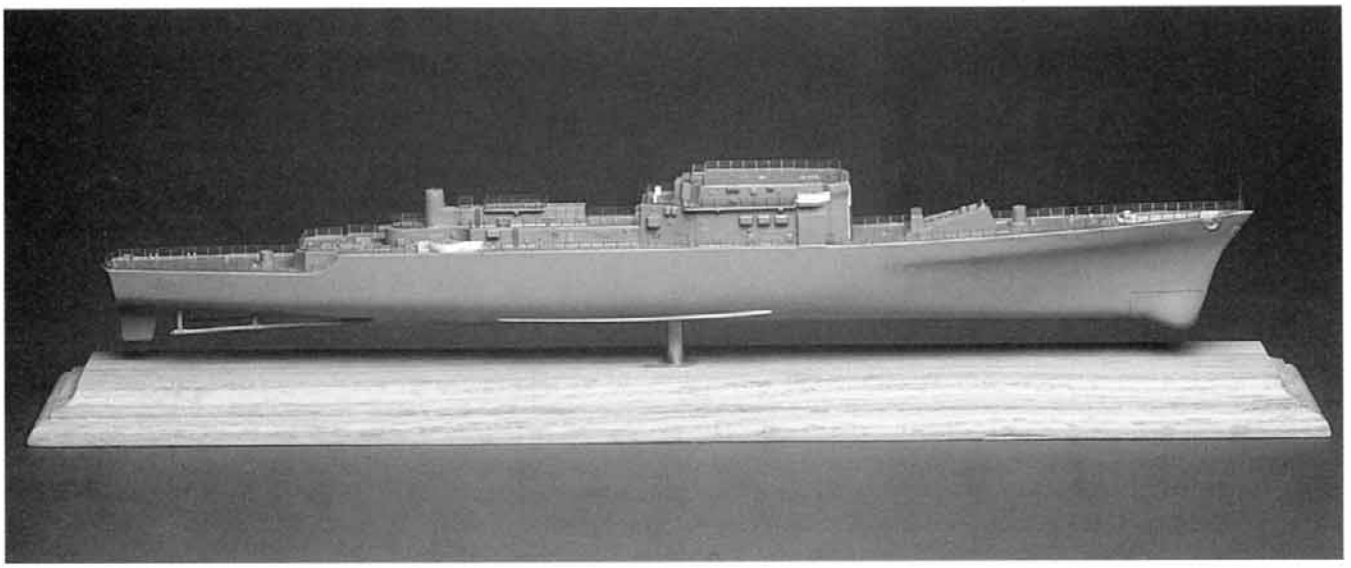
CHAPTER SIX DISPLAYING YOUR MODELS



The wood display base and brass tube pedestal get a fit check for Monogram's 1/400 scale *Halsey*. Photo by Glenn Johnson.

The display you choose for your model depends on the materials you have and the type of model you are building. Decide how you want to display your model when you are still working on the hull and before you glue the decks in place, because some displays require adding resin inside the hull, which can only be done while it is still open. All kit manufacturers provide some sort of display stand that glues to the hull and can also be mounted on a wood base. While these can be used, the more traditional displays use brass pedestals or ones where the model is mounted on keel blocks. The blocks simulate a ship as she would appear in dry dock.

You can, of course, display full-hull models in water dioramas by cutting off the lower hull. The advantage of using a full-hull model for a water diorama is that you can cut the hull at angles to allow you to give it some roll and surge. Waterline models must be displayed in a diorama. You can give them the appearance of roll and surge by adding plastic to the bottom of the hull.

