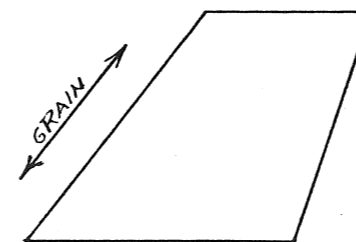



NOSE CONE



FIN PATTERN

WEIGHT (NO MOTOR):  
ASTROBEE 250 - 0.9 oz.  
ASTROBEE 350 - 1.0 oz.

FOR NON COMMERCIAL USE ONLY	
 <b>NATIONAL ASSOCIATION OF ROCKETRY PLAN PROGRAM</b>	
ASTROBEE-250 & 350	
MODEL SCALE: As shown	DRAWING SCALE: Full
SCALE SOURCE: Aerojet General Corp.	
DESIGN BY: Stine	DRAWN BY: GHS
CHECKED BY: WSR	RELEASED: Oct. 1961
DRAWING NUMBER: NAR- 104	

# National Association of Rocketry

Plan No. 104

## PLAN PROGRAM FACT SHEET

Model Name ASTROBEE 250-350

### PROTOTYPE DATA:

The Astrobe 250 is a single-staged solid-propellant sounding rocket capable of carrying a 300-pound load of scientific instruments to an altitude of 250 miles. It is 34 feet 3 inches long.

The Astrobe 350 is also a single-staged solid-propellant sounding rocket capable of carrying a scientific payload of 300 pounds to an altitude of 350 miles. It is 50 feet 6 inches long.

Both vehicles use solid propellant rocket engines developed for military missiles, and both have similar aerodynamic configurations. They are part of a series of Astrobe sounding rockets developed by the Aerojet-General Corporation for upper atmosphere and space research. They both feature one solid propellant rocket engine, simplicity, high payload weights, high altitude capabilities, ease of check-out and launching, and high reliability.

### MODEL DATA:

Both models were scaled from official drawings supplied by the Aerojet-General Corporation. The nose cone and fins of both models are identical. The models were scaled to use the commercially-available 13/16" o.d. paper body tube. Other commercial parts may be used as well.

The nose cone may be turned or carved from a wood dowel. The vinyl nose cone from the Aerobee-Hi or Arcon commercial kits may also be used.

The body of the Astrobe 250 is cut to 5-7/8" length from a standard 13/16" o.d. paper body tube by using a razor saw. The body of the Astrobe 350 is cut to 7-13/16" length from the same type of body tube.

Fins may be cut from 1/16" sheet balsa. Both models use the same size fins.

Install the recovery system of your choice. The models were designed to be launched from a tower; they may be launched from rod launchers by gluing a soda straw or a length of 5/32" o.d. aluminum model airplane tubing to the side of them. They have been designed to use NAR Type A or Type B engines. Paint scheme is silver nose cone, white body, two white fins, and two black fins.

Be sure to observe the takeoff CG points for both models, since these lie very close to the CP of the models.

These models make an excellent scale model project for the beginning rocketeer. For the advanced competition rocketeer, they are fine scale altitude competition models.

---

NOTE: No NAR Plan Program material may be used for commercial purposes. The NAR Plan Program is a non-profit service exclusively for members of the NAR. Members may duplicate, photostat or copy plans for non-commercial use. This service is intended to guide model rocket enthusiasts and promote safe model rocketry.