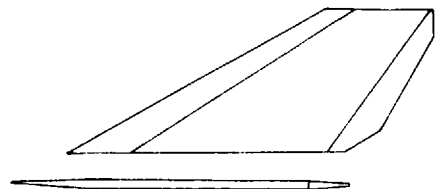


1. ASSEMBLE ENGINE MOUNT

- A. Cut a slot $\frac{1}{8}$ " from one end.
 - B. Insert one end of the engine retainer in the slot.
 - C. Spread glue around the outside of that end, and slide one of the centering rings on so that it is flush with the engine tube.
 - D. Cut a $\frac{3}{16}$ " slot in the other centering ring.
 - E. Spread glue around the other end of the tube and slide the centering ring over it.
 - F. Wrap a piece of tape around the middle of the tube so as to go over and secure the engine retainer.
 - G. Cut the nozzle shroud from the pattern sheet and place slits at the dotted lines. Cut out a slot from the indicated area. Fold down the slits at the solid line and glue the ends of the shroud together. When dry, place glue on the slits and glue it to the end of the engine mount. The slot that was cut from the inside is to be positioned over the engine retainer.
2. Spread glue around the inside of the main body tube up $\frac{23}{4}$ " and around the rear centering ring. Slide the engine mount into this end of the tube until the bottom centering ring is flush with the base of the tube. The nozzle shroud is allowed to protrude.

3. Cut out the fin pattern and trace three of them on the balsa. Be careful that the grain direction is as marked. Cut out each of the fins carefully with a modeling knife or razor blade.



4. Shape the fin to the airfoil as shown, use emery board and sandpaper. Sand the fin with extra fine sandpaper.
5. Prepare the body tube by sanding smooth with extra fine sandpaper.
6. Apply a coat of sanding sealer to the fins. Both sides should be done at once, then propped on its side to avoid warping. When thoroughly dry, sand lightly with fine sandpaper, then apply another coat of sealer. Repeat this, sanding between steps until a smooth glossy surface is attained. Do the same procedure for the nose cone.
7. Cut out the fin marking guide and wrap it around the rear of the body. Mark the tube at each arrow. Connect and extend the lines. The arrows indicated as "STRIPE" need not be marked till the model is painted.

PAINTING

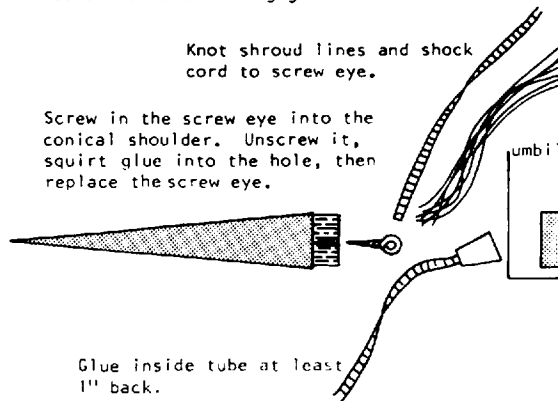
1. The entire rocket should be given an undercoat of glossy white. Another coat may be added to thoroughly cover all parts of the rocket. Set aside the model to dry thoroughly. NOTE: It is best to let the model sit over night before masking if a laquerized enamel is used. If regular enamel is used, it should be left several days.
2. Mark off where the stripes go in reference to the fins from the fin marking guide. Extend the lines to either end of the tube.
3. Mask off the stripes... The stripes must be masked off extremely accurately, because the lettering decals must fit perfectly inside them.
4. Mask off the fin indicated on the marking guide as "WHITE FIN".
5. Run your thumbnail down all masking tape edges to be sure they are sealed.
6. Paint the entire rocket and nose cone a glossy cherry red. When the paint is dry, run the blade of a modeling knife lightly along all the masking tape edges. Remove the tape by peeling it back against itself.

STRIPES

Stripe widths and locations may be found from the marking guide.

Knot shroud lines and shock cord to screw eye.

Screw in the screw eye into the conical shoulder. Unscrew it, squirt glue into the hole, then replace the screw eye.



Glue inside tube at least 1" back.

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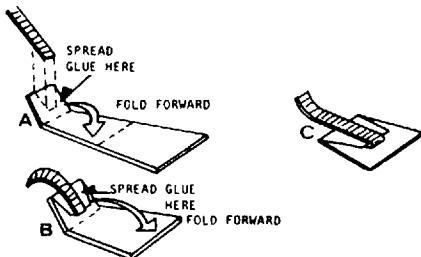
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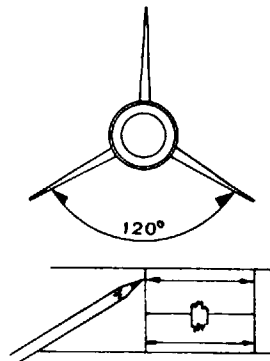
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8. One by one, glue the fins to the body tube. This is done by placing a thin film of glue along the root edge of the fin and positioning it along the lines made. Check to be sure the fin is aligned properly. When the fins are dry, fillet the fins by running a line of glue along the joints.