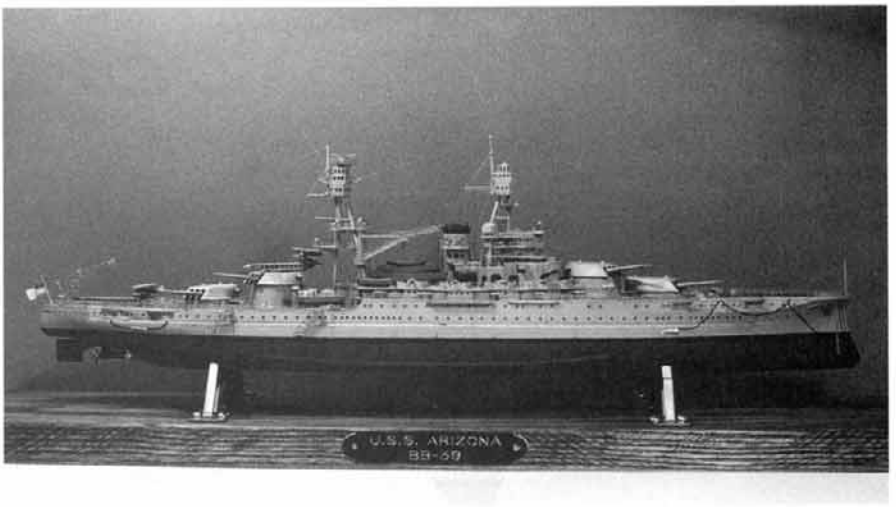
PEDESTAL AND WOOD BLOCK DISPLAYS

For all my wood base displays I use either red oak or hard rock maple. This is readily available in most large construction or hardware stores and is inexpensive compared to other hardwoods such as walnut or mahogany. I cut the boards to size and use a router to decorate the edges. I stain the maple with Minwax red mahogany stain and the red oak with either their red mahogany or dark walnut stain. To protect and seal the stain I give it one or two coats of Minwax polyurethane sealer. If you prefer to buy ready-made bases or do not have access to power tools, get a Model Shipways or a Bluejacket shipcrafters catalog. They sell beautiful ready-made bases in a variety of hardwoods and sizes and they also sell solid brass pedestals.

If you plan to use the kit's stands, be sure there are holes drilled into them so you can screw them onto the wood base. If there are no holes or indentations along the base of the stands, drill them. Airbrush the stands with several coats of Testor's model masters buffing metalizer paints. If you use the same color mix that I recommend for painting ship propellers you can achieve a nice bronze appearance. These metallic-based paints will buff up to a bright sheen if you use the buffing metalizer paints. Before you paint the stands, tape them to the hull at the locations you want, position the hull on the wood display base, and mark the drill holes. After you have drilled the base and painted the stands, mount the stands on the base. Once you complete the hull assembly you are ready to glue the hull to the stands.

If you want to display the model using brass pedestals, visit your local hardware or lamp supply store and buy some lamp finials. These inexpensive brass lamp stems have beautiful designs and add that extra touch.

The first step in using lamp finials is to position the hull on the base and mark the locations of the pedestals on the wood base. Drill the hole sizes you need in the wood base, making sure they are straight. Now position the pedestals on the wood base and lay the hull on the pedestals so you can

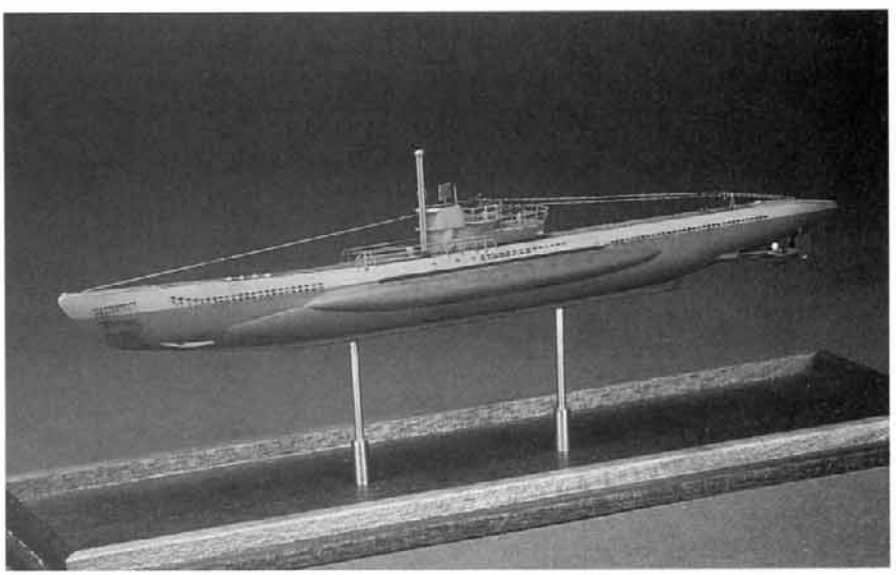


The kit's display bases were used for Revell's 1/426 scale *Arizona*. The plastic was painted with Testor's buffing metalizer.

