings. Fillet standoff and lug. Allow to dry completely.



6. Glue large end of transition section into one end of upper body tube (18" X 1.6) Glue nose cone in other end of the tube. Put a drop of glue on the eyescrew and twist it into the small end of the transition. Glue upper launch lug parallel to the body tube, just above transition.



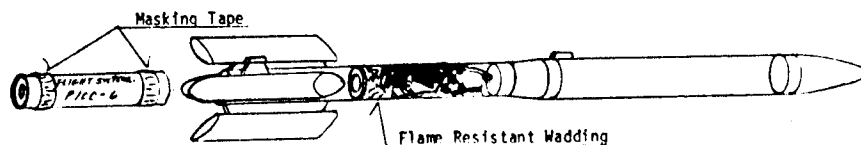
7. Run a line of glue the length of the tip edge of each fairing. Attach and position stabilizers as shown above. After dry, fillet stabilizers for added strength.



8. Cut out parachute to 16". Assemble parachute by attaching a glue tab to each corner, punching a hole through the center of each, and tying one shroud line through each hole. Tie the shroud line to the snap swivel and attach it to the eyescrew. Tie the free end of the shock cord to the eyescrew.
9. The rocket is now ready to paint and add decals. It is recommended that a light coat of paint be sprayed on and let dry. Add a couple more mist coats lightly sanding between them. Then apply a wet coat (gloss just appears) and set aside to dry. After model is completely dry apply decals. Cut one decal at a time from the sheet and submerge in luke-warm water until decal will slide off of the paper (usually about 20 seconds). Gently slide decal onto rocket and carefully smooth out any wrinkles.

### FLIGHT PREPARATION

1. Install flameproof wadding as shown in cutaway view of rocket.
2. Fold and install parachute. It is a good idea to dust parachute with ordinary talcum powder before each flight.
3. Install engine using Friction Fit. Several wraps of masking tape are placed around the engine as shown to hold the engine in place.
4. Insert F.S.I. engine until contact is made with the thrust ring. Be sure to use enough masking tape to assure a snug fit in the body tube. It should require a firm push. If the engine doesn't fit firmly it will be ejected instead of the parachute and the rocket will free fall.
5. Place the rocket on the launcher insert the F.S.I. ignitor and attach the firing clips as shown.
6. Go back to launch control and clear the area. Arm the launch control by inserting the phone jack attached to the firing line.
7. Give count down, 5-4-3-2-1, egnition!!

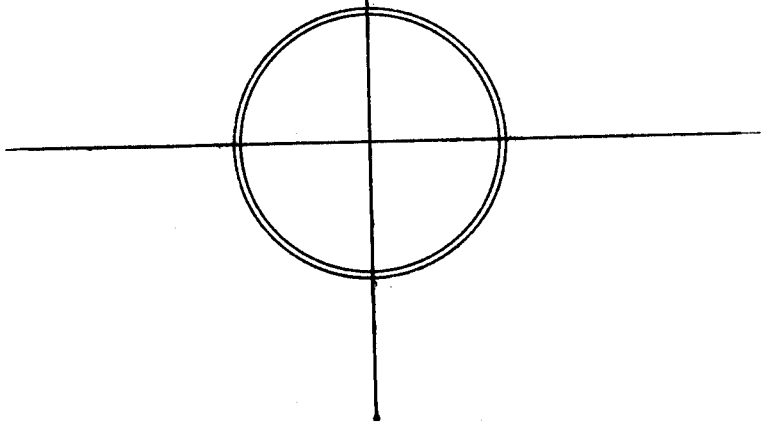


Be sure to follow the \*HIA-NAR Model Rocket Safety Code when carrying out your model rocket activities.

