

Chapter Seven **Planking Inboard (deck and bulwarks)**

With the planking completed on the outside of the hull you can now turn your attention to planking inboard. Before you start planking however, the bulwarks must be thinned down to their proper thickness inboard. The bulwarks should be thinned down to $5/32$ " thick. If you feel up to the challenge it can even be thinned down more. The bulkheads were originally created thicker than needed for added strength. If they were cut to the proper thickness originally they would have been too fragile and probably would have snapped while framing the ports and planking the exterior of the hull.

After planking the bulwarks with $1/16$ " x $1/8$ " strips a cap rail will be placed on top of the bulwarks. This cap rail will be $1/4$ " wide and it won't fit properly if the bulwarks aren't thinned down to the width required. So take your time here and measure that thickness in various locations down the length of the bulwarks until you are satisfied. If you prefer, the bulwarks can gradually taper from the deck upward to its proper thickness. It does not have to be $5/32$ " thick from top to bottom. However, there will need to be some thinning at the deck level. But if you find it difficult, it can be left a little thicker there. See the photo above.

Once the bulwarks are sanded you will need to add a filler strip along the bulwarks at the stern. This will give you

a surface to glue the bulwark planking to. Any size strip will do. It will end up being about $1/16$ " thick. It should be sanded down to match the thickness of your bulwarks. See the photo above.

Use a $3/16$ " x $1/16$ " thick strip as your first bulwark plank. This plank should fit nicely since you should have $3/16$ " of space from the top of the bulkheads to the top of the gun port sills. If you don't have $3/16$ " of space between the top of the bulkheads and the port sill then the top of the bulkheads should be sanded down until you do. Be careful to maintain the proper camber of the deck while doing so. Using the wider first plank will make it easier to finish the bulwark planking. All of the bulwark planking should be cut flush to the edge of each gun port. With the first plank in position you can switch to $1/8$ " x $1/16$ " planks to finish the bulwark planking. When the planking is completed, sand it smooth and paint the interior red. You can also sand the top of the bulwarks down to accept the cap rail which will be created next. The finished cap rail will end up being $1/4$ " wide when completed. It consists of two elements to achieve the $1/4$ " width. A $3/16$ " wide cap rail is positioned first and then a $1/16$ " wide molding strip will be added to the outside edge bringing it to $1/4$ ". It will overhang the bulwarks inboard and outboard. The cap rail and bulwarks may get a little wider at the bow but this is ok. See the photos provided.



The bulwarks have been planked and painted. The cap rail has been glued in position.

More Photos of the finished cap rail and bulwark planking.



The cap rail at the bow will be cut from a 1/16" thick sheet. It will be 3/16" wide. The cap rail at the bow curves significantly and bending a 3/16" strip edgewise would be difficult. To establish the proper curve, press the basswood sheet firmly on top of the bulwarks at the bow. Simply trace the outboard profile of the bow onto the sheet. Then create another line inside of this one in order to establish the proper width of the cap rail. Always make the cap rail a little wider so it can be sanded to its true width after it is glued into position. Only the curved section at the bow needs to be created this way. The remaining section of the cap rail can be added using a 3/16" x 1/16" strip.

Sand the first piece of the cap rail flush with the external planking but leave a little overhang inboard. Fill any seams between the curved cap rail and wood strip and sand it smooth. At this point the cap rail should be approximately 3/16" wide except for along the extreme bow where it may be wider. To finish the cap rail glue a 1/16" x 1/16" strip along the outboard edge of the cap rail. This molding will give you the overhang outboard that the plans call for. Sand the top of the cap rail smooth and paint it black. Several photos are provided that show the bulwarks planked and the cap rail painted and completed. Note how a gap was left at the bow to accommodate the bowsprit. More advanced modelers may want to create a fancy molding edge on the outboard edge of the cap rail. As shown on the plans the molding strip would have had a double beaded profile.

Companionway framing is completed.



The deck will be planked with 1/8" x 1/16" basswood strips. As usual, before you can start planking a few things should be taken care of first. The companionway will need to be framed with 1/8" x 1/8" strips. See the photo provided. You can use the framing plan as a guide for all of the measurements. Be careful to ensure that the opening for the companionway is centered properly in relation to the centerline.

The deck planking will be nibbed or "joggled" into a margin plank that runs along the bulwarks. This margin plank is



Margin plank on the port side.

3/16" wide. The curved section of the margin plank at the bow has been laser cut for you. The remainder of the margin plank is created using a 3/16" wide basswood strip. See the photo that shows the margin plank at the bow along the port side of the bulwarks. Each Syren model will most likely vary a little bit, so test fit them in position before you glue the laser cut pieces on permanently. The ends of each piece have a scarp joint where they will meet the 3/16" strip that continues the margin plank along the hull towards the stern. Cut the end of the strip to fit snugly into the joint before gluing any of the pieces into position.