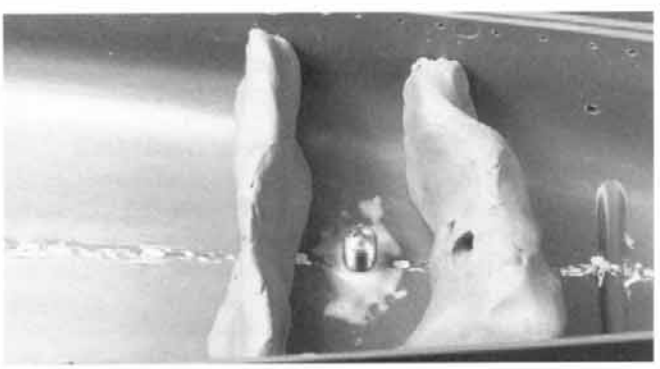
mark their locations on the hull, then drill the hull to accept the stems of the finials. The holes should be just large enough to accept the stems. At this point you can secure the finial stems to the hull with two part epoxy or resin. I recommend resin because it will provide the strongest attachment.

To pour resin, form a box inside the hull at each finial location. The easiest way to do this is with modeling clay. Form two thin sections of clay long enough to span the width of the hull and place them inside. Work the clay along the hull's interior, making sure it forms a good seal along the inner surface. You needn't go higher than about an inch or so, but don't change the shape of the hull when you position the clay. To check this, set the decks in place. Have the deck sections handy because you will need to position them immediately after you pour the resin to prevent it from pulling the hull sides inward.

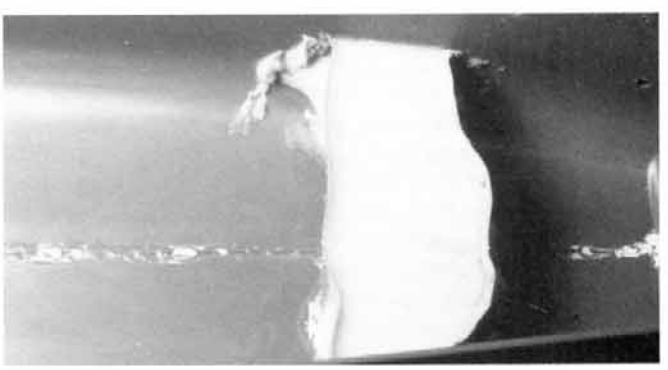
Now position the hull on the pedestals and apply some white glue around the base of the finial stems to hold it in place when you pour the resin. This is your last chance to ensure that the hull is sitting straight and level on the wood base, so be sure to check. When the white glue is dry, mix some resin and pour it into the box formed by the clay. Immediately set the decks in place on the hull, but



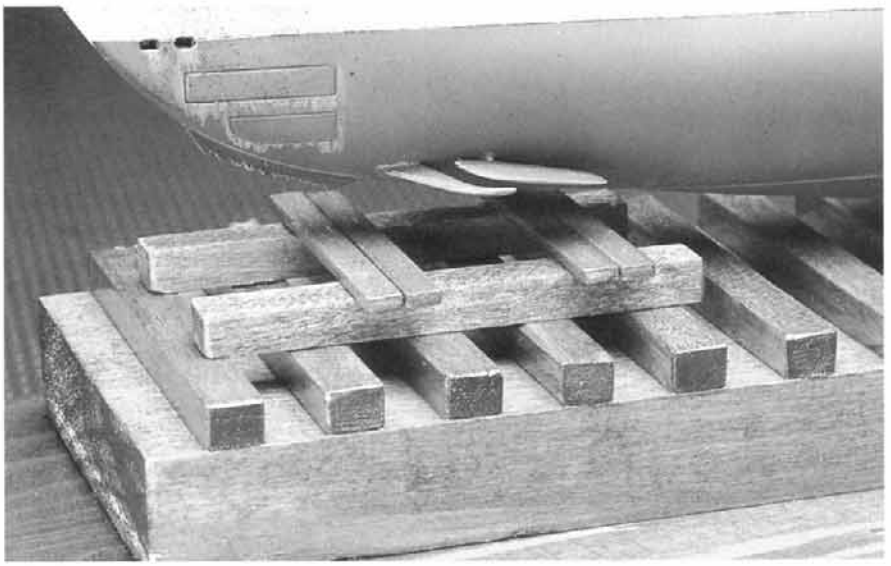
Even long lengths of brass tubing or rod can look good on a display so long as the size of the rod is in balance with the size of the model. Photo by Glenn Johnson, model by John Ficklen.



