MIKE ASHEY PUBLISHING

COMPREHENSIVE SERIES SCALE MODEL SHIP MANUAL
NUMBER 1

BUILDING & DETAILING THE TRUMPETER 1/350 SCALE USS NORTH CAROLINA, BB - 55

This kit builds up into an impressive replica of the USS North Carolina, however there are some fit challenges that require patience and some unique construction techniques. For this kit a Gold Medal Models photoetch set was used along with some radar screens from a Toms Model Works photoetch sheet. The kit was backdated to 1943 so there are some minor changes and additions to the radars that need to be made. Evergreen plastic strips, solid rod, half and quarter round rod, and sheet were used extensively for construction to both add strength to sub-assemblies and to hide seams.

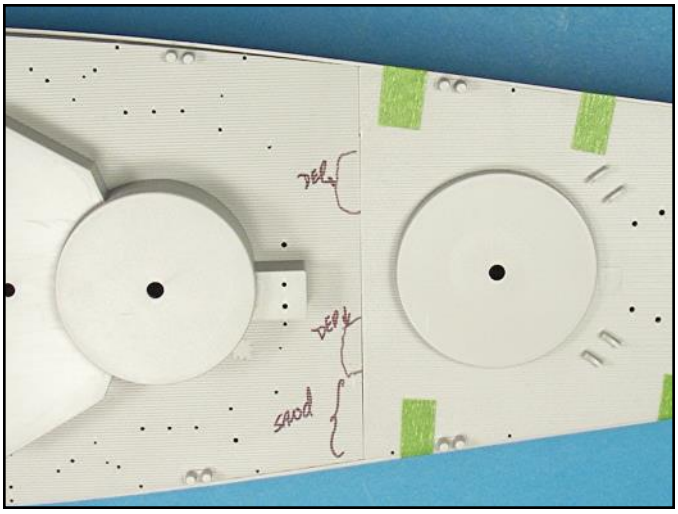
Tamiya's 1/350 scale Missouri was used for parts such as the 16 inch guns, the forward yardarm, whale boats and the gun directors. The kits 5 inch turrets were replaced with Voyager Models resin turrets and brass barrels. Although the kits 20mm guns were used, the Missouri 20mm would have been a better choice.

Testors enamel paints were used including their clear dullcoat. Four turned brass lamp risers were used for the display base and the model was mounted on a length of hard rock Maple stained with Minwax red mahogany.

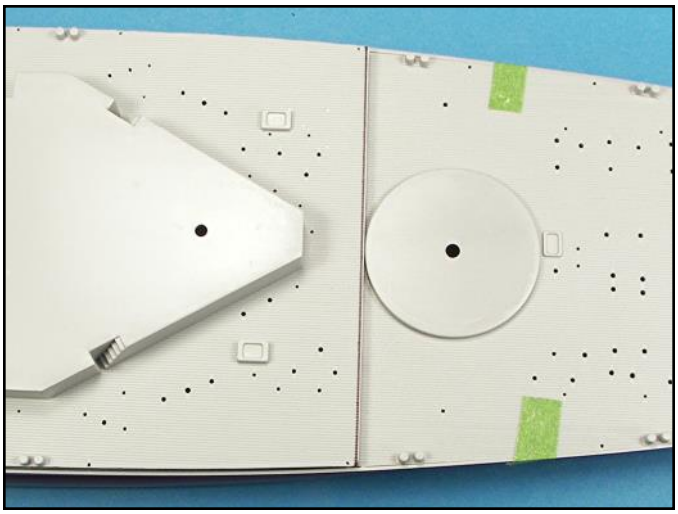
The application of super glue was accomplished with .015 to .035 inch diameter wire applicators. The end of the wire applicator was dipped in a puddle of super glue and the glue was then applied along a seam line. Generally. the amount of glue on the tip of the wire can be spread about an 1/8 to 1/4 of an inch along a seam line.

In 1943 the ship had a Measure 21 pattern, navy blue on all vertical sides and deck blue on all horizontal surfaces. The navy blue and deck blue colors were achieved using Testors dark sea blue and intermediate blue. Dark sea blue mixed with intermediate blue makes a navy blue color and mixing more intermediate blue makes a deck blue color.

This kit's main deck is in three sections so the first step is a test fit between the sections and the upper hull. The positioning tab extensions on the underside of the decks have to be removed for a tighter fit along the deck seam lines.

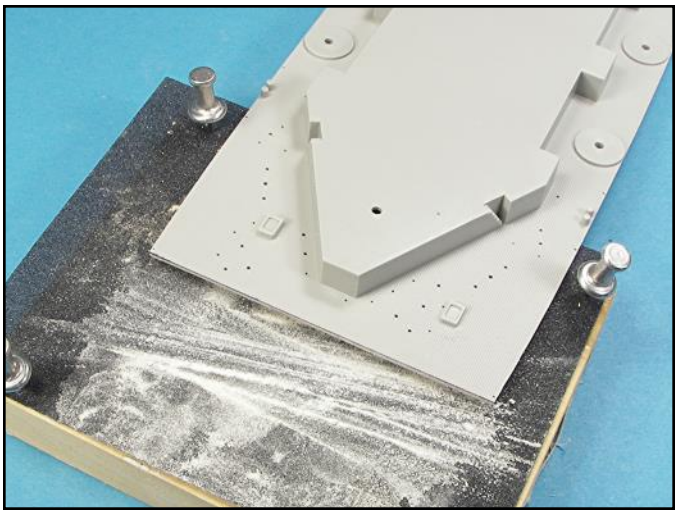


The forward seam line area had slight depressions on the surface. These depressions will be fixed when the seam line is carefully sanded and the wood deck detail re-scribed. The deck edges also needed some cleanup work.



The center deck section had a slight overlap with the aft section. The overlap was marked with a sharpie.

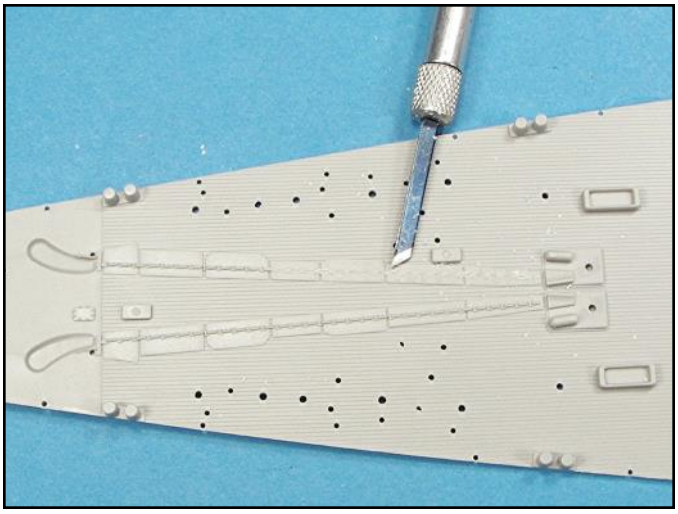
The remaining positioning tabs on the undersides of the decks were sanded off. A new lip will be added on each deck section.



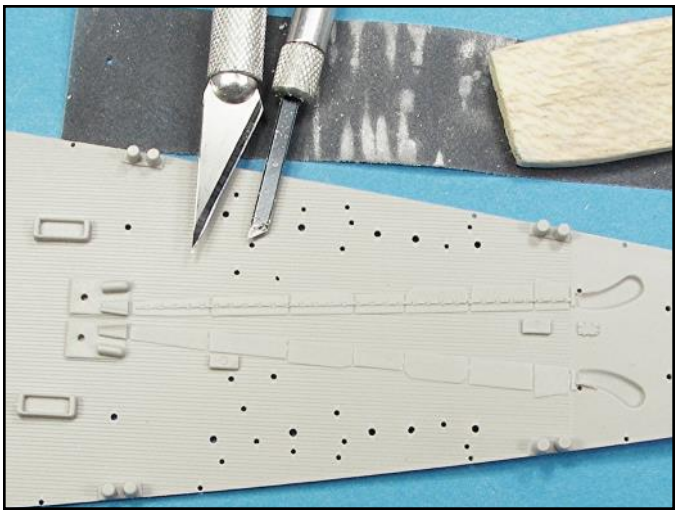
The entire undersides of each deck section were also sanded flat so that additional plastic sheeting could be laminated onto the surface adding strength to the completed deck assembly and help prevent flexing.

The excess plastic on the aft center deck section was slowly sanded down by adding more pressure to the side that had the most plastic to remove. The deck was form fitted into place by sanding, test fitting and sanding again.

By frequently checking the sanding progress and form fitting the deck section into place you can achieve a very tight fit.

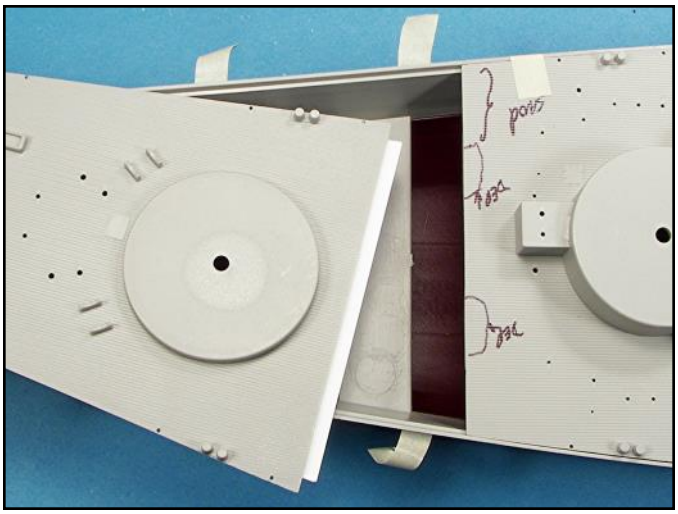


The molded on anchor chains were carefully scraped off with an X-Acto stencil blade held at a 45 degree angle. Care must be taken not to gouge the chain deck plating. Scrape small sections at a time.



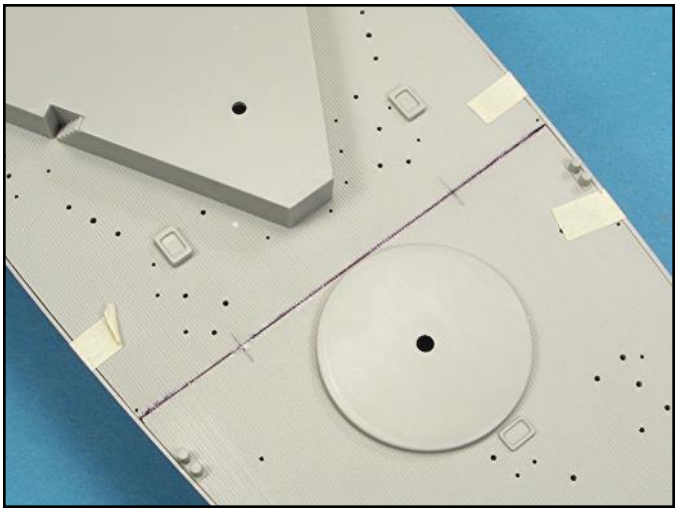
After the deck chain was scraped off, the chain plating was wet sanded smooth with 400 to 600 grit sandpaper wrapped around a length of balsa wood. Holes for the chains were then drilled to accept real lengths of chain.

To add strength to the deck seams and prevent it from cracking, .040 x .250 inch plastic strips were glued to the undersides of the forward and aft deck sections. Glue from the backside so no glue gets onto the exposed area.



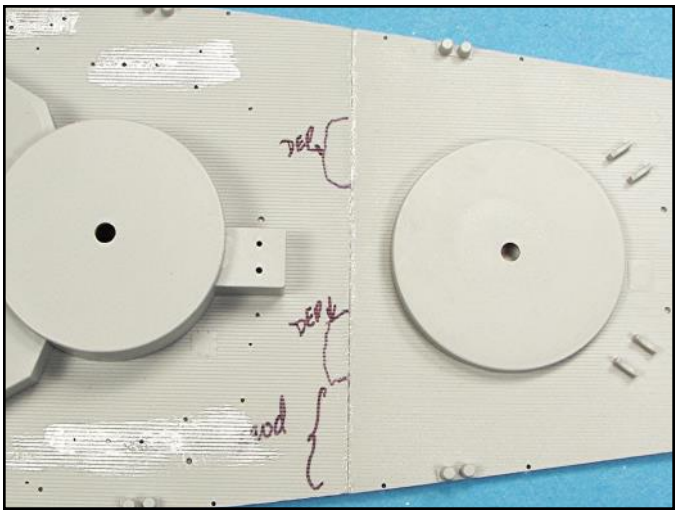
With a lip extending the entire length of the forward deck seam, the slight indentations will be easier to remove and the deck scribing will not crack the seam.

To get the upper and lower hull sections to fit better along the seam line and to reduce the amount of sanding, add .250 x. .250 inch spreaders to the lower hull to push out the plastic to get a flush fit along the seam line.

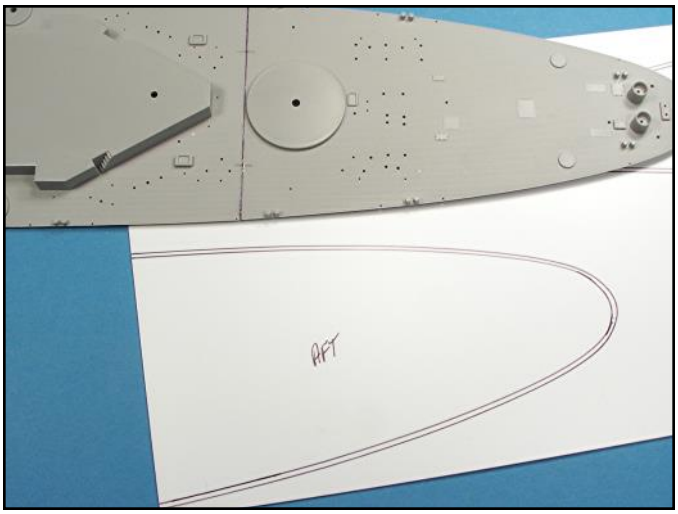


Tape the deck sections tightly in place and carefully apply tiny amounts of super glue along the seam lines. Be careful not to glue the deck to the hull. Also apply glue to the lips on the undersides of the decks to strengthen the joints.

Note how tight the hulls edge is against the edge of the deck. The tighter the fit, the less seam work will need to be done.

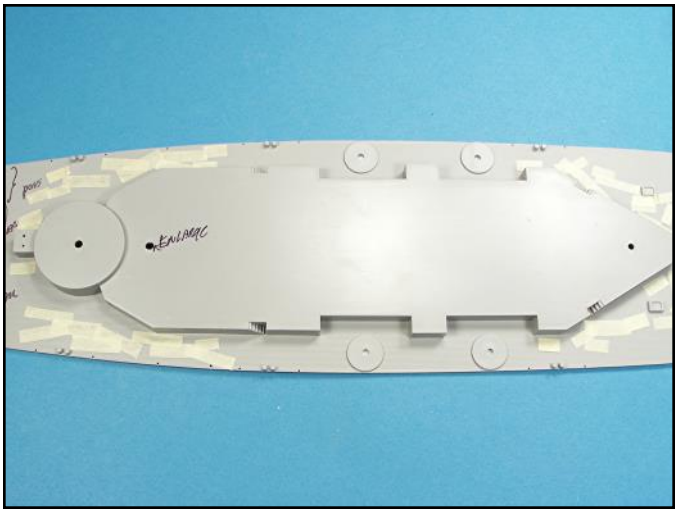


Very lightly wet sand along the deck seam line with 400 grit and then 600 grit sandpaper wrapped around a length of balsa wood. This will smooth out the glue line. The deck detail will be damaged, but it will be re-scribed.

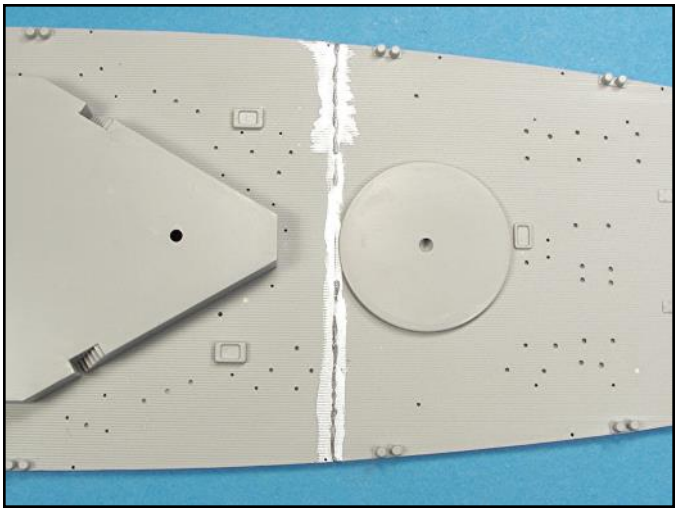


Outline the deck sections and be sure to adjust the outline for the inside lip of the hull. This .040 inch thick sheet will be laminated to the underside of the completed deck assembly.

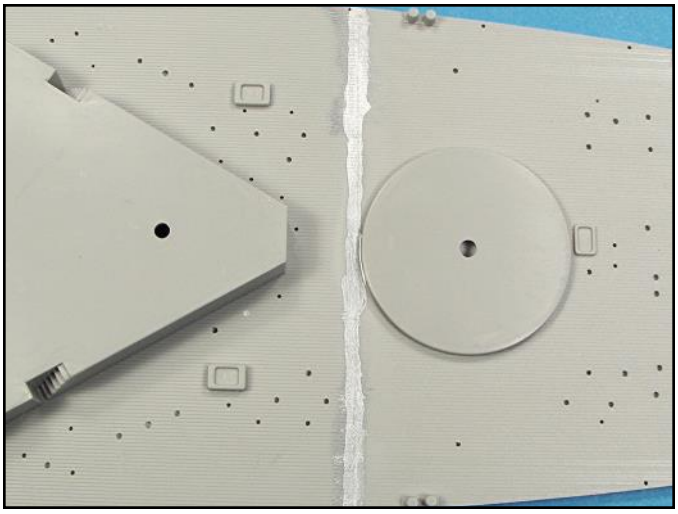
Sections of sheeting were super glued into place. The seam deck joints were staggered with the underside sheeting joints.



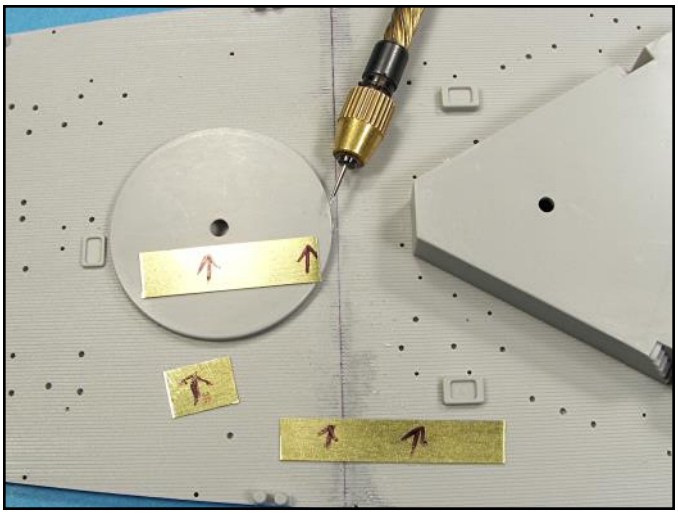
To prevent super glue from seeping onto the deck, seal all the deck holes with masking tape.



The first super glue application was sanded smooth and then silver paint was applied to highlight areas where additional super glue would need to be added. The second coat of glue was applied and ready for final sanding.



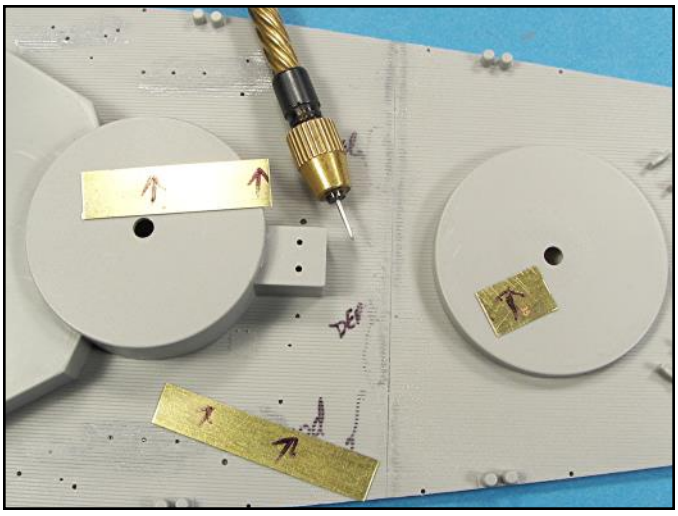
Silver paint was again applied for a second time to the seam to recheck it. No new areas were identified and the paint was then removed with 0000 steel wool pads.



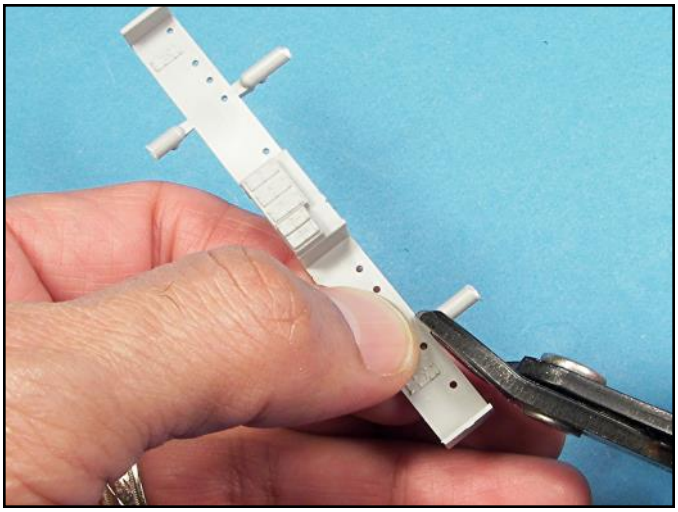
Sections of photoetch were used as a guide for the scriber. A thick sewing needle in a pin vice was used for the scribing. The edge of the guide was lined up with the planking on both sides of the seam and then lightly scribed.

The forward seam line was wet sanded first then the depressed surface areas were wet sanded. Silver paint was applied to check the seam and no additional super glue was required.

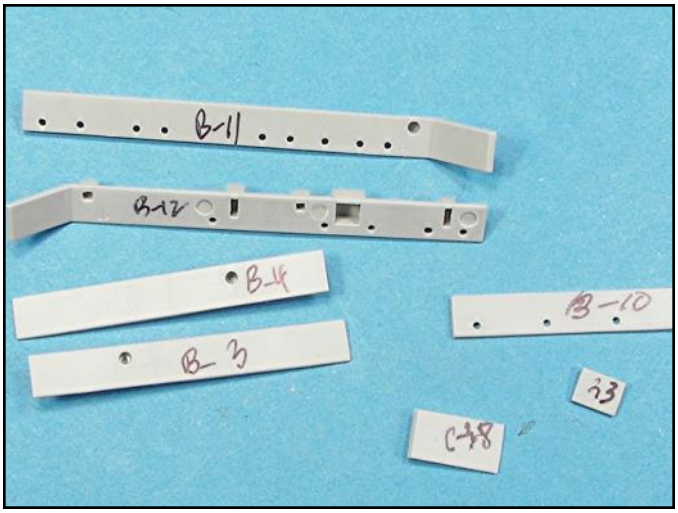
The silver paint was removed from the plastic to make it easier to see the deck planking lines.



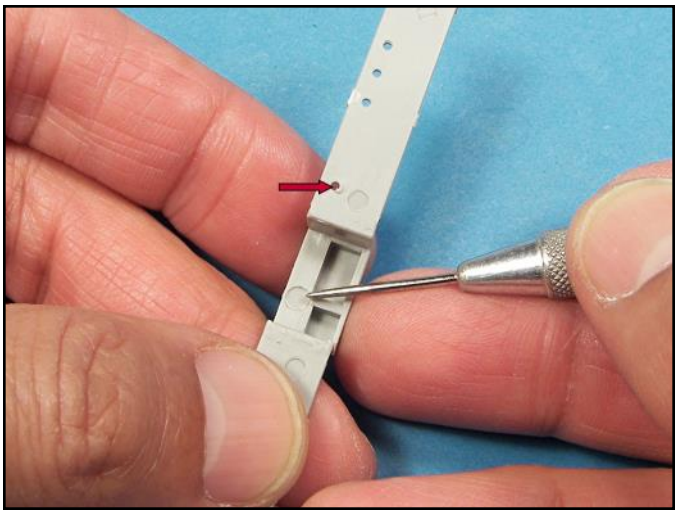
The forward deck area that needed to be re-scribed had longer scribe lines than the aft area due to the surface depressions. The scribed areas were polished with 0000 steel wool pads to remove any surface scribing burs.



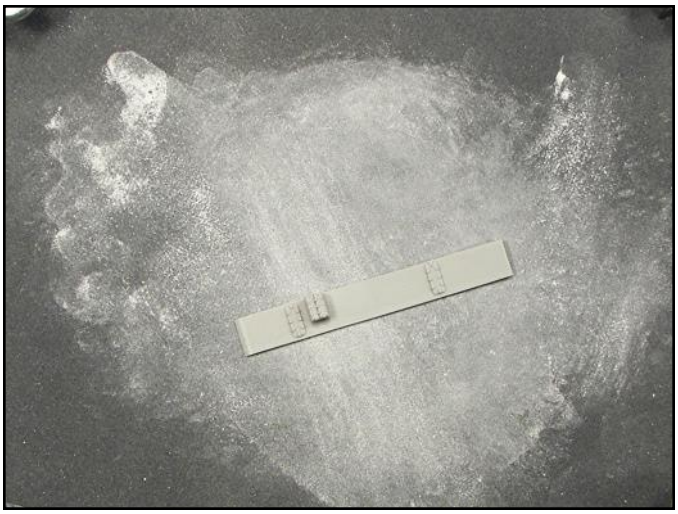
The superstructure parts were cut from their trees and then the stubs were carefully trimmed off.



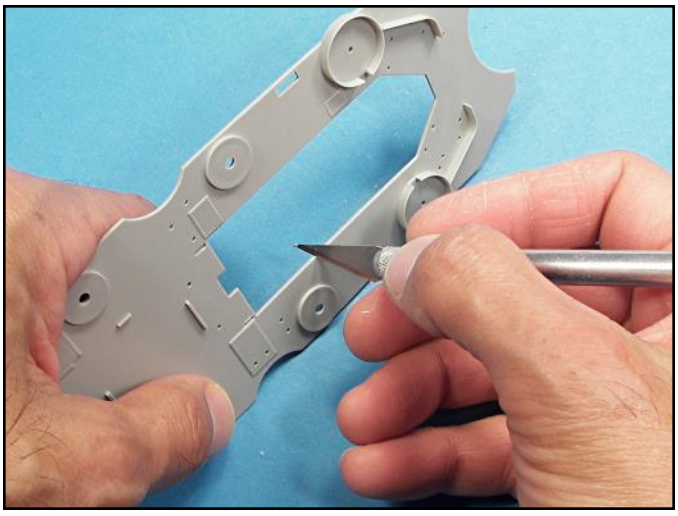
Every part was marked on its backside.



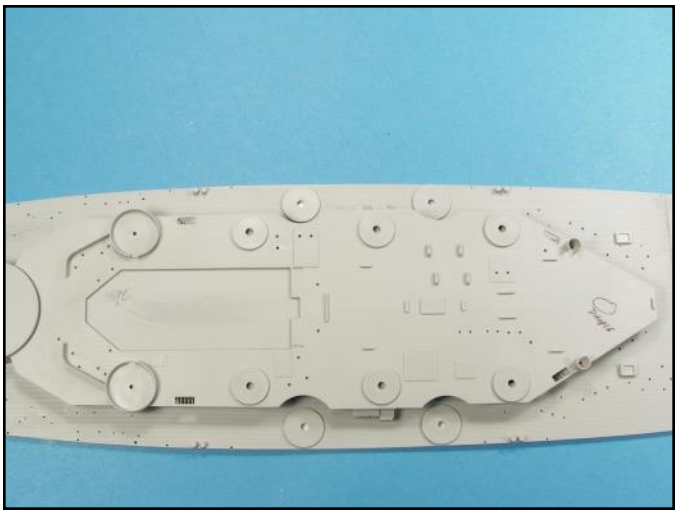
Be sure to check the backsides of the superstructure parts and scrape off any excess plastic so the surfaces are flat. This will ensure a tight fit.



Some parts can just be sanded smooth by running them across a stationary piece of sandpaper.

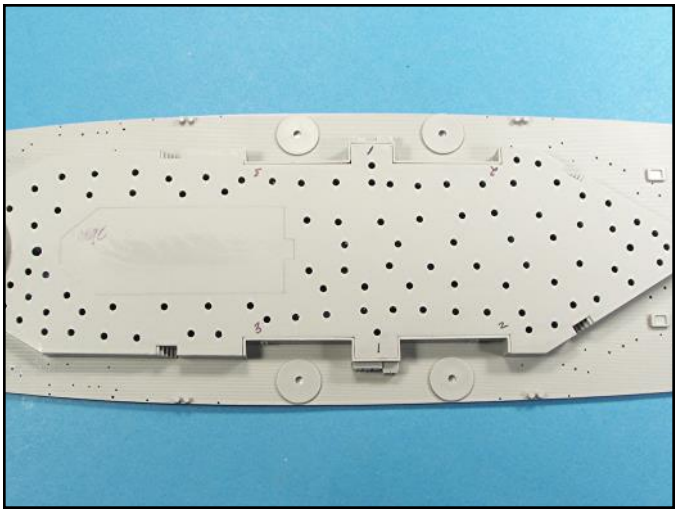


There was a mold line that needed to be removed on the inside of the 01 deck layer where the forward superstructure will sit.

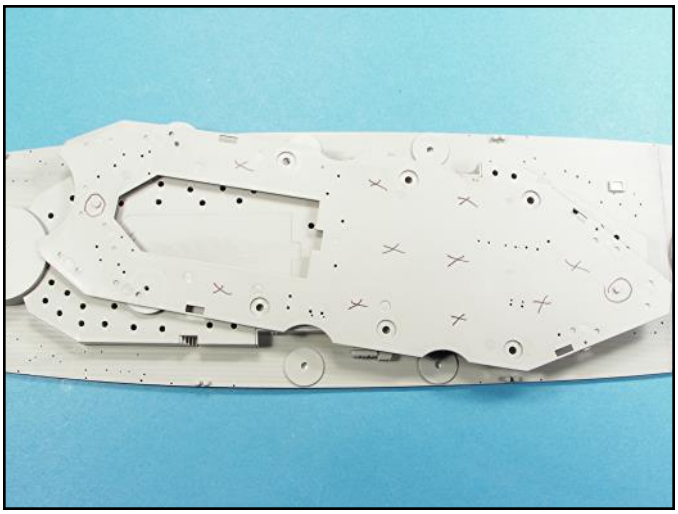


Laminating the 01 deck layer onto its base can be tricky, but there is an easy way to ensure a consistent lamination and prevent glue from oozing out the sides and onto the vertical surfaces.

