



### Continuing work on the interior...

For my own comfort, I decided that it would be much easier to split the interior into two parts. This would break up the tasks and compartmentalize the items that needed to be completed. The side-arms for the two benches would act as a divider and it made sense to me that these should be completed first. Then I would complete the details aft of the bench arms first and then complete the interior work forward of this area second.

The two arms for the benches are laser cut for you and have raised panels laser etched into them. The laser etched panels face forward. The bench arms will be glued to the forward face of frame six. You can see this detail on the plans. The top of the bench arms should sit flush with the top of the cap rail as shown in the photo above. The foot of each will also be glued to the forward face of frame six. Examine that photo carefully. I found that it was easier to paint these two pieces first and then glue them into position.

### Planking the interior.... Aft of the arm rests....

The same photo above shows the laser cut piece used to plank the interior being clamped into position. You

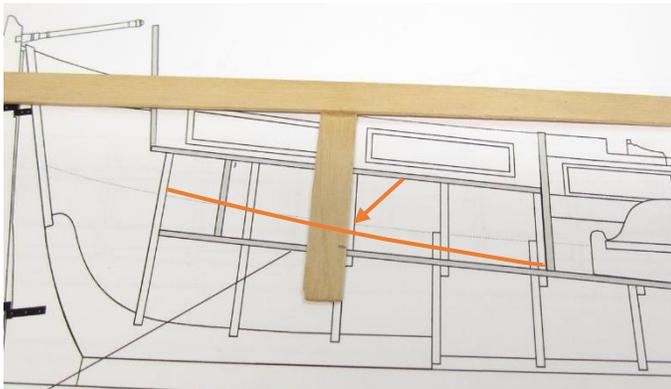
may have to tweak it a bit to get a perfect fit as everyone's model may vary slightly at this point. The laser cut pieces were cut slightly oversized for this purpose. Try and get a nice tight fit. Then sand the top edge flush with the top of the cap rail. Fill any gaps you might see in the corners because you will be painting these pieces red. In fact, you can see that I have already painted them red along with the forward side of the transom. Photo below.



## Framing the base for the benches....

That same photo shows the base for the bench seats installed. Once again these were laser cut for you but were also left just a bit larger in case you need to tweak them for a tight fit. The outside faces were painted red afterwards. That is the easy part...but how will you determine the proper placement for these pieces?

As you did earlier, the best way to find the correct position would be to use your depth gauge "T" square.



You can find the bottom of these two long pieces on the plans. The line is shown in orange above. The depth gauge is then marked at each frame where the bottom of this piece should fall on each frame. Transfer these marks to your model. This will give you a good idea where you should position them. It will help you set the correct angle for them as well. This is very difficult to describe in writing but if you can transfer those measurements properly you should be OK. Once the two longer pieces are in position, you can place the smaller piece between them which will become the base for the back bench. Once again the photo below shows these three pieces in position and painted. Examine their placement carefully before you commit to gluing them permanently.



## The bench tops...

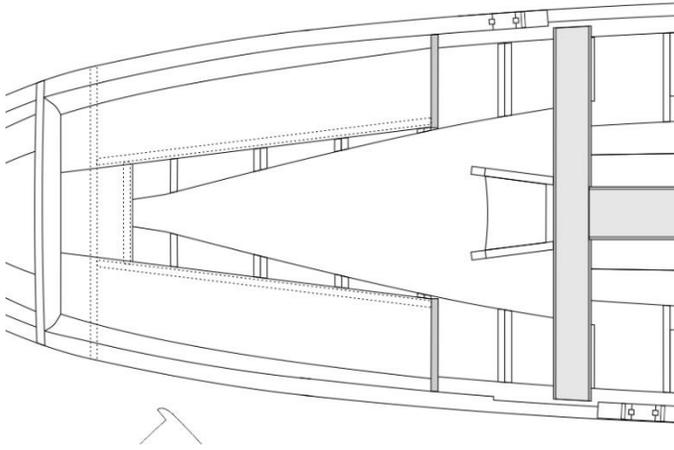


The bench tops are laser cut as well. There are three pieces. All are shown above. The edges have a fancy laser etched detail and this can be cleaned up with some fine sandpaper so it will be smooth enough to paint. The back edges for the longer pieces should be beveled so they sit tight and flush against the interior planking. Fill any gaps before you paint them red. I glued the two longer pieces in position first and then followed up with the third smaller piece so I could tweak it for a proper fit. Then they were painted after being glued into position.