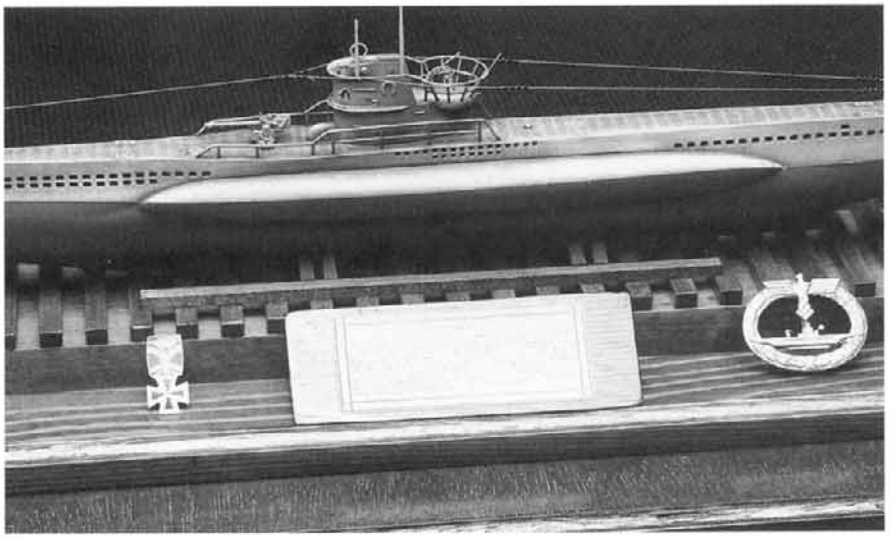
The clay for the resin box on this kit was carefully worked into place. Then the deck was fitted onto the hull to ensure that the placement of the clay did not distort the shape of the hull. Once the white glue is dry the resin will be poured in.



After the resin dries the clay is removed and the resin block is glued into place.



Adding extra lengths of wood to a keel block display can add a great deal to the overall presentation of the ship model. Photo by Glenn Johnson, model by Richard Boutin, Sr.



Another nice touch is to attach name plates and descriptions as well as real medals to the display. Photo by Glenn Johnson, model by Richard Boutin, Sr.

be careful not to move it. When the resin is dry apply some super glue to the top surface where the resin touches the hull. When the glue is dry remove the clay and apply glue along both sides of the resin block so it will be well secured to the plastic. Now you can remove the pedestal screws from the display base and continue to work on the hull. When you are ready to paint just mask the pedestals.

If you are mounting a resin ship model on pedestals simply drill holes into the bottom of the hull to accept the pedestals and glue them in place with two-part epoxy. One point to remember when drilling resin is that this material is very soft, and although it is a solid mass the bit will cut through it like a hot knife through butter, so go slowly and be careful how deeply you drill into it.