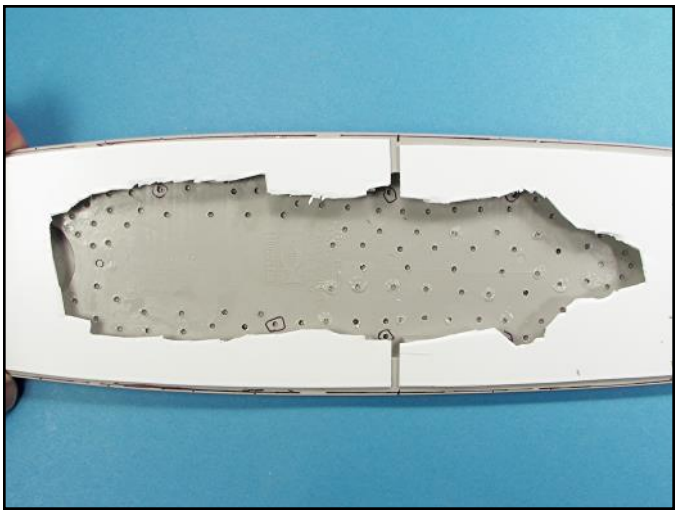
Using the 01 deck as a guide mark locations were no holes are to be drilled. Then start drilling lots of holes. These holes will be used to apply glue from the underside of the lamination.



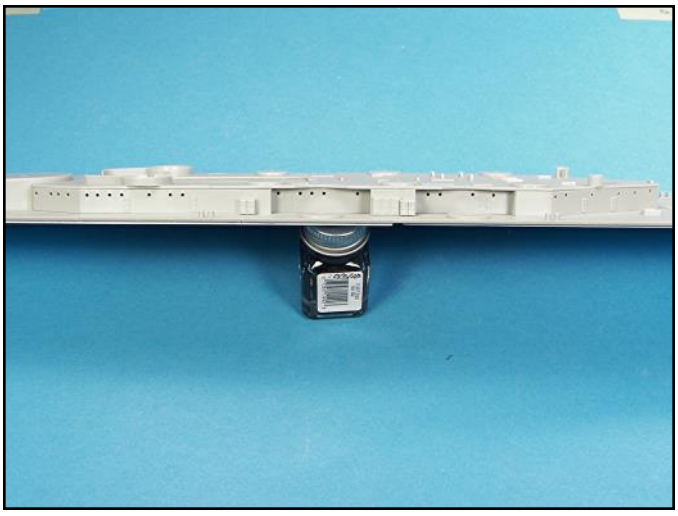
All the plastic drill burs were removed. When the glue is applied through these holes, the capillary action of super glue will pull it along the two surfaces that are to be laminated. This will result in a tight lamination with no bumps.



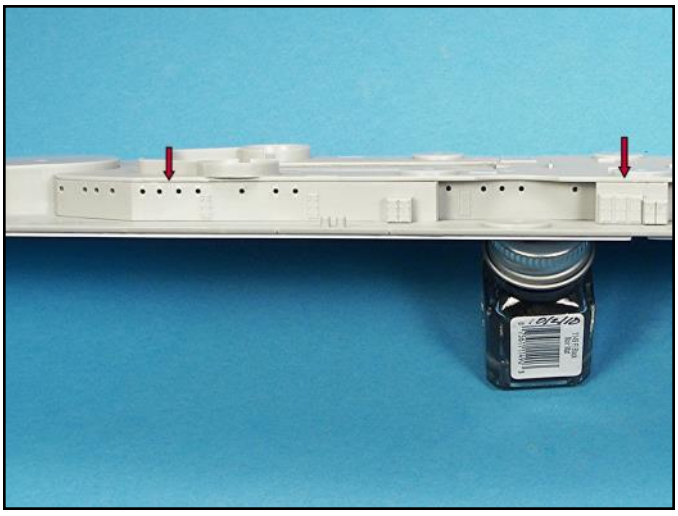
The center superstructure sides were glued into place. Tiny drops of super glue were applied at the marked locations and then the 01 level was positioned and pressed down into place.



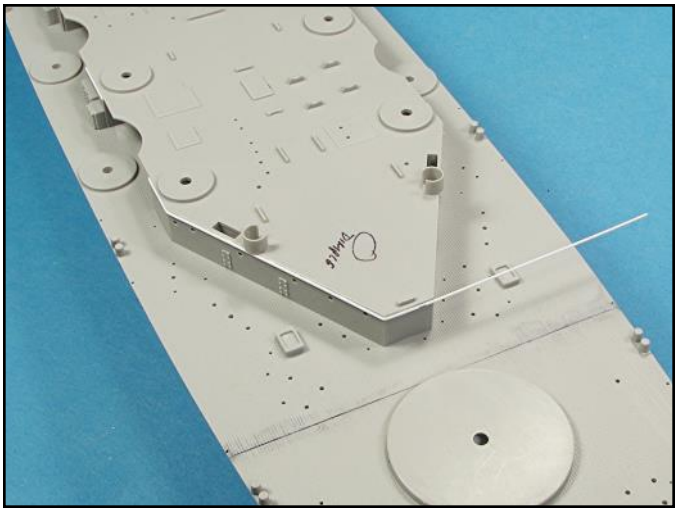
The laminated plastic on the underside of the deck assembly was cut open and then drops of super glue were applied to a few holes at a time. Those areas were pressed down and then the process was repeated for the next group of holes.



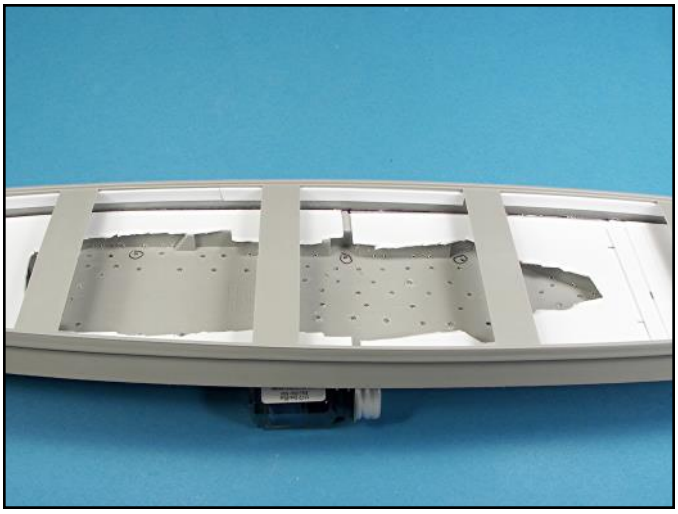
After all the holes received super glue, the remaining superstructure sides were glued into place.



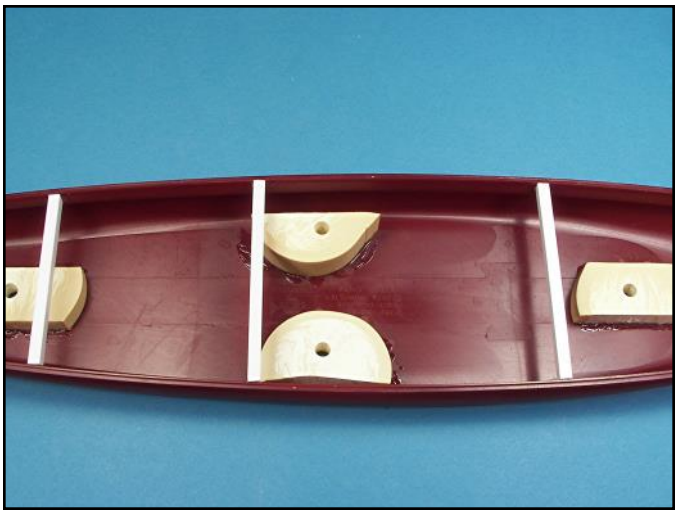
The 01 deck lamination leaves a seam line that is almost impossible to fix without damaging the surface detail. The solution is to hide it!



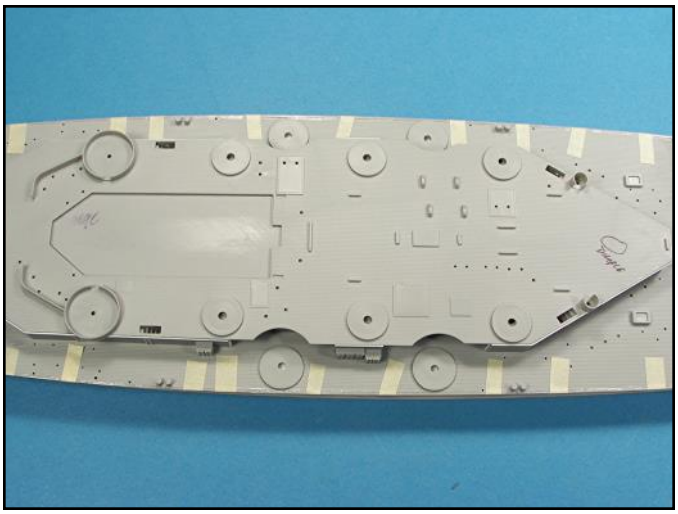
To hide the seam line around the edge of the 01 level, I laminated .030 inch half round over the seam. Be sure the half rounds are straight and level.



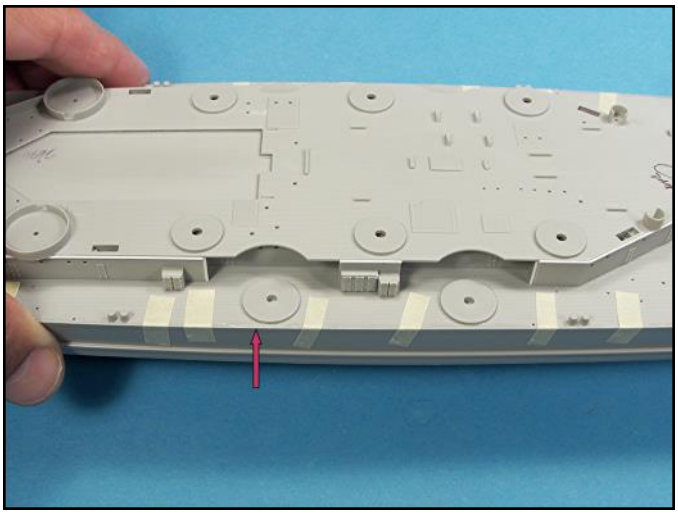
To stop the upper hull from flexing, laminate .030 x .250 inch strips to the inside surfaces.



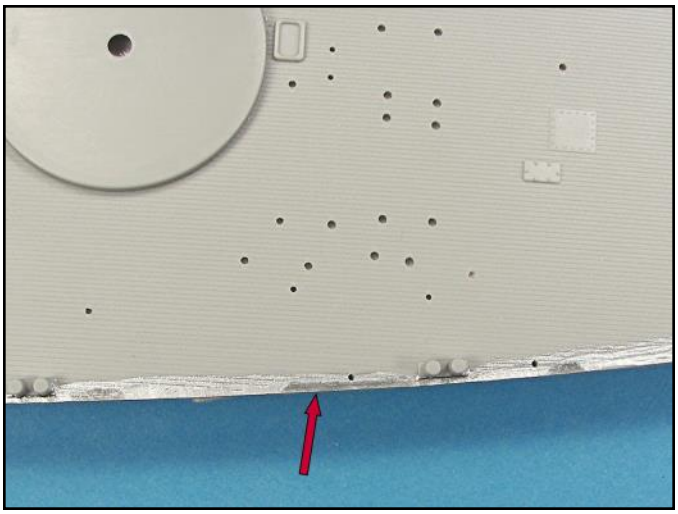
Resin blocks cut from a 1/200 scale sub model were super glued and drilled out to accept turned, solid brass lamp riser stems that will serve as the models pedestals.



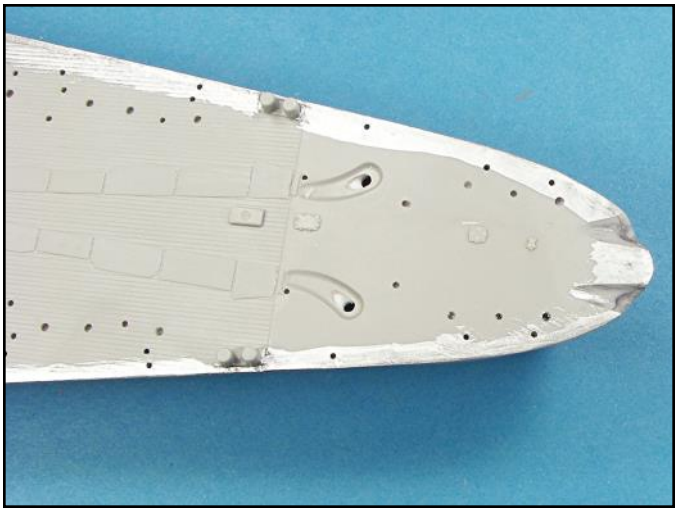
The deck assembly was tightly taped to the upper hull to minimize any voids between the deck and the hull's edge.



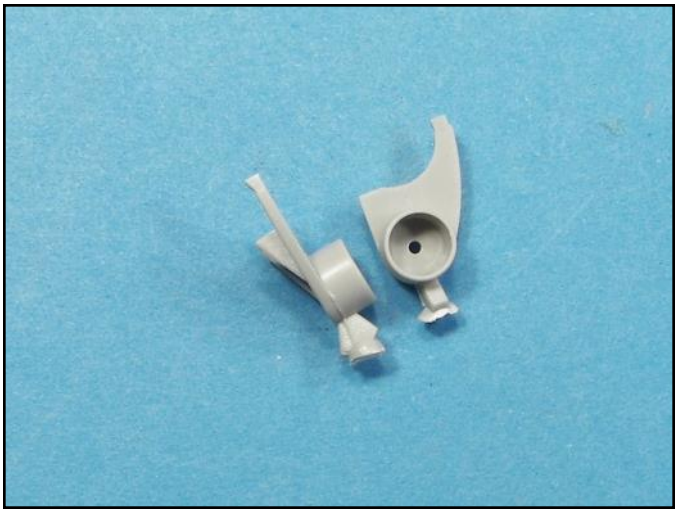
Super glue was applied with a thin wire applicator between the masking tape locations. Do not let the glue get to close to the masking tape. Remove the tape and complete the gluing and then add glue to the seam from the underside.



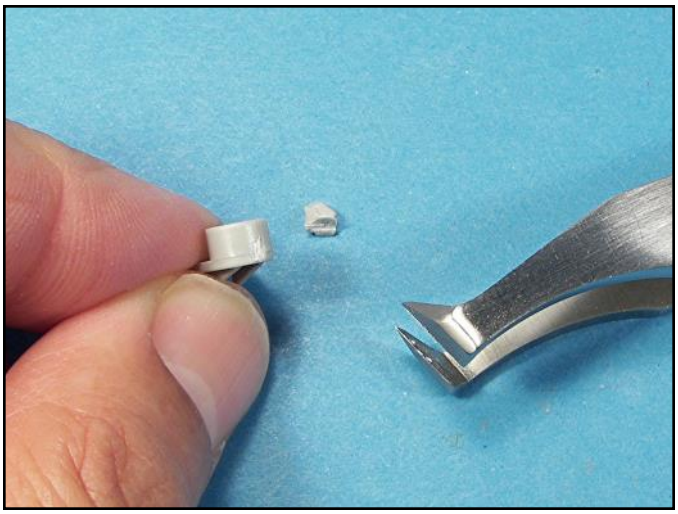
The seam lines were lightly scraped and then silver paint applied to identify areas that still needed attention. Additional beads of super glue were applied, scraped smooth and then wet sanded.



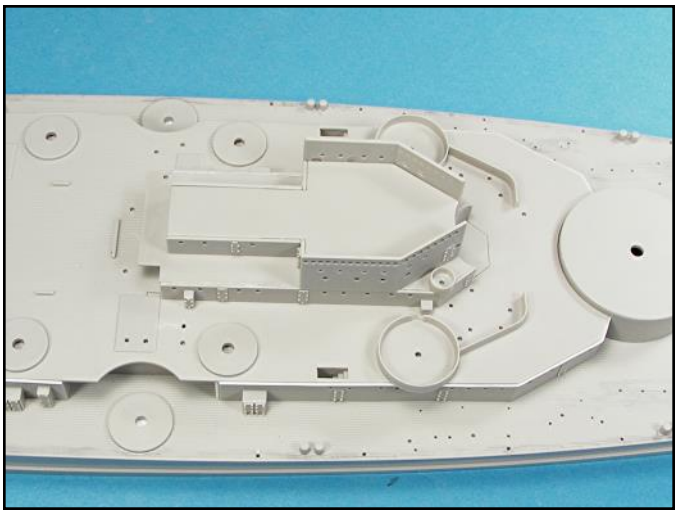
The mine sweep chain holes needed work to get them to look good. Use micro files to shape the plastic and then use sandpaper wrapped around a small diameter dowel to smooth out the plastic. Note the chain holes.



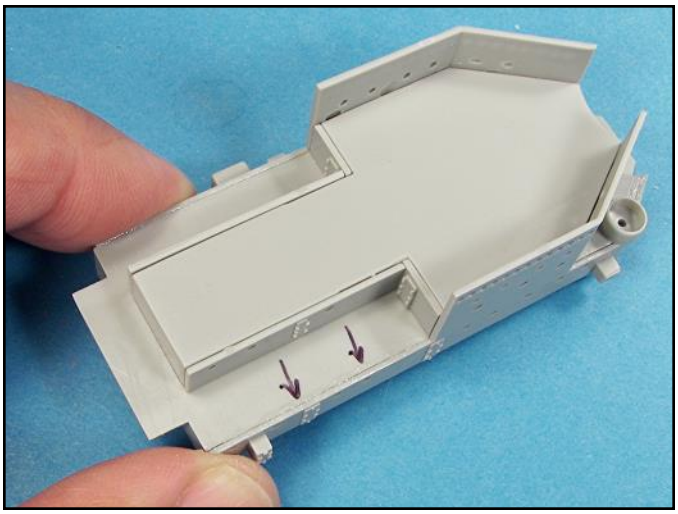
Many of the delicate and small parts in this kit have excessively large attachment trees, which results in marring of the surfaces of the parts.



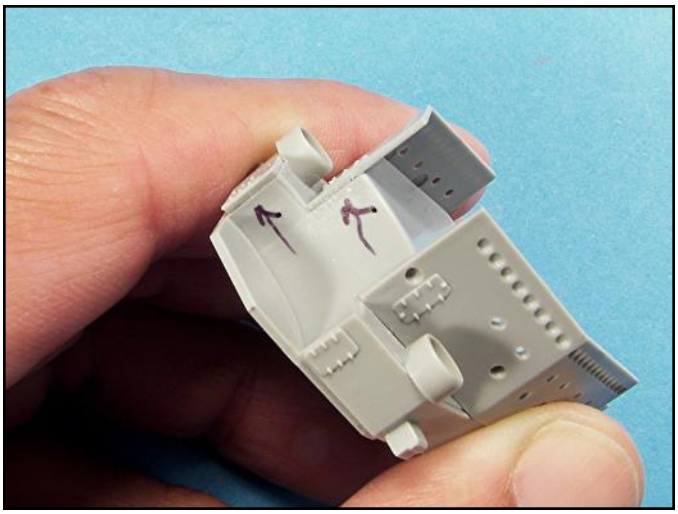
To reduce the surface marring use plastic snippers. Drops of super glue were then applied to the snipped areas and sanded smooth with a wet sanding stick.



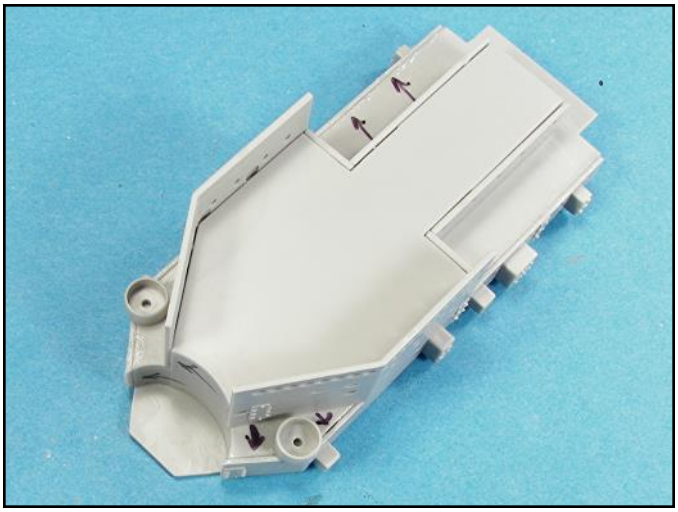
The forward superstructure assembly is complete and it is getting a fit check on the 01 deck indentation.



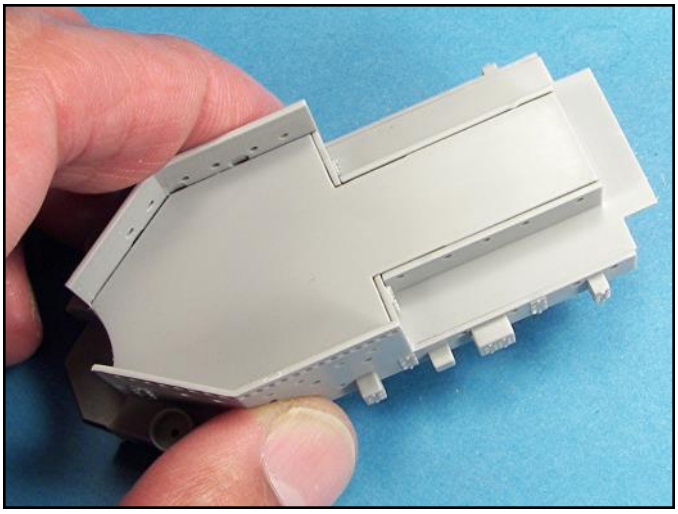
There are a lot of seams on the forward superstructure assembly. All of them required several applications of super glue to fill the voids.



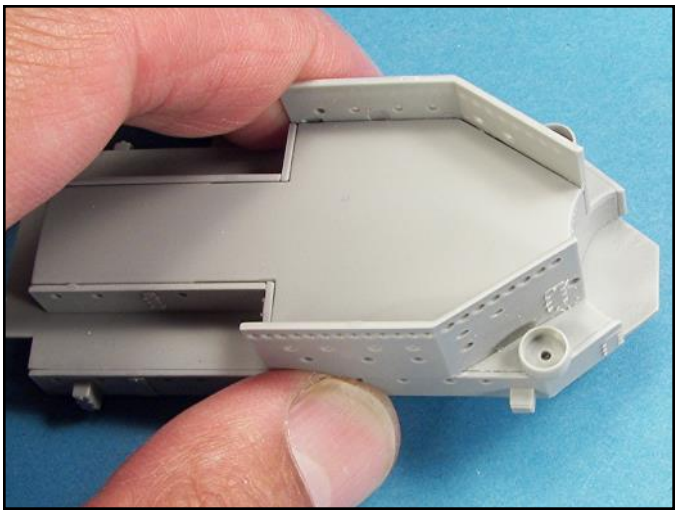
These seams will not be noticeable once the armored tower is attached so they do not need to be worked on.



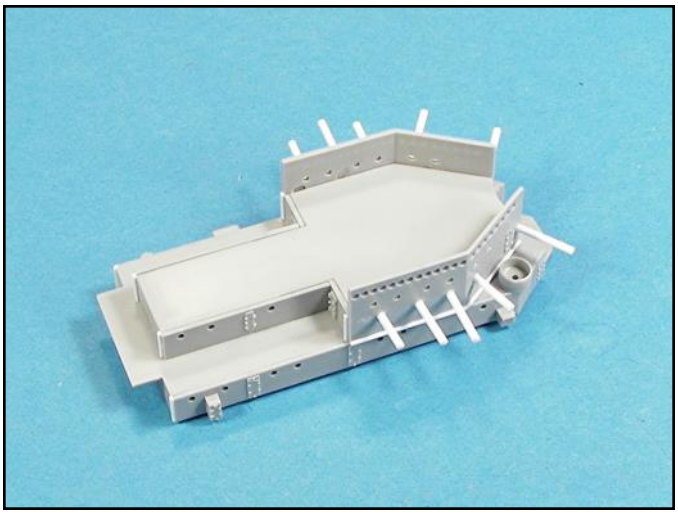
The seams on the forward area need very careful and extremely light scraping because they are just about impossible to sand smooth.



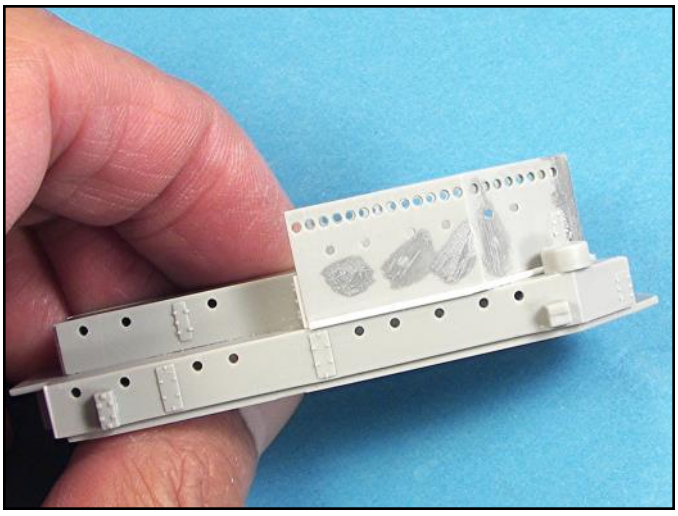
All the seams have been scraped and sanded and now it is time to fix some other issues with this assembly



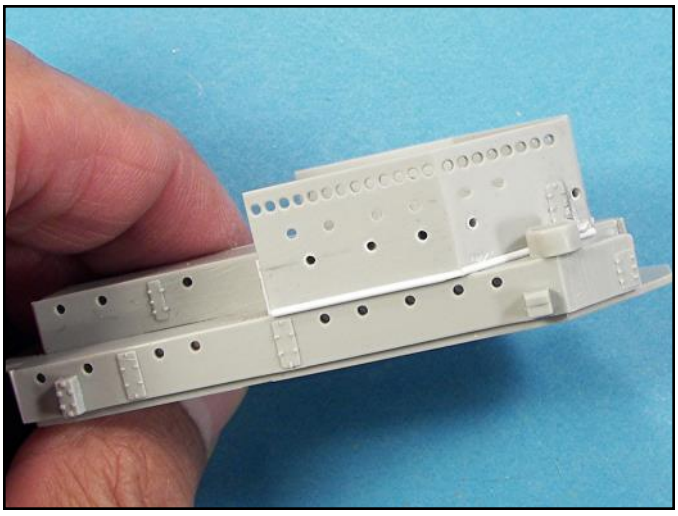
The tiny seams on both sides of the gun director tub were checked with silver paint and then the paint was completely removed so that primer and surface colors would not be pulled off during any masking.



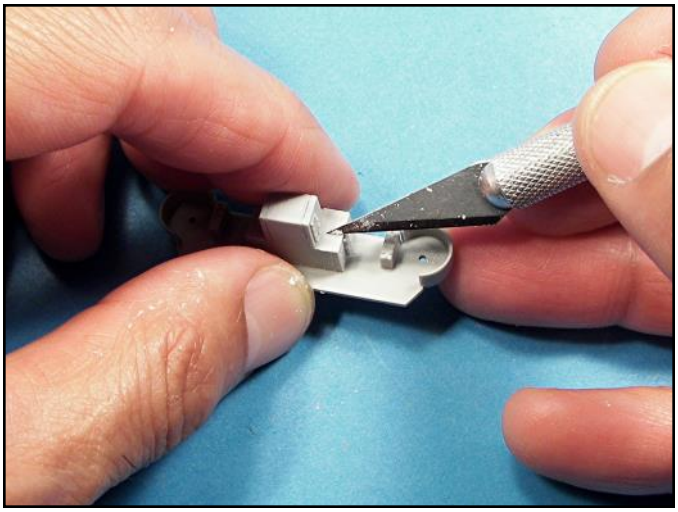
There are a row of portholes that are out of scale on the sides of the forward superstructure. Drill them out with a .052 inch bit and then super glue .050 inch rod into them.



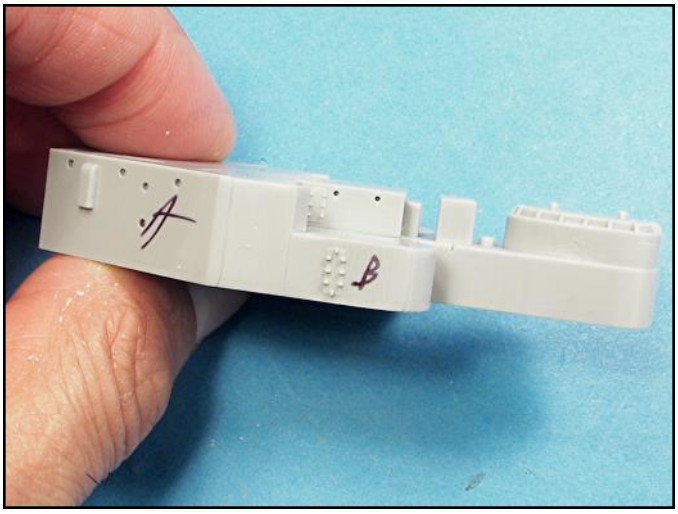
The rod was sniped and cut flush with the surface and then sanded smooth. Note the seam line that is hidden with sections of half round plastic strips.



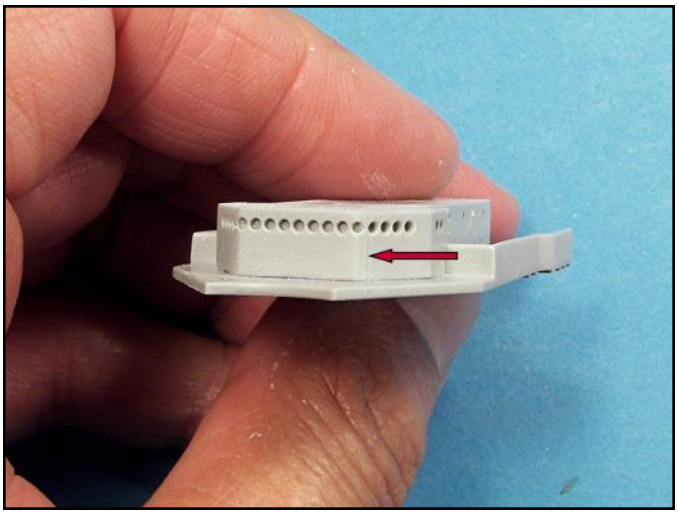
Pencil lines were measured and drawn across the surface of the filled port holes. New port hole locations were marked and drilled out.