The bench tops are being test fit above. I hope you can see how important the placement for all of the previous parts for the benches are. If the front faces or bases for the bench tops were not placed in their correct positions, the bench tops would certainly not sit properly on top of them. You can see in the photo above how the bench tops have a tiny overhang. All of these elements are accurately shown on the plans. If you examine the overhead view on the plans you will see the elements shown with a dashed line. You can

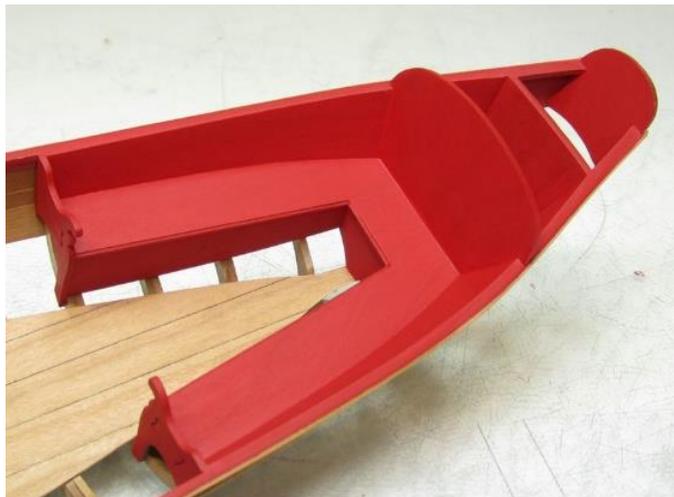
see how the bench tops overhang the bases. Note the relationships between all of the bench parts and it might be a good idea to test fit them all in position ahead of time first. Just use the tiniest drop of glue so you can remove them for any tweaking. Note the dashed lines on the plan shown below.



### The Bench Seat back...

You may have noticed how I paint the parts as I progress. I find it easier this way but you can proceed in a way that makes it easier for you.

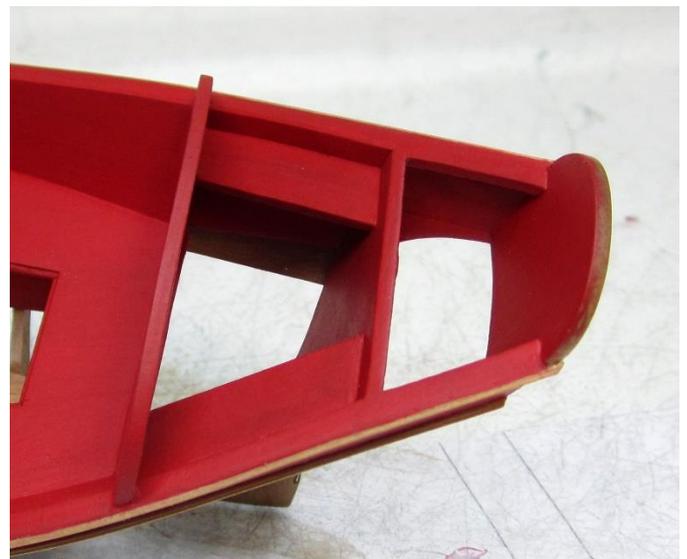
The bench seat back was positioned next. It is laser cut but just like all of the other pieces it will require some tweaking. Depending on how well you faired your frames before you started detailing the interior, your model may be slightly different than others. The important thing to do is try and get a nice tight fit. Because these parts will be painted, don't be afraid to fill any gaps and seams before you paint. Spend some time getting a nice clean finish in all of the corners before you start painting. Sand everything down with some fine grit sandpaper (320 grit) to get the smoothest finish.



Note the angle for the seat back on the plans. The sides should be beveled to sit flush against the interior planking. Paint both sides red as shown in the photo below left.

### The coxswain seats...

The two coxswain seats are laser cut but they are still very tricky to position correctly. They will be angled in a way that will require multiple bevels on both ends and also against the interior side planking. This may require multiple attempts at shaping them so it is best to trace these two parts on a piece of paper before you start shaping them. Just in case you have to cut some new ones as a replacement.

