

THE ROCKET PLAN

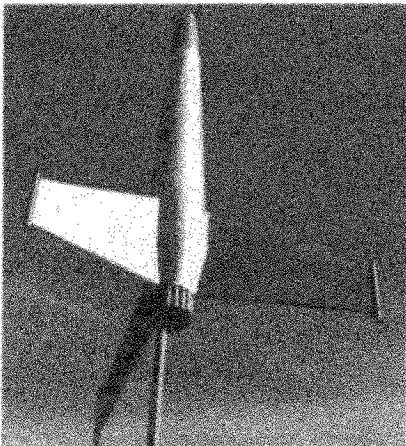
Plan Number

100

EDITOR'S NOTE: *In the center of every MRN you will find the Rocket Plan. This could be a reprint of an old plan or one of the past winners of our Design Contest. This plan can be removed and you will notice that it is not page numbered. Build them - enjoy them.*

1940 Exploratory Planetary Cargo Ferry

BY THOMAS BEACH



Model

Features:

- Classic Sci-Fi-motif
- Unique body shape due to paper shroud construction
- "Radium power rocket tube" tail assembly
- Large fins with "wing tip landing shocks" for stable boost and three-point landings

Parts

List:

BT-50 body tube (9½ inches)
BT-60 body tube (1¾ inches)
PNC-50KA nose cone
EM-2050 engine mount
JT-60C tube coupler
RA-5060 centering rings (two)
PK-12 parachute kit
BFS-30L 3/32" fin stock (two sheets)

Launch lugs (six: 1/8" dia., 2¾"

Launch lug (3/16" dia.)

Shock cord (18" long)

Small screw eye

1/8" dowel (6 inches)

Index card stock (8" x 10")

My completed model has a mass of **45 grams.**

The following engines work well:

A8-3 B6-4 C6-5

B4-4 would undoubtedly also work. I did not try a B8. I did try a 1/2A6-2 with unimpressive results, so I wouldn't recommend it.

Inspired by the spaceships that graced the covers of the pulp science fiction magazines of the 1930's, this is an all-purpose ship that was used to explore the stifling swamps of Venus, the canal-fed lichen fields of Mars, and the frozen night side of Mercury. Later, these versatile vehicles plied the lucrative interplanetary trade routes linking the many sentient races throughout the solar system.

Assembly

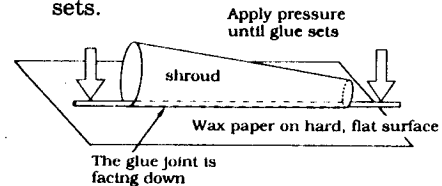
Notes:

1.

Build the body and engine tube assembly as shown in the construction diagrams.

2.

The most difficult construction step is forming the two shrouds. Make the rear shroud first, then the forward shroud. Trace the shroud pattern onto index card stock and cut it out carefully. Pre-curl the shroud until it holds its final shape. Apply glue to the glue tab and hold the shroud in shape until the glue sets. When gluing the long forward shroud it helps to have a long dowel (or similar object) to hold the glue joint. Place the dowel inside the shroud against the inside of the glue joint and press down on a hard, wax-paper covered surface until the glue sets.