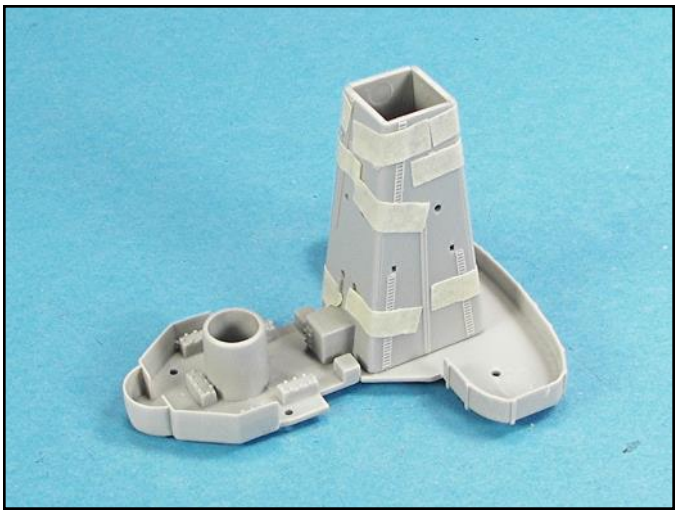
After the superstructure sides were glued onto their respective box shapes, several coats of super glue were applied to the perimeter seams and then carefully and lightly scraped flat with a sharp number 11 X-Acto blade.



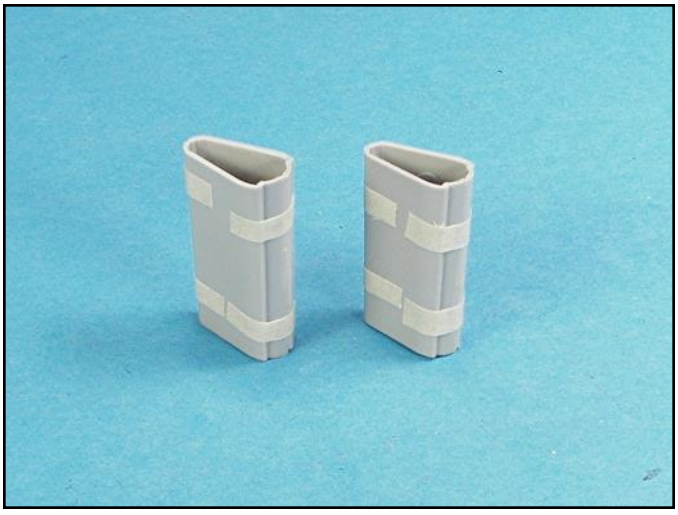
Some seams were also on the sides of superstructure parts. Careful scraping and sanding is required so that you do not distort the vertical edges.



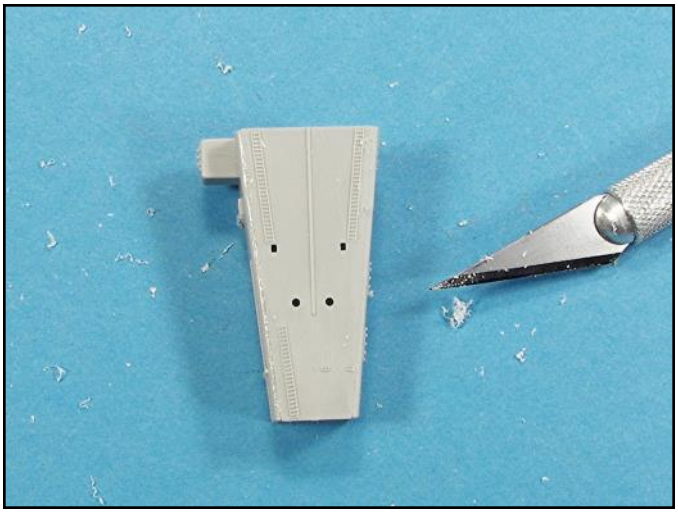
This seam which is on both sides of this assembly was carefully scraped with a number 11 X-Acto blade and then sanded smooth with a sanding stick.



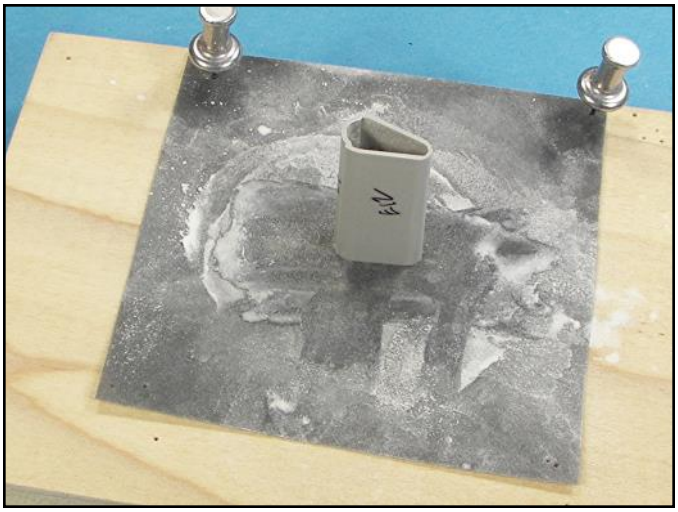
The forward superstructure tower is a real challenge to build. Tape it together tightly, position it on the deck to help set the shape and then apply tiny drops of super glue to the inside top to secure the parts together.



The smoke stacks were also a multi-piece assembly and the parts did not fit together very well. Here again, super glue was first applied to the inside seam areas.

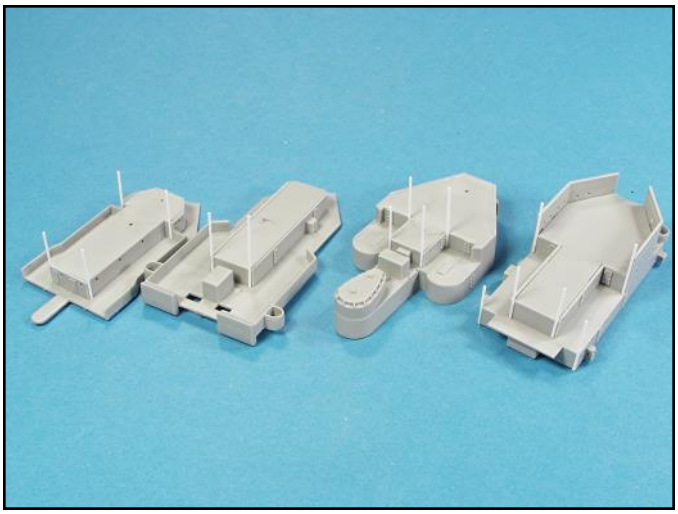


More super glue was applied along the inside and outside seam lines of the tower. The seams were then carefully scraped and sanded smooth with a wet sanding stick.

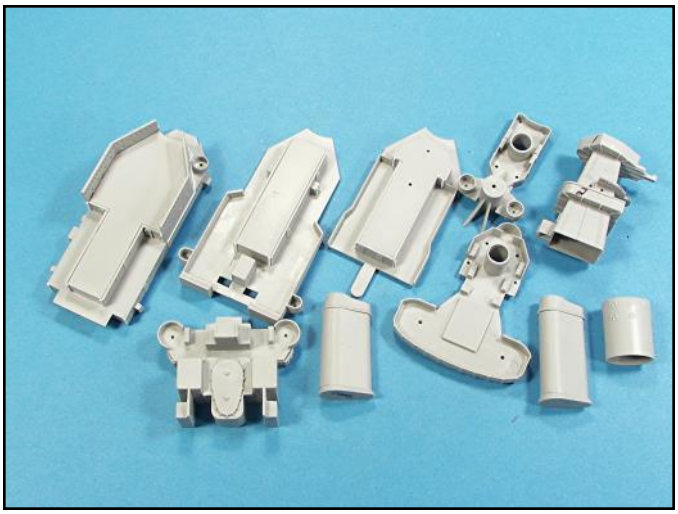


The bases and tops of both smoke stacks need to be flattened so that the assembly will sit straight and the top piece will be positioned correctly.

The forward part on each stack was also a very poor fit requiring lots of super glue to fill the voids. The curved surfaces were reshaped with a Flex-I-File.

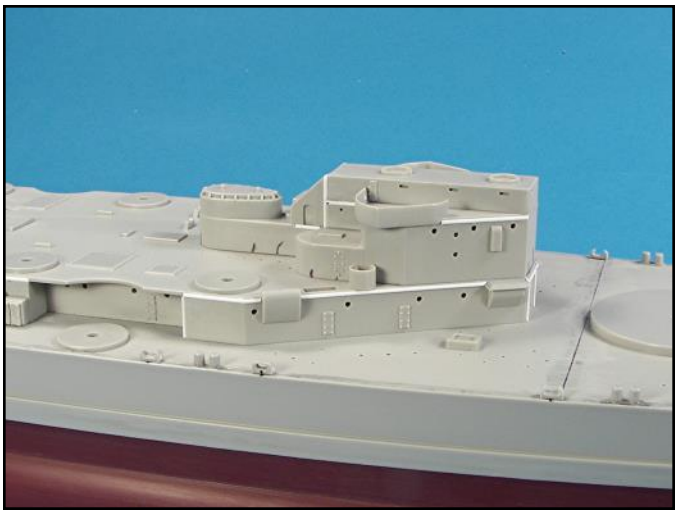


Many of the perimeter seams on the superstructure sub-assemblies were difficult to fix without damaging or distorting the edges or surfaces. Hide them with .030 inch half and quarter round strips.



All the superstructure sub-assemblies are now complete and they have been primed. Once they are painted they can be further assembled in their respective locations.

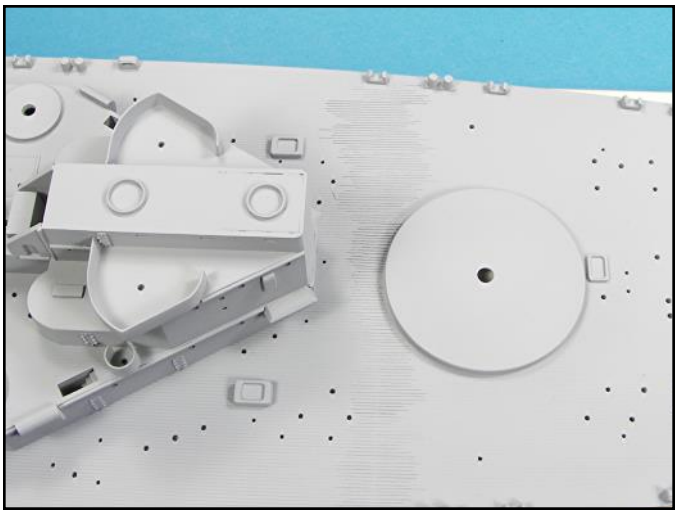
The upper and lower hull sections were tightly taped together, super glue was applied to the seam lines and then sanded smooth as well as the depressions on the surface of the bow. The lamp risers were then glued into place.



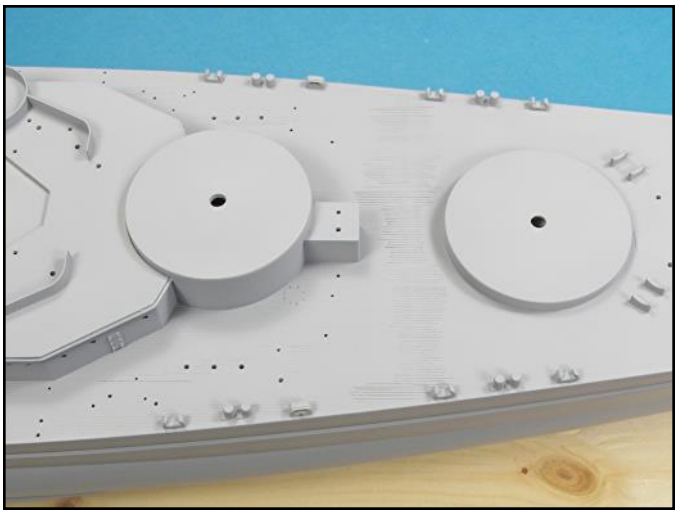
The aft superstructure was attached to the 01 level to make it easier to paint. Note the .030 inch half round sections applied to the superstructure assembly to hide seams that would be difficult to fix.

All the superstructure sub-assemblies got several fit checks throughout their individual construction. Here, one final fit check is necessary to be sure there are no fit problems.

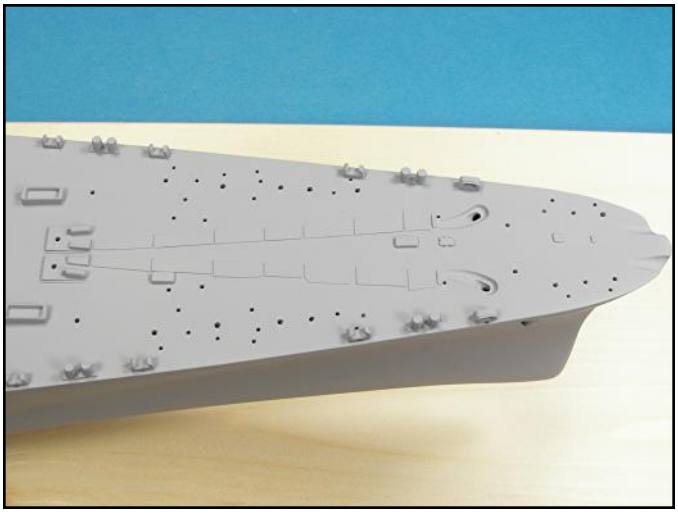
The deck chocks and bitts were attached using tiny drops of super glue applied with a thin wire applicator.



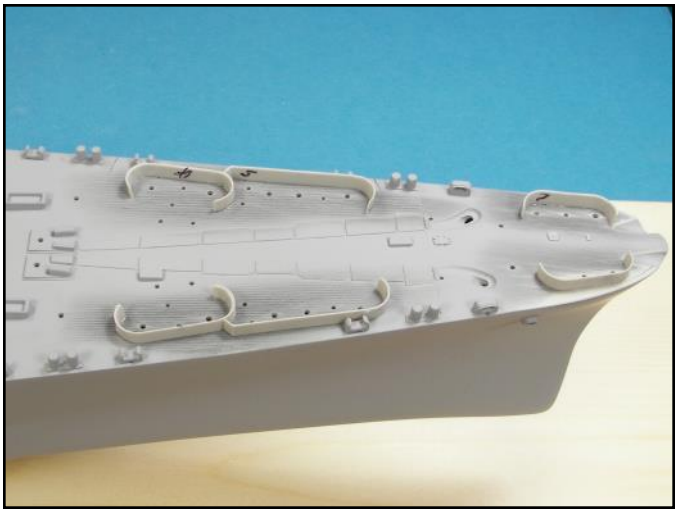
The entire hull & deck assembly was primed and checked closely for any flaws. The re-scribed deck planking was very noticeable on the aft deck area. The scribing needle cut too deep into the plastic.



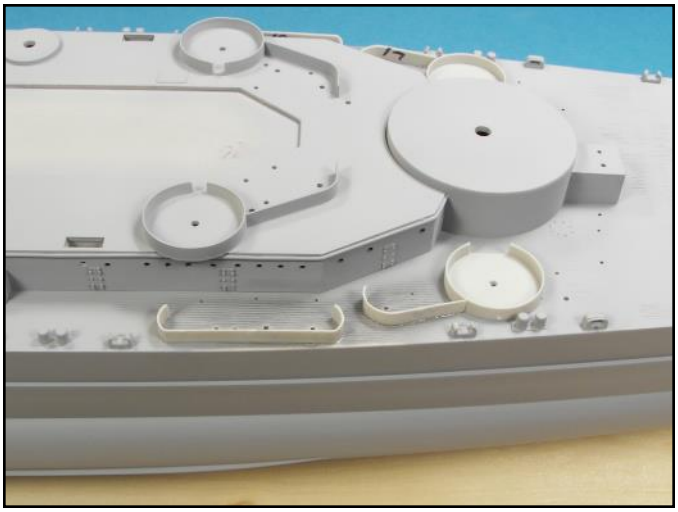
The forward deck area's re-scribed planking was also very noticeable. To reduce the depth of the re-scribed lines, the surface was lightly wet sanded with 600 grit sandpaper and then smoothed out with 0000 steel wool pads.



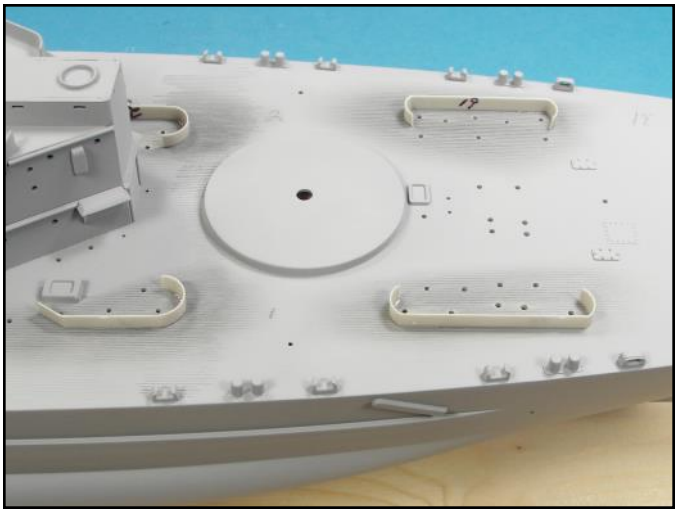
Before attaching the 20mm gun shields, the surface was polished with 0000 steel wool pads to remove the primer.



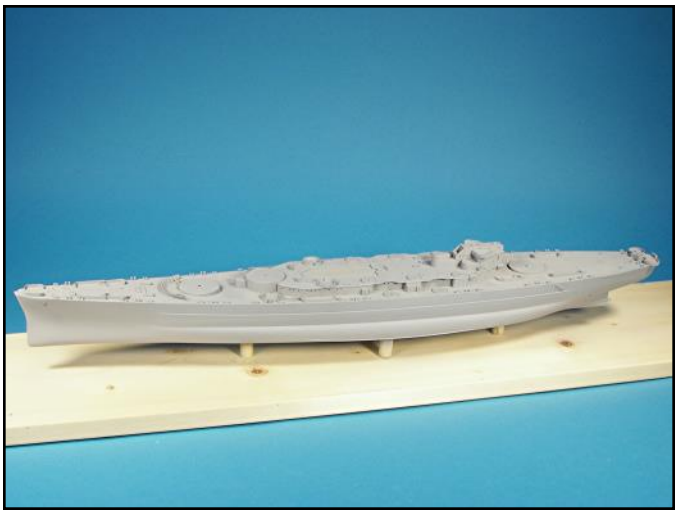
The 20 mm shields were positioned and tiny drops of super glue were applied on the ends and mid sections to set these fragile kit parts in place. A bead of super glue was then applied to the base on both sides of each shield.



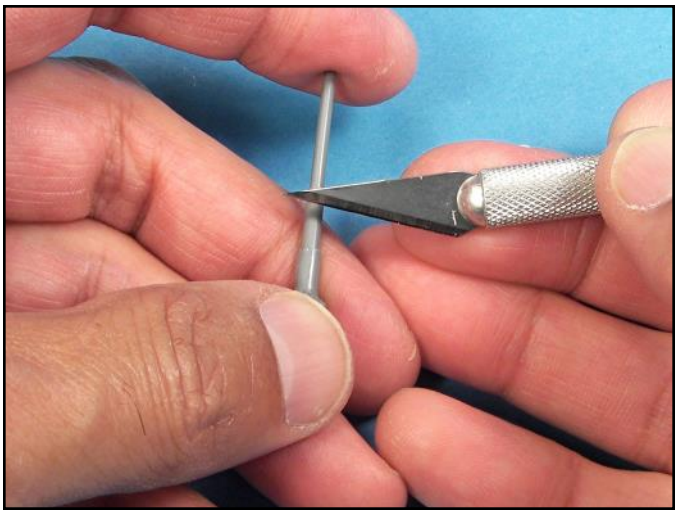
The 20mm shields and the 40mm gun tubs were attached along the forward port and starboard areas. Some of the 20mm shields needed some careful cleanup work prior to gluing them into place.



The aft 20mm shields seemed to be a tiny bit thicker and not so fragile so they were easier to handle.

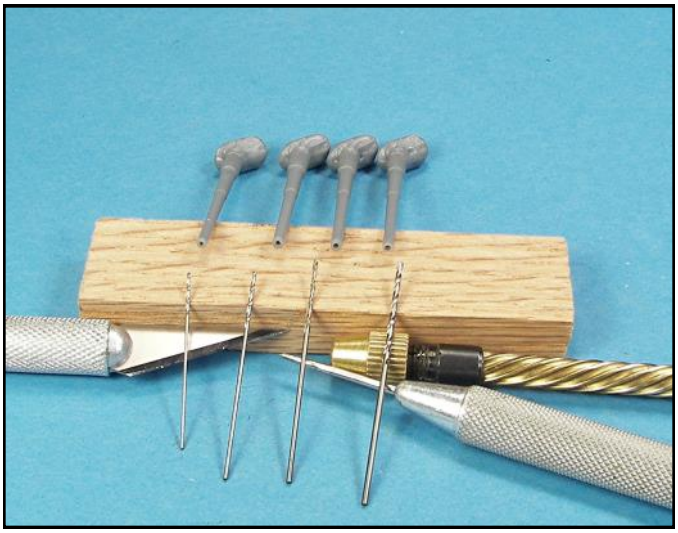


The hull and deck assembly is now complete and it is time to start working on the guns, photoetch and radars. Note how big the pine board is that the model is attached to. An oversized board helps prevent damage to the model.

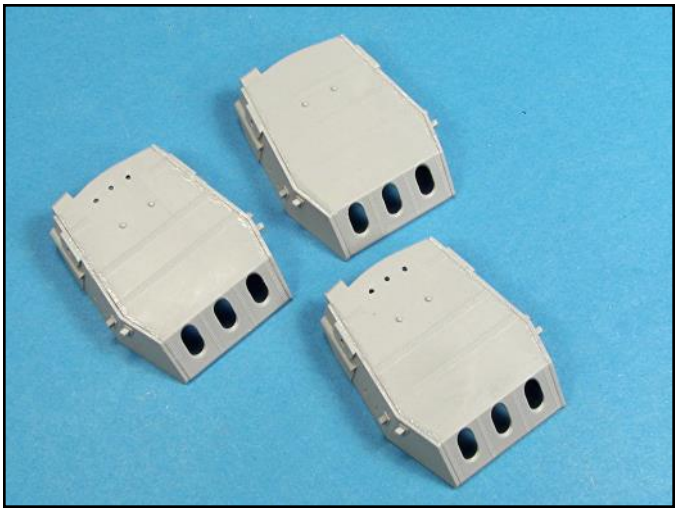


The seam lines on the 16 inch barrels from the Tamiya Missouri were carefully and lightly scraped holding the blade at about a 45 degree angle. Be very careful not to distort the shape of the barrel.

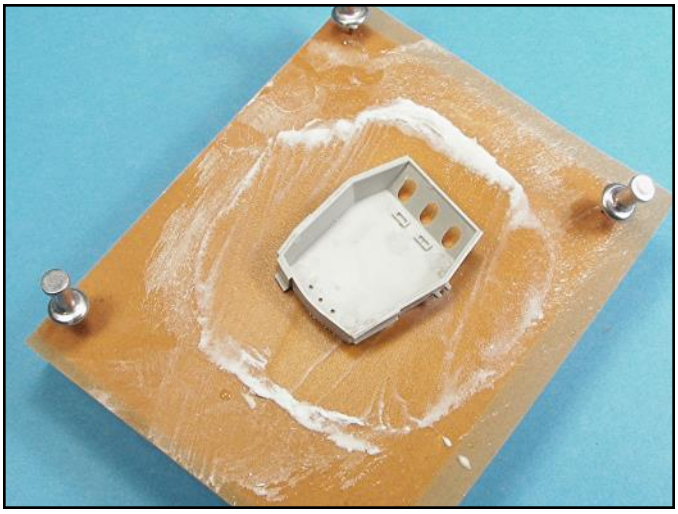
To polish the surface of the barrels and restore the round shape, 0000 steel wool pads were wrapped around the barrels and the plastic was rotated inside the pads.



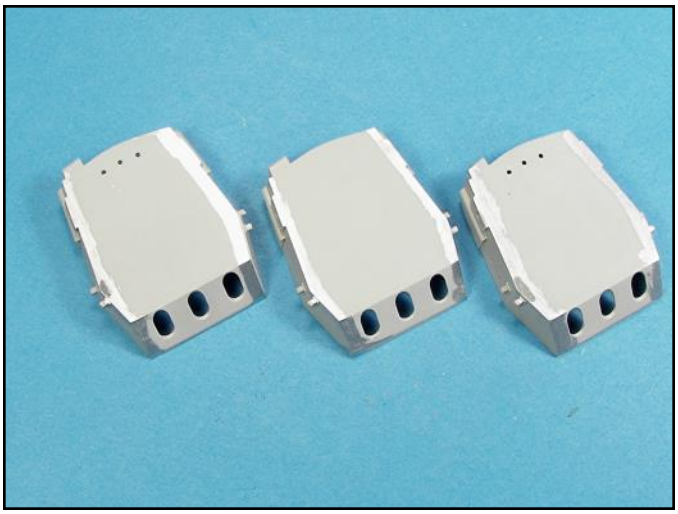
The barrel tips were hollowed out using various sizes of drill bits. Use a pin vice to center punch an indentation in the tip of each barrel and then use the smallest drill bit for the first hole and then graduate to progressively larger bits.



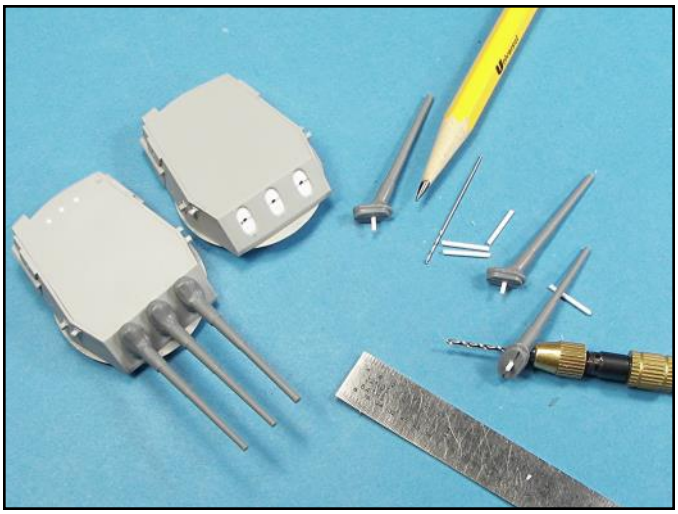
The Trumpeter 16 inch turrets have separate sides that have fit challenges along the top and the front. A lot of super glue was applied along the seam lines to fill the voids.



The turret tops and the fronts were wet sanded to smooth out the super glue. This destroys the surface detail, but some of it will be restored.



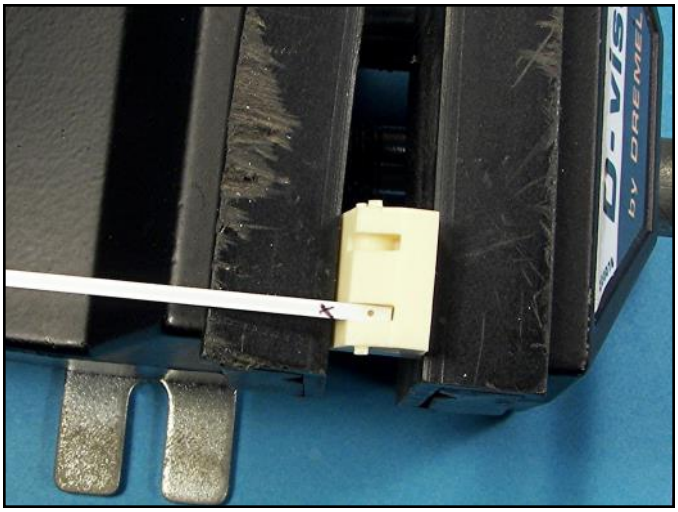
The seam lines were checked with silver paint and additional super glue applied in needed areas. The sanding and finishing process was then repeated until the seams disappeared.



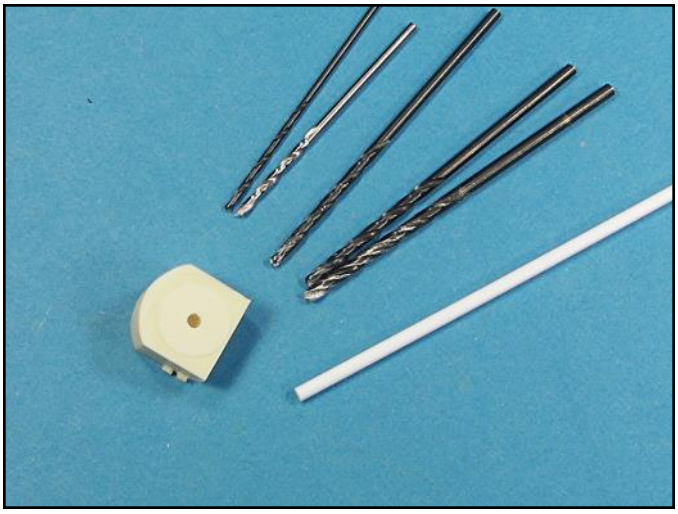
Small sections of plastic were glued to the back side of the gun openings. The guns had rods set into their bases along with corresponding holes in the turret face so that each barrel would have a strong, positive attachment.

The locations of the turret vents were marked, holes drilled and then .035 inch round stock was cut and glued into place. The optical range finders were added, the turrets primed and then the photoetch ladders were added.

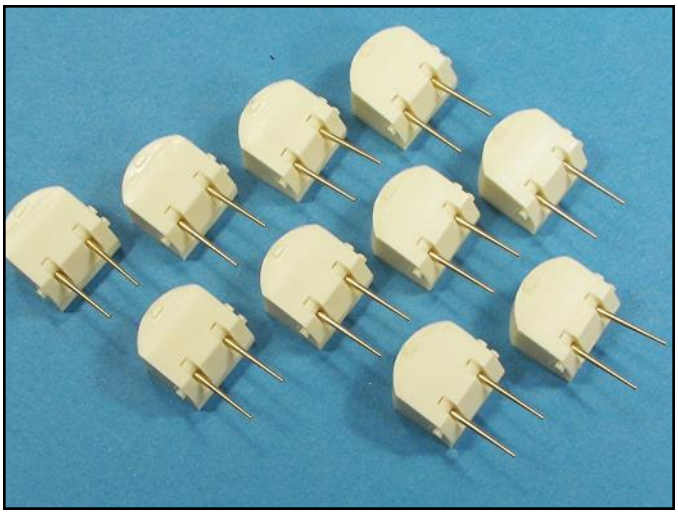
The kits 5 inch turrets were replaced with cast resin ones from Voyager Models. The castings were easy to clean up and beautifully cast. The brass barrels have stems to set them correctly and indentations in the tips!