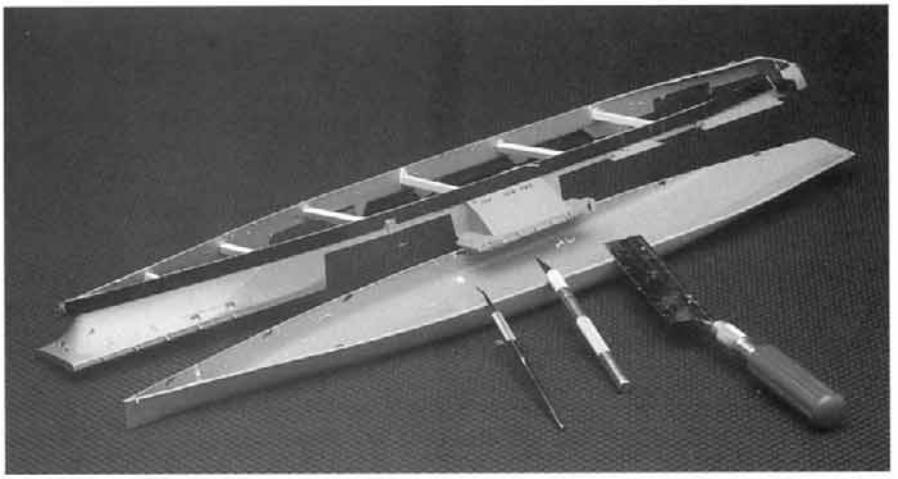
A ship model display on wood blocks is easy, but more time-consuming to build than pedestals. With the blocks you don't have to worry that the pedestals and hull are all straight and level. Generally, blocks are placed under the keel and along the rim of the lower hull area to balance the ship when it is in dry dock. Be mindful of the size of the blocks in relation to the model's scale if you want to represent an actual ship on scale keel blocks. Also keep in mind that if you decide to take this approach you will be cutting and painting a lot of small blocks. Strips of basswood make good blocks. You can get various sizes from arts and crafts stores if your hobby store does not carry this wood. I usually use contact cement to glue the blocks to the display base and paint or stain them before gluing them down.

The easiest way to set the blocks is to strike a light pencil line down the center of the display base and mark the end points where the front and rear blocks will go. These end points should be under the keel at the bow and stern. I glue the end blocks first, then space the others out and glue them. To secure the hull to the display blocks, drill holes through the blocks and the base so you can run long thin bolts through the entire display base up through the hull. You will need to countersink the holes at the bottom of the display base to hide the bolt heads.

You also must drill corresponding holes in the hull large enough to accept miniature collapsible wing bolts. When you are ready to mount the hull on the display base simply run the bolts up through the wood base, screw on the collapsible wing nuts, insert the wing nuts into the holes in the hull, and then adjust the location of the hull as you screw down the bolts. If you are mounting a resin ship model, use brass tubing, which will be glued into the hull and the display base with two-part epoxy.

WATER DIORAMAS

I have tried several materials for replicating water over the years and have found that the simplest, least complicated material is acrylic gel medium. This inexpensive product, which looks like white glue jello, can be found in arts and crafts stores and is easy to use. The first step is to mount the model onto its display base in the position you want to represent the model. I recommend Devcon's two-part epoxy to attach the model to its



Full-hull models can easily be cut down using Bare Metal Foil's plastic scriber and lengths of labeling tape. The hull on Revell's 1/540 scale *Saratoga* also has plastic strips glued to the inside area to add strength to the hull and to keep it from flexing. Photo by Glenn Johnson.

base. If you use super glue the glue will probably fog the paint job along the lower hull area.

Mounting a waterline ship model is pretty straightforward unless you want to give it a slight pitch or roll. To do this add some plastic strip to the base so it will sit to one side and be slightly higher at the bow than at the stern. Since the gel will cover these areas you shouldn't have to sand or shape them.

If you have a full-hull model and want to create a water diorama you must cut off the lower hull. Position lengths of labeling tape along the sides where you want to cut. Most full-hull ship models have at least one line along both sides of the hull that represents the waterline. Use this as your guide. If you want to give the ship a slight pitch or roll, adjust the tape accordingly. Once the tape is in place drill a series of holes along both sides of the hull just below the tape line.

Since the hull will become very flexible after you cut off the lower section, install reinforcing strips across the hull prior to cutting. Carefully position lengths of Evergreen 3/16" x 3/16" strips every few inches and glue them in place one at a time using super glue and accelerator. Don't force the strips against the inside because you will distort its shape. Use the holes you drilled through the hull to set the locations of the strips and keep them as close to the holes as possible.