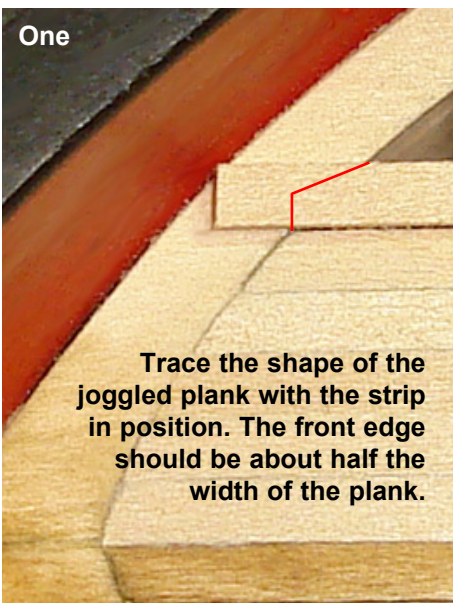
Take a look at plan sheet one which shows how the deck planking should be nibbed into the margin plank at the bow. The first five or six planks from the center line do not have to be nibbed into the margin plank. Simply cut them flush to the margin plank. The remainder of the planks along the side of the hull should be nibbed into the margin plank. See the photos provided which will show you how to do this. Depending on your experience you may opt not to nib the planks at all. Even though this is a more accurate representation of the deck planking you can also cut them flush to the margin plank if you find the process difficult. It will not hurt the overall appearance of your model. In actual practice the deck planking would have been nibbed into the margin plank along the entire length of the bulwarks. Wherever the end of a plank would meet the margin plank it would be nibbed. This was done when the end of the plank would come to a sharp point. This would

render the plank very weak and prone to quicker rot. Nibbing allowed the end of the plank to remain blunt and square and thus stronger and less likely to rot so quickly. Another method commonly used towards the stern was to taper each plank so they were not as wide from mid ship to the stern. The planks would actually follow the bulwarks so no plank ends would come into contact with the margin plank.

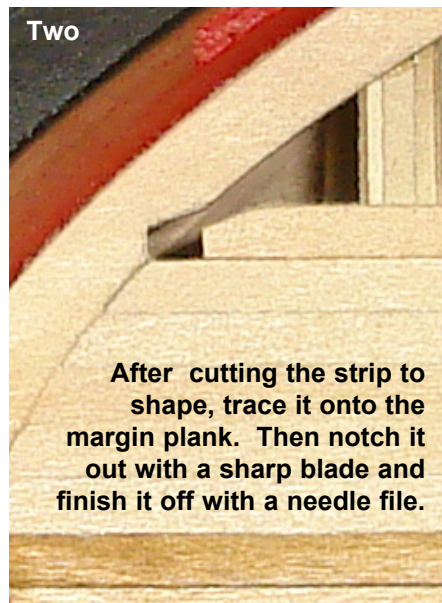
This method would require some advanced modeling skills and each deck plank would need to be spiled to its proper shape. In the end most of the deck planking along the bulwarks will be covered with the carronade sleds, rope coils and other deck fittings. It is up to you to decide which method best suits your skills and preferences.

While planking the deck be sure to stagger the plank butts from bulkhead-to-bulkhead. Each segment of deck planking should only be long enough to span across four bulkhead edges. A "four butt shift" for the plank butts was used on the prototype. This refers to the fact that as you lay your planking down, the butt ends will create a pattern where they will repeat every fourth row. You will end up with the butt edge of a plank every three rows which creates the pattern shown in the photos. Caulking between the planks was simulated again by running a pencil down one edge of each plank. Some additional photos are provided that show the deck planking completed with joggling along the margin plank. The deck planking was tree nailed the same way the external planking was. It was sanded and stained with MinWax Golden Oak stain.

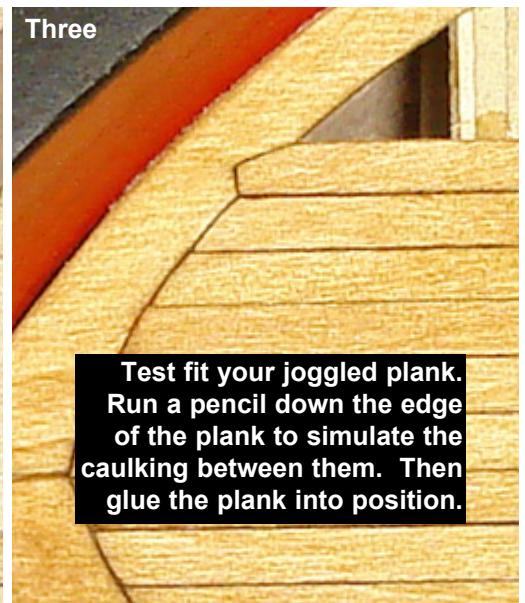
The last step in this chapter will be to create and install the waterway around the bulwarks. A 1/16" x 1/16" strip was shaped as shown in the drawing and glued into position on deck along the sides of the bulwarks. There is no waterway along the inboard side of the stern. It was sanded to a triangular profile rather than a square. At this stage there should be 1/8" between the top of the deck and the top of the port sills. Adding the waterway will still



Trace the shape of the joggled plank with the strip in position. The front edge should be about half the width of the plank.



After cutting the strip to shape, trace it onto the margin plank. Then notch it out with a sharp blade and finish it off with a needle file.

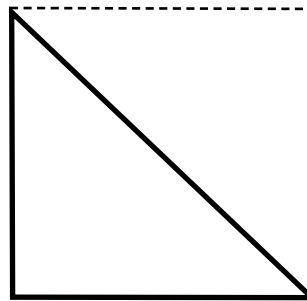


Test fit your joggled plank. Run a pencil down the edge of the plank to simulate the caulking between them. Then glue the plank into position.

Plank jogging or "Nibbing"



leave 1/16" between the top of each sill and the top of the waterway. This is very important because this space is needed for the carronade sled supports that will be added later. If you don't have 1/18" of space between the top of the port sills and the deck you should use a strip of wood that is slightly smaller for your waterway. The waterway can be stained to match the deck when finished or painted red to match the bulwarks. The choice is yours. It was done either way in general practice at the time. The waterway was stained on the prototype. A final photo shows the work completed with the waterway in position.



The Waterway is shaped from a 1/16" x 1/16" strip and sanded to the triangular profile shown.