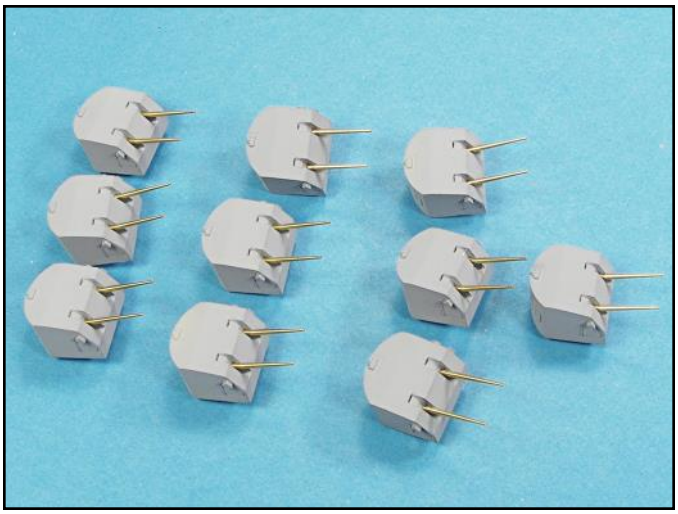
To set the position of the barrels I made a gauge from .015 x .040 inch sheet with a .0225 inch hole. I used a pin vise to indent the surface on the turret and then used a .0225 inch bit to drill the barrel holes.



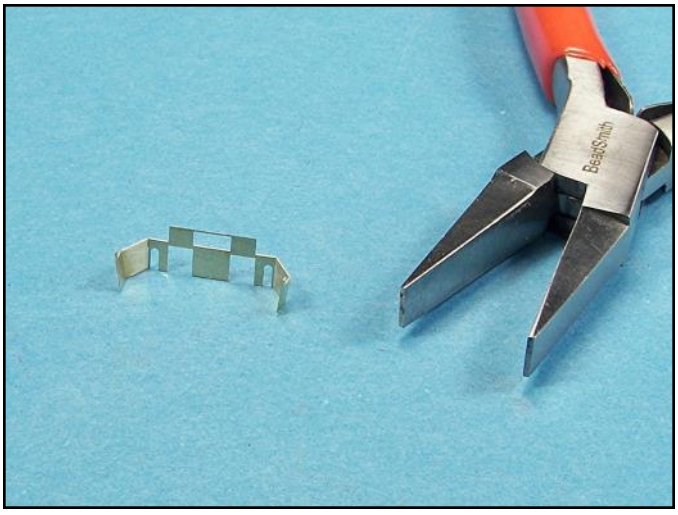
To set the turrets correctly on the deck I drilled a .082 inch hole in the bottom and added short lengths of .080 inch plastic rod. This diameter rod almost matched the diameter of the round holes on the deck.



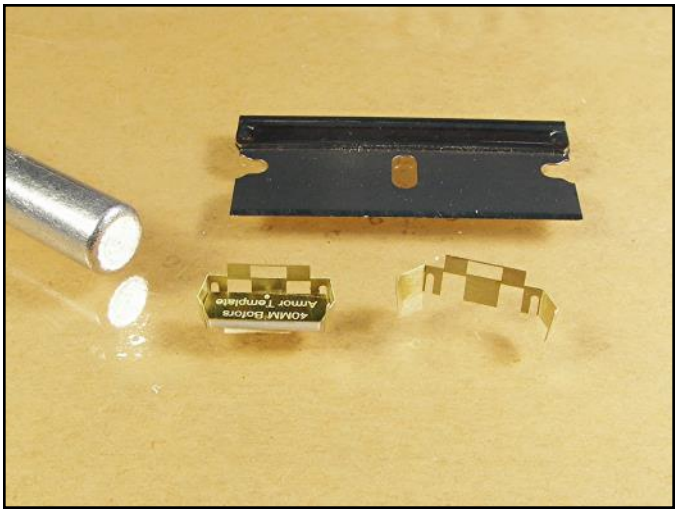
The barrels were first set with white glue so they could be adjusted and then secured with tiny drops of super glue. The barrels need to be set straight and both barrels on each turret need to be the positioned at the same angle.



The turrets were primed to check for surface flaws. These castings were flawless with no surface bubbles or voids. I have several sets and all of them have flawless castings.

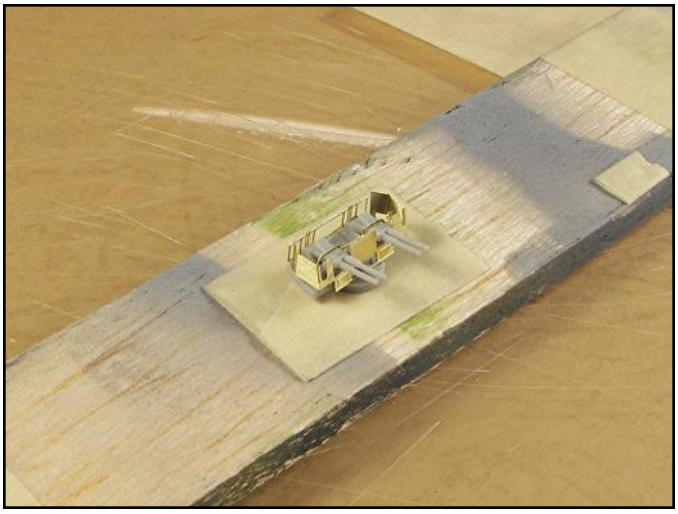


The Gold Medal Models Photoetch detail set comes with 40mm shields and they are easy to shape and install. I slightly pre-bent the shields along the bend lines as a first step.

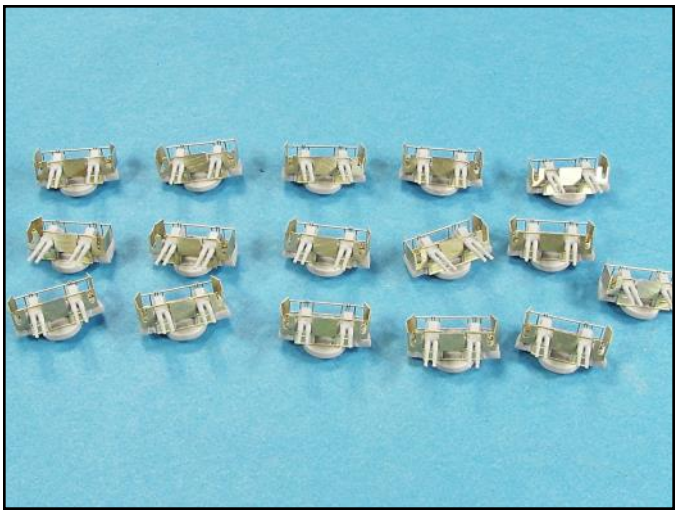


The photoetch detail set also comes with a gauge for setting the correct angles of the shields. I glued the gauge to a .040 inch thick piece of plastic and trimmed it to the gauges shape. Each shield was then folded around the gauge.

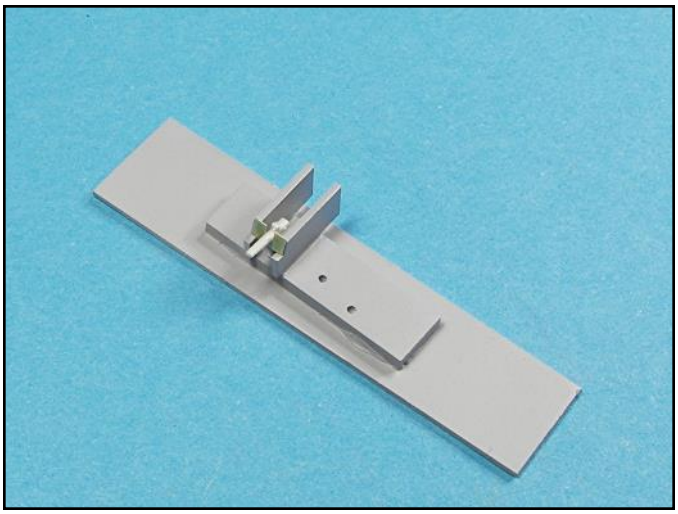
For the quad 40mm assemblies remove the mold lines on the guns, clean up the bases and then glue on the guns. Attach the gun sights and the aft railings. The shields were then bent and attached to the bases with super glue.



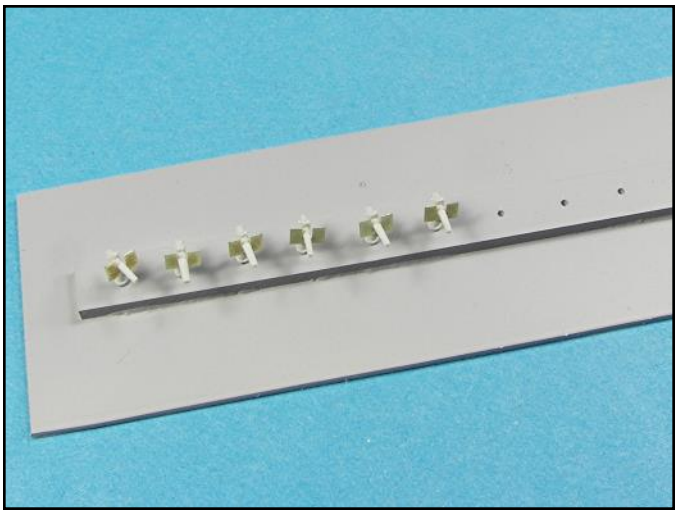
To help with the assembly of each 40mm gun platform, attach the gun platform to a piece of balsa wood with double folded tape so the assembly will not move as you work with it.



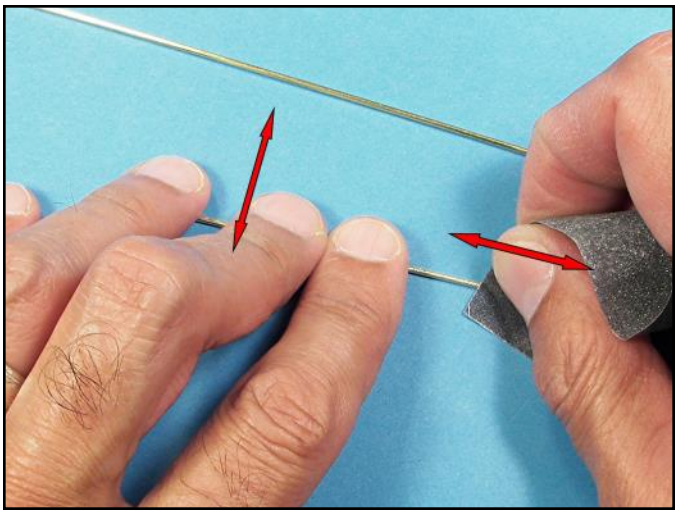
All the 40mm guns are now completely assembled and they are ready to be primed. The gun shields were glued at the lower front end first and then at the back sides where the edges touched the rear of the gun platform.



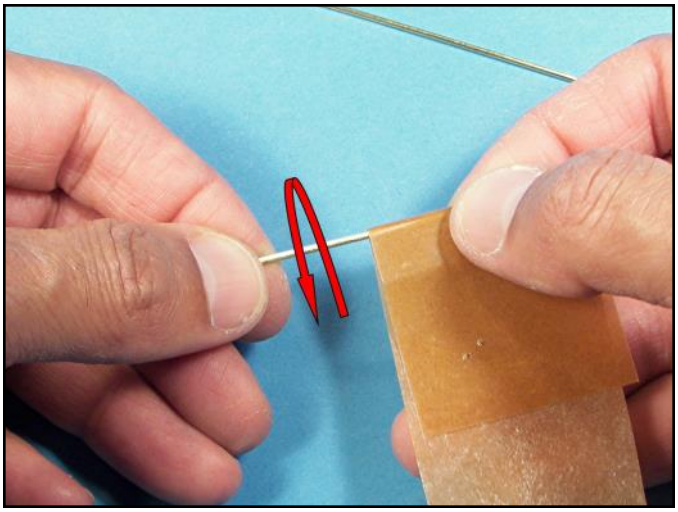
To aid in positioning and attaching the photoetch shields to the Trumpeter 20mm guns, make a jig. The height of the front vertical face is 4/32 inches high, and the angle is approximately 70 degrees.



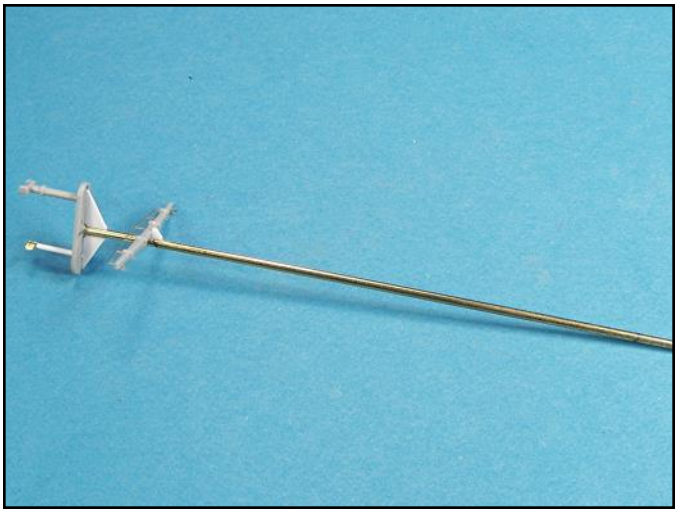
Make a 20mm gun holder so that the assemblies will be positioned upright while drying. This holder can also be used to airbrush the completed guns.



The kit's main mast was replaced with a length of .052 inch diameter brass rod. To give the rod a slight contoured shape along its length sandpaper the surface while rolling the brass rod.

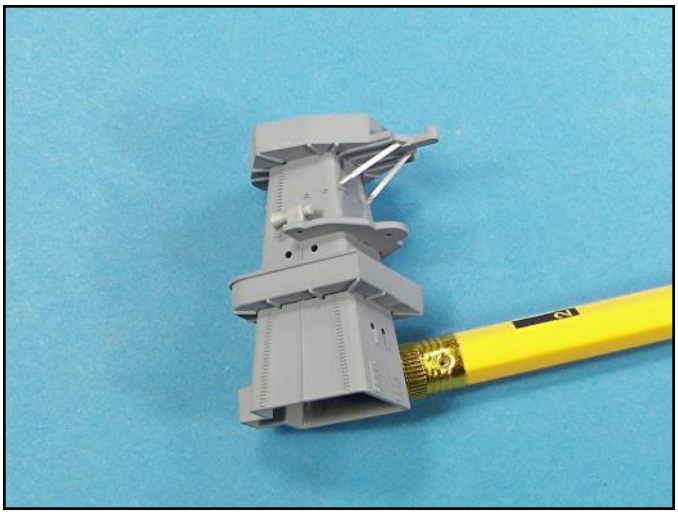


To restore the round shape of the rod, wrap sandpaper around it and rotate the rod while slowly pulling it through the sandpaper



The main mast has been assembled with the kit's parts, small shapes for support bracing were cut using a Northwest Shortline chopper and the Gold Medal Models photoetch details.

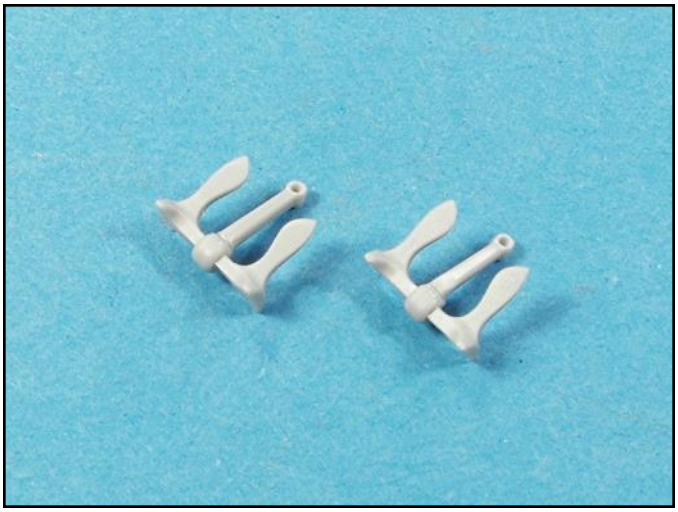
The kit's forward yardarm was not long enough so it was replaced with the Tamiya Missouri yardarm. The photoetch details were then glued into place. The mast assembly will be glued into place after final painting



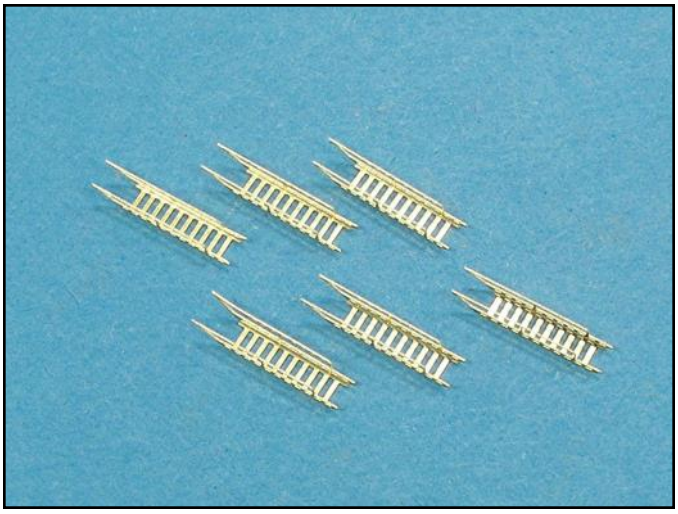
There is no support bracing for the underside of the upper platform so .030 inch plastic rod was cut and form fitted into place. This bracing is very noticeable in reference photos.

The Tamiya Missouri whale boats were used and the GMM details fit perfectly.

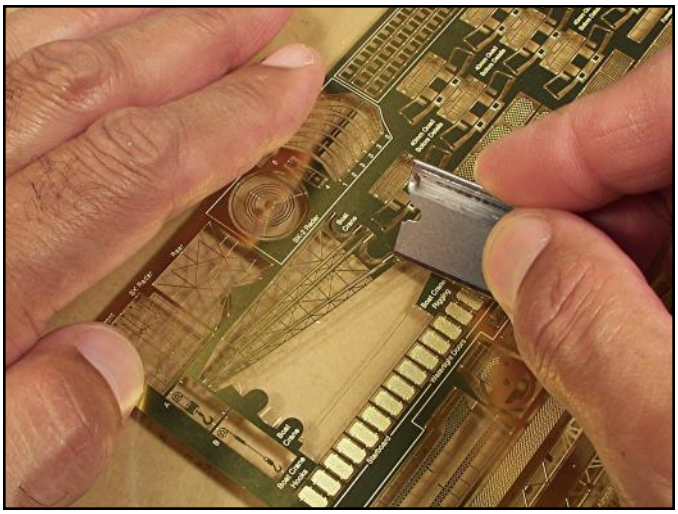
The backsides of the 36 inch searchlights were hollow so I covered them with small .015 inch thick disks punched out with a Waldron punch tool.



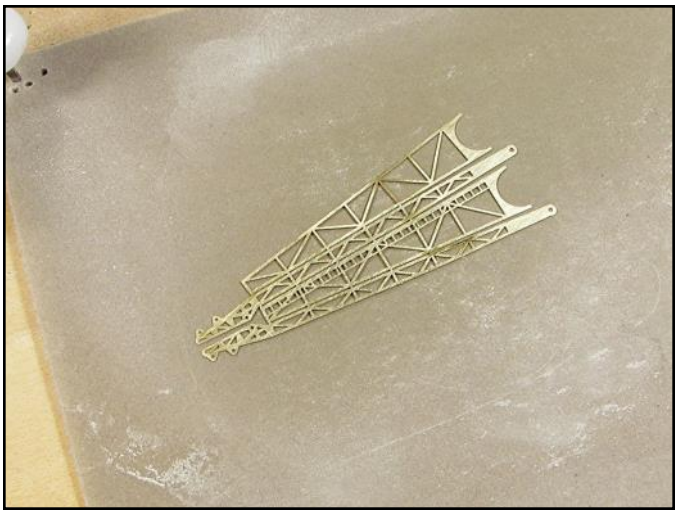
To get the anchors to sit correctly against the side of the hull, I carefully removed the stems at their base, cut the plastic at a slight angle and then glue them back into place.



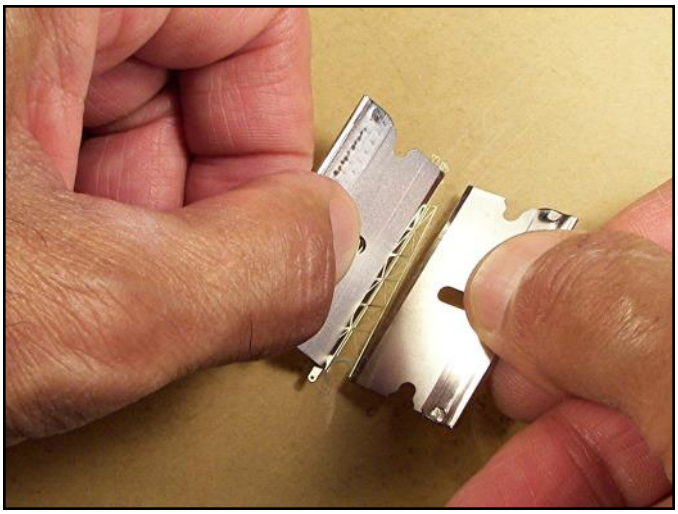
The steps on the photoetch inclined ladders are designed to be turned upward so the ladder steps look real.



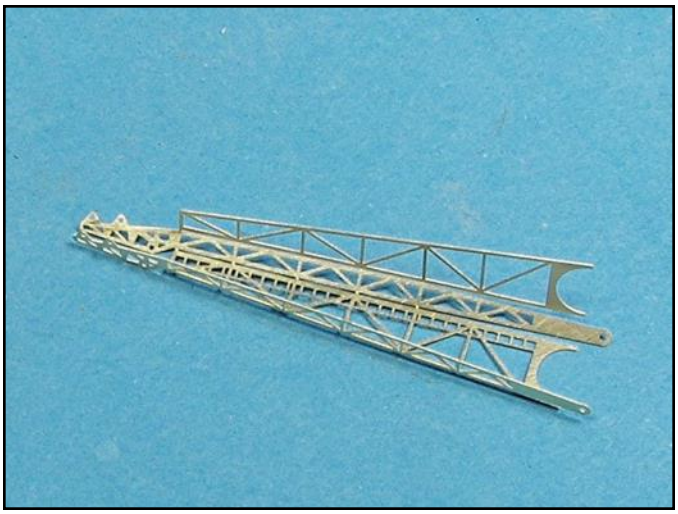
Cut photoetch on a solid surface such as a section of Plexiglas using sharp blades. Cut as much of the tree stubs as close to the part as possible. The remaining stubs can be sanded off with a sanding stick.



Super glue sticks better to a clean surface, so run parts across a stationary piece of 400 grit sandpaper to clean the brass surfaces.

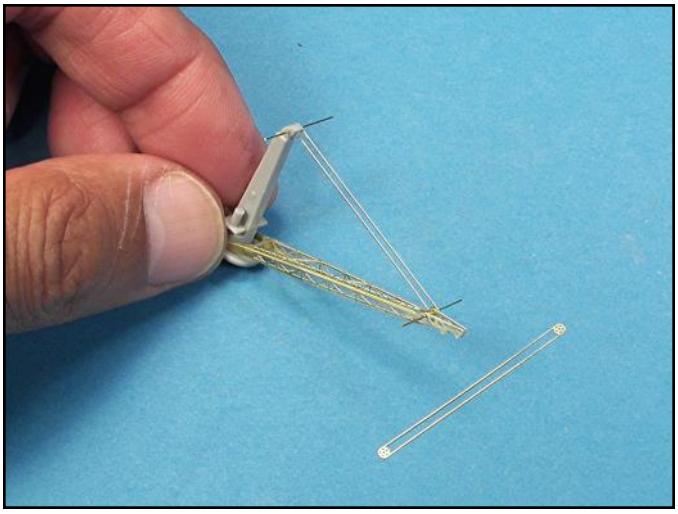


Most photoetch cranes are easily bent into shape using a set of single edge razor blades. The one on the left holds the part in place at the fold line and the one on the right is slid under the fold line and then bent up.

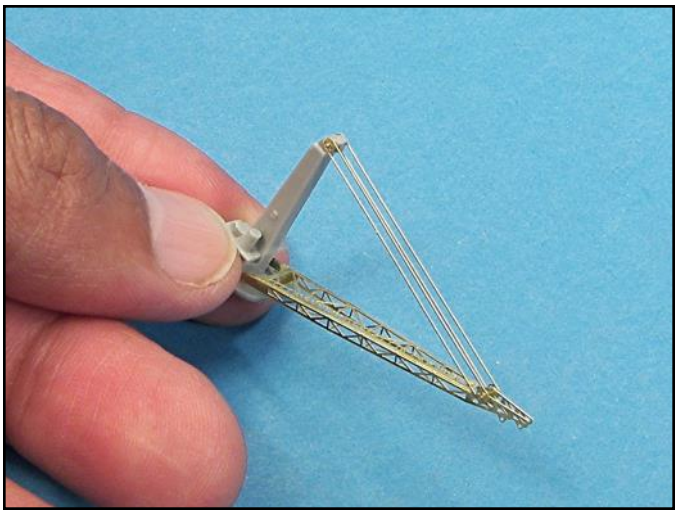


Bending the sides of a crane takes time and careful work. Get the sides positioned first then slowly bend the top into place. The assembly can then be super glued along the seam line where the brass edges met.

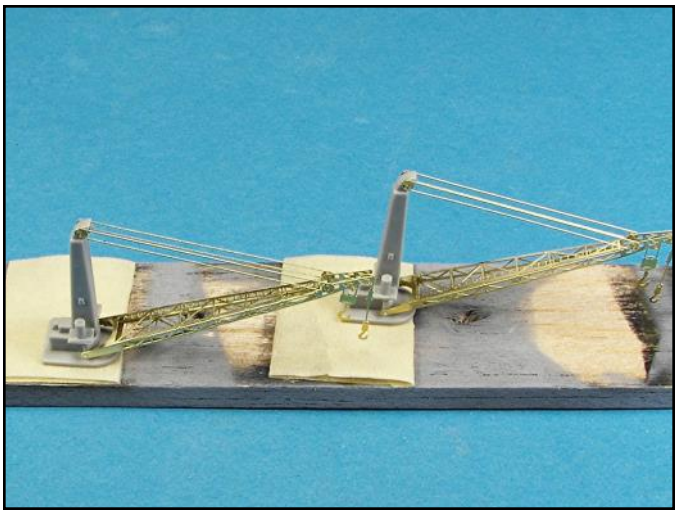
The Gold Medal Model cranes are designed to fit into the positioning stubs located at the base of the kits vertical crane pedestals.



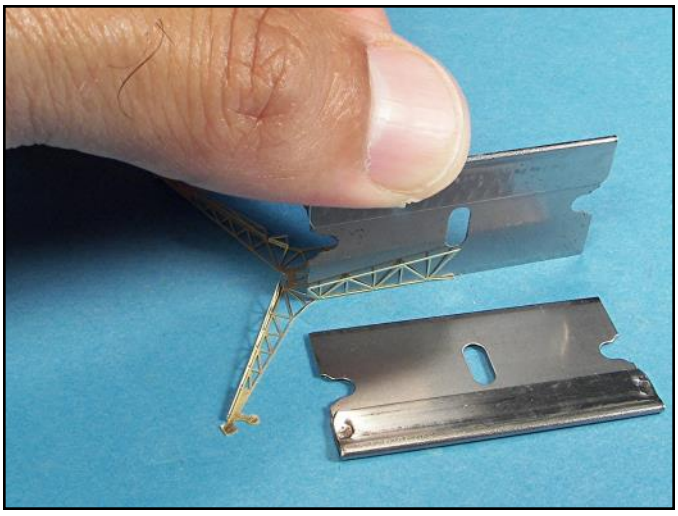
To set the crane cables, drill a hole through the top of each pedestal and pin the cable parts into place with .012 inch diameter brass wire.



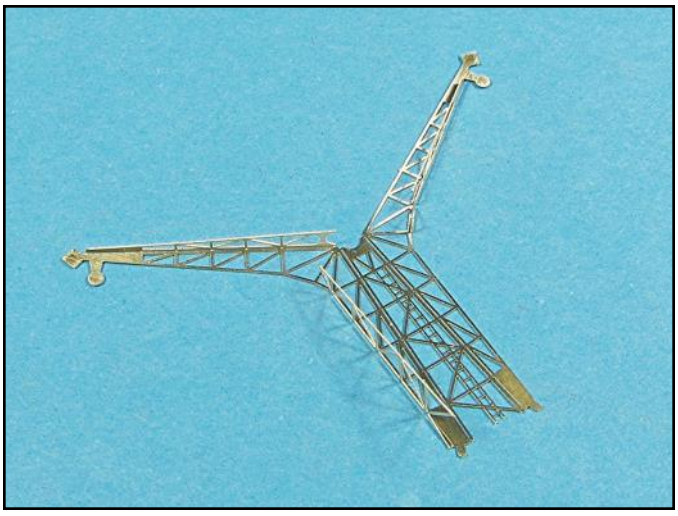
Small drops of super glue were applied to the brass wire and then the wire was carefully trimmed with a pair of sharp wire snipers.



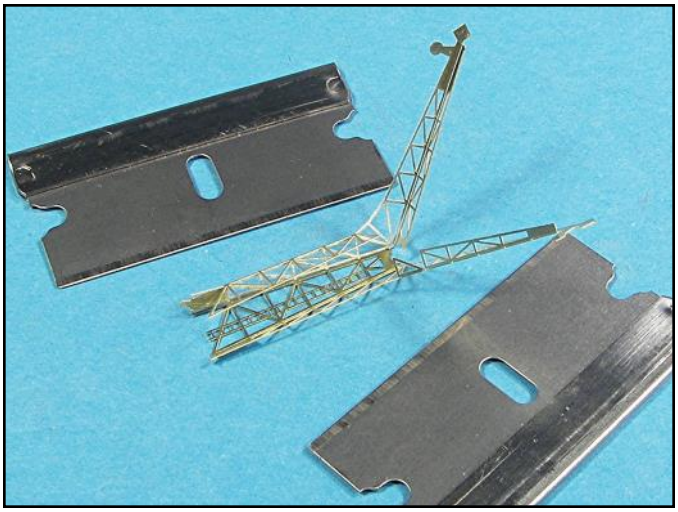
The last step in building the cranes was to add the hooks. These assemblies are now ready for priming.



