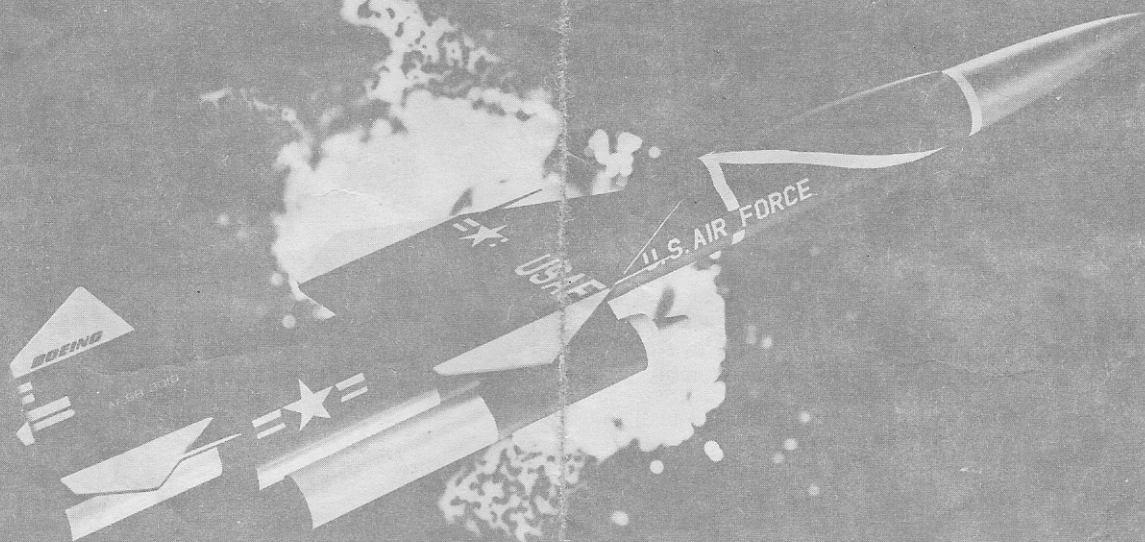




CITATION

KC 5

BOEING IM-99A BOMARC



General Information

The BOMARC is a United States Air Force missile used for defense ground to air against manned bombers. Driven by a 30,000 lb. thrust rocket engine and two ramjet engines of over 50,000 horsepower in the nacelles, the 15,000 lb. BOMARC reaches over twice the speed of sound at up to 60,000 feet of altitude.

The first fully operational production unit of the missile was "rolled out" on December 30, 1957. The first prototype had been fired in September 1952.

BOMARC utilizes extensive electronic control for a fully automatic intercept. Alert to launch takes less than two minutes.

Like the actual missile, your 1/24 scale BOMARC blasts vertically into the sky and then transitions to flying as a winged vehicle.

The BOMARC'S glide has a relatively high sink rate, giving about 25 seconds with a B-2 and one minute with a C-3 engine.

This scale model features thermoformed plastic parts for the most accurate reproduction of the contours of the original "bird". Die-cut and pre-formed balsa complete the picture for a fast-building beautiful model.

RECOMMENDED ENGINES

For first flight and small fields use a B-2. When you have unlimited space and visibility, a C-3 will give spectacular results.