9. Assemble the shock cord anchor as shown. Glue it into the body at least 1".
10. Glue the launch lug into the position shown on the scale drawing. When dry, place fillets along the joints.

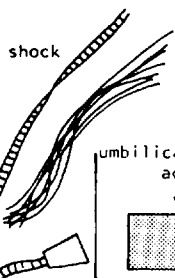


FIN PLACEMENT

- A. Cut out the fin marking guide and wrap it around the rear of the body. Mark the tube at each arrow indicated "FIN". Connect and extend the lines.
- B. One by one, glue the fins to the body tube. This is done by placing a thin film of glue along the root edge of the fin and positioning it along the lines made. Check to be sure the fin is aligned properly. When the fins are dry, place a thin line of glue along each joint to form a fillet and strengthen them.

DECALS

Trim the excess material from around each decal (including details), lift them from the backing with a sharp knife, and apply them to the positions shown.

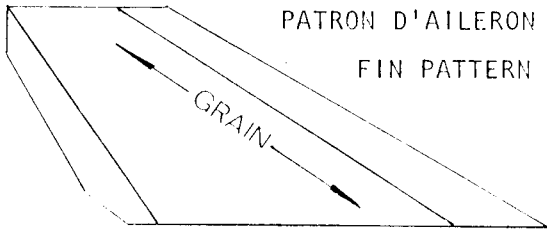


BLACK BRANT III	1.9"
bristol aerospace	
limited	11.25
Screw Detail	1.0"
Ignitor Access	1.15"
Umbilical Connection	1.15"
Screw Detail	1.5"
Top of Stripe	1.52"
Bottom of Stripe	13.52"

umbilical connection
access panel
screw details

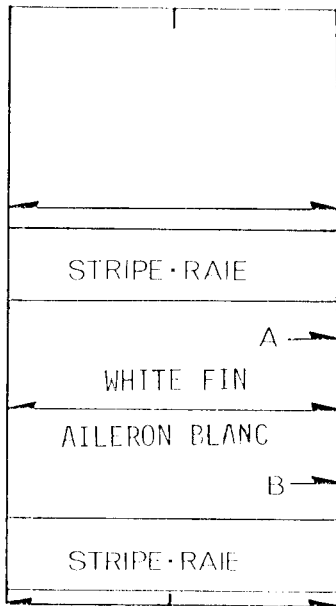


(all measurements from the top
of the tube to the top of the detail)



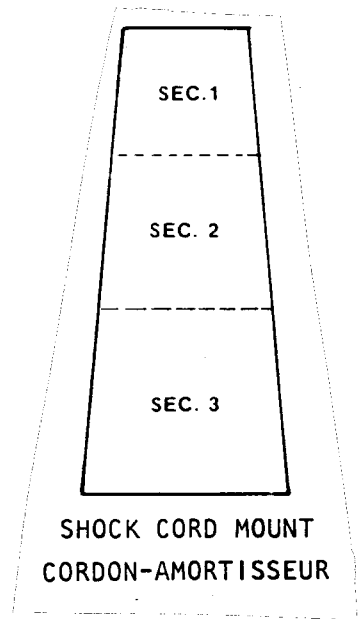
A - UMBILICAL HATCH
- HUSLOIT OMBILICAL

B - ACCESS DOOR
PORTE D'ACCES



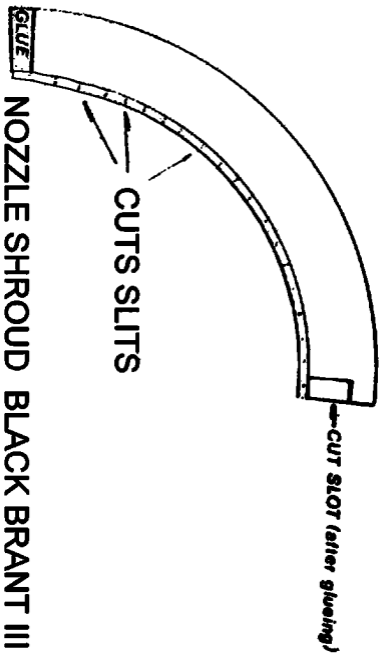
FIN MARKING GUIDE

GUIDE DE MARQUAGES



BLACK BRANT III

1 Inch



BLAGY BRANT III

bristol aerospace limited