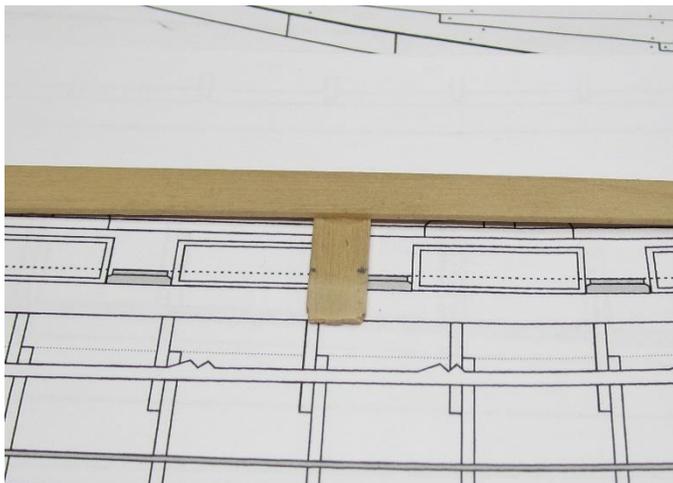


These were painted after they were installed. Check the plans for their placement and angles. Try and keep them consistently positioned on both sides. This is as far as I took detailing the interior aft of the arm rests. Now it's time to start adding the forward details inboard.

### Installing the risers...

The risers are the long planking pieces with little notches cut out for the thwarts. The thwarts or seats will sit in these notches. As with all of the parts that need to be positioned inside of this model, the height in which they are installed is very important. To locate the height we will once again be using the depth gauge.

The top of the riser should be marked onto each frame. I am not talking about the top of the notches but the very top of the riser instead. This is indicated by a dashed line on the plans. I also cut the bottom of the depth gauge shorter at this point because it will need to



The riser pictured at the bottom of the page has been laser cut and pre-spiled for you. Depending on how you faired the interior frames, it should fit pretty well. It has been cut a little longer on the aft end so test fit the riser in position and adjust its length only on the aft end. It will be VERY important that the notches are lined up on both sides of the model so the thwarts are not crooked after being installed.

To give you some extra support on the front end of the riser it is recommended that you add a tiny length of wood as a filler just aft of the frame shown below.

be able to slide up against the sides of the interior so you can accurately mark each frame. See the photo below which shows the depth gauge being used to find the height location for the riser. The location is marked onto the depth gauge.

Then use the depth gauge to transfer that tick mark to the frame on your model as shown below.

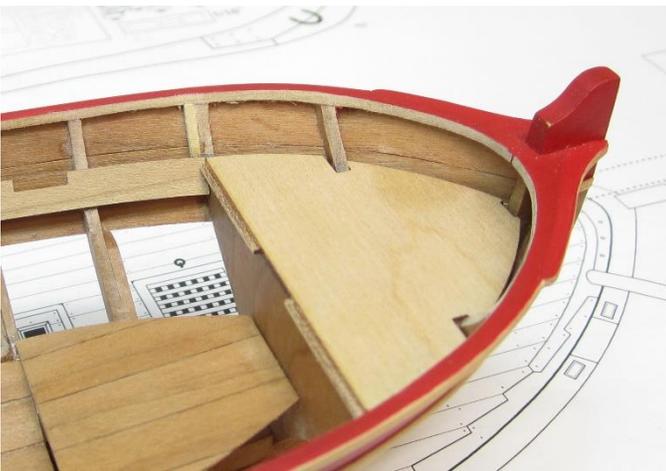


Don't make this filler strip so long that you can see it hanging below the riser after it is installed. You should also add one of these at the aft end of the riser for extra support, just ahead of the arm rest for the benches. This will give you a surface to glue the riser to on both ends. Pre-bend the riser strip just like you did with the exterior planking so it sits nicely against each frame. Note in the photo below where the front of the riser ends. See the photo on the next page which shows the entire riser installed.





Once the riser has been installed on both sides and at the same height, you can add the forward platform. The forward platform is laser cut in one piece. Depending on how well you faired the inside of the hull at the bow you may need to tweak its shape in order to get the best fit. See the photo below. Note how the top of the platform is flush with the top of the riser. This is important because the top of the thwarts should be at the same height as the top of this platform.



At this stage I decided to paint the risers and the top of the platform red. It will be very difficult to paint the riser neatly after the thwarts are added. Note how the platform overhangs just a bit on its aft edge. See the plan for details.