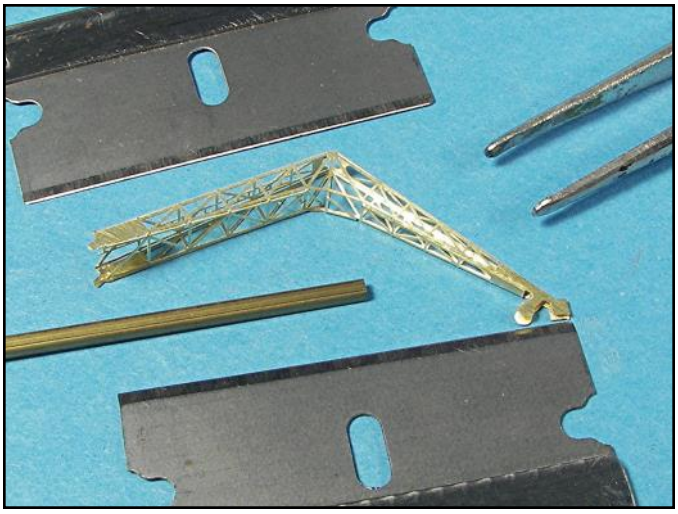
The aft aircraft crane has multiple surfaces bent at different angles. Here again, use single edge razors to bend the surfaces. Do not press down very hard as the blade can damage or cut through the photoetch.



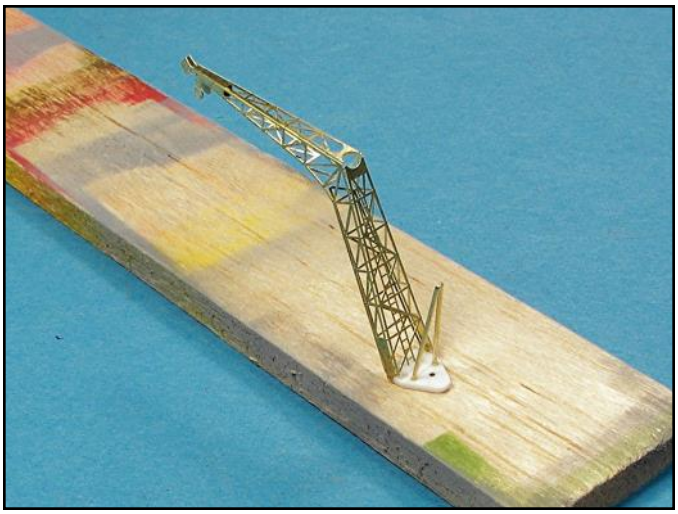
All three outer sides of the aft aircraft crane are folded up 90 degrees.



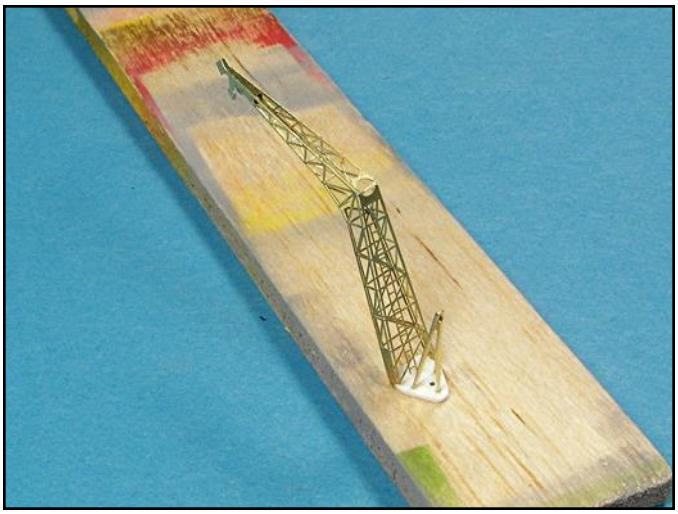
Next put bend creases into the aft sections so they can be folded 90 degrees with a pair of tweezers. The outer edges that were folded first will interfere if you try to complete the bends without using tweezers.



The crane folds are complete and the edges are flush and ready to be super glued. To keep the folds sharp as they were bent into shape, use a .062 x .062 inch length of brass, which can be slid into the inside of the crane frame.

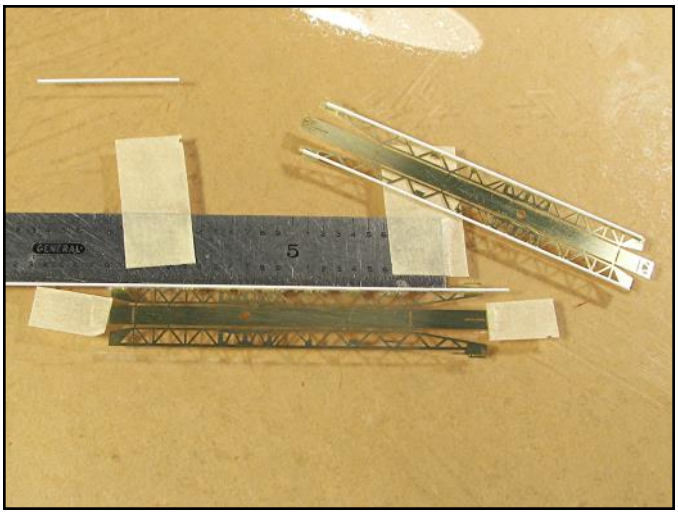


The crane base was made from a .030 inch thick piece of Evergreen plastic. The strong back frame is made from .020 inch diameter brass rod bent into a "V" shape.

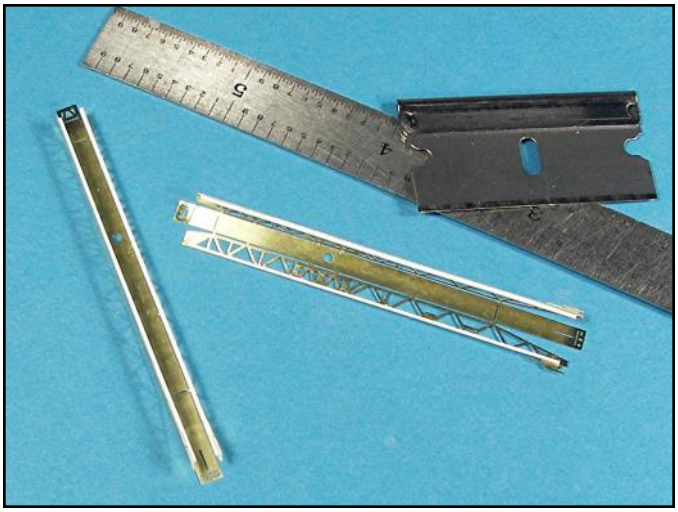


Next, add the back end of the strong back using the same diameter brass rod. The parts were then super glued together.

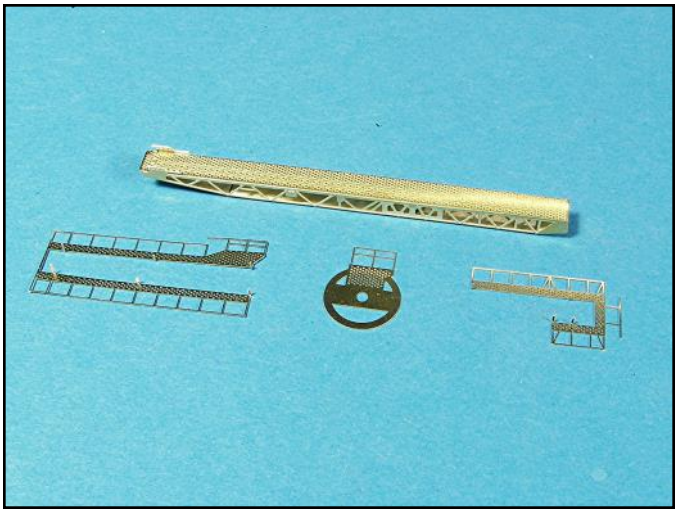
The last parts to add were the photoetch details for the cables and the crane hooks.



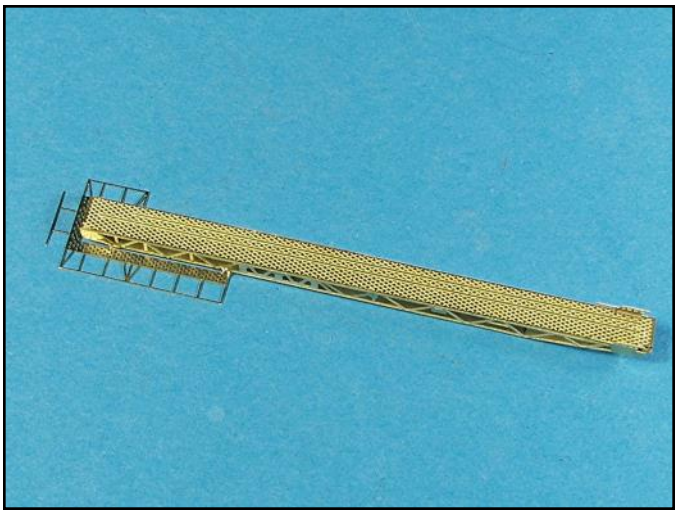
To help with the assembly of the catapults add .020 x. 020 inch strips to the tops of the frames so that the catapult platform will have a positive seating for gluing.



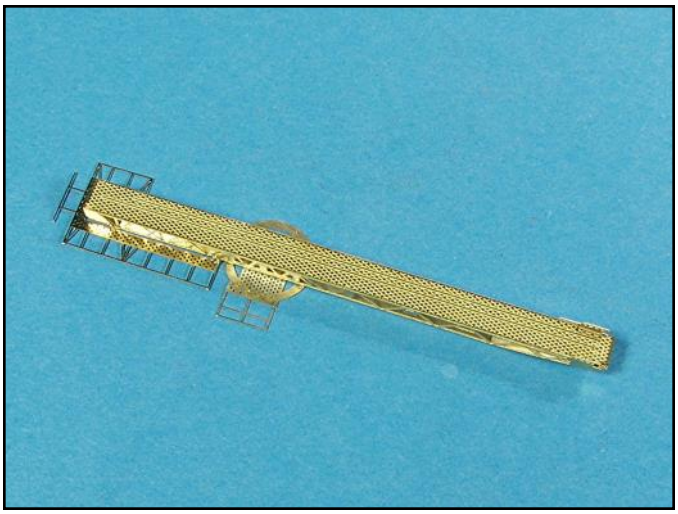
The catapult sides were then bent up at 90 degrees using a 6 inch straight edge and a single edge razor blade.



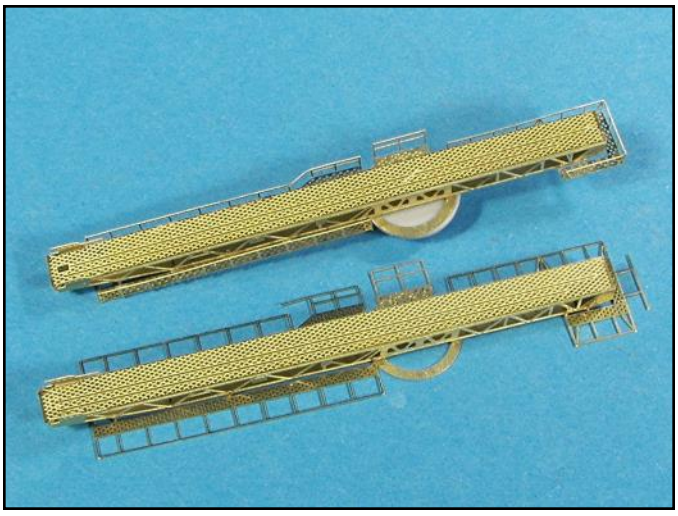
The catapult top was then glued into place and the platform parts were cleaned up and prepared for attachment by running them across a stationary piece of 400 grit sandpaper to clean the surfaces.



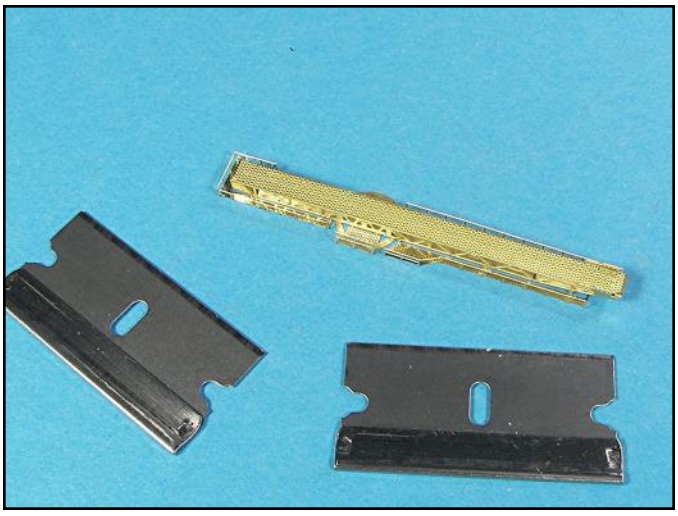
Attach the platform parts first and then bend up the railings. The tiny tabs on the inside lips of the platform are bent up 90 degrees and then the part is slid into place and glued using the tiny stubs



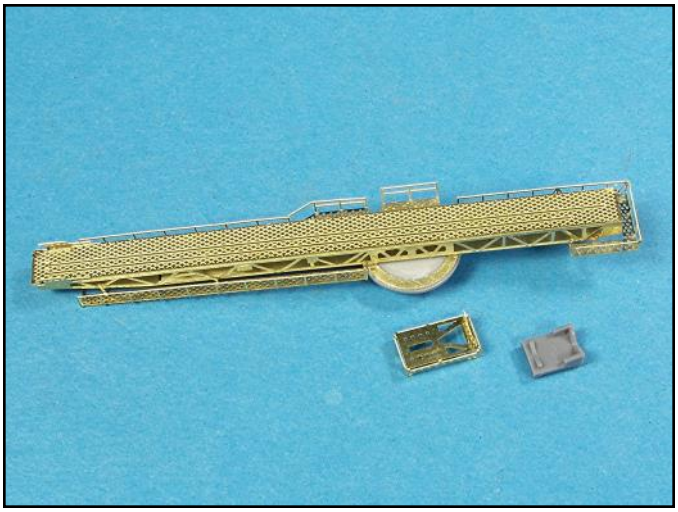
The center section is added next. There is a positioning hole on the underside of the catapult and in the circular part for alignment and it also needs to be set straight along the length of the catapult.



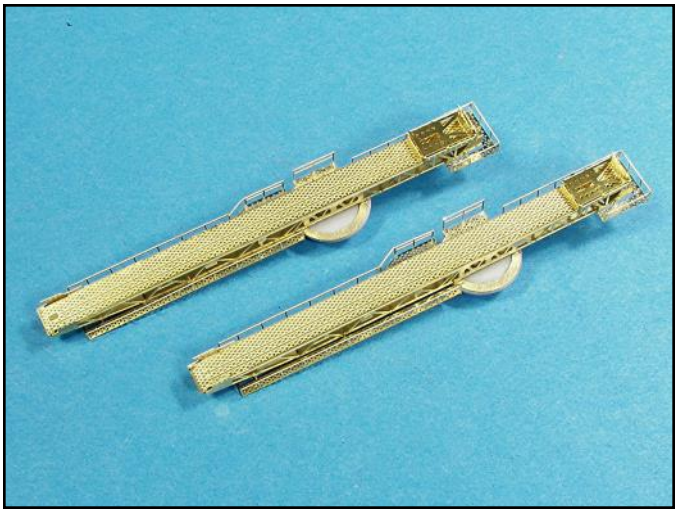
The forward section is added last. Here again the tiny stubs are bent up and the catapult assembly is slid over the forward platform. The upper platform has already been completed and the kit's catapult base attached.



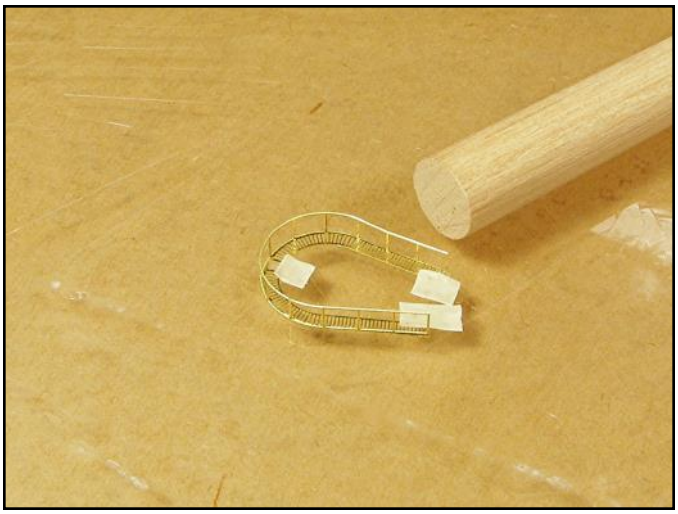
The railings were bent up 90 degrees using two single edge razor blades.



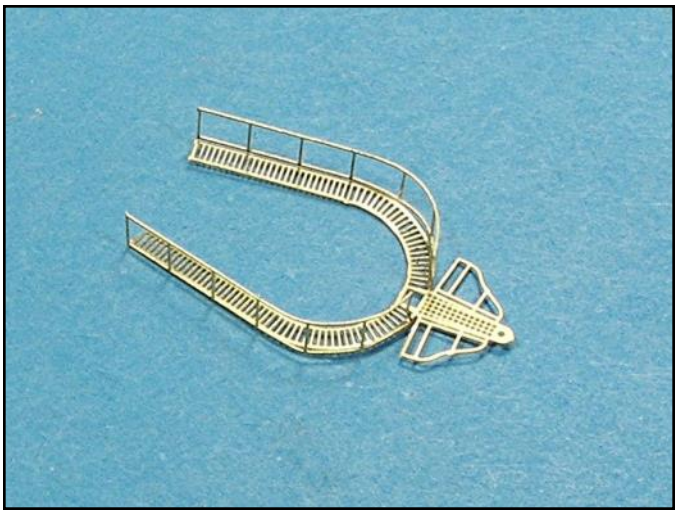
The aircraft cradles were bent into shape. The Tamiya Missouri cradle almost got used instead of the photoetch ones.



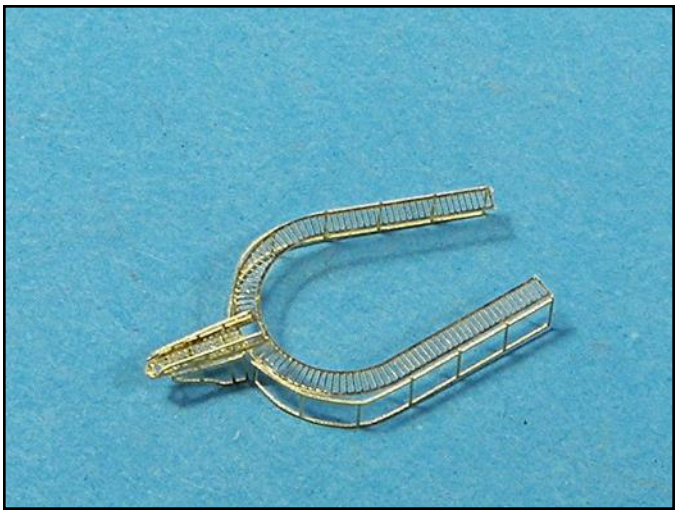
The two assemblies are now complete and ready for priming and painting.



To work with the delicate smoke stack platforms, carefully tape them to a piece of Plexiglas, shape the railings and glue them into place.

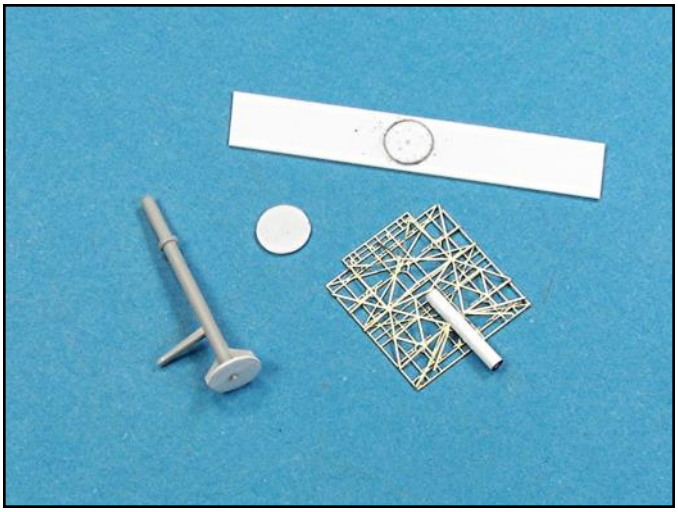


The other stack platform had its railings attached so they were bent up 90 degrees first, then slightly curved and then glued into place. The last step was to fold up the tiny railings on the catwalk.



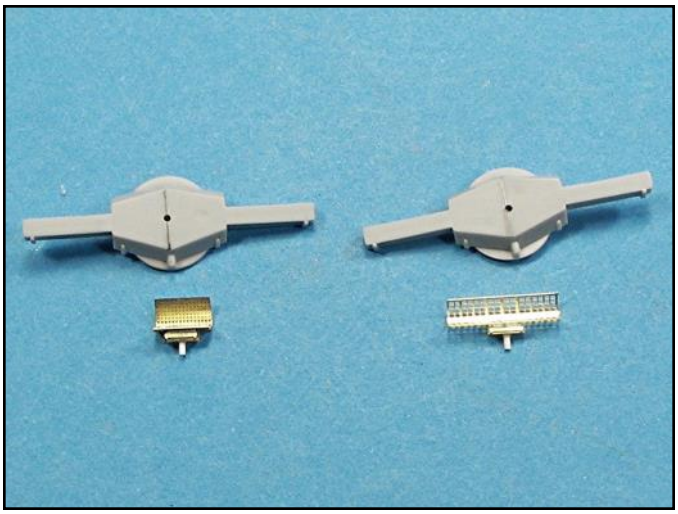
The underside framing was carefully positioned and glued into place with tiny drops of white glue. Once the parts were positioned and the glued dried, super glue was added to strengthen the assembly.

The smoke stack platforms were then glued to their respective stacks. Be careful, as the photoetch assemblies are different for each smoke stack.

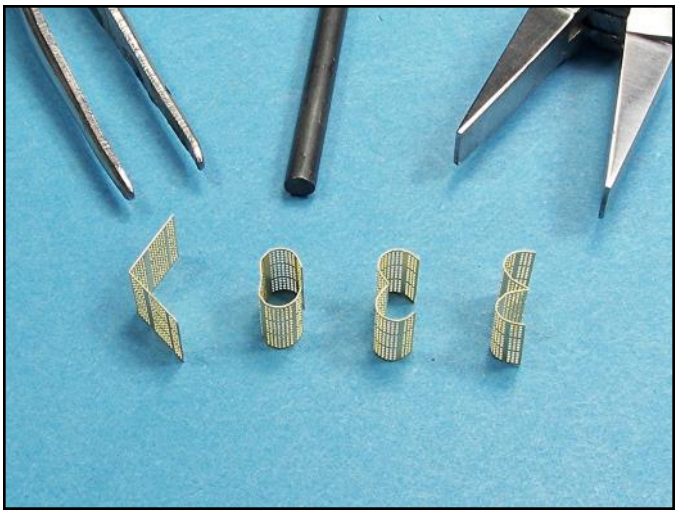


The ship will be painted measure 21 (navy blue & deck blue) as she appeared in 1943. The forward mast and radar were slightly different in 1943. Use the kit's mast and make a circular platform for the SK radar.

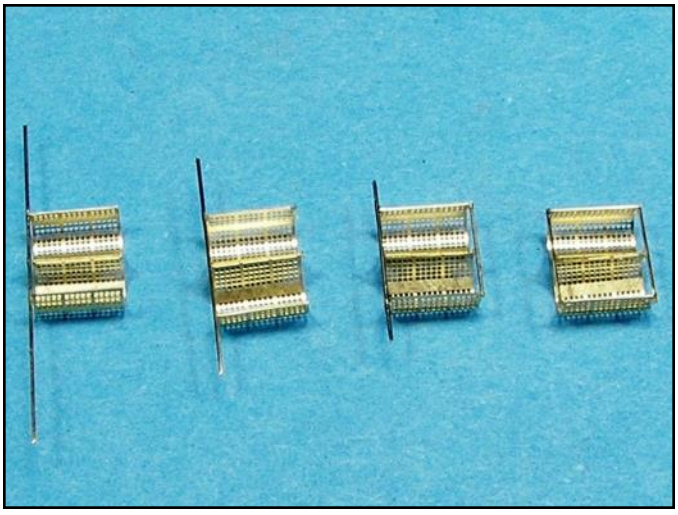
Another back date were the MK-3 radars that were installed on top of the 16 inch fire control range finders. These were later replaced with the MK-8 fire control radar. The molded on framing also needed to be removed.



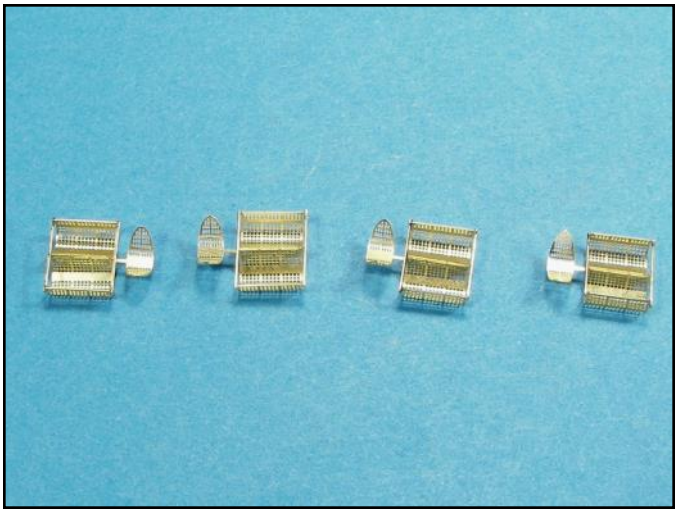
Both the front and aft range finding radars were slightly different in size. The forward MK-3 was 3x12 and the aft one was 6x6. The radars were modified from radar sheets from Toms Model Works and Gold Medal Models.



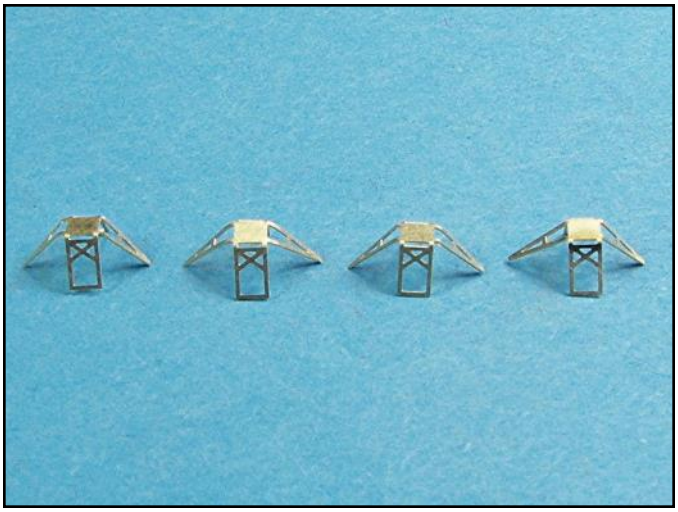
This is the sequence for bending and shaping the MK-37 gun director radars.



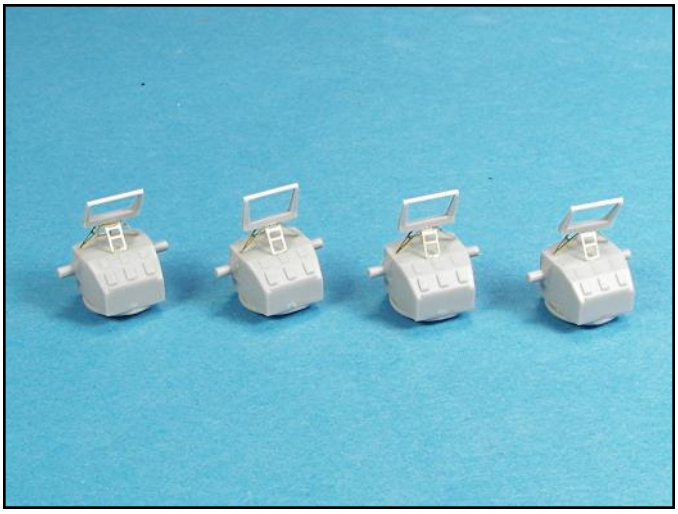
To represent the side frame of the radar screen, glue .012 brass rod lengths to the edges and then trim them to size. Flatten the tips with the edge of a sanding stick.



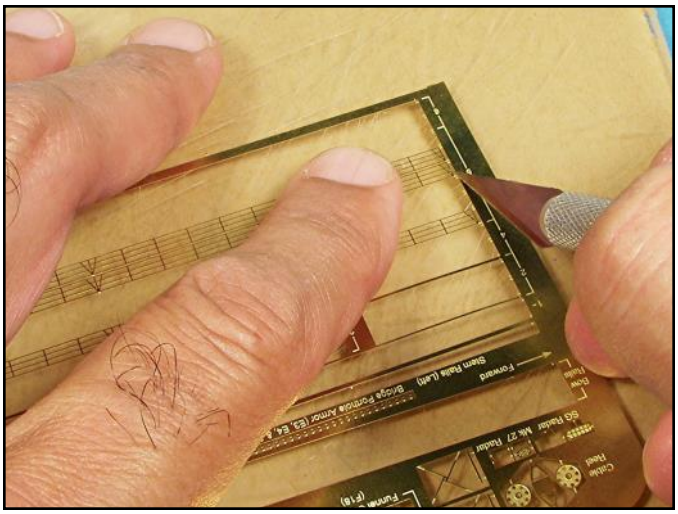
The side radars were shaped and then attached with .012 brass rod. The rod lengths were placed on the backsides of the radars and inside the bend between the upper and lower panels.



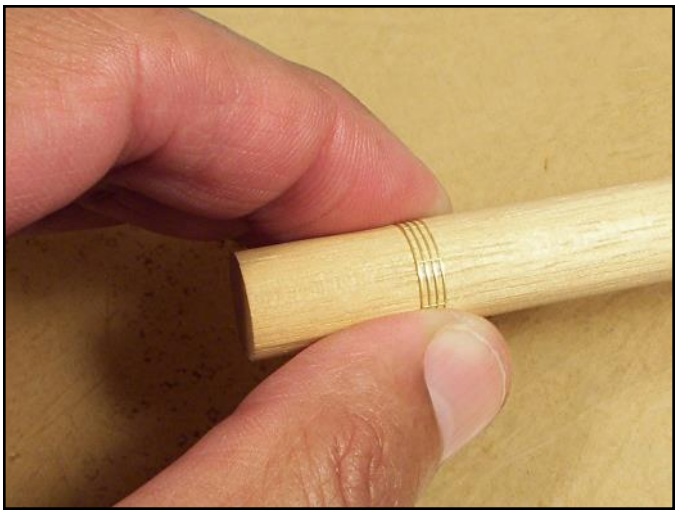
Bend the MK-37 bases together to help ensure that they are all the same shape and height.