ASSEMBLY INSTRUCTIONS

PART
NUMBER

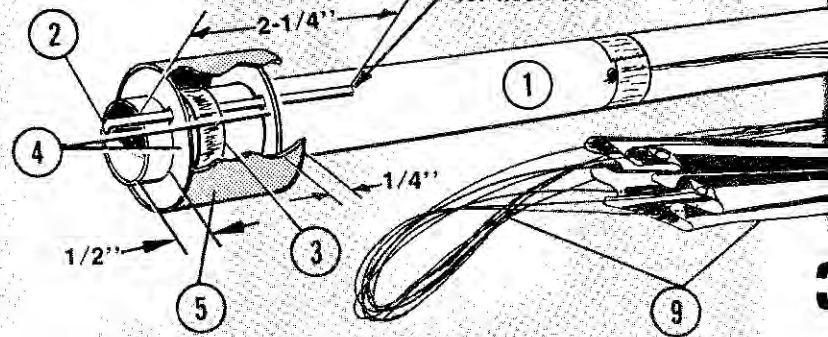
PART LIST

1	1-Pod Tube, Punched
2	1-Engine Hook
3	1-Mylar Hook Retainer
4	1-Card Die-Cut
5	1-Rear Seal Ring
6	2-Ballast Retainers
7	6-Ballast Discs
8	1-Front Seal Ring
9	1-Parachute & 1-Shroud Line
10	1-Body Tube
11	1-Die-Cut Balsa
12	4-Antennas
13	2-Nacelle Tubes
14	2-Pylons
15	2-Nacelle Cones
16	2-Small Liners
17	1-Raceway
18	2-Launch Lugs
19	1-Hinge Material
20	1-Elastic Thread
21	1-Modeling Clay
22	1-Nose Cone
23	1-Vinyl Tape
24	1-Decal
25	1-Die-Cut Metal Mylar

1

Glue notched card rings to tube, then glue rear seal ring over them.

Cut a 1/8" slot for hook end.



Assemble
card ring to

1 Cut a 1/8" slot, 2 1/4" from the rear of the pod tube (1), insert the metal engine hook (2) and slide the mylar retainer ring (3) into position. Glue notched card rings (4) to the tube as shown in Figure 1, then glue rear seal ring (5) over them and allow to dry.

2 Smear inside of pod tube front with glue. Quickly slide retainers (6) and ballast discs (7) into tube to the position shown in Figure 2. Glue remaining card ring (4) to tube 1 1/2" from the front of the pod and add front seal ring (8).

3 Assemble parachute (9) per instructions on parachute (leaving 3" of shroud line for elevator hold down) and tape to the center of the pod assembly.

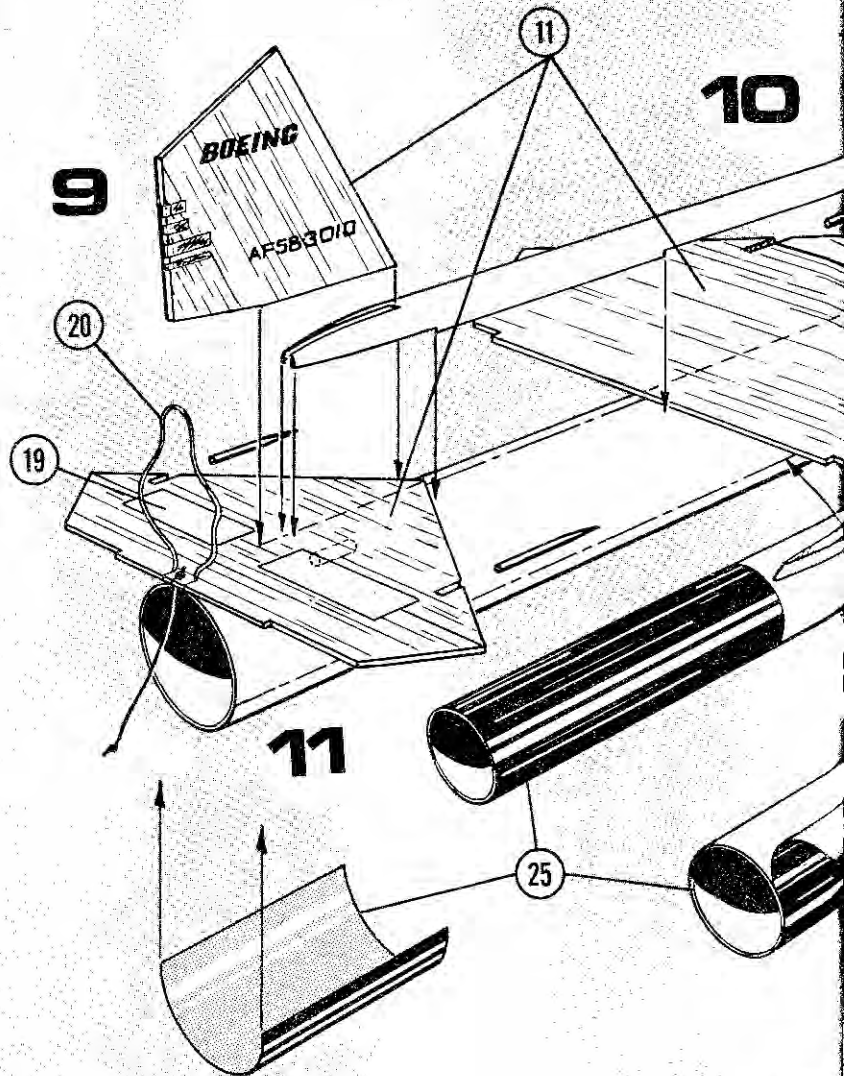
4 Mark top and bottom lines on the body tube (10) with marking guide (4A) as shown in Figure 4. Cut a 1/8" notch in the body tube tail on the top line.