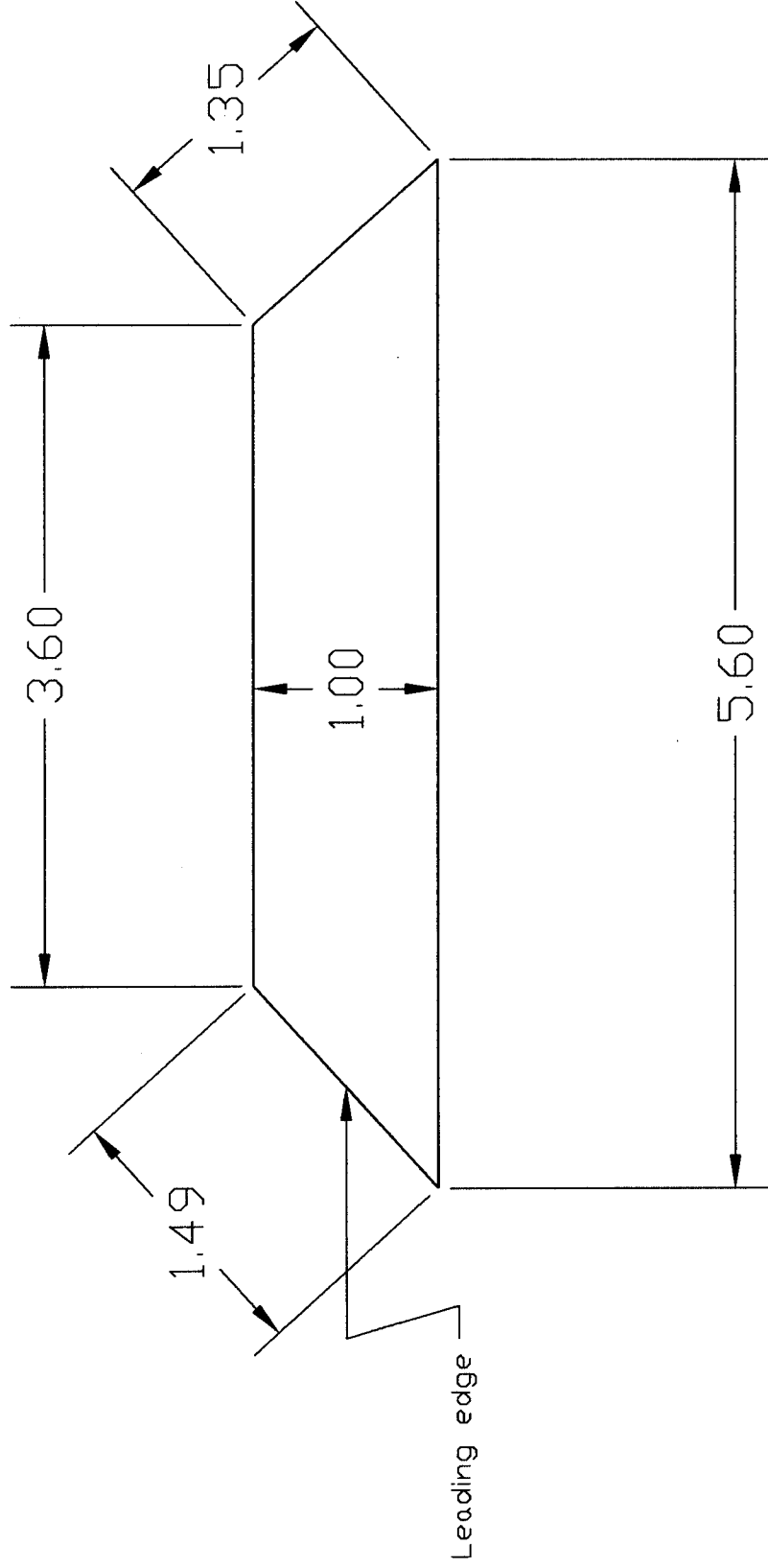
\*HIA- Hobby Industry of America

NAR- National Association of Rocketry

# **FIN PLACEMENT GUIDE**



3/16" Balsa



MAKE FOUR

FSI

VIKING V

FIN PATTERN

TODAY  
1993

S M T W T F S

JANUARY

1 2  
3 4 5 6 7 8 9  
10 11 12 13 14 15 16  
17 18 19 20 21 22 23  
24 25 26 27 28 29 30  
31

FEBRUARY

1 2 3 4 5 6  
7 8 9 10 11 12 13  
14 15 16 17 18 19 20  
21 22 23 24 25 26 27  
28

MARCH

1 2 3 4 5 6  
7 8 9 10 11 12 13  
14 15 16 17 18 19 20  
21 22 23 24 25 26 27  
28 29 30 31

APRIL

1 2 3  
4 5 6 7 8 9 10  
11 12 13 14 15 16 17  
18 19 20 21 22 23 24  
25 26 27 28 29 30

MAY

1 2 3  
4 5 6 7 8 9 10  
11 12 13 14 15 16 17  
18 19 20 21 22 23 24  
25 26 27 28 29 30  
31

JUNE

1 2 3 4 5  
6 7 8 9 10 11 12  
13 14 15 16 17 18 19  
20 21 22 23 24 25 26  
27 28 29 30