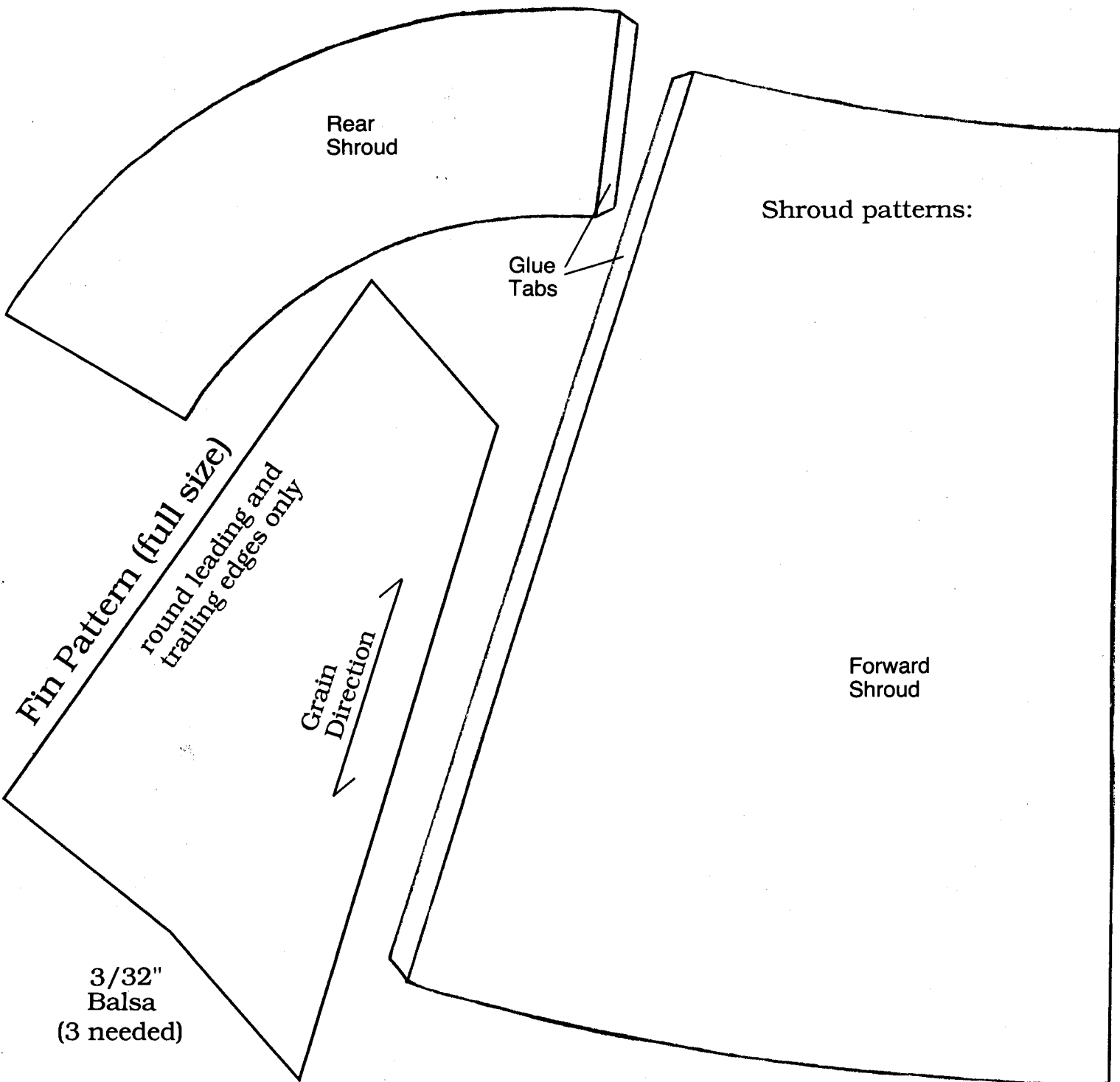
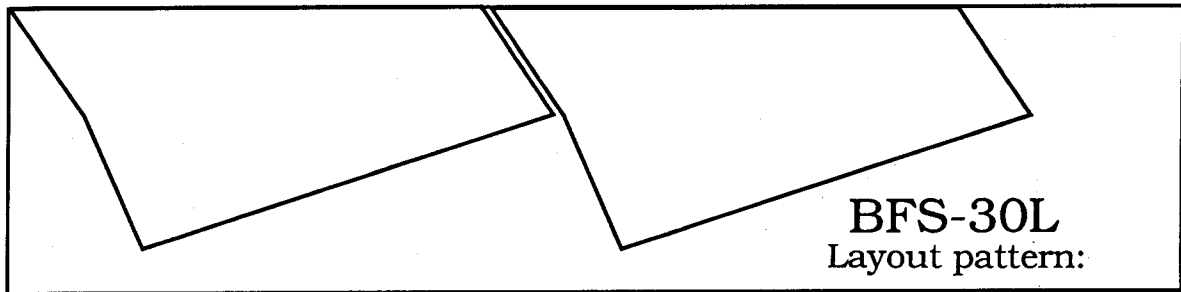
Test fit the shrouds. Notice that the lower shroud overlaps the "rocket jet tubes" a distance of 1/8 inch. If either shroud fits poorly, start over and make another one -- paper is cheap, and properly fitting shrouds are vital for a good looking model. Apply glue to the model on the shoulders and where the narrow ends of the shrouds contact the tubes, then seat the shrouds in place. I suggest aligning the seam of the lower shroud with a fin line (this will allow the fin to cover the seam of the lower shroud) and align the seam of the forward shroud with the launch lug.