5 Carefully separate the balsa parts from the die cut sheet (11). Glue wing parts together and pin down over a sheet of waxed paper, on a flat surface and allow to dry. Sand both sides of the wing assembly smooth and sand the leading edges round. Draw a light line down the center of the wing assembly. Glue wing 5 3/4" from the rear of the body tube aligning the top center line and the center line of the wing as shown.

6 Glue stabilizer (11), 1 1/8" from the rear of the body tube, lined up with the top line of the body tube. Then lay model upside down on flat table to dry. Cut antennas (12) to length (as in Figure 6) and glue in position.

7 Mark a straight line down each nacelle tube (13). Align and glue each pylon (14) to the nacelle tube, flush with the tube end. Using a razor saw, cut each thermoformed plastic nacelle cone (15) and small liner (16) along marked lines. Cement small liner to nacelle cone and then, cement this into the nacelle tubes.

8 Glue nacelle assemblies to the lower lines 10" from the rear of the body tube to the front of the pylon leading edge.

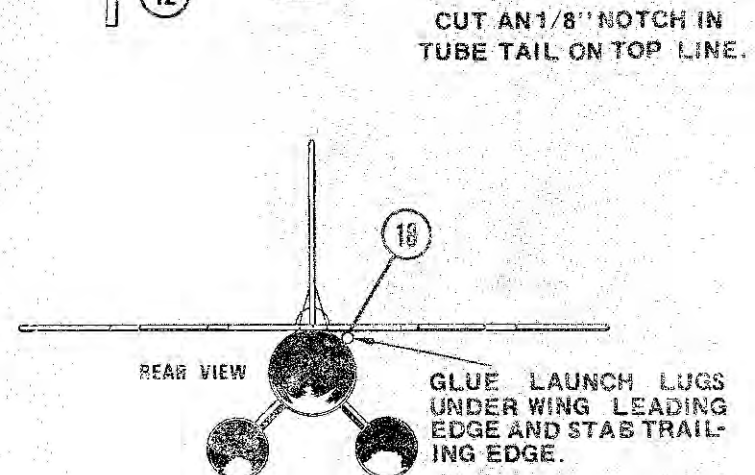
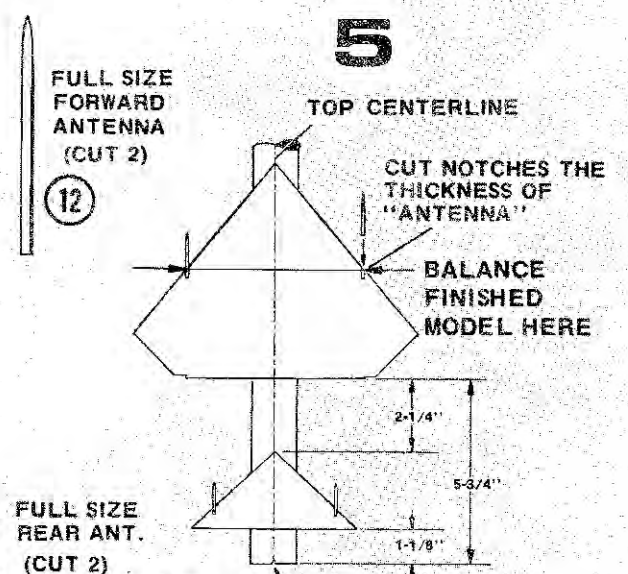
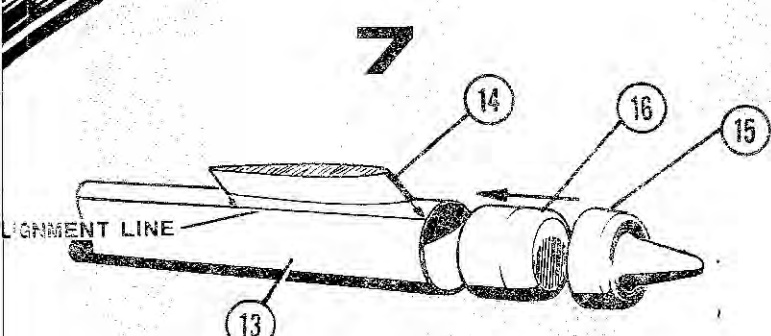
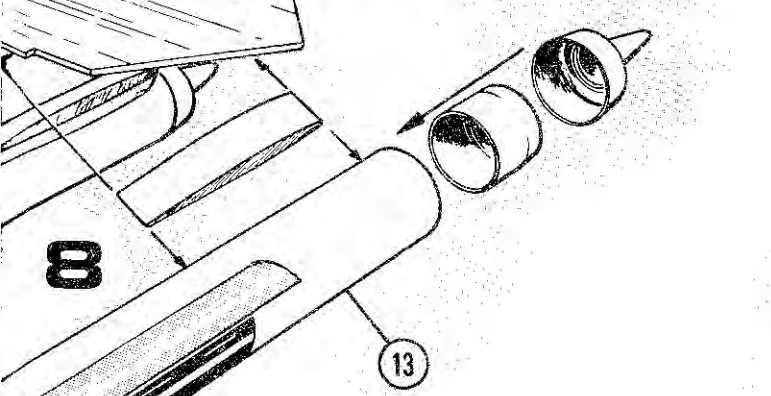
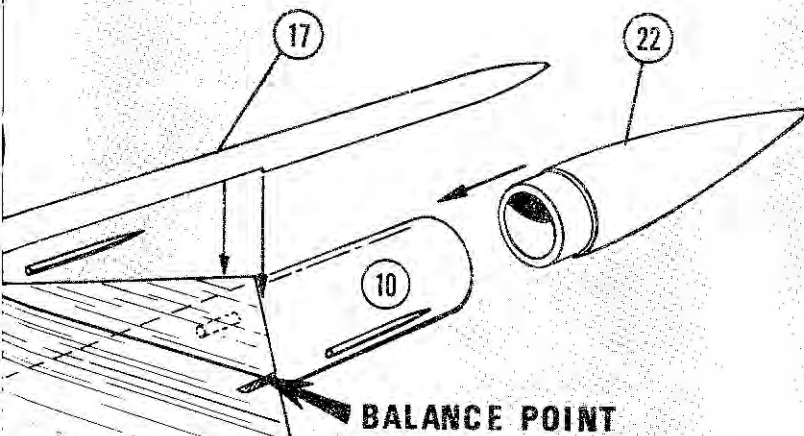
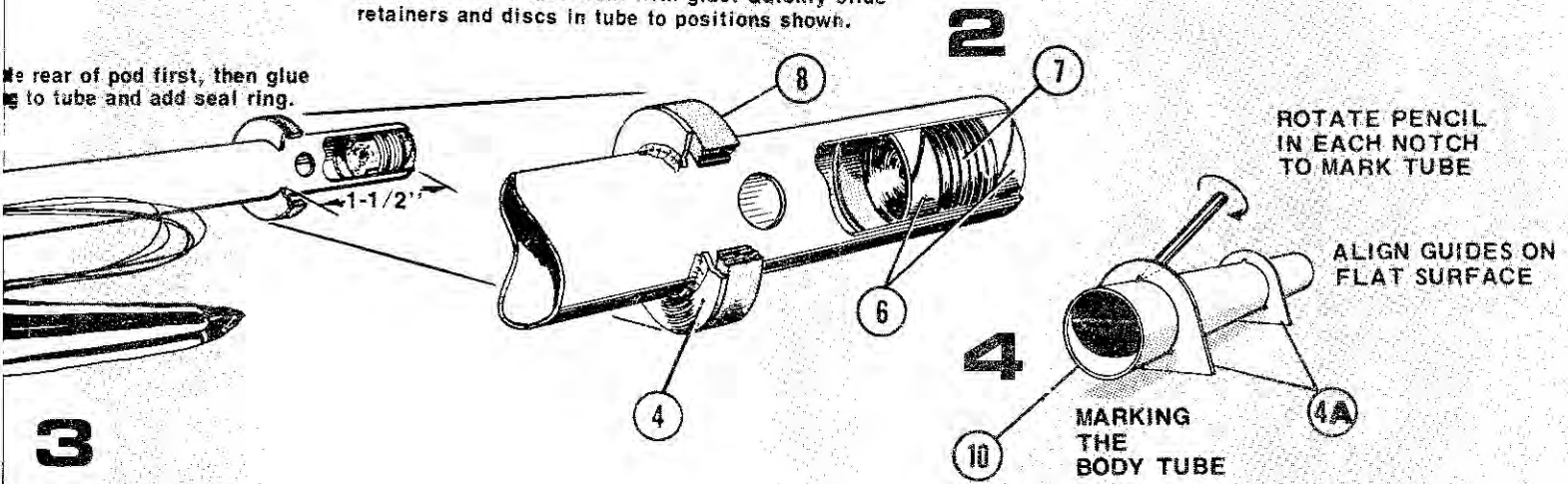