### Adding the stretchers...

Before adding the thwarts, you should add the stretchers. These are the thin square timbers that *stretch* across the bottom of the model. These were used by the rowers to push off with their feet and keep themselves secure on the thwarts as they rowed.

The stretchers were placed into chocks on a long thin timber that ran along the bottom and sides of the frames. It is situated just above the floorboards.

These should be glued into position first. Once again, their placement is important so the chocks are lined up on each side to accept the stretchers so they are not crooked. I left them natural which is how they are shown on most contemporary models although the actual stretchers are rarely shown unless rowing figures were included. This is such an interesting feature I decided to include them even though I won't be adding any rowers. Carefully sand the laser char from the long thin pieces and try to get into the corners of the chocks as best you can. You will notice how the chocks were set up so the stretchers can be moved to multiple locations depending on how tall the rower is.

The stretchers are cut from the 1/16" x 1/16" cherry strips provided in the kit. See the photo below which shows the stretchers glued into position. Note the painted riser and forward platform. Look at the



stretchers in relation to the notches for the thwarts. They are lined up almost even with what will be the forward edge of each thwart.



### Let's add those thwarts...

The thwarts can be a little tricky to install. First let me point out that the thwarts are laser cut on the sheet in the order that they need to be installed. I have marked them in pencil. You should sand the top of each thwart before you remove them from the sheet and then mark each of them again with the appropriate number in pencil so you don't mix them up afterwards. Thwart number "one" is the first thwart at the bow. Once you cut them free from the sheet use some fine sand paper to smooth the top of the fancy edge on each side. But there is no need to remove all of the char. You are just smoothing out the surface so you can paint them after. Also lightly sand the edges. You can see in the photo (top right) that they are NOT completely free of laser char.

In addition to the thwarts, there are short pieces that will be fixed into the notches you see in the center of each thwart. This will create a continuous run down the center of the model and they should line up with the keel below them. Sand these as well but don't worry about numbering them because they are all the same length. In fact, they are all laser cut much longer than you will need them and you will need to cut them to length so they fit snug between two thwarts. Please also note (and this is very important) that you should NOT over sand the edges of these shorter pieces. You want them to fit tightly into the notches of each thwart. Try and test fit one of these pieces into the notch of a thwart before you sand the edges. This way you will know just how much to sand each the edges and won't over-do it. Use a very light touch so you get a tight snug fit.



The first thing I did was test fit the thwarts in the notches of the riser. You may need to adjust the notches along the riser so the thwarts sit properly in them. Remember that the thwarts should all be parallel. The ends of the thwarts may also need to be beveled so they sit against the frames properly. The top of each thwart should be flush with the top edge of the riser (maybe even a little lower is best). This is very important because you will be adding a planking strip on top of the riser later which should sit down flush against the top of the thwarts leaving no spaces between the riser and this plank above it. It is much better to make the notches for each thwart deeper so the planking above it will sit in position better.

Once you have test fit all of the thwarts in their respective positions and are satisfied, you can begin test fitting the shorter pieces that run down the center of the model. To do this, I actually glued one of the shorter pieces into the notch of a thwart and then test fit it on the model so the center piece overlapped the next thwart it will affix to. This is shown in the photo above. This allowed me to mark the length of the piece so I could trim it to fit into the notch correctly on the next thwart. I removed thwart with this piece glued into it which forms a "T", and trimmed the short piece to length. But I was very cautious. I cut it a bit long and then used a sanding stick to carefully sand it a little at a time. Repeatedly checking/testing it in position to see if it fit snug into the next notch. I did this several times until I achieved a good fit.

This process was repeated for every thwart until they were all test fit. Then afterwards I labelled and disassembled them so I could paint them and glue them into place permanently. The photo at the top of the next page shows all of thwarts test fit in place with no



glue. This is how it looked before I disassembled them for painting and reassembly. Note how tightly the center pieces are fit into the notches of each thwart. See how the thwarts sit in each notch of the risers??

