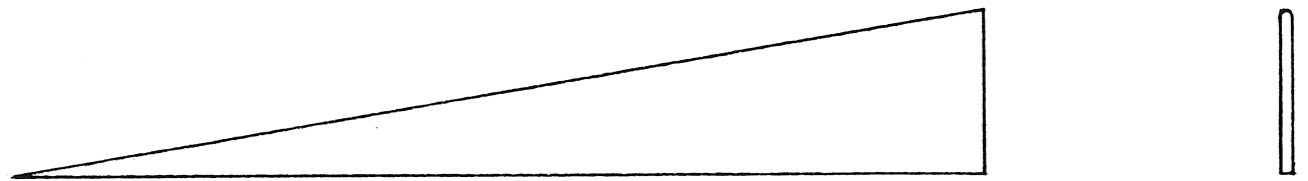
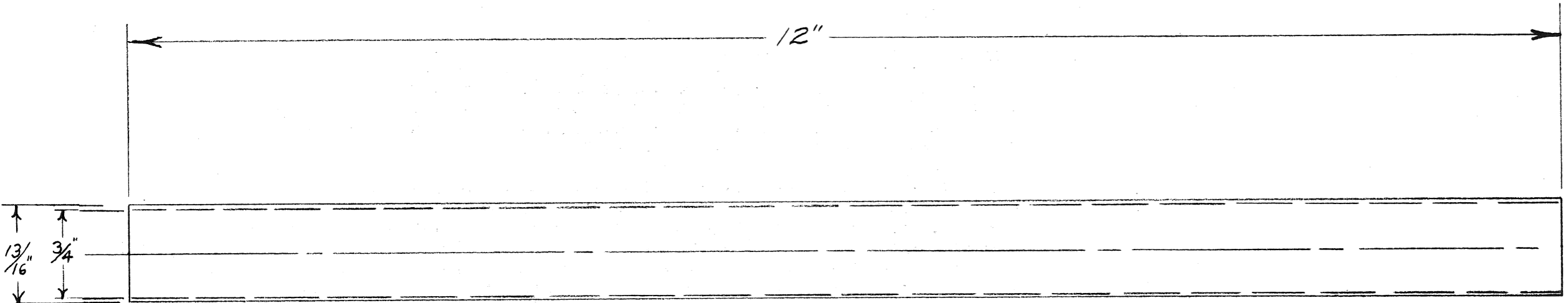


Soft Wire

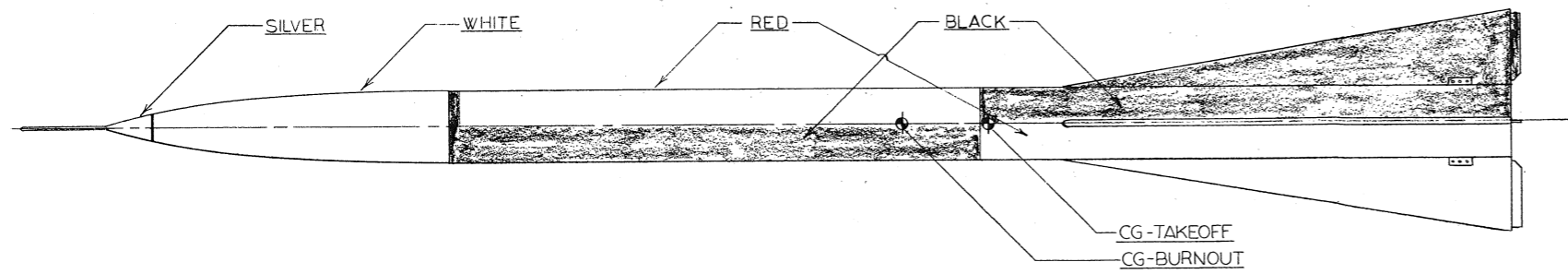
NOSE CONE (wood)
Full Size



FIN (1/16" Balsa-4 required)
Full Size

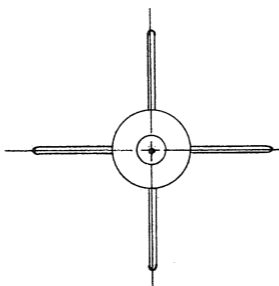


BODY (paper tube)
Full Size




SIDE VIEW
Half-size

WEIGHT (NO MOTOR): 1.3 oz.



FRONT VIEW
Half-size

FOR NON COMMERCIAL USE ONLY	
 NATIONAL ASSOCIATION OF ROCKETRY PLAN PROGRAM	
ASP	
MODEL SCALE: 1/8	DRAWING SCALE: As noted
SCALE SOURCE: Newell "Sounding Rockets"	
DESIGN BY: G. Harry Stine	DRAWN BY: GHS
CHECKED BY: JDH	RELEASED: 6 Jan 60
DRAWING NUMBER: NAR- 101	

National Association of Rocketry

Plan No. 101

PLAN PROGRAM FACT SHEET

Model Name Asp

Prototype data: The ASP sounding rocket was developed in 1956 by the Cooper Development Corporation of Monrovia, California under contract to the U. S. Navy Bureau of Ships. In the particular version shown on Plan 101, it is capable of carrying a payload of 80 pounds to about 200,000 feet; it can carry a 10-pound payload to nearly 800,000 feet if launched from a balloon at an elevation of 75,000 feet. It is capable of reaching speeds of 3600 miles per hour within a few seconds after launching.

The ASP is powered by a solid propellant rocket motor. The rocket is 6.5 inches in diameter and 12 feet long, weighing 245 pounds at launch.

Model data: The first model ASP was built and flown at White Sands in the spring of 1957. Material relating to scaling and paint pattern were obtained from unclassified U.S. Navy photos and from the March 1957 issue of "Jet Propulsion," the Journal of the American Rocket Society. Additional data was obtained from the book "Sounding Rockets," by Homer E. Newell, Jr.

This model was one of the very first scale model rockets, and has proved itself in thousands of flights. Because of its length, it is a very stable bird in flight. It has very small weathercocking tendencies. All ASP models to date have been built for tower launching. The model placed second in the 2-B Scale Altitude event at the 1959 NAR National Meet. Powered by NAR Type B engines, the model ASP will consistently reach altitudes of 300 feet or better. Modifications to the basic model ASP design have been successful payload entries and altitude birds.

The nose cone is turned from pine or basswood. The body tube is fabricated from a rolled manila paper tube. The fins are cut from 1/16" sheet balsa with the grain running parallel to the leading edge of the fin. If a launching tower is not available, the model may be launched from a 1/8" dia. launching rod provided a guide lug fabricated from 5/32" aluminum model aircraft tubing is glued to the side. (This is not considered to be a "substantial metal part" under NAR rules.)

All ASP models have been flown with the Rock-A-Chute model rocket system and recovery method.