10

ALIG

Smear inside of tube front with glue. Quickly slide retainers and discs in tube to positions shown.

Glue rear of pod first, then glue front to tube and add seal ring.



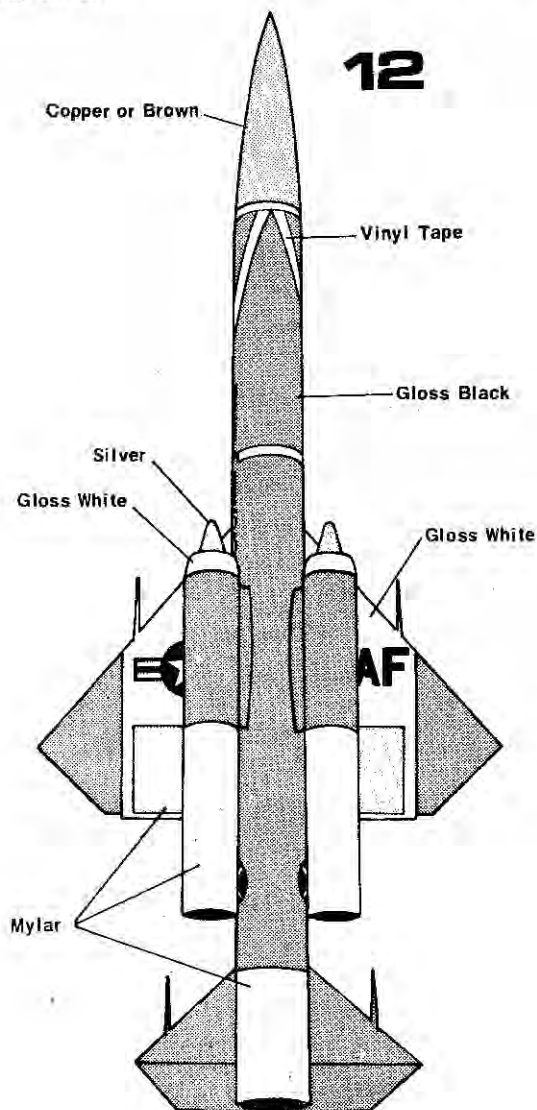
9 Glue vertical tail (11) on top of the horizontal stabilizer, check alignment by sighting from the front of the model.

10 Trim the thermoformed Raceway (17) by cutting part of the way through with a knife and breaking along this scored line. Cement raceway to wing, tail and fuselage, centered along top line as shown. Glue launch lugs (18) to underside of wing leading edge and stabilizer trailing edge.

11 Hinge the elevator (11) with hinge material (19), to the top side of stabilizer. Tie a double knot in one end of the 3' piece of shroud line. Slide pod assembly into the body with the knotted end of the string held in by the rear seal ring. Hold elevator full down and glue the string tight into the center notch in the elevator thread to act as a hold-down during boost flight. Stretch elastic thread (20) around the front of the vertical tail and glue into the outer two notches in the elevator trailing edge.