### Finishing the inside planking...

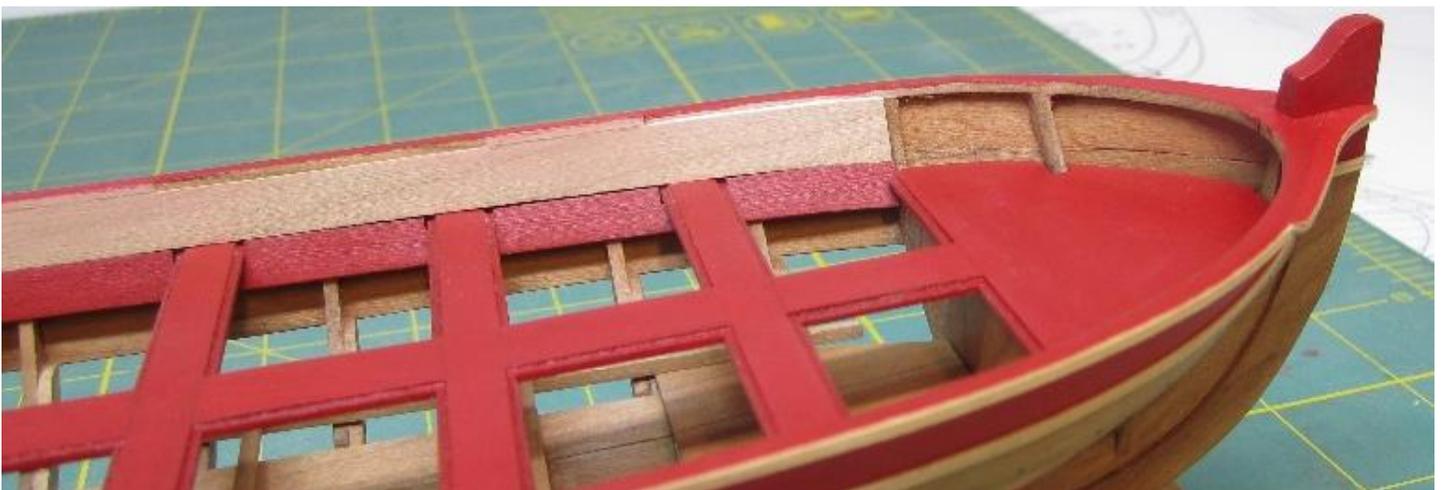
As mentioned earlier, you will be planking the interior above the thwarts. A long plank has been laser cut for you and is 1/32" thick. It is pre-spiled but will still need some shaping. Most important is its width. This plank will NOT extend to the top of the cap rail. It will need to be carefully sanded along the top edge so it extends only up to the BOTTOM edge of the cap rail. This will leave a small rabbet of sorts all along the top as it runs from bow to stern. This is a feature shown on all contemporary models and is rarely seen on modern kits or scratch built models of barges. It's a shame because this is a very distinctive feature. This initial plank will only extend forward to the platform. An additional shorter, curved plank is laser cut for you that will extend to the stem.

At various intervals between certain thwarts you will see a thin cherry strip that should be placed in position so that it does extend up to the top of the cap rail. These pieces should be placed along the top edge of the

longer plank and should be sanded flush with the top of the cap rail. The purpose of these short pieces is to make the cap rail wider for the thole pins. You can see



how it creates a decorative pattern along the edge of the cap rail inboard. The photo above shows this detail on a contemporary model of a barge. Examine the plans carefully for where these short lengths should be added because they alternate from one side of the barge to the other. The bottom photo shows these elements in position on our model. This is why it is so important that the initial plank only extend up to the bottom edge of the cap rail. If you placed your riser too low you may





have to use the laser cut plank as a starting template only and cut a new plank from a 1/32" sheet of cherry so it is the correct width. Use it as a pattern to cut a wider version.

The photo above shows the aft end of this planking. Note how the planking is extended up to the top of the cap rail here. The shorter lengths that you will place between the thwarts are also laser cut for you so their lengths will be consistent. Fill any gaps and sand everything smooth to prepare the surface for painting.

Unfortunately I don't have any photos of the shorter curved piece of planking that finishes it off at the bow. But I will show a later photo below of the model so you can see how this portion of the interior planking should look after it's all painted. Note how the plank was run



under the cap rail at the bow. The seam between this piece and the longer section of planking was filled with wood filler and sanded smooth. It also shows how the shorter sections atop the planking makes the cap rail wider where the thole pins will reside. I also added a few filler strips close to the stem so I would have a surface to glue the curved plank onto. The filler strips were faired so the plank would sit nicely in place. The smaller curved plank was pre-bent and cut to length as it was laser cut a bit longer so it could be tweaked to fit properly.

That same photo is actually a great preview for the next step which will be to add the laser cut panels along the inside of the barge.

**Adding the boxwood panels...**Fair warning!!! The boxwood panels are very **VERY** fragile. Handle them with extreme care. These panels were laser cut from a 1/32" thick sheet. They are extremely fragile and prone to splitting along the grain but will make the task of adding them much easier than cutting individual strips to form each "box panel" one at a time. Each panel has a laser etched decorative edge as well. I would recommend that you only lightly sand the top surface of each panel to clean it up a bit. I would not even try to remove the laser char from the etched edges at all or even the inside edge of each panel.





The photo provided on the previous page shows the smaller panels test fit in position. They are all the same size. You can see how the laser char was left in place and in my opinion it actually helps accentuate the etched profile. I actually did remove all of the laser char from one panel which took a very long time and only after breaking several of them in the process. Once I tested it in position, it did not look as nice as the panels that had the char remaining.

Note that the smaller panels are all the same size except for the one panel at the extreme bow and the two that will be placed along the back of the benches. And finally there is the large boxwood panel with the curved top that should go on the seat back. I would recommend that you leave this one as the last panel you position because its size makes it even more fragile.

Those smaller panels should rest on top of the thwarts. They should sit in the etched edge of each thwart as shown in the photo on the previous page.

The first panel at the bow will need to be bent slightly to fit properly. I pre-bent the panel just like I did for the planking using heat from the hair dryer. It only needs a

slight bend. This must be done very carefully and then maybe clamped in place as the glue dries.

Once all of the panels are glued in position you can cut out the paper friezes provided and glue them inside each panel. The friezes are sized to be a perfect fit if you cut them out carefully. Use a sharp number 11 blade and cut them right up to the edge of each frieze. I used a child's glue stick to affix them inside each panel.

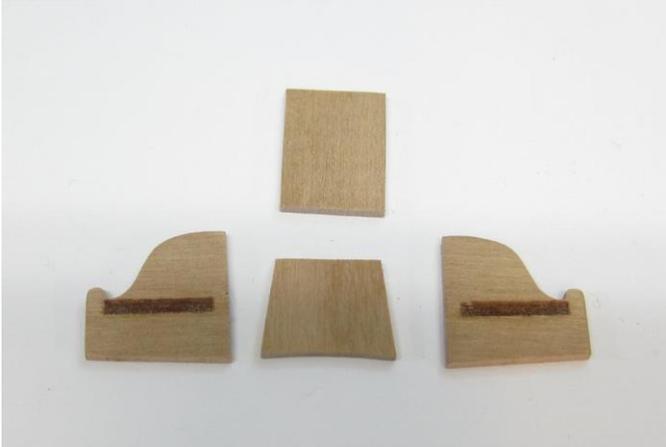
Note how the smaller friezes are all the same but when you add them to each panel you should alternate the design by turning every other frieze upside down. See the photos on this page.

The bottom photo also shows the boxwood molding added to the flying transom. You don't have to add this yet but I couldn't resist. It should have a slight overhang inboard and outboard. This is laser cut for you although you may have to trim the bottom ends a bit. I also added the carving of Queen Anne's monogram to the inside of the flying transom, but again this will be described later. You can use the resin casting or carve your own.



### The step and flag support bracket...

There are two more details that should be added to the interior of the barge before we return our focus outboard. The first is the step down into the stern sheet or "cockpit" area. The step consists of four laser cut pieces shown below. Sand them smooth and assemble them.



The two sides have a laser etched slot to accept the step. Glue the step into position first and then glue the backing on. The completed step is shown below.



In the same photo you will also see the support bracket for the flag which will be placed at the bow. You can see the image below which shows this bracket glued in position. It was painted red. Not the hole in the bracket. This is for the flag staff. But in addition to this hole, there should be another directly below it which you need to drill through the forward platform. So when you place the bracket in position make sure the hole is lined up with the center of the barge. See the photo above right.



You probably recognize this photo from being posted earlier, but this time take note of how the bracket rests on top of the panel. You will need to bevel the sides so they sit flush against the inboard planking at the bow. The second hole has not been drilled through the platform yet beneath the hole in the bracket. I am going to wait until I make the flag staff so I can make sure the staff is perfectly vertical after being inserted through both holes. Any cracks or seams were filled along the sides of the bracket and then it was painted red.



The step was glued to the aft side of the last thwart as shown above. It was painted first and then glued into position. In the last part of this project (part 3) we will return our focus on the outboard details and finish up the model.