Honorable Mention Design of the Month Contest January-February, 1985

by Bill Engar Salt Lake City, UT

### SKILL LEVEL 2

Build the COMSAT FOUR with Estes High Performance Parts and Accessories

# **PARTS NEEDED**

- A) 1 Body Tube BT-20; 2.75" #30316
- B) 1 Nose Cone BNC-20B (or similar) #70230
- C) 6 1/12" dowels, length 8" #32058
- D) 1 Launch Lug, 1" length #2321

## ASSEMBLY:

- A) Glue nose cone into one end of body tube.
- B) Using Fig. 1 as a guide, cut one end of each dowel to the angle indicated.
- C) Using Fig. 2 as a reference, glue the beveled surfaces of two dowels together, resulting in 3 identical assemblies.
- D) Allow the dowel assemblies to dry well, then glue them to the nose cone at 120° of each other. (Evenly spaced around the nose cone.) Refer to Fig. 3 for general concept.
- E) Glue the launch lug between two dowel assemblies.

The COMSAT FOUR is a very unique rocket design representing a communications satellite that might be lofted by the Space Shuttle. The model is very easy to build, and can be made with just a few spare parts that any involved rocketeer should have. Expenditure is minimal even if one is buying parts to construct the model. Wrap engine with masking tape to hold in place during launch and flight. The rocket uses "feather weight" recovery, by nature of its simple design, and is very rugged. It would be an interesting addition to any rocket fleet.

### **PAINTING SCHEME**

Nose and upper tube silver Antennae silver, red tipped Lower part of tube black

Hobby knife, white glue, ruler, sandpaper, sealer, paint,

RECOMMENDED ENGINES: All regular-sized upper stage engines will give good performance.