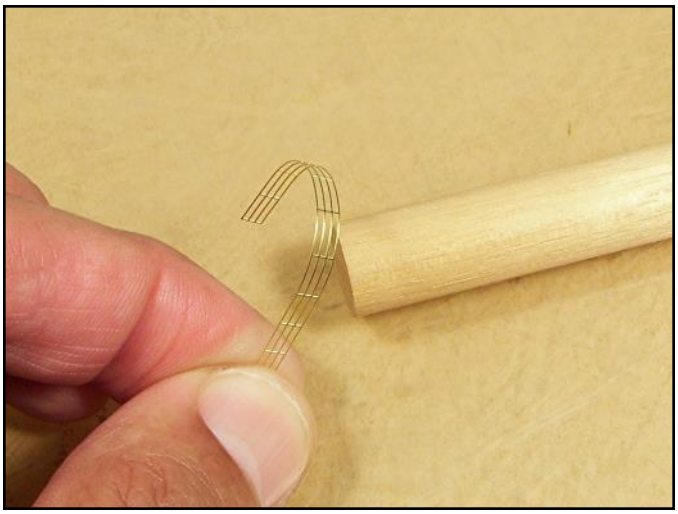
The photoetch bases were super glued to the directors. Then I attached .020 inch diameter plastic rod to the kits radar frames and glued the assembly to the photoetch bases.



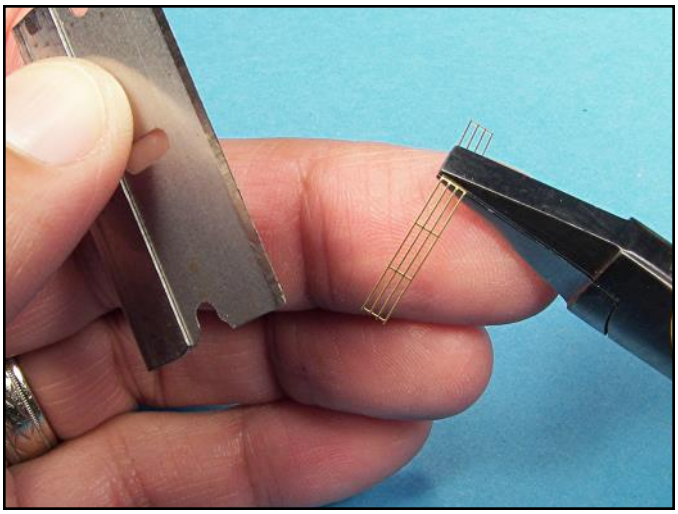
Although the GMM railings are petite and thin, they are very strong. Cut and trim the railings with the tip of a sharp number 11 X-Acto blade.



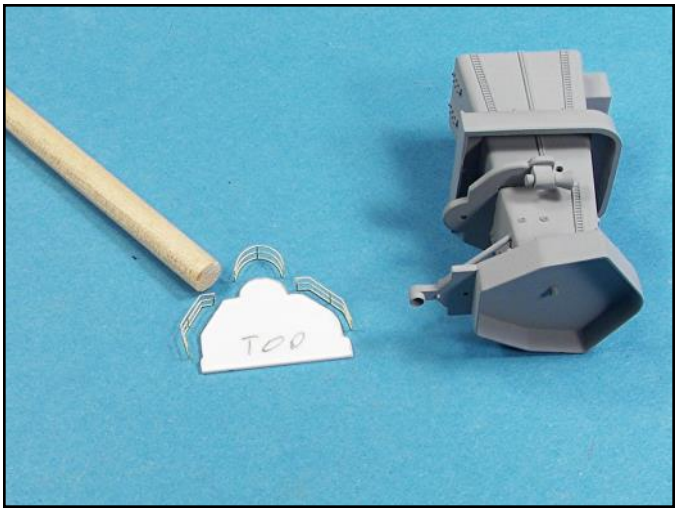
To achieve curves use wood dowels and the stems of drill bits. Use a diameter slightly smaller than the one you need, as the curve you form in the railings will spring back some resulting in a slightly bigger radius.



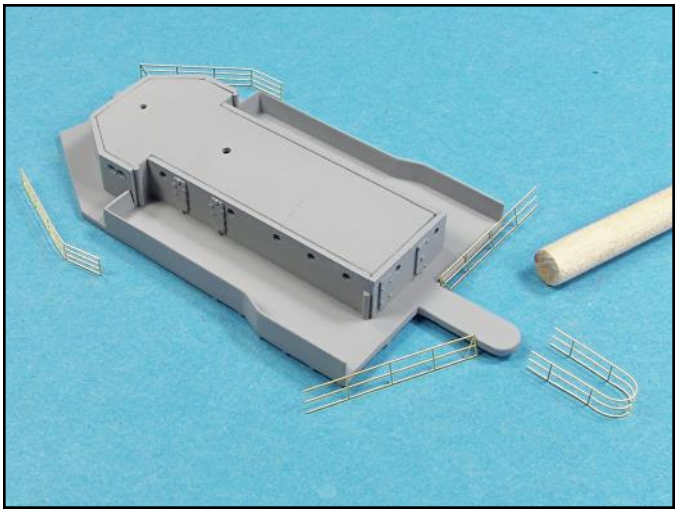
Careful shaping of the railing around a dowel will produce a nice curve with no distortions or bends.



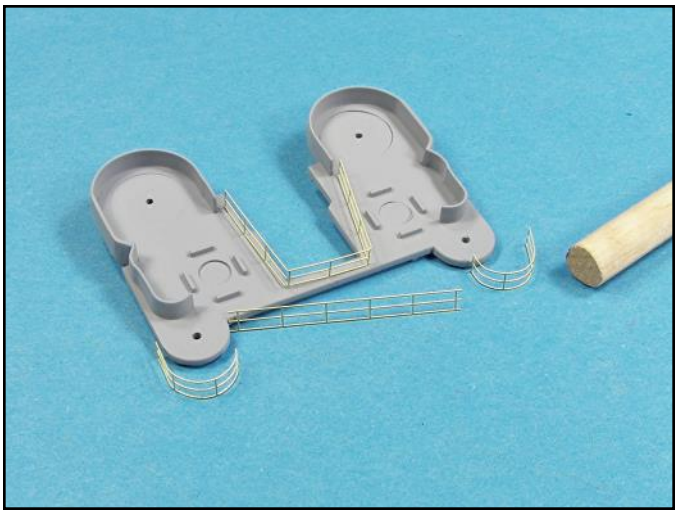
To get a sharp bend at a stanchion, position the railing at the bend location inside the jaws of flat nosed pliers and use a single edge razor blade to bend the photoetch and get the correct angle.



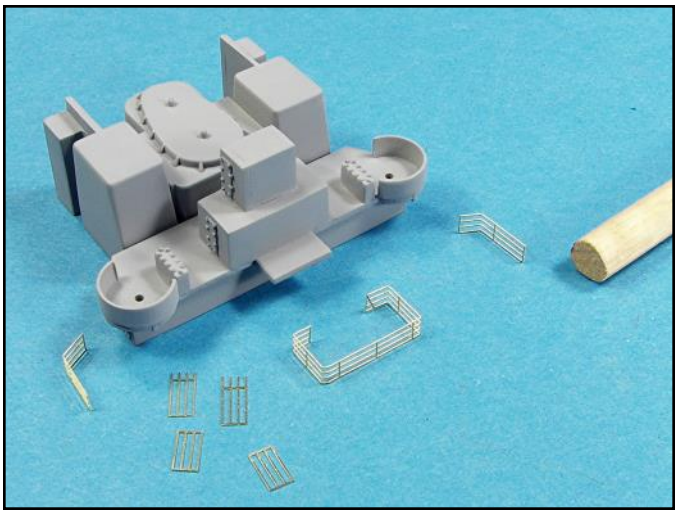
To bend and shape railings for hard to get to deck areas, make a template from the deck part prior to construction. This template is for the ships horn and searchlight platform.



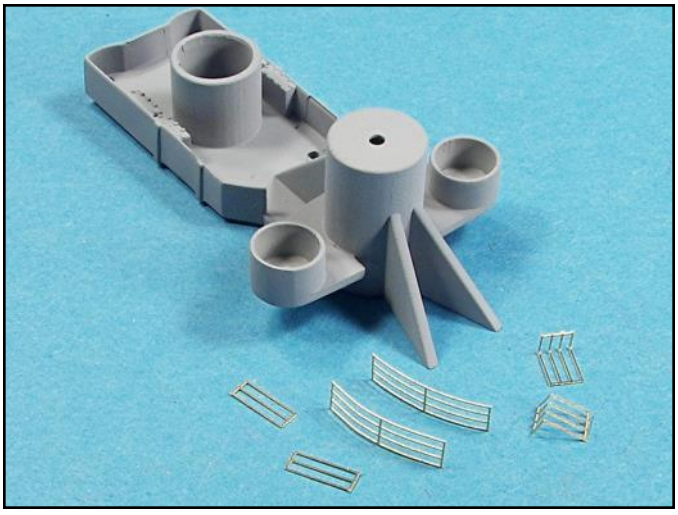
Sometimes it is easier to make railing sections and then join them together. The railings on the back side of this platform were cut between the stanchions. The individual railing lengths will be glued together with tiny drops of white glue.



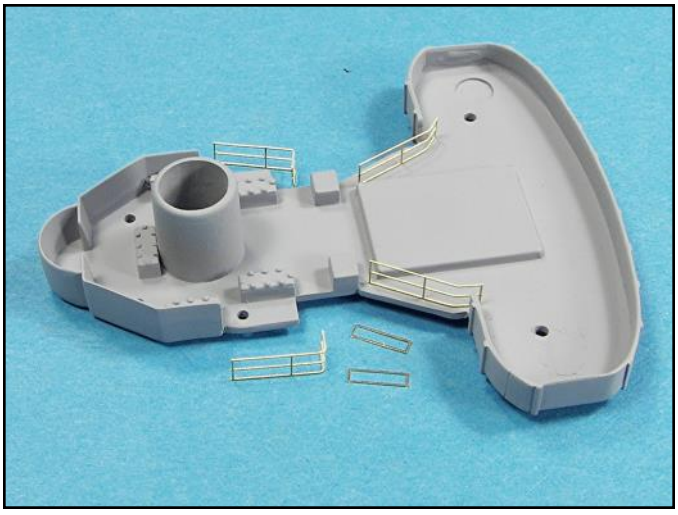
Complex railing lengths can be more easily achieved by breaking them into sections. This approach greatly reduces the amount of time spent bending, shaping and form fitting railings lengths.



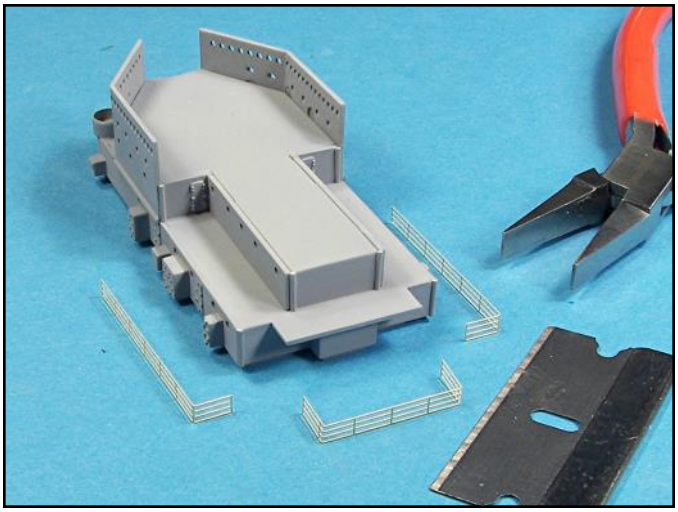
Railings in tight fitting locations need to be carefully trimmed and shaped.



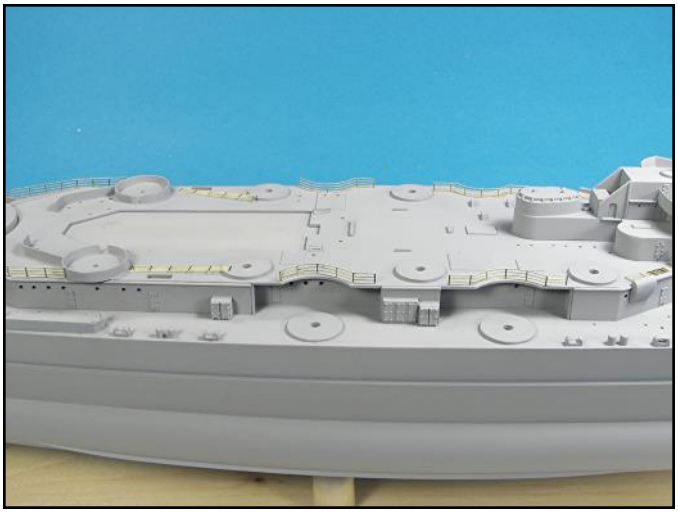
Here is another example of several sections of railings that required careful measuring, bending and shaping.



Sometimes you have to trim the railing height down, as well as along their lengths.



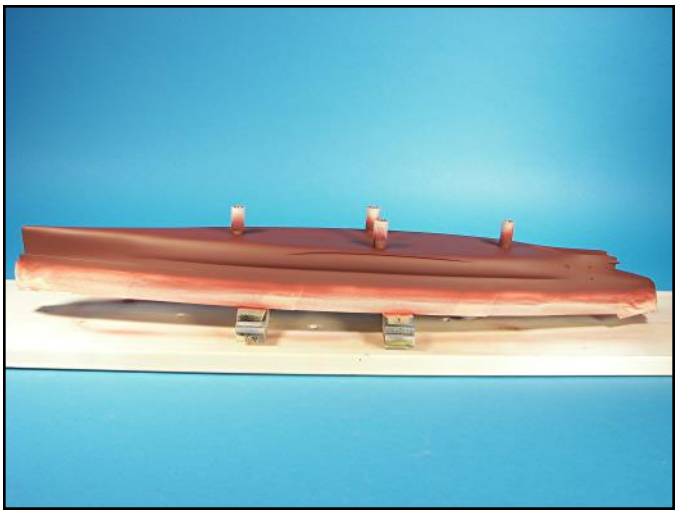
Note how sharp the bends are and the railing lengths are very straight. It is easy to distort the railings when bending them so position the railings inside the flat nosed pliers carefully so that the bends will be sharp and straight.



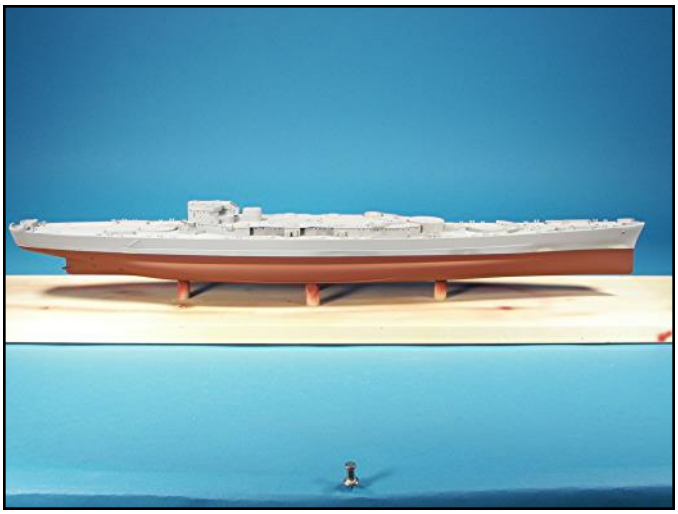
The deck railings on the 01 level are getting their final fit check. Be sure that railings on both sides are the same shape and length. The railings should also not interfere with the 5 inch gun turrets.

To set the water line, lightly sand off some of the primer and be sure to remove all the paint dust from the surface.

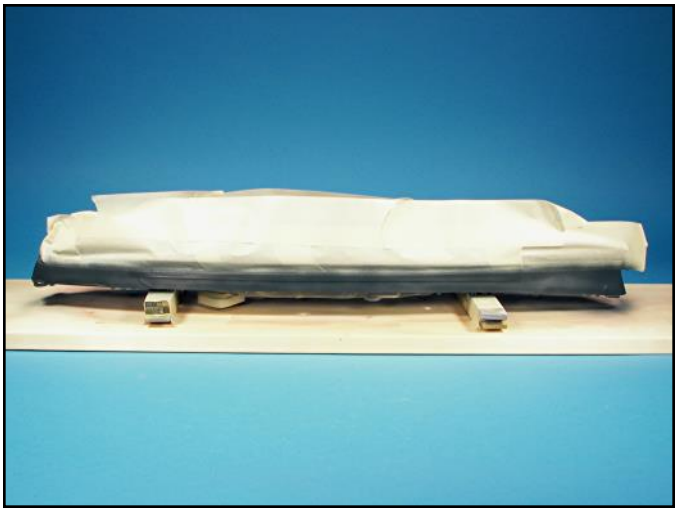
The red and gray plastic demarcation line is where the masking tape will be placed so that the hull red color can be airbrushed.



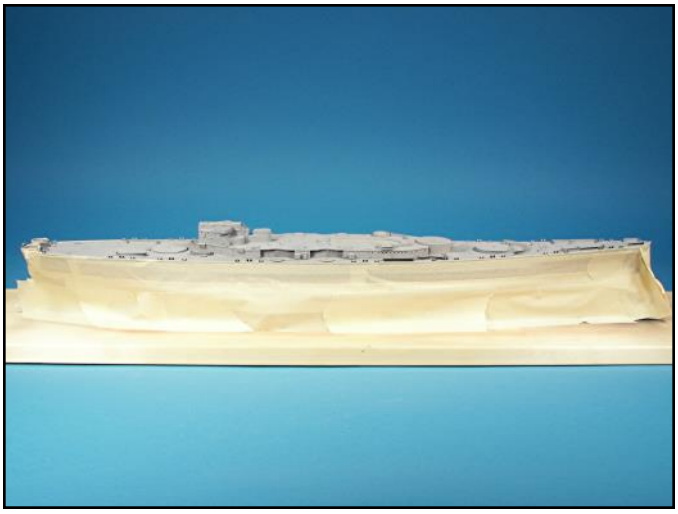
Masking tape with a clean cut edge was placed along the demarcation line and then the upper hull area was masked. The blood red color was achieved by mixing Testors flat red with some flat black.



The blood red color will contrast well with the navy blue color for the upper hull.

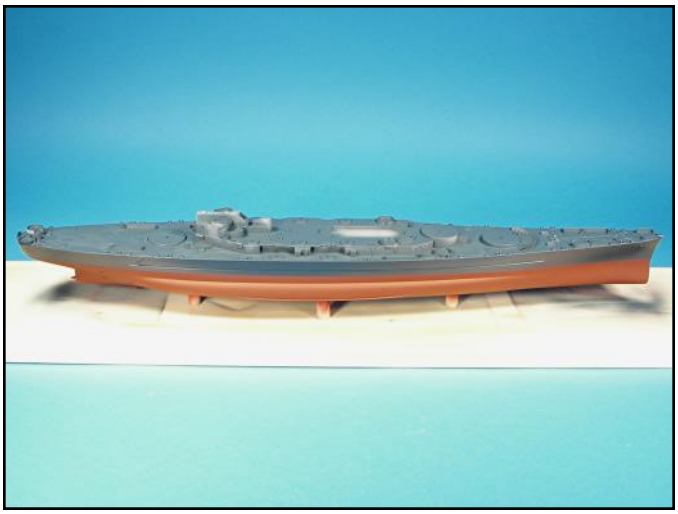


The lower hull was then masked and the navy blue color was airbrushed onto the upper hull. The navy blue color was achieved by adding some intermediate blue to dark sea blue to slightly lighten up the dark sea blue color.

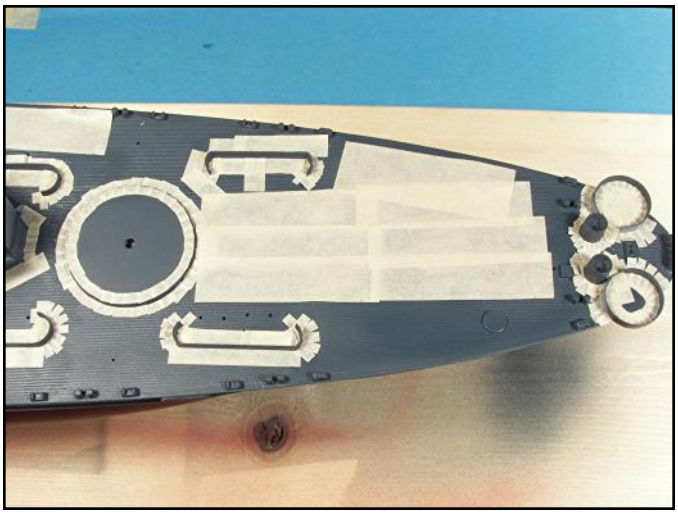


The model was set onto its working platform and then more masking tape was applied to the upper hull to protect it from overspray and paint dust.

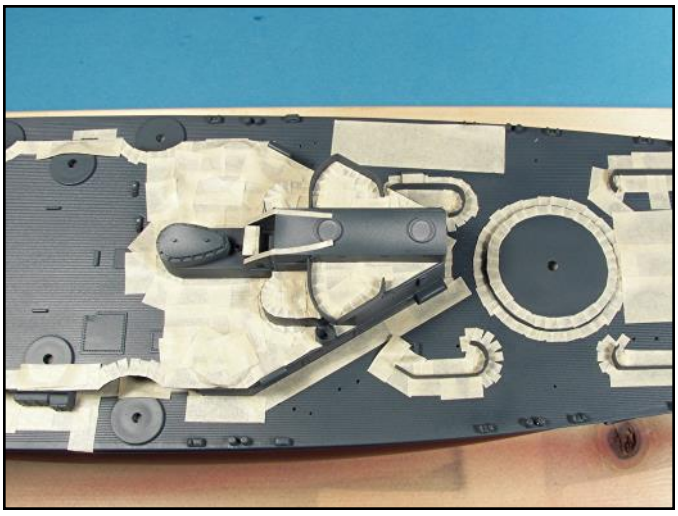
Several light coats of deck blue were airbrushed onto all horizontal deck surfaces. The deck blue color was achieved by mixing additional amounts of intermediate blue with dark sea blue to make the color lighter than the navy blue color.



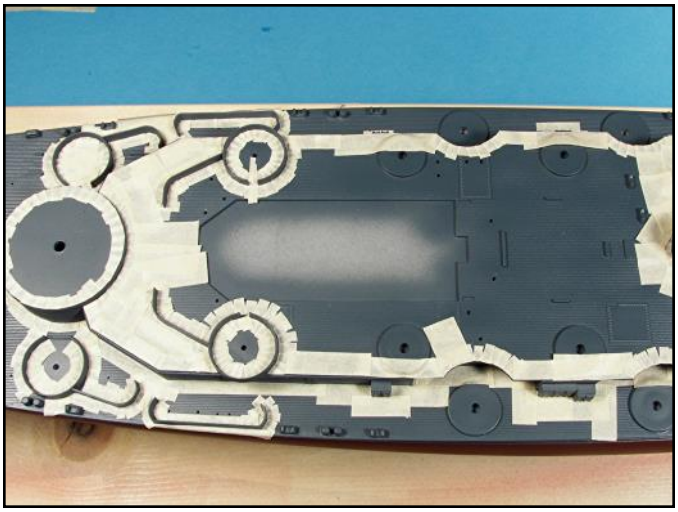
All the masking tape was removed to check the painting progress and ensure that there was no paint bleeding between the hull red, navy blue and deck blue colors.



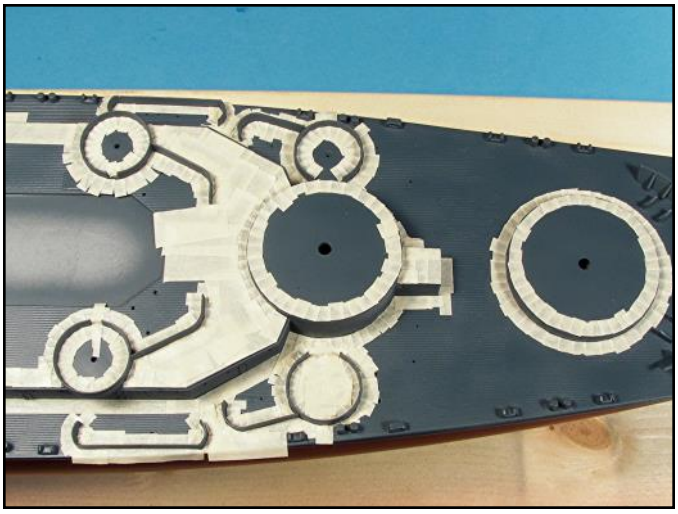
The most tedious part of painting ship models is masking the deck so that all vertical surfaces can be airbrushed navy blue. Use small strips of tape to outline the edges of vertical structures. Push the edges of the tape down with a pencil tip.



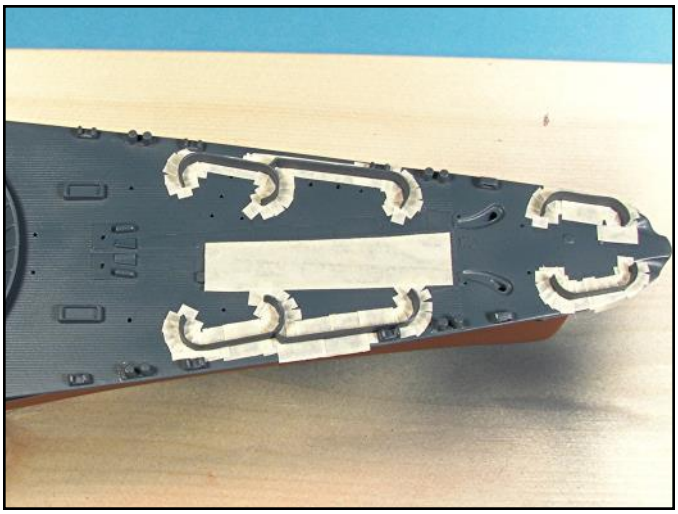
Larger sections of tape are used to fill in the areas around the outlines of vertical structures.



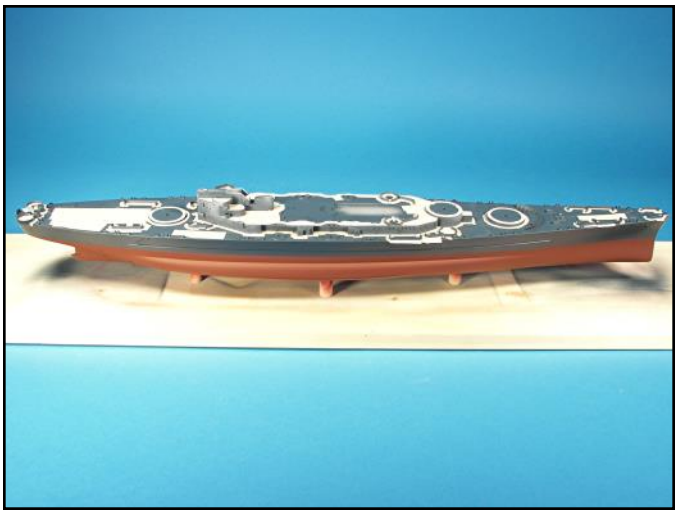
Lay two layers of masking tape on top of one another and cut out sections of tape from the top layer for masking using a sharp number 11 X-Acto blade.



Peel up each small tape section with the tip of the blade and carefully position the tape onto the surface. Hold the free edge of the tape down with a toothpick and then pull the blade away. Use the toothpick to set the final tape position.



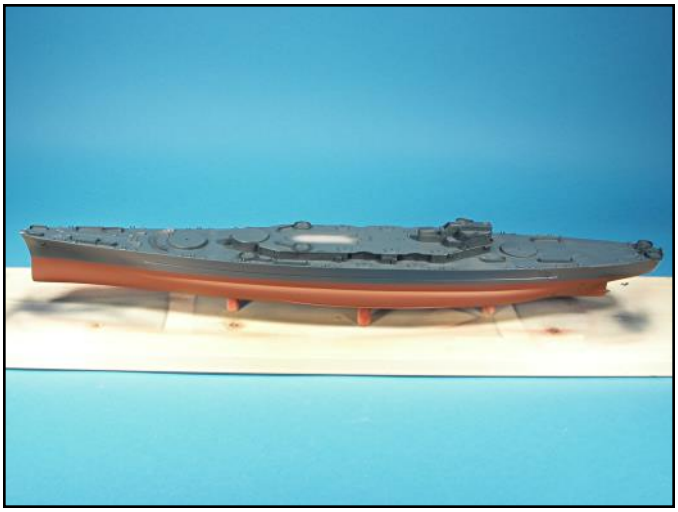
Using small sections of tape and overlapping each one as you progress across the decks surface is a very tedious and time consuming process.



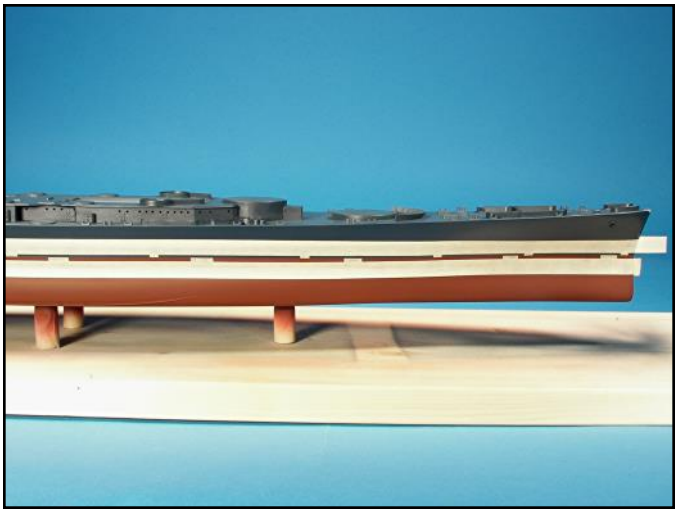
All the vertical surfaces have been masked around their bases and now it is time to completely cover the remaining exposed areas.

There is a lot of masking tape covering the surface and it is important to be sure the tape has good contact with the surface to prevent any paint bleed or overspray.

The vertical surfaces were airbrushed with two light coats of navy blue at low air pressure to reduce the chances of drips and paint dust settling onto the wet surfaces.