Once you have finished attaching the strips, use Bare Metal Foil's plastic scriber to cut into the plastic. Lightly run the scriber along the edge of the labeling tape and hold the scriber at about a 45-degree angle. After a few passes you can add more pressure because the channel will be deep enough to prevent the scriber from jumping out and scratching the plastic. As you cut through the hull the plastic on the inside of the hull along the cut line will appear almost white. This indicates that you are almost all the way through the plastic. Areas at the bow and at the stern, especially around the corners of the stern, may require a razor saw or an X-Acto blade to finish the job. Cutting a full-hull model in half is a messy job, so be prepared to get a lot of plastic residue all over your workbench.

Once you have removed the lower hull, run the upper section across 150-grit sandpaper to smooth out the cut line and then across some 200-grit sandpaper to smooth out the plastic. Next, lay the upper hull onto sheet stock, draw the hull outline onto the sheet, and rough-cut along the outline leaving an excess of about 1/4". If the ship hull is longer than the sheet stock, work with one length at a time. Glue the sheet to the hull by applying super glue to the inside of the hull. The super glue will seep in between the lip of the cut line and the sheet stock.

Trim the excess plastic with a number 11 X-Acto blade, using the edge of the hull to help guide the blade. To ensure a good bond and to fill in any minute cracks and gouges I run a bead of super glue along the outer perimeter of the hull and sand it smooth. This sheeting will increase the strength of the hull, prevent any flexing, and provide a good bonding surface between the hull and the display base.

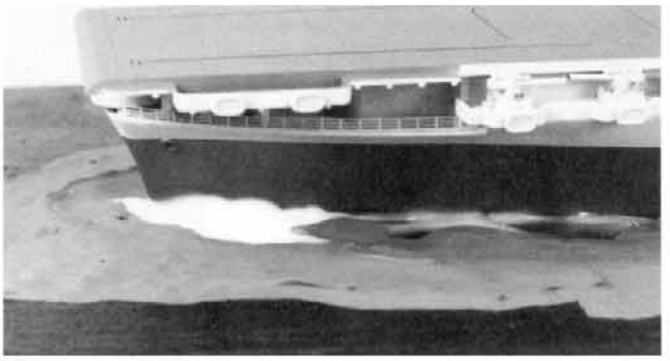
Replicating water. Glue the hull to the display base using two part epoxy. After the epoxy is dry start applying the gel using a 1/2"-wide soft flat brush to spread it. It can be applied in the same way as thick paint and responds well to shaping. Lay the gel in thick layers around the model and carefully push it up against the hull. To get it into small areas I use a small flat brush, which I also use to shape it against the hull. Be careful when painting the gel onto the base because small drops can splash onto the model. You can wipe off the drops with a damp Q-Tip. You can also use the Q-Tip to remove excess gel from the lower hull area as well as to shape it.

There are two ways to replicate water. One is to create an area around the hull that will represent the water. In other words the material that you use to create the water will not cover the entire surface area of the display base. While this may sound strange the effect can be quite dramatic. The other approach is to cover the entire surface of the display base with the material. If you have more than one model to display you may want to consider covering the entire base.

For the first application of gel I concentrate on coverage more than shaping, although you must be careful that you don't have odd-looking waves. For the gel to have the appearance of sweeping past the ship your brush strokes must be from bow to stern only. As you work you can create the effect of waves, swells, and troughs by piling gel in areas around the ship. As you shape remember that waves usually come as long straight lines until they start to break.

You can also have wave caps, which are areas where water seems to pile up in rough weather. The brush strokes and the gel itself will create this effect almost without your doing anything. Keep a sharp eye out for gel that sets into points, as this is not realistic. Simply flatten them out with the brush—do it by brushing past the point and moving the brush across the

Holes are common on acrylic gel medium, but they are easy to fill by adding more gel. New gel will also stick to gel that has already been painted.



Additional applications of gel around the bow area are necessary to help shape the gel correctly.

gel. Now let the gel dry, which can take up to 3 days in areas where there is a lot of it.

As the gel dries it will open up small pinholes along the flat areas and larger holes where it has been piled up. Fill these with additional gel, working it into the small holes with a thin wire or toothpick.