JULY

1 2 3  
4 5 6 7 8 9 10  
11 12 13 14 15 16 17  
18 19 20 21 22 23 24  
25 26 27 28 29 30 31

AUGUST

1 2 3 4 5 6 7  
8 9 10 11 12 13 14  
15 16 17 18 19 20 21  
22 23 24 25 26 27 28  
29 30 31

SEPTEMBER

1 2 3 4  
5 6 7 8 9 10 11  
12 13 14 15 16 17 18  
19 20 21 22 23 24 25  
26 27 28 29 30

OCTOBER

1 2  
3 4 5 6 7 8 9  
10 11 12 13 14 15 16  
17 18 19 20 21 22 23  
24 25 26 27 28 29 30  
31

NOVEMBER

1 2 3 4 5 6 7  
8 9 10 11 12 13  
14 15 16 17 18 19 20  
21 22 23 24 25 26 27  
28 29 30

DECEMBER

1 2 3 4  
5 6 7 8 9 10 11  
12 13 14 15 16 17 18  
19 20 21 22 23 24 25  
26 27 28 29 30 31

FLIGHT SYSTEMS



T F S  
JANUARY 1 2  
7 8 9  
14 15 16  
21 22 23  
28 29 30

JANUARY 1  
4 5 6  
11 12 13  
18 19 20  
25 26 27

FEBRUARY 2  
4 5 6  
11 12 13  
18 19 20  
25 26 27

MARCH 3  
1 2 3  
8 9 10  
15 16 17  
22 23 24  
29 30

APRIL 4  
6 7 8  
13 14 15  
20 21 22  
27 28 29

MAY 5  
3 4 5  
10 11 12  
17 18 19  
24 25 26

JUNE 6  
1 2 3  
8 9 10  
15 16 17  
22 23 24  
29 30 31

JULY 7  
5 6 7  
12 13 14  
19 20 21  
26 27 28

AUGUST 8  
2 3 4  
9 10 11  
16 17 18  
23 24 25  
30

SEPTEMBER 9  
1 2  
7 8 9  
14 15 16  
21 22 23  
28 29 30

OCTOBER 10  
4 5 6  
11 12 13  
18 19 20  
25 26 27

NOVEMBER 11  
2 3 4  
9 10 11  
16 17 18  
23 24 25  
30 31





AY  
3  
T F S  
AY  
1 2  
7 8 9  
4 15 16  
1 22 23  
8 29 30  
1  
AY  
4 5 6  
1 12 13  
8 19 20  
5 26 27  
H  
4 5 6  
1 12 13  
8 19 20  
5 26 27  
2  
T  
1 2 3  
8 9 10  
5 16 17  
2 23 24  
9 30  
3  
6 7 8  
3 14 15  
0 21 22  
7 28 29  
4  
3 4 5  
0 11 12  
7 18 19  
4 25 26  
5  
2 3  
8 9 10  
5 16 17  
2 23 24  
9 30 31  
ST  
5 6 7  
2 13 14  
9 20 21  
6 27 28  
6  
BER  
2 3 4  
9 10 11  
6 17 18  
3 24 25  
7  
ER  
1 2  
7 8 9  
4 15 16  
1 22 23  
8 29 30  
8  
BER  
4 5 6  
1 12 13  
8 19 20  
5 26 27  
9  
ER  
2 3 4  
9 10 11  
6 17 18  
3 24 25  
0 31  
8



**VIKING V**

**FLIGHT SYSTEMS**



1  
2  
3  
4  
5  
6  
7  
8

**FSI 1024 Viking V Parts List**

- |    |                    |                               |
|----|--------------------|-------------------------------|
| 1. | 3/16" Balsa        | Fin stand-offs                |
| 2. | RT-12 Body Tube    | 7" length, 1.3" ID, 1.34" OD  |
| 3. | RT-12 Body Tube    | 18" length                    |
| 4. | RT-15 Body Tube    | 18" length, 1.6" ID, 1.64" OD |
| 5. | TS-1215 Transition | 1.75" length                  |
| 6. | NC-152 Nose Cone   | 6" length                     |
| 7. | Launch Lug         | 1.25" X .25"                  |

Use engine mount to fit. Weighs about 6 oz complete. Catalog calls for D20-3, E60-6, or F100-8.

Estes BT-55 and BT-60 can be substituted as close approximations for RT-12 and RT-15, respectively.