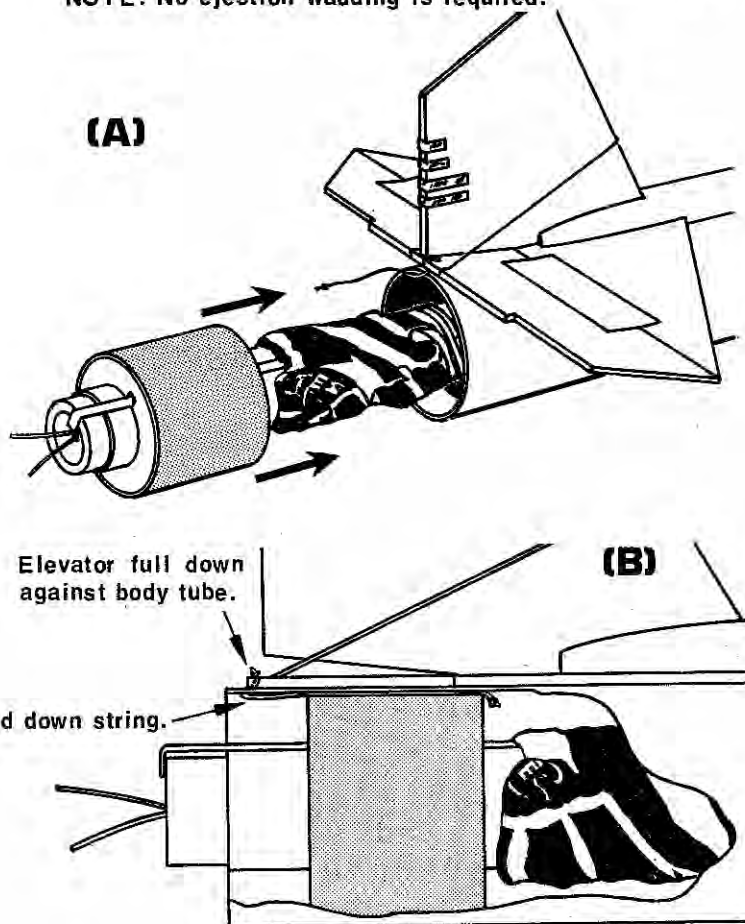
12 Fine sand all the balsa parts, including the nose cone. Paint them with sanding sealer. Sand lightly and repaint with sealer. Sand again, very lightly. Spray entire model with flat white paint. Paint and decorate the model with tape (23), decals (24) and metallized mylar (25), as shown in Figure 12.

13 With the pod removed, balance the model at the root of the wing antennas by pressing modeling clay (21) into the nose cone (22). Glue nose cone into the body tube.



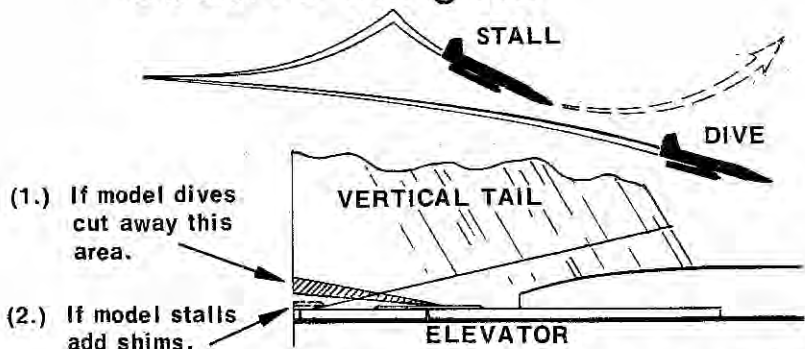
Flight Preparation & Trim

Install an igniter into an engine and the engine into the pod. Slip the pod into the model with the parachute wrapped loosely around the rear of the pod (Illustration A). Be absolutely sure that the hold down string pulls the elevator full down against the body tube (Illustration B). Recheck this when model is on launch pad. **NOTE:** No ejection wadding is required.



LAUNCH THE BOMARC FOLLOWING THE ESTES COUNTDOWN CHECKLIST CARD INCLUDED WITH THIS KIT.

Observe the glide



If the model stalls, glue thin shims to the elevator where it hits the vertical tail to reduce the angle of pop-up.

If the model dives, open up the cut out in the vertical tail slightly to allow the elevator more movement.

If the model turns too tightly, check the vertical tail for warps or misalignment. A slight turn is desirable to keep the model in the flying area.