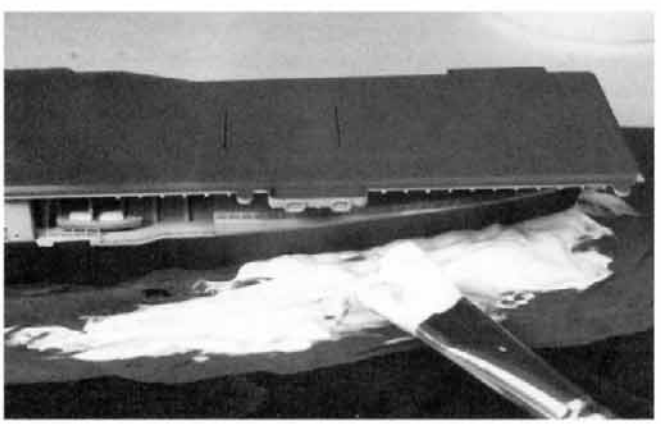
For the second application I start forming waves and piling and shaping the gel at the bow and stern. At the bow you shape it so it appears as though the stem of the ship is slicing through the water. This should be represented by a cutting and peeling effect on the water. Don't let gel pile up at the stem. It should be higher just behind the stem as it sweeps along the sides of the hull that are close to the stem area and then it flattens out some farther towards the stern.

Around the stern, mass the gel so it appears frothy, piled up, and disturbed. Carefully work the gel under the stern if it has a curve to it, as most aircraft carriers do. Along the sides of the ship the water slaps and rolls, and you can simulate this by running gel along the side of the hull like a shallow roller coaster. Keep in mind that it should be generally smooth along the sides of the ship as you make the transition from the piled-up area around the bow to the disturbed area of the stern. If you let it set for about a half hour or so it becomes very workable, and you can achieve some neat-looking waves if you are willing to be patient. Once again, wait a few days until the gel dries to check for holes.

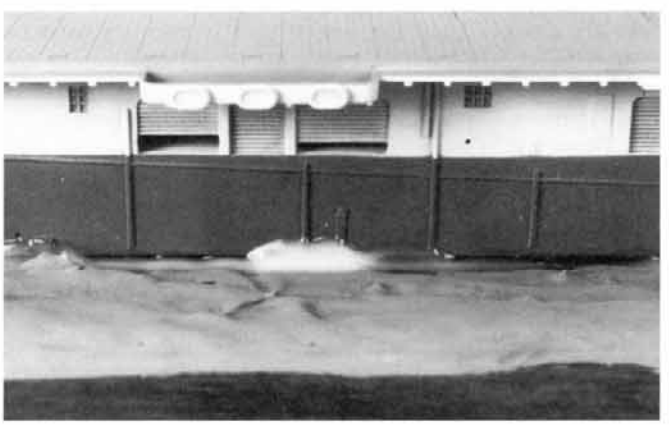
Painting. When it is dry you are ready to paint it. It is compatible only with water-base paints, and Polly-S or Testor's are your best choices. I start with a base color and drybrush additional colors. Unpainted gel appears smooth, but in fact it is very rough. This is great for drybrushing because the minute edges of the surface will pick up paint particles from the brush easily. I recommend a medium blue as a base color. Drybrush one or two additional shades of blue such as light and dark blue and then drybrush the surface with white. Apply two coats of the base color to seal the gel, as it absorbs paint.

When you are painting around the hull, use a small flat brush and work the paint into the areas around the bow and stern carefully. If you splash paint on the model use a damp Q-Tip to remove it before it starts to dry. If it runs over onto the hull just above where the gel stops don't worry—it will look like water.