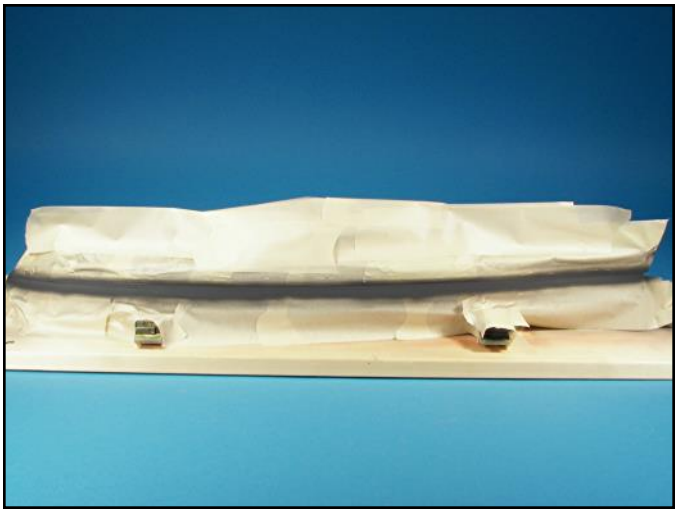
All the masking tape was removed and all the painted surfaces were checked for bleeding and overspray.



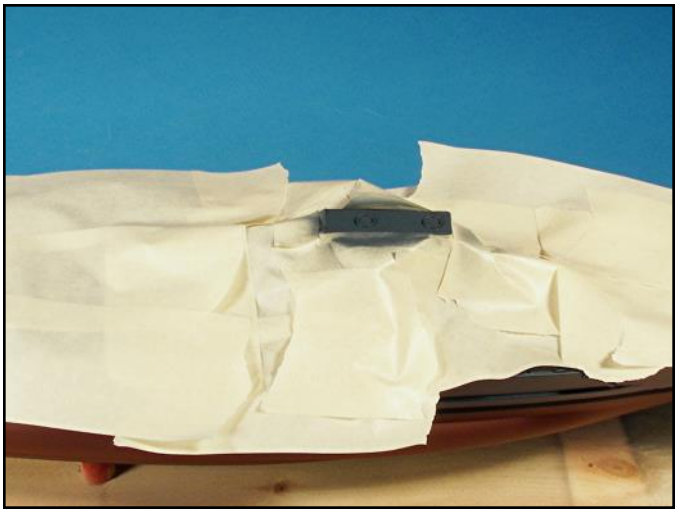
Masking tape sections were used to set the locations height and the thickness of the black boot strip.

The small sections will be removed and the entire surface will be masked.

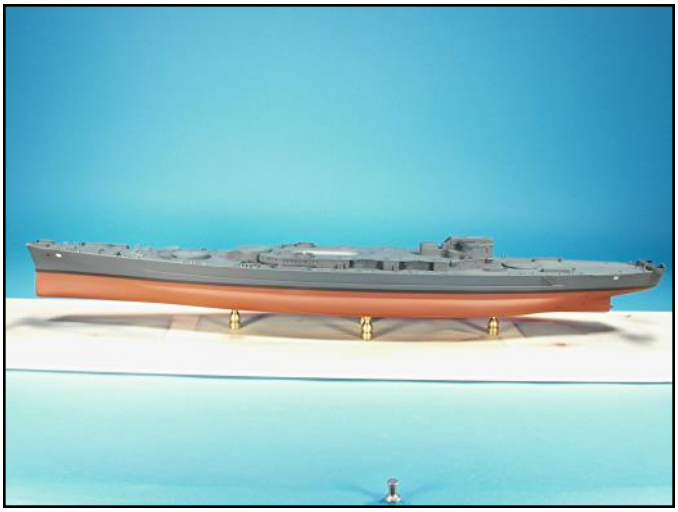
With the masking now complete the black boot strip is ready to be airbrushed.



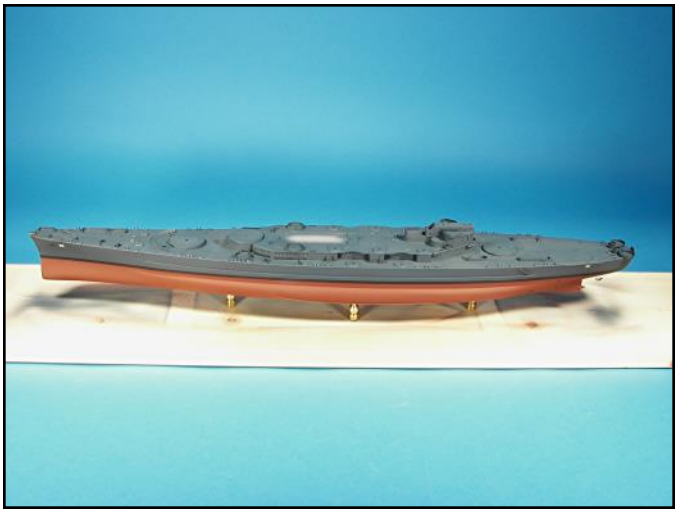
The black boot color was achieved by mixing a few drops of flat white to the flat black color.



The deck of the aft superstructure platform needed to be airbrushed again with deck blue.



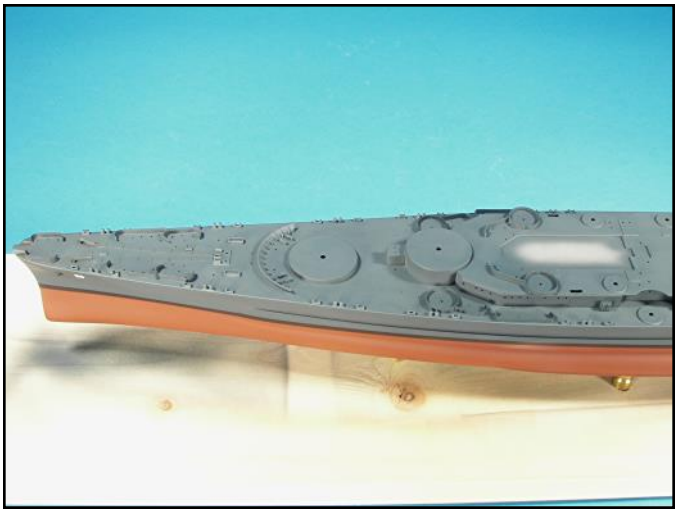
The hull surfaces got a coat of clear gloss for the hull number decals. The navy blue and deck blue colors are a semi-gloss because the dark sea blue color is a gloss color.



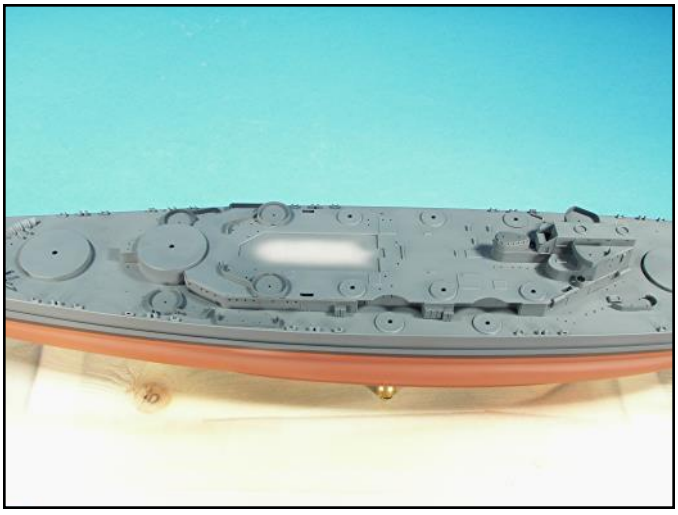
The entire model was then given a coat of Testors Dullcoat so all the painted surfaces have a flat color.

The residual decal setting solution was not cleaned off prior to applying the dullcoat. At this point there were two choices, carefully sand everything off the area and reapply the paint and decal or hide the stain.

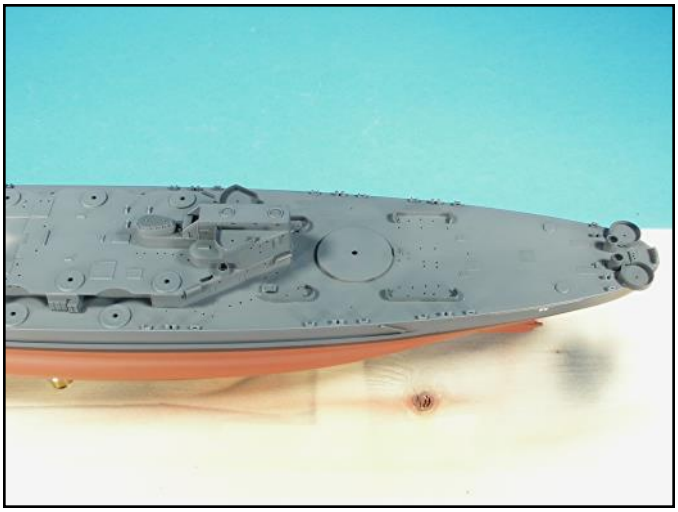
A dusting of rust colored pencil pastel dust was applied to the blemish to represent mild surface rust. This was applied to both sides of the hull in the same location. The pastel dust was sealed with dullcoat and hid the blemish.



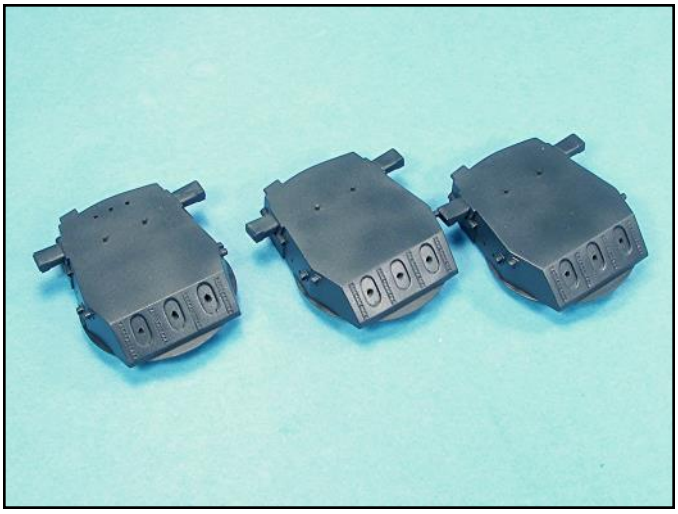
The forward section of the model looks great! The demarcation lines between colors is very sharp.



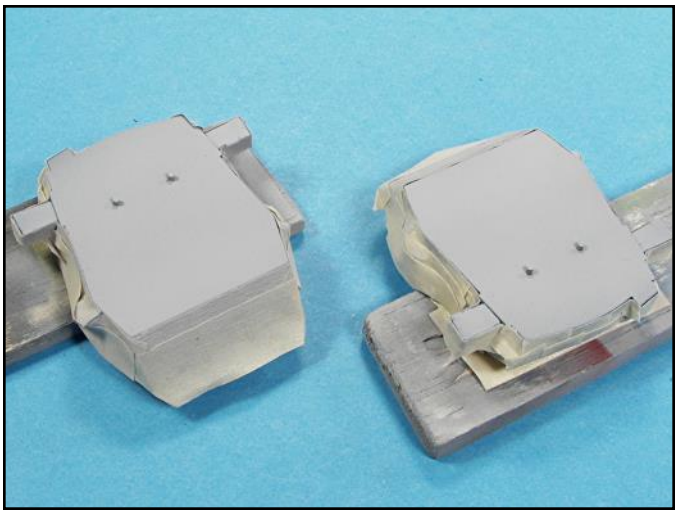
The deck blue color could have been a bit lighter to provide a better contrast with the navy blue color.



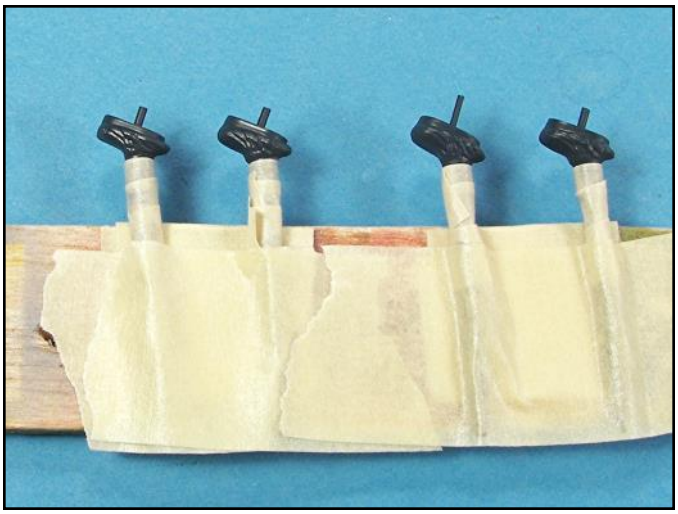
The aft area also looks very good. Once all the superstructure parts, guns and fittings are installed the model will take on a vert busy and detail appearance.



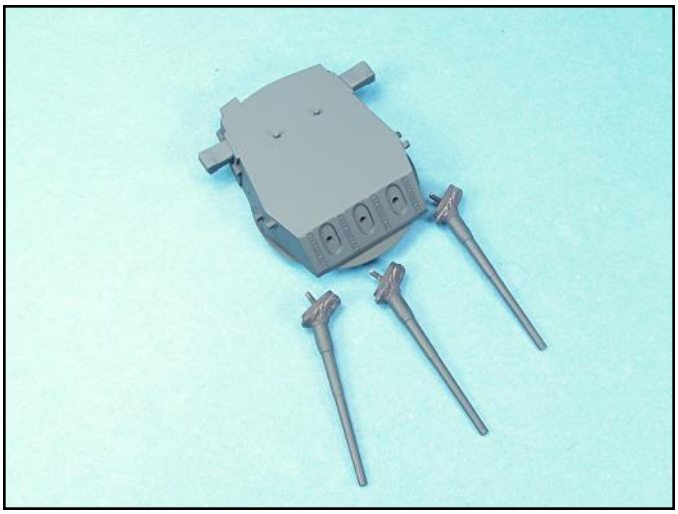
The 16 inch turrets received several light coats of the navy blue color. Note the semi gloss sheen.



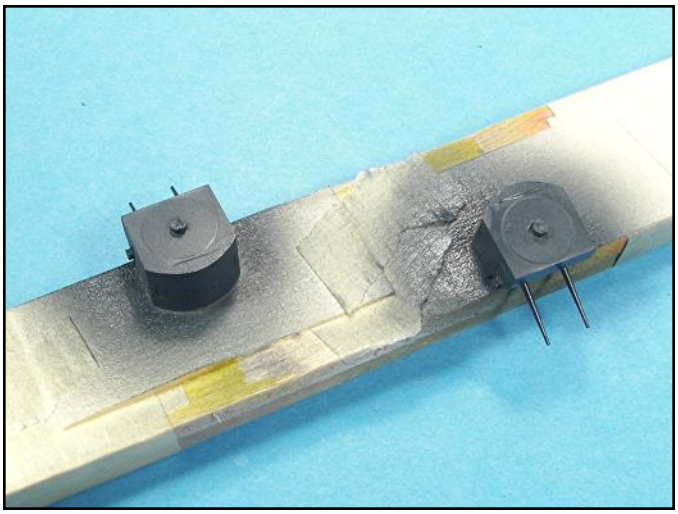
The turret sides were masked and the tops re-primed. The deck blue color was then airbrushed. The mask at the upper edges of the turret were also rechecked just before airbrushing to prevent any paint bleeding down the sides.



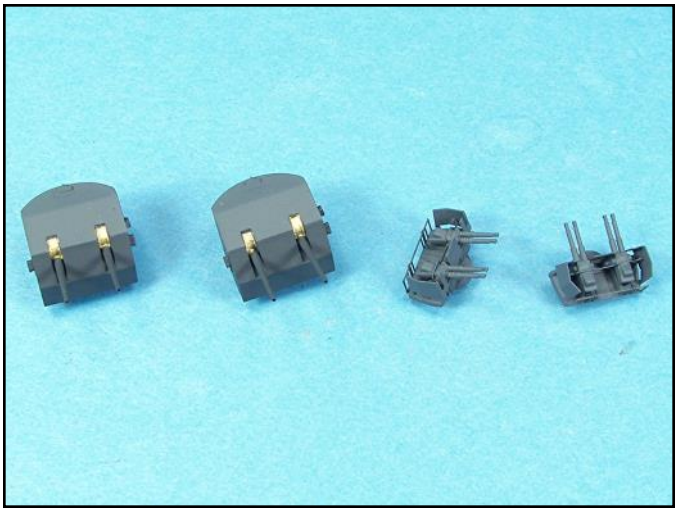
The 16 inch guns were airbrushed navy blue and then masked so the blast bags could be airbrushed flat black.



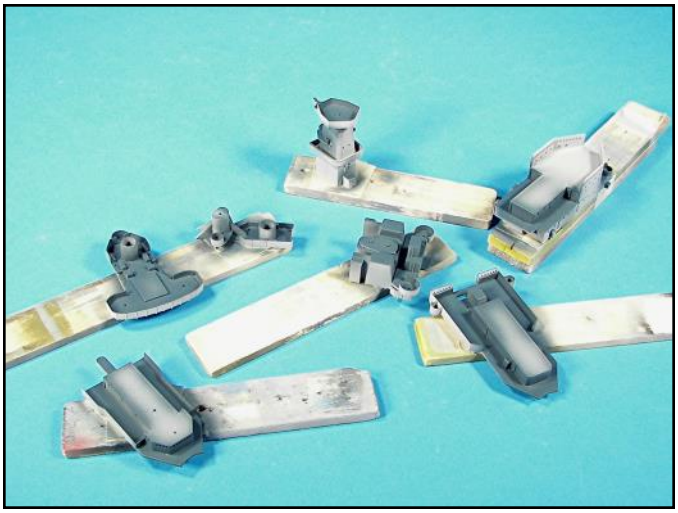
The guns and turret have received a coat of Testors dullcoat. Note how much lighter the navy and deck blue colors appear with a coat of dullcoat



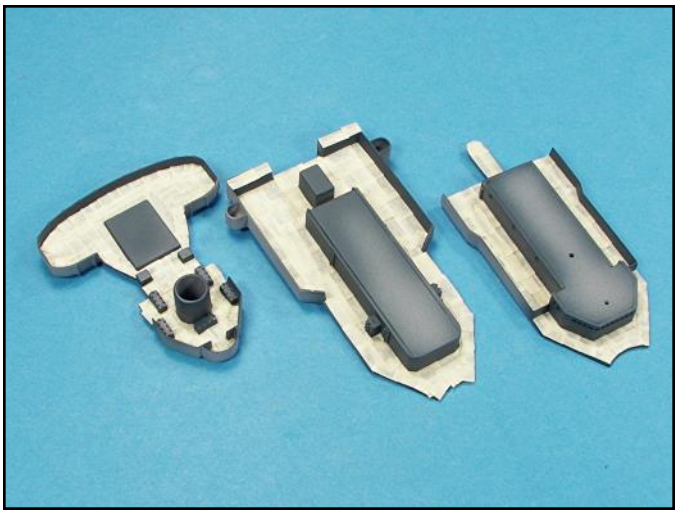
The 5 inch gun turrets were airbrushed navy blue first. The sides and lower front were masked and the deck blue color was applied to the top and the upper angle on the face of each turret.



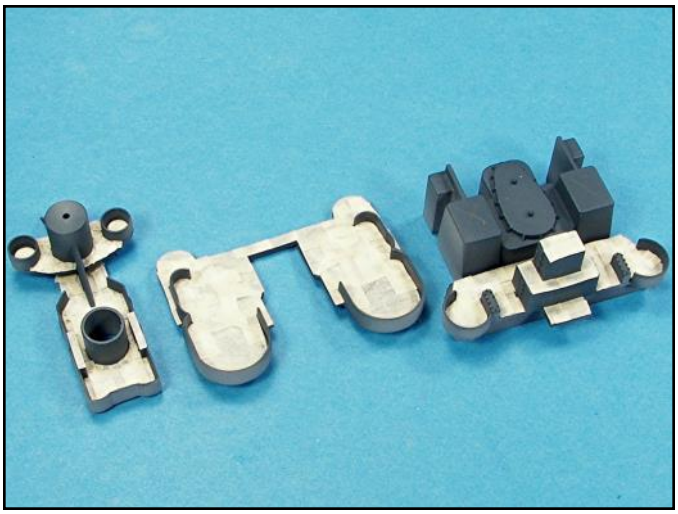
The brass faces of the 5 inch guns were hand painted with a detail brush. Sometimes the brass was also painted blue but the paint would wear off very quickly.



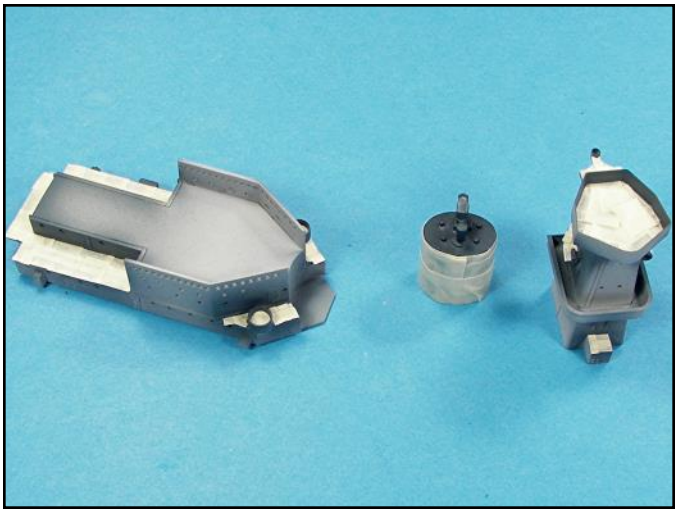
All the superstructure parts have received the deck blue color first. Taping the parts to lengths of balsa wood make them easy to handle and airbrush.



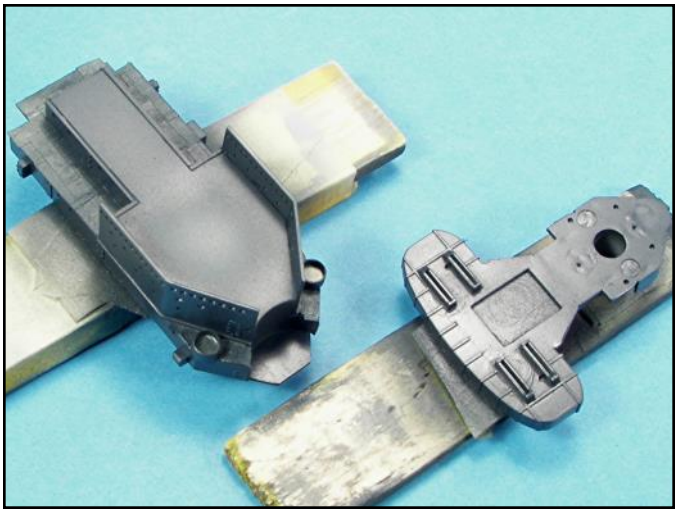
Here again, small sections of masking tape were used to mask off the deck blue color.



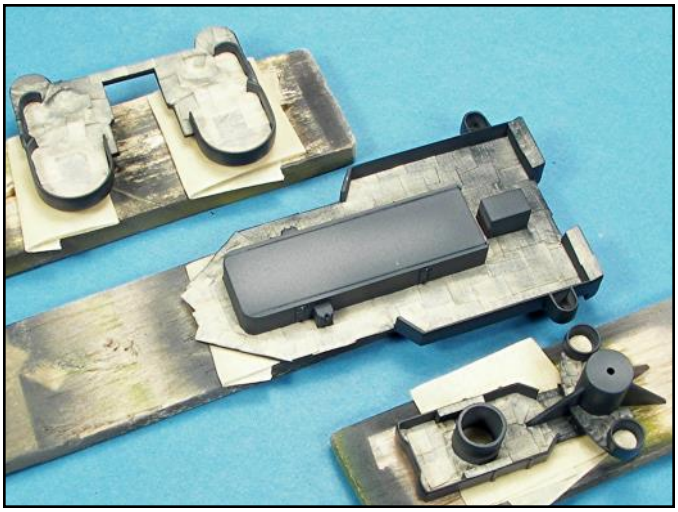
Careful masking of the decks will yield sharp demarcation lines between the two colors.



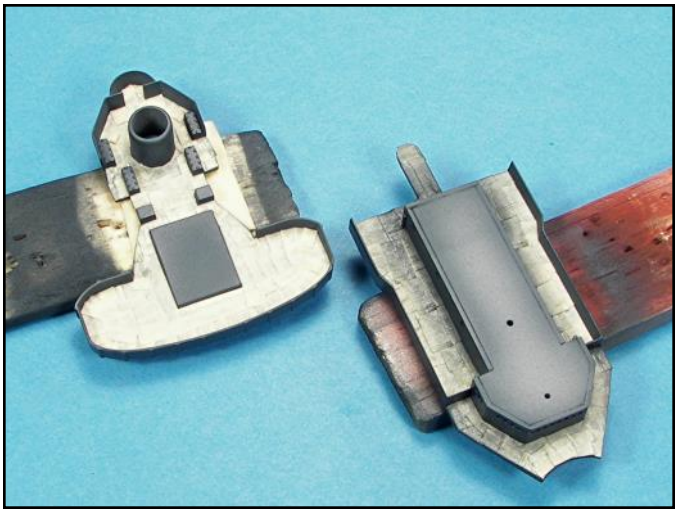
The armored tower had its sides painted navy blue first because the top surface had details that could not be masked over.



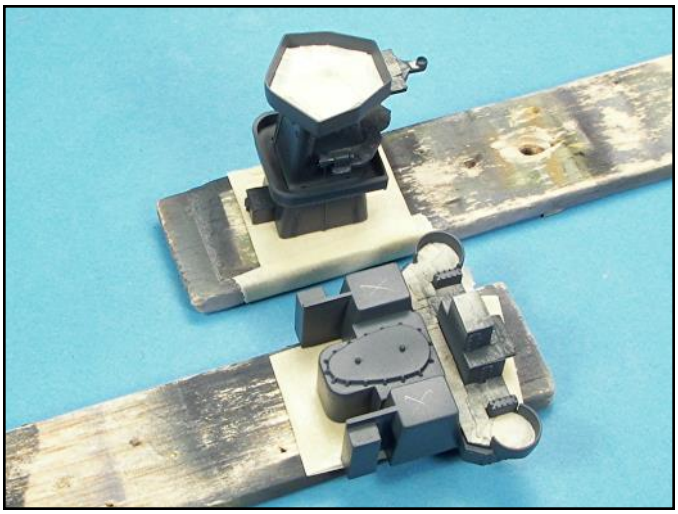
Both sides of each superstructure part received two coats of navy blue.



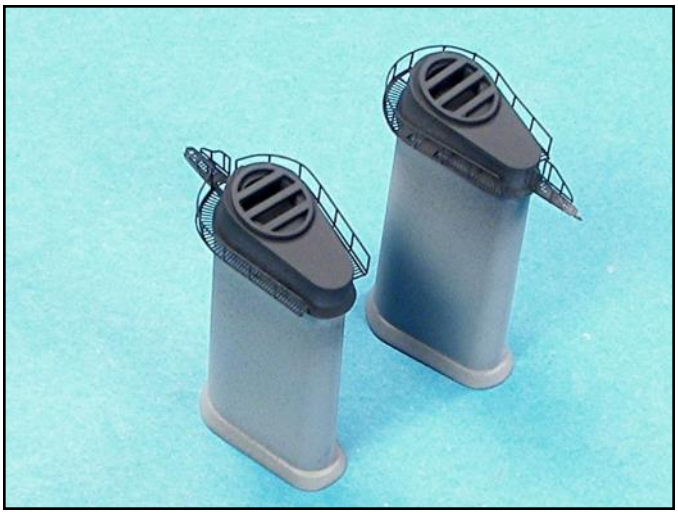
Low pressure and several light coats were used to apply the navy blue color to reduce the chances of paint bleeding.



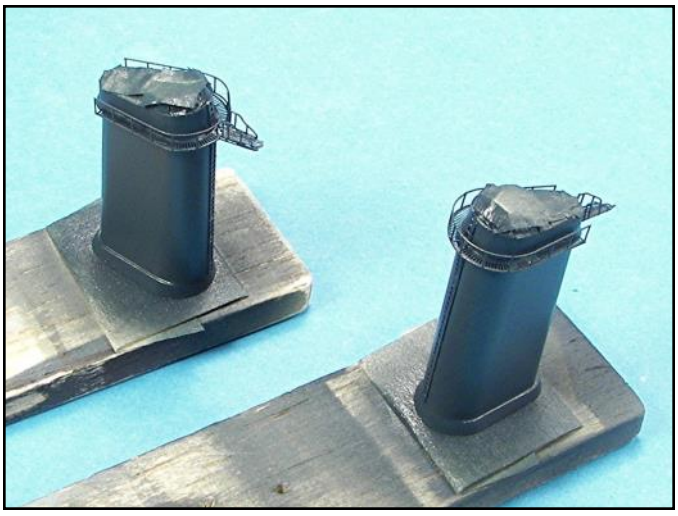
Good masking takes a lot of time on ship models, but the results are well worth the effort.



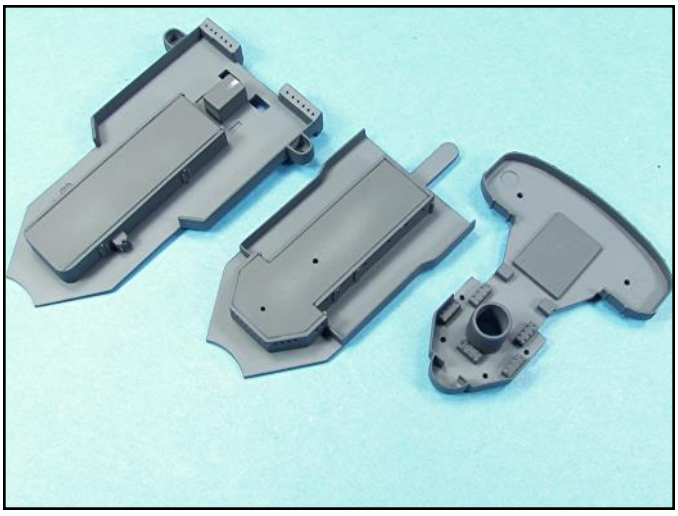
Be prepared to dedicate at least 10 to 15 hours for masking and do not try to do it all at once. All the masking for this model occurred over a week's time.



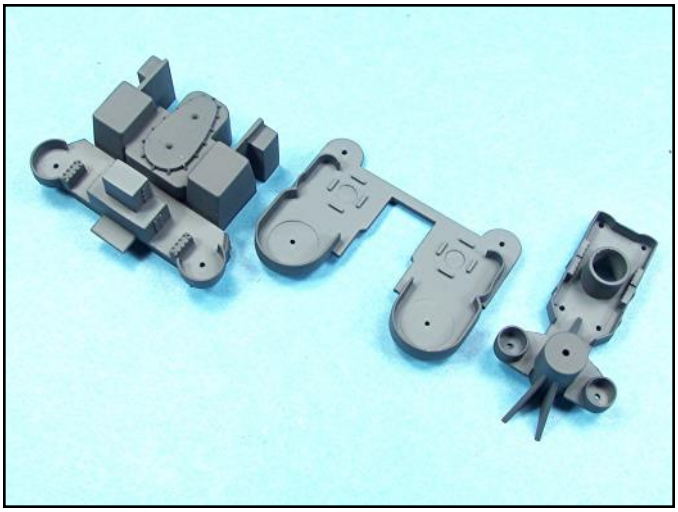
The flat black color for the smoke stack tops was applied first.