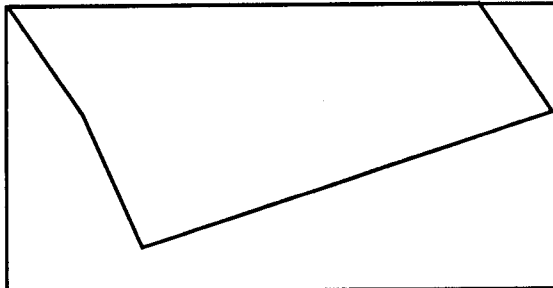
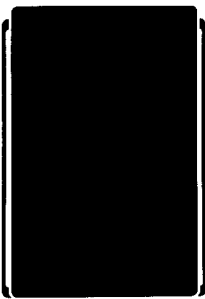
3.

Add the fins and fin-tip dowels as shown in the construction diagrams. Shock cord and parachute are installed in the normal manner.

Finishing the Model:

Apply sanding sealer to the fins and the shrouds. Do not use excessive force when sanding the sealer on the shrouds. When the sealing is complete, paint the model. My original model was sprayed with metallic blue. The rocket jet tubes and fin tip dowels were hand-painted red.

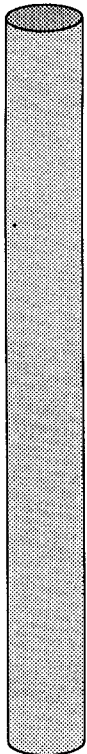




BFS-30 or BFS-30L

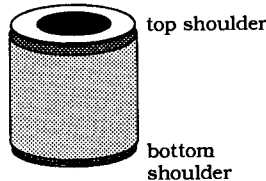
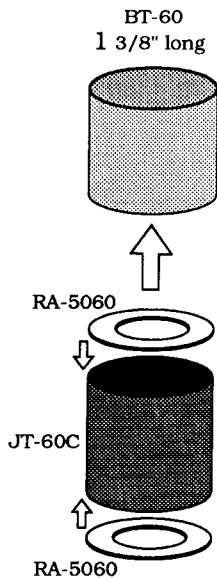
Construction Diagrams:

BT-50
cut to 9.5"

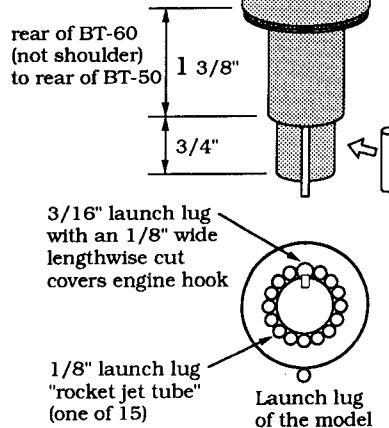
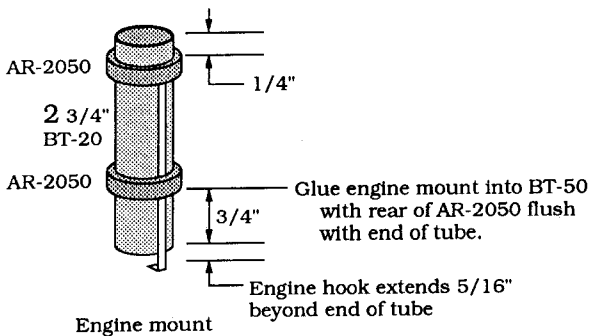
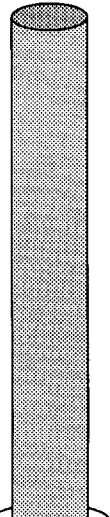


Glue the two RA-5060 rings to the ends of the JT-60C coupler. When glue dries, sand the edges of the rings to the same diameter as the coupler and glue the coupler inside the BT-60.

The portions of the coupler assembly extending out of the BT-60 act as shoulders to which the bases of the shrouds are glued. Glue the assembly into the BT-60 so that the top shoulder is twice the length of the bottom shoulder.



PNC-50KA



Fifteen 3/4" long pieces of 1/8" launch lug glued around BT-20 as shown in rear view below. A 3/4" long piece of 3/16" launch lug (with an 1/8" wide lengthwise section cut out, so the lug has a C-shaped cross-section) is glued over the engine hook.

Construction Diagrams, continued:

