



Chapter Eighteen

Finishing up the Outboard Hull Details

The Boarding ladder...

The boarding ladder has nine steps. There are seven short steps and two longer ones. They were made using $3/32" \times 3/32"$ strips. There are many ways to make the fancy profile for these steps. On the prototype for the Confederacy they were shaped by hand using various needle files. The steps were cut to length first and then each step filed down to create the molded profile. When installing these against the hull, be sure to bevel the back side of each step. You must create an angle that will allow the top of each step to be level and flat. The top of each step should not slope down or up after you hold them against the hull. Paint the top step black after you are finished. Carefully line them up so they are evenly spaced and oriented. Any slight deviations will be very noticeable.

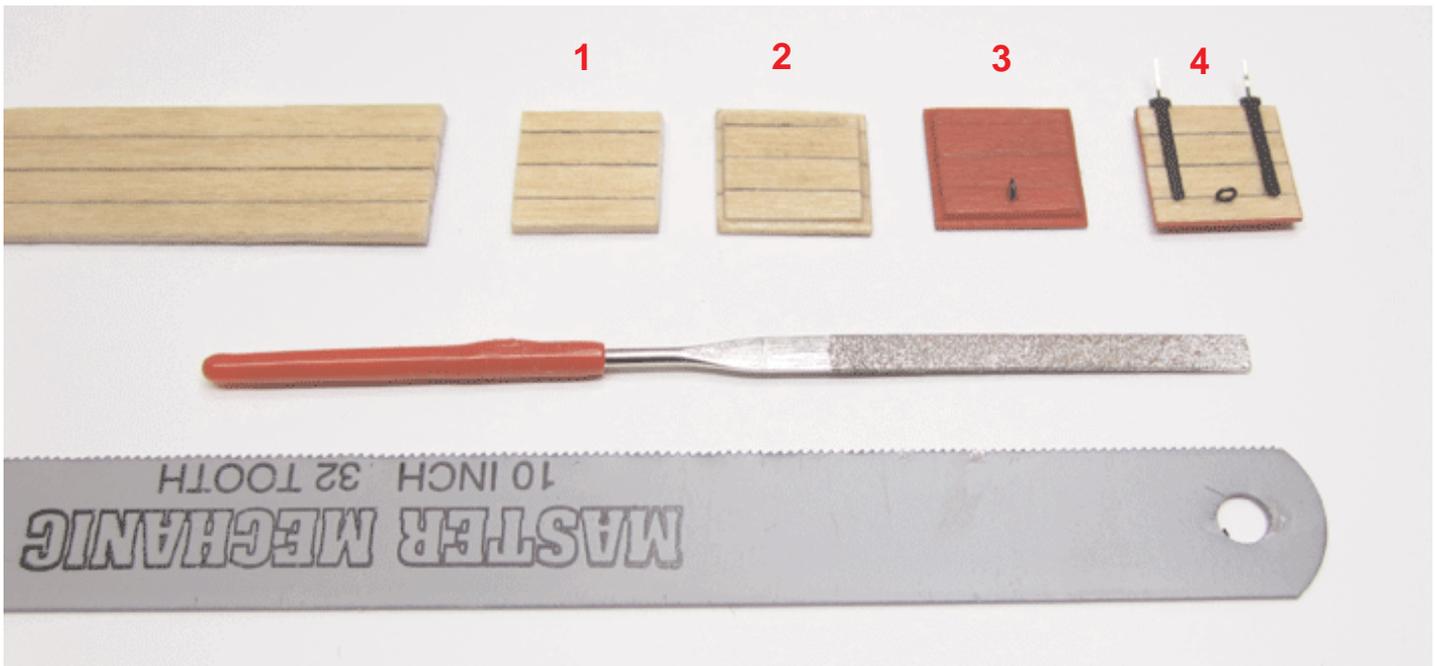
Fenders and Chesstrees...

Just forward of the entry ladders you will find two fenders. They are laser cut for you and are $3/32"$ thick. They also have molded edges that run down both sides. After you sand them to fit against the hull you can create the grooves down each side. The same techniques you used to make them for the headrails can be applied here. The double-beaded hull molding will need to be notched away to accept the fenders.

The chesstree is made similar to the fenders although it's much shorter. Cut away the hull molding and sand the back of the chesstree so it sits flush against the hull.

Making the Gunport Lids...

It would be easier to make and fit the port lids at this time. However, they will not be glued into position permanently. That will be done after the channels and chainplates are completed. It will be easier to shape each port lid so they are a good fit now without having all of that in the way later.



To begin, glue four 1/8" x 1/16" strips together edge-to-edge. Simulate the caulking between each strip with a pencil to highlight the seams. Refer to the photo provided that shows each step for the construction of the lids.

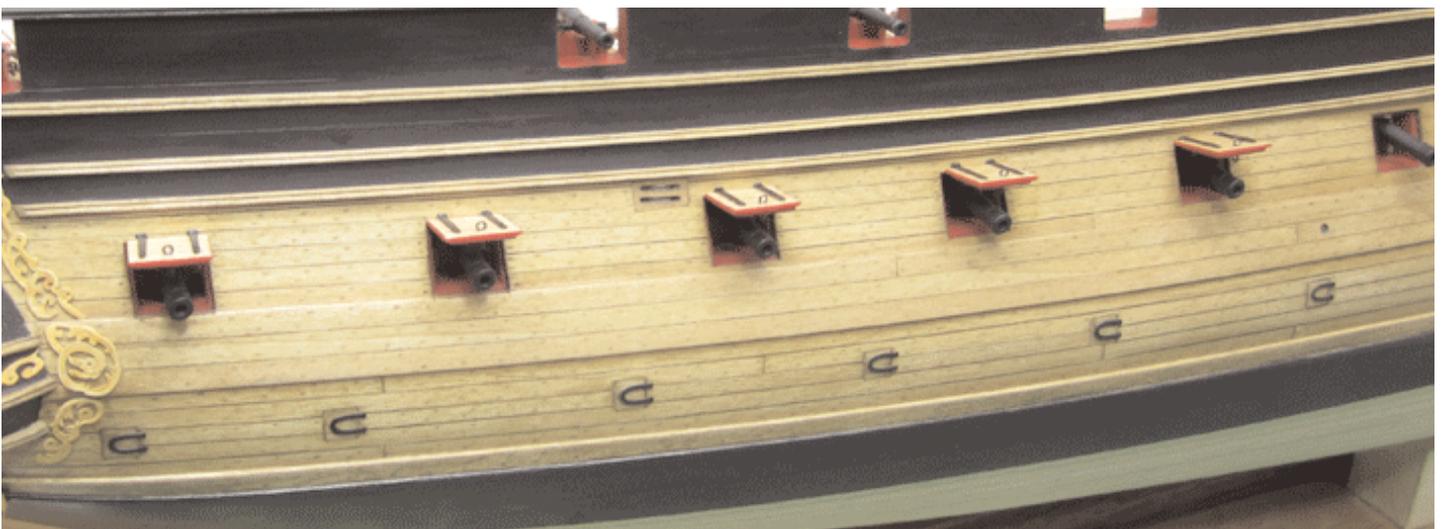
Step 1 - Hold the strip of four planks against one of the open ports that will get a lid. Angle it so the run of the port lid strip matches the run of the hull planking. Then mark the angles for the sides of the lid on the strip so you can cut it to match the shape of that opening. Each lid has a unique shape and you can't simply cut a bunch of squares the same size and shape.

Step 2 - Create a rabbet around all four edges of the port lid. There are many ways to do this. On the prototype, a fine-toothed hacksaw blade was

used to make straight cuts half the thickness of the lid. The blade was held against a steel ruler which was used as a guide so the blade wouldn't wander. The rabbets were cleaned up afterwards with a needle file.

Step 3 - Paint the inside of the lid red to match the bulwarks. Insert an eyebolt into a pre-drilled hole on the inboard lower part of the lid.

Step 4 - Glue the photo etched port lid hinges on the outboard side. Don't snip off the extension (sprue) on the top of each hinge. This is what you will insert into holes drilled above each port opening. You can see that in photo provided for this step. Finally add another eyebolt on the outboard side of the lid.





With the gun port lids completed, you can hold them in position within their respective port openings. Then mark the locations of the pins of the hinges above the opening. Drill them out and insert the port lids. But don't glue them into position permanently yet. You might find it helpful to have the flexibility to remove them when you are working on the channels and chainplates.

Installing the Channels...

The channels have been laser cut for you and are 1/16" thick. Hold them against the hull where they would be positioned. Make any adjustments to the inside edge until they fit flush against the hull. The hull molding will need to be removed where the channels will be placed and you should do this before testing how well they fit. There are several eyebolts located on each channel. They can be added prior to gluing them into position. Be careful to line up the channels evenly port-to-starboard as it will be quite noticeable if they aren't. You can also create a double beaded edge on the fore and aft edges of each channel. This will be a nice detail to add before you glue them onto the model. The outboard edge has many notches in them for the deadeyes and chainplates. Once the deadeyes are added a double beaded molding strip will be placed along the outboard edge to secure them. This will be done after the chainplates are permanently positioned in each notch.

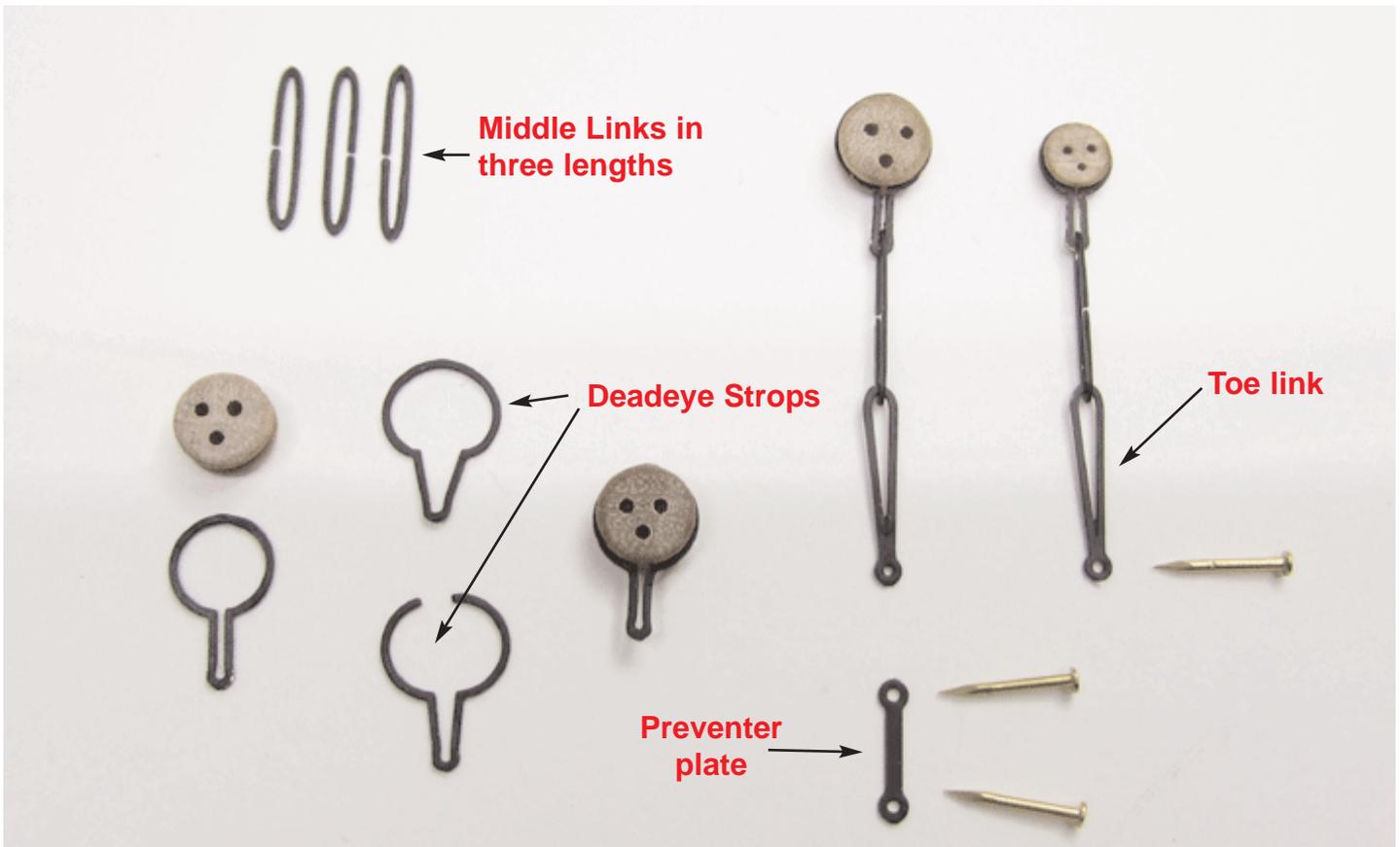
Having the double beaded edges on all three edges of the channel will be a nice detail. You can use the photo etched scaper to make the molded profile on the fore and aft edges.

You will notice on the plans and in the photo provided that standards (or inverted knees) are evenly spaced along the channels for support. These have been laser cut for you as well. Sand them clean of laser char and glue them into position. They should fit between the channel and the molding above it. Tweak their shape so they sit flush against the hull. These standards along with the channels were stained to match the hull planking.

Making the Chainplate Assemblies with Deadeyes...

The chainplates for the Confederacy have been supplied as photo etched brass. You may find it easier to paint the chainplates while they are still on the photo etched sheet. They can be snipped free afterwards with a good pair of flush cutters. Then all you need to do is touch up the areas where you snipped them free of the sheet.

There are two sizes of deadeye strops provided as called for on the plans. Insert the respective sized deadeyes into their strops. There are two ways you can do this. The first being to simply open up the strop with some hobby pliers until the deadeye fits into it. You can see this in the photo provided. The opened strop looks like an



ice cream cone shape. The second method would be to snip the top of the strop to open it up. Then insert the deadeye and bend the strop closed around it. A small drop of super glue on the joint will secure the strop in tightly around the deadeye. Make sure you orient the deadeye with the holes in their correct positions before applying any glue. You can touch up any paint that got damaged in the process.

The deadeyes in their stropps can now be added to the middle links. There is a tiny opening on each middle link that will allow you to insert the bottom of the strop into it. If you examine the plans, you might notice how the angles of the chainplates increase as they work their way aft on the channels. Yet the bottoms of each chainplate are kept along the same line as they are secured to the channel wales. This is accomplished by making the completed chainplate assemblies slightly longer as they work their way aft along the channel. To make this possible, the middle links have been supplied in three lengths. You can see in that same photo how the middle links are only slightly longer for each size. When you are setting up the chainplates for the larger

deadeyes, you will need create them in all three lengths. Keep them separated by size so you can easily identify them when it comes time to place them on the model.

The toe links (or bottom links) are all the same size. You can add them to each assembly at this time.

You are now ready to mark the locations where you will need to drill the holes along the hull. The chainplates are secured to the hull along the channel wales. Small brass pins secure the toe link and preventer plate to the wales. This can be a finicky process. What follows is the method used to secure them along the wales on the prototype.

You should have all of the deadeye assemblies made for the two sizes of deadeyes. This includes the length variations needed for both. Place them temporarily into each notch on the channels. Make sure you examine the plans carefully so the correct sized deadeyes are in the right order. The notches should be small enough that the bottom of the deadeye stropps should sit



firmly in them without falling out. The toe links should be hanging freely at this point below the channels. Use the sharp point of an awl and insert it into the hole of the toe link. You should be able to approximate the angle of each chainplate as shown on the plans. When you are happy with the angle for each one, press the awl into the hull planking to mark the location for drilling that hole. On the prototype this was done one at a time. The location for the hole was marked and drilled. Then that chainplate was taken off the channel so the preventer plate along with a nail could be added.

A brass nail was inserted into the hole on the bottom of the toe link. Then one of the preventer plates (piece with two holes) was slid onto that

brass nail as well. This will position the toe link on the outside of the preventer plate. This is not historically correct but it is one solution that makes installing them easier.

Finally, place the chainplate assembly back in its notch on the channel. Push the nail into the pre-drilled hole you made for it. This should secure the assembly in position. But the bottom hole on the preventer plate still needs to be drilled and nailed. You can make a small divot with the awl to mark the location of the bottom hole. Then slide the preventer plate over so you can pre-drill that hole. Don't try to drill the hole through the preventer plate. It won't end well. Pivot it aside first and then drill the hole. When you are done, pivot it back over the drilled hole and insert the





bottom nail. Repeat this process for all of the chainplates assemblies on each channel. Once completed, create some doubled beaded molding using the photo etched scraper. Use 1/16" x 1/16" strips for the molding. The strips should be glued to the outboard edge of the channels to fully secure the chainplates. Then use a needle file blend the double beaded molding on the corners where it meets the edge profile you created on the sides of the channels. See the photo provided showing the main and mizzen channels completed on the port side. To finish up the channels, add the eyebolts to the hull between each preventer plate. You can see where they are located on the plans. There are also a few other eyebolts scattered around each side of the hull and they can be added at this time as well.

Closing in the Waist and Gangways...

Remove the remaining hanging knees which have been laser cut for you. Sand them to remove the laser burn. Then add three simulated bolts on the lower leg of the knee with 28 gauge wire. Use the same technique you used when creating the bolts on the other hanging knees. Examine the photo provided that shows the hanging knees glued along the bulwarks. Note how the top of the knees is set against the bulwarks. The tops are placed flush with the bottom of the cap rail. Once the gangway planks are glued on top of the knees, the top of the gangway planks should be flush with the top of the cap rail.

Plank the gangway as shown on the plans. The plans show the gangway planked with 5/32" x 1/16" planks. You could however use 1/8" x 1/16" strips as well. Just make sure you don't exceed the width of the gangways as shown on the plans. Keep it within 1/32" as shown. The gangways were very narrow during this time period. Treenail the planking once you are finished. The treenails should line up with the hanging knees. You can also simulate the caulking between each gangway plank by running a pencil down each edge before gluing them into position.

The ends of the gangway should create a step up onto the quarter deck and forecastle. If for some reason the gangway planking sits to low and creates a gap between the deck beam and the gangway, you can add short length of wood under the deck beam to close it up. You should do this before you plank the gangways so you can butt the edges of the planks against the deck beams.

Create the ladders that sit against the gangways on each side of the waist. These can be made like the others earlier in the project. The stanchions and railings for the hatches in waist can also be completed if you haven't done so already. Use the photo etched stanchions and 28 gauge black wire for the railings.

Adding the Skid Beams...

There are four skid beams that cross between



the gangways. These beams are secured in iron crutches that are glued into holes along the gangways. Use the 1/8" x 1/8" laser cut deck beams for your skid beams as they have the correct camber cut into them. Cut them to length so they just span across the waist from gangway to gangway. The iron crutches are simulated using heavy paper or card stock painted black. Cut some strips that are 1/32" wide. Simply glue them to the bottom ends of each skid beam so they look like "U" shaped iron brackets. Then drill a hole through the underside of the paper brackets to accept some 22 gauge black wire. Insert a small length of wire into the hole to complete the skid beam crutches. Use a length of wire long enough that the skid beams will be elevated 3/32" off of the gangways after they are installed. Drill a corresponding hole along the edge of the gangways and insert the crutches into them. Use the plans to determine how far apart the skid beams should be. Also be very careful in making sure they are all straight and lined up consistently. If one of the skid beams is angled in comparison to the others it will be very noticeable. The skid beams were stained to match the hull planking and other deck beams. See the photo provided that shows the skid beams completed.

Adding the Waist Rails...

A photo is provided that shows the waist rail completed. The rail runs along the cap rail of the waist. Photo etched stanchions are supplied for the rail. These are different than the other stanchions you have been using. There is a bracket on the top of each stanchion for the wooden rail. Paint the stanchions black. When you remove them from the photo etched sheet, leave the sprue attached to the bottom of each stanchion. These pins will be inserted into pre-drilled holes along the cap rail. There are stanchions of various heights as depicted on the plans. You can even use a photo copy of the plan to help mark the locations for each stanchion along the waist. Glue them into position being careful to make sure the tops are all level in relation to one another.

Then cut some 1/32" x 1/16" strips to length and glue them into the brackets on top of each stanchion. You can stain this strip of wood before you glue it into position so the stain doesn't get blotchy from the gluing process. You will need two lengths of wood on each side of the hull. Be sure to leave the opening in the rail where the boarding ladders are located.



Building and Stepping the Stump Masts...

If you haven't done so already, the stump masts can be made and glued into the mast coats on the gun deck. The main and fore masts are made using a 7/16" diameter dowel. When you cut them to length be sure to add an extra 1/4" to compensate for the depth of the holes for each mast. You can use the plans as a guide for cutting them. Since only a short length is needed there is only a very slight taper to the masts. They taper slightly smaller as they get higher. It's very insignificant and you probably don't even have to do so. Sand them smooth and stain them.

The main and fore masts will have one set of woodings on each of them. You can see them on the inboard plan sheet. Mark their locations on each mast. Heavy paper was painted to look like wood. Acrylic paints were used to match the color of the stained masts. Cut the paper or card into thin strips about 3/64" wide. Glue them around the mast to simulate the wooden hoops on the top and bottom of the woodings. Then use some .028 black rigging line to create the woodings. Wrap them around the mast between each mast hoop. You can bury the end of the line under the previous coil and glue it securely. Paint and add

the cleats around the base of both masts and then glue them into position on the model.

The mizzen stump mast does not have a wooding to model. Just cut the dowel to length and add the cleats shown on the plans. Glue it into position when you are finished. Be sure to establish the proper rake for each mast when you install them. The fore mast is virtually straight up and down with no aft rake. The main mast is raked aft but very slightly. Then the mizzen mast should be raked slightly more. These angles are shown on the inboard plansheet.

Making and Adding the Anchors...

Two cast britannia metal anchors are supplied with kit. The anchor stocks are laser cut for you. There are two halves that must be glued together. Examine the plans for details. Note how the stock tapers on three sides. The top of the anchor stock is not tapered. It is easier to complete the tapering of the anchor stock after the halves are glued together. Notch out the center of each half so when they are joined the anchor can be slid through the hole it creates. See the photo provided. Wrap some 1/16" wide black pinstripe tape or card around the stock to simulate the iron bands. The bands are painted black. Several bolts can



also be simulated on both sides of the stock between each iron band. See the plans for their locations. The bolts can be made with 28 gauge black wire as you have done earlier in the project.

Then create the iron ring using 22 gauge black wire. Place the ring through the hole on the end of the anchor. Depending on your level of experience, the ring could be wrapped (served) with sewing thread to add another optional detail. See the photo above that shows the ring being served with black thread.

Because this is an unrigged Navy Board style model, the anchors aren't rigged to the cathead. On the prototype, they were simply lashed to

the forecandle rail as if stowed. You could opt to fully rig them however if that is what you prefer.

Use .028 gauge tan rigging line to lash the anchors to the timberheads. Two lashings on each anchor are appropriate since these are very large anchors. A photo is provided that shows the anchors lashed to the timberheads.