Drybrushing. Give the base coats at least two hours to dry between coats and before you start drybrushing. When you are ready, dip the tip of your flat brush into the paint and

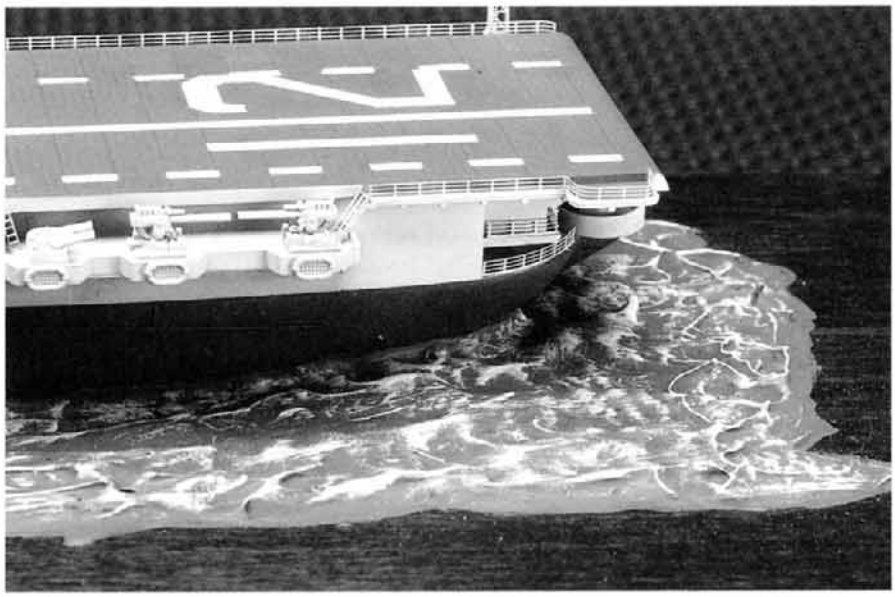


Pile up additional gel around the stern using a wide flat brush. To work the gel up against the model use small flat brushes.



Form the gel along the port and starboard sides into sweeping and rolling shapes. Once the gel is painted and drybrushed it will appear as though the model is cutting through the water.

The bow of this 1/700 scale aircraft carrier appears to be slicing through the water, thanks to some drybrushed light blue and white paint. Photo by Glenn Johnson.



The stern area on the same model appears to be greatly disturbed, as it should be; after all, this aircraft carrier is running at high speed into the wind! Photo by Glenn Johnson.

gently wipe the brush onto a piece of white paper. When only the faintest touch of paint is apparent, lightly run the brush across the surface of the gel. I usually concentrate the blue shades along the surface and on the sides of waves, but don't worry if some gets onto the tops where you want to drybrush the white. I sometimes overlay blue shades to give a multicolor appearance and in other areas try to have just one shade. Be sure the drybrushed paint is dry before applying another color. I concentrate the white along the rims of waves, but I also add some to the flat areas and on the sides. Concentrate white paint at the bow and stern to represent churned-up areas, but be careful not to get any overflow onto the hull. It is easy to overdo the drybrushing, so go slowly and check your work as you progress.

Remember, the sea looks different to everyone except when it is perfectly flat. I have seen the Gulf of Mexico so calm you would think it was covered with glass, which brings me to our closing discussion. I have seen water surfaces in flat paints and also covered with a clear gloss, and quite frankly I can never decide which looks more realistic. If you are representing a very rough sea you can leave it flat or give it a clear gloss coat. For a ship at anchor in a calm sea I would give the surface a coat of gloss. I have also tried a combination of both on rough seas and it looks just as good to me as either all flat or all gloss. I guess the best recommendation I can give you is to experiment, be imaginative, be creative, and most importantly have fun doing it.

CONCLUSION

After you have selected the model you want to build, decide what details, modifications, and scratchbuilding you want to add before you begin. If you were to try all the techniques and projects in this book at one time it would overwhelm you. Pick two or three that intrigue you the most, then add to your accomplishments as you build more models. I encourage you to improve and modify my techniques. There is often a different or better way to achieve the same results. Aside from the fun of trying something new, it will stretch the bounds of your creativity and imagination.

Keep in mind that even when your modeling skills are advanced you will still have disasters. Any modeler who says he or she doesn't is either lying or does not truly build models. If you ruin a model, so what? If your patience is running short, set it aside for a while. It's only a hobby, and it is supposed to be relaxing, not raising your blood pressure! Happy modeling, and don't forget the kid on the bike who yearns to be creative and imaginative.