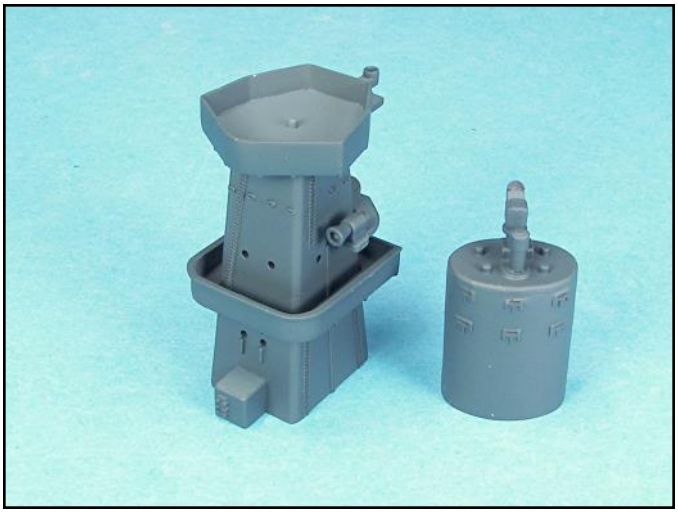
The smoke stack tops were masked and the remaining surfaces were airbrushed navy blue.



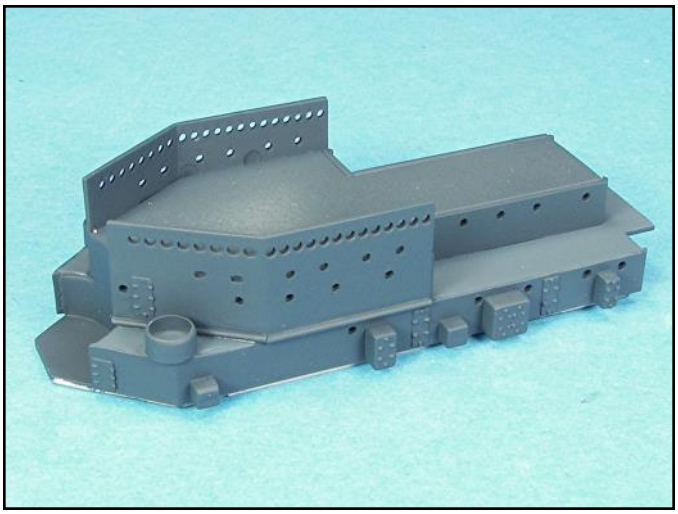
All the masking was removed and each superstructure part received a coat of Testors dullcoat. Do not forget to also apply the dullcoat to the undersides of each part.



Note that there is no detectable overspray or bleeding of navy blue onto the deck blue color. Good masking technique and patience are the key ingredients for good airbrush results.

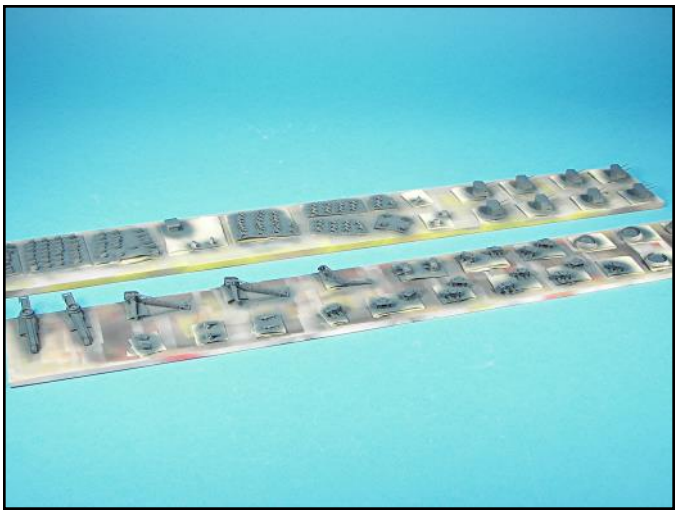


Light coats of airbrushed paint applied at low pressure helps ensure even coats and no paint drips.



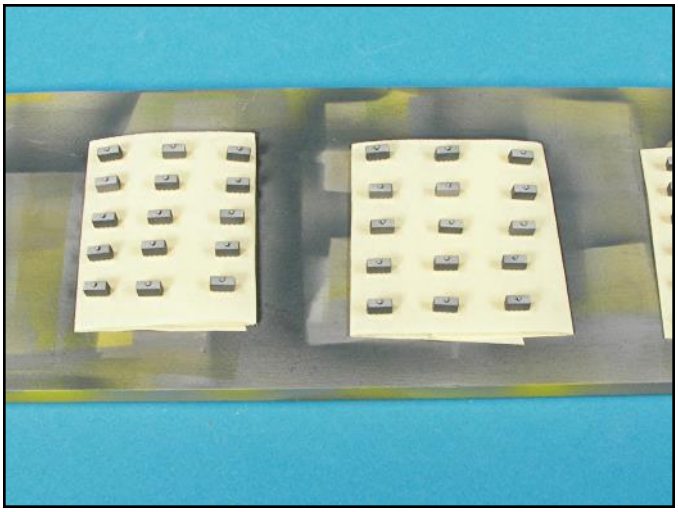
The deck blue color could have been slightly lighter so that the difference in colors would be more apparent.

The flat black color for the smoke stack tops should have pure flat black, not a mixture of flat black with some flat white added.

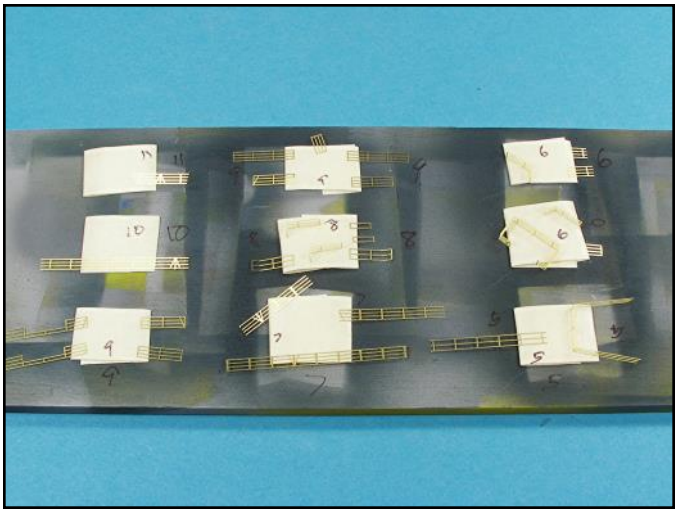


All the small parts were attached to sections of balsa wood and airbrushed. Ship models have a lot of parts so "parts management" is important. Use plastic bin organizers to store all the parts.

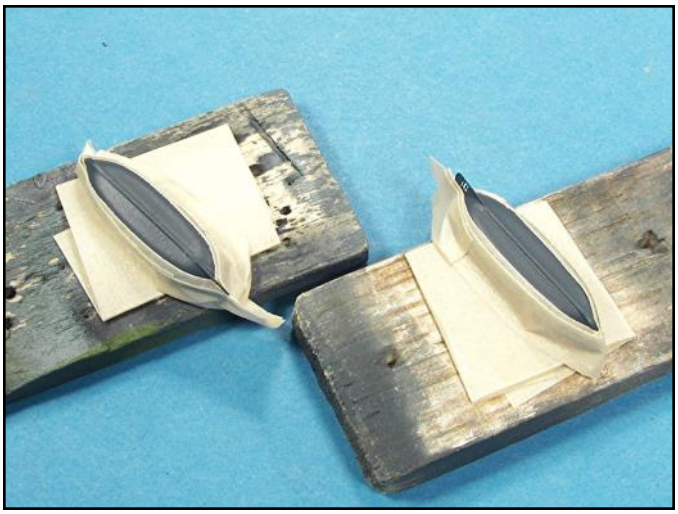
The 20mm ammo box tops were airbrushed deck blue. The boxes were then flipped over onto masking tape and the sides airbrushed with navy blue. The boxes were flipped again and given a coat of dullcoat.



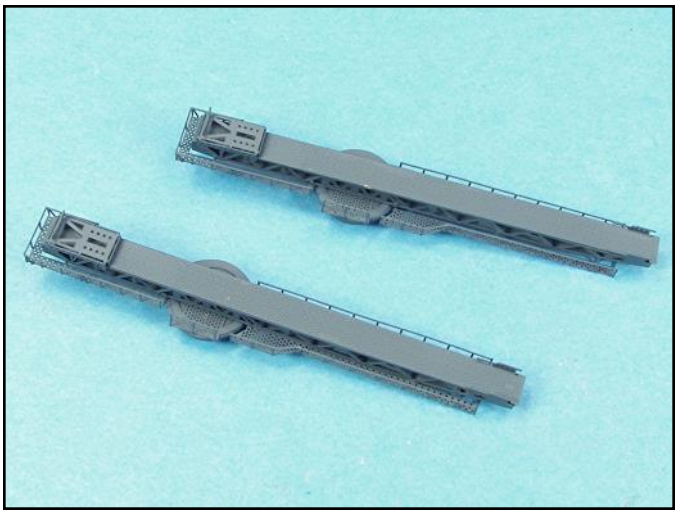
Be sure to use new tape when flipping parts otherwise you run the risk of having parts flay away due to the air pressure from the airbrush.



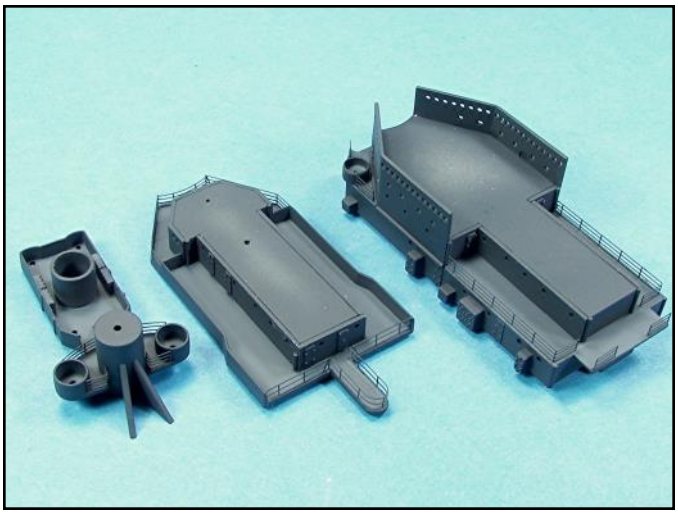
All the photoetch railings were also attached to masking tape and airbrushed. The railings were carefully peeled off the tape and flipped using the tip of a number 11 X-Acto blade.



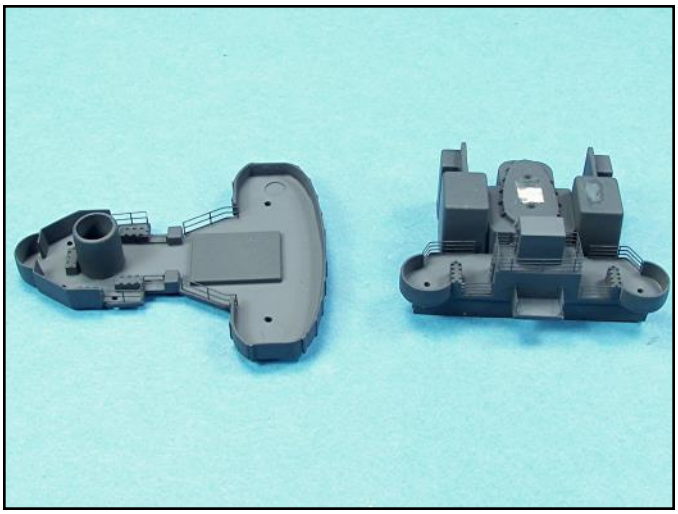
The hull red color was also applied to the bottom hull areas of the whale boats.



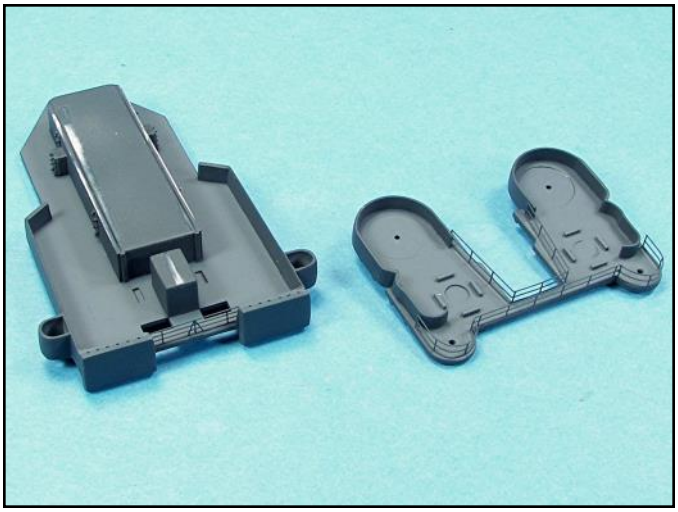
The aircraft catapults are now ready. Gold Medal Models added a lot of detail to these photoetch assemblies.



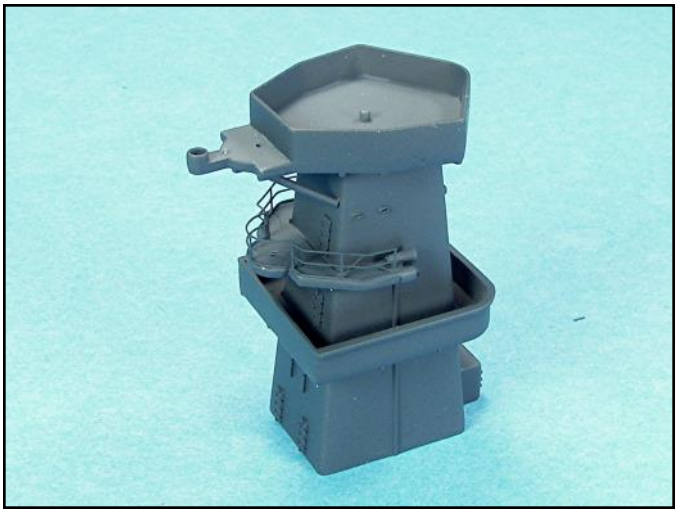
Always plan your superstructure assemblies so that each layer gets its photoetch railings prior to attaching the levels together. The pre-shaped and painted railings were glued into place on the different superstructure levels.



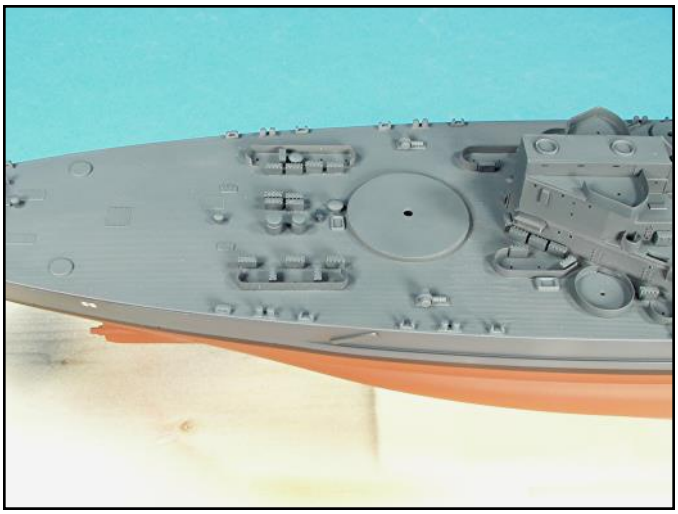
Trying to attach railings to superstructure parts after they are glued together can be difficult. More precise railing positioning can be achieved prior to final assembly.



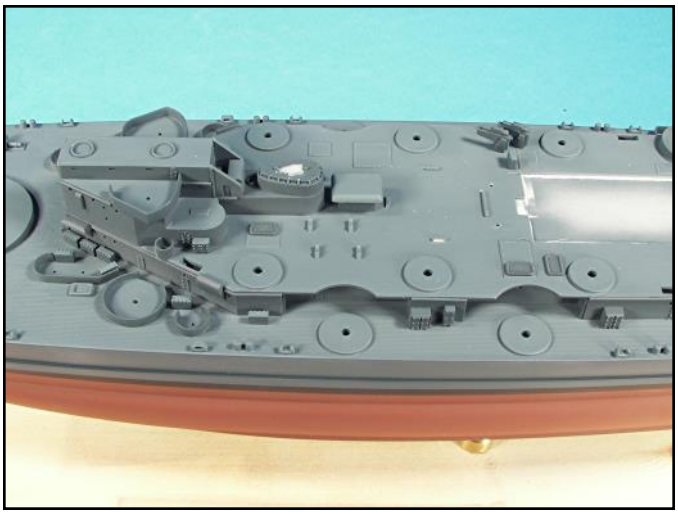
Some railings can be a challenge to attach even prior to assembly. The railings on the right superstructure deck are several different sections of pre-shaped lengths and curves.



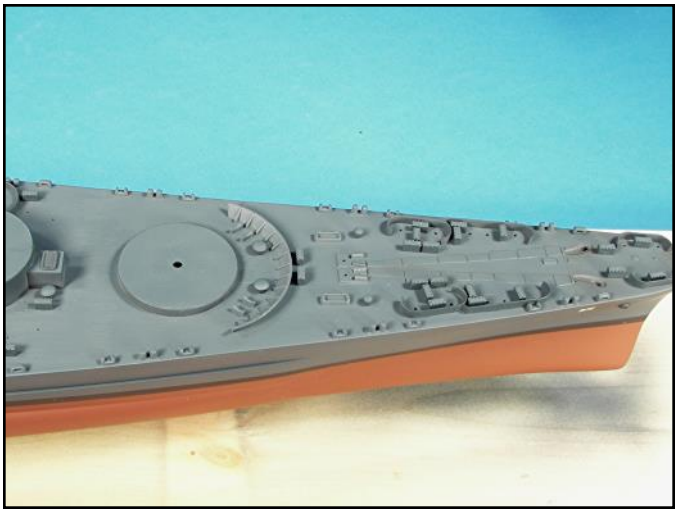
The railings on the searchlight platform fit perfectly thanks to the template that was made prior to assembly. This template was used to bend and shape the railings.



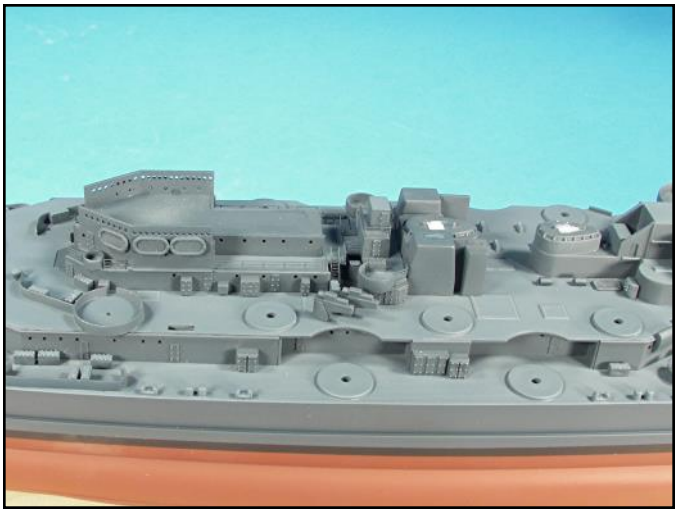
The deck fittings and 20mm gun boxes were attached with tiny drops of Elmers white glue.



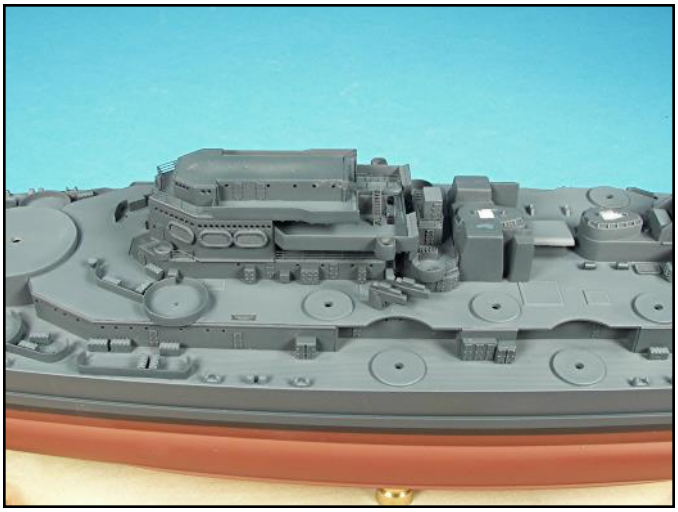
All the deck fitting should be attached first.



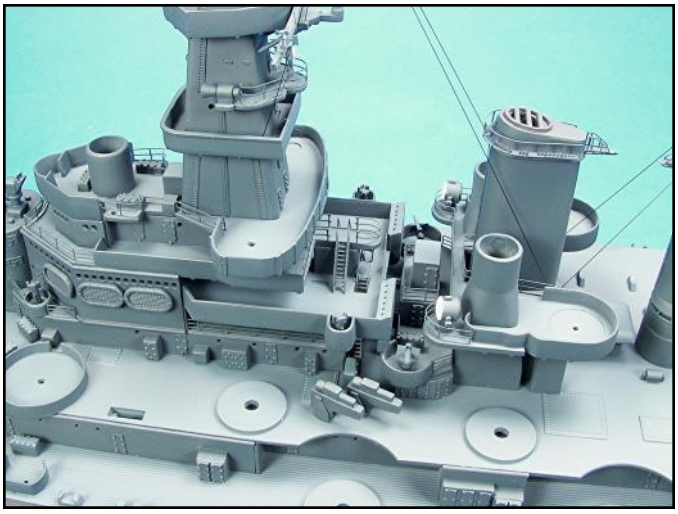
The forward section is now complete and it is time to start building up the superstructure.



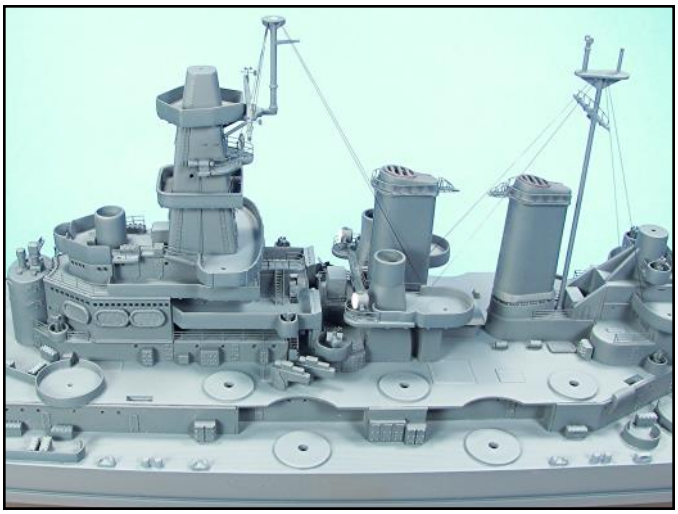
If any Elmers glue overflows on the deck let it dry and then touch the dried glue with a detail brush with some Testors dullcoat on it. When the dullcoat dries, the Elmers glue will disappear.



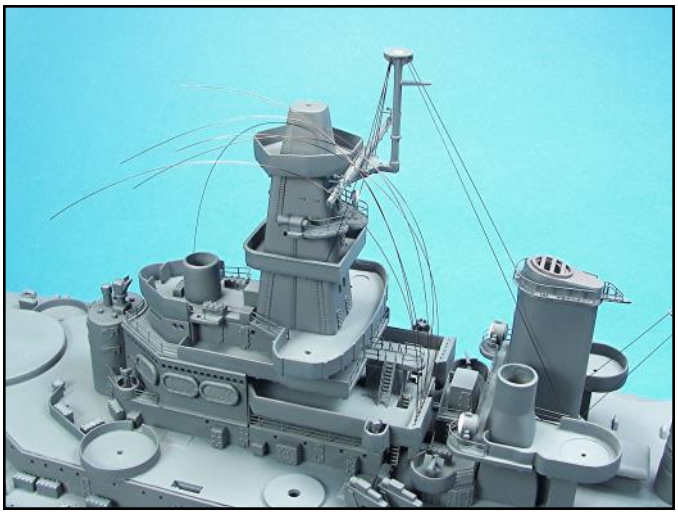
The superstructure levels were glued into place one layer at a time. The forward levels also had inclined ladders added to each layer as the superstructure was built up.



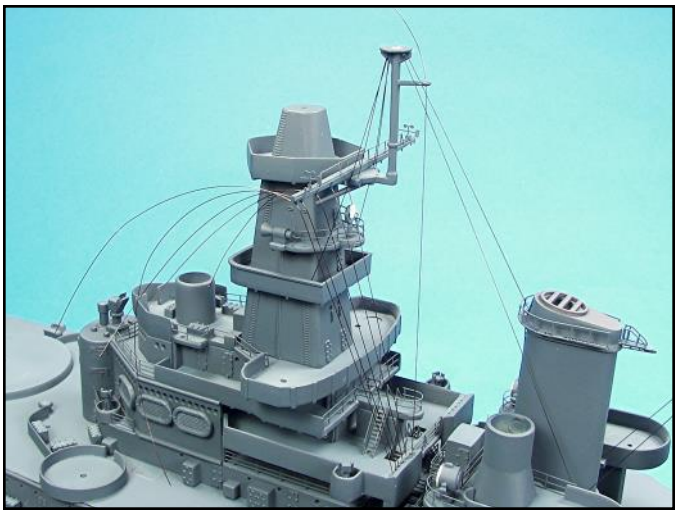
Here is a close up of the aft area of the forward superstructure. Note the small caliber gun directors and the searchlights were also added. These ship fittings would be difficult to add once the rigging was completed.



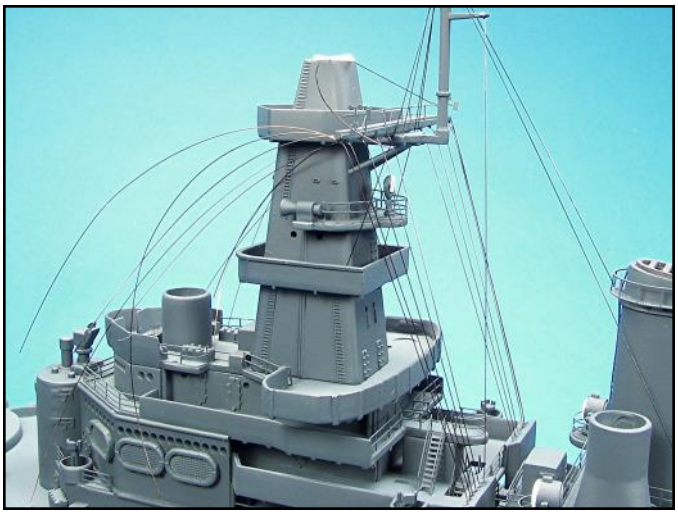
The masts were added, as well as the smoke stacks and then rigging was added. For the rigging nylon sewing thread inked black with a sharpie marker makes excellent rigging.



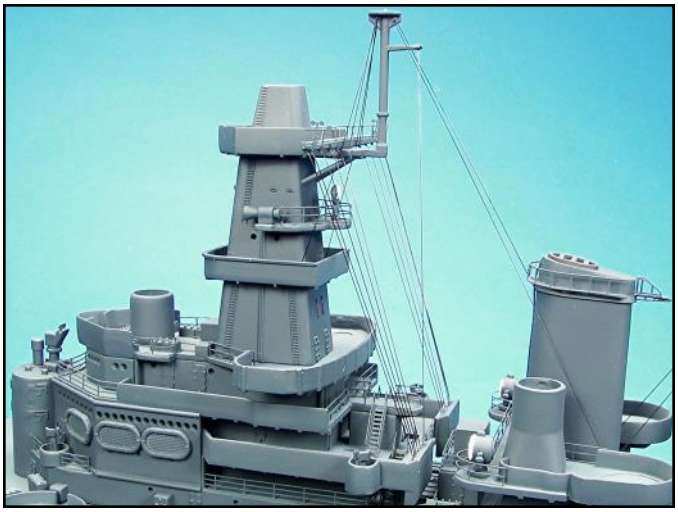
The flag rigging was added to the port side first. Note how long the individual strands are. These were inked with a brown colored Sharpie marker.



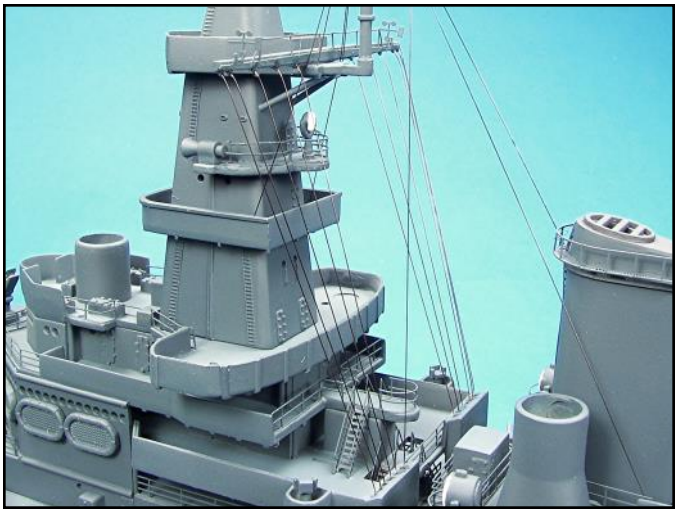
The individual strands were pulled tight and a tiny drop of super glue was applied to each location on the yardarm.



The same process was repeated on the starboard side. Be sure the locations of the flag rigging lengths on each side match one another.



Once all the strands were glued in place, carefully trim each strand with a sharp number 11 X-Acto blade tip.



Note how ship shape the rigging looks. All the rigging is tight and neat. If the plastic masts had been used, the rigging would have bent them. That is why for all masts it is best to replace the plastic ones with brass rod.

More fittings and gun mounts along with the deck railings have now been attached. Fittings and guns were attached with white glue and the railings were attached with super glue.

The chains were added first, then the main deck railings and then the 20mm guns. To keep the chains tight, apply tiny drops of super glue along their lengths. A drop of Testors dullcoat onto the super glue makes the glue stain disappear.

The remaining 40mm quad mounts were added, then the twin 5 inch turrets and finally the 16 inch turrets. The railing locations got a coat of Testors dullcoat to hide the super glue.

The main deck railings were attached along the mid section and then the aft area. Then the 20mm guns, the catapults and the crane were added.