

Bluenose II – Part 4

Cutting the Scupper Holes

Last time, we finished planking the hull and bulwarks. Next, let's cut the scupper holes. Referring to the L.B. Jenson book, you'll see that there are quite a few more scuppers that what AL shows in their plans. The scuppers are cut between stanchions and follow a particular pattern. On the afterdeck, counting forward from the stern, there are scuppers between each stanchion, except there is no scupper between the 6th and 7th stanchions (counting from the stern forward). On the foredeck, the pattern is a bit more complex. I'll represent the pattern using the following symbols: “|” = stanchion, “o” = scupper, and “X” = no scupper. Thus, the pattern, starting from the break beam, is X | o | o | X | o | X | o | X | o | o | o | o | o | o | o | o | X |. This should be clearly visible in Photo 1. This pattern is not repeated – the scupper holes on the foredeck do not go all the way to the bow.



Photo 1: Scupper holes

Cutting the scuppers is not hard. Using a 1mm (3/64-inch) drill bit, drill a hole along the side of each stanchion where a scupper should be located. Drill from the inside out. Watch the deck – if you're using a Dremel tool to drill, you can easily scratch the deck with the chuck. Lay the paper template you used to mark the stanchions over the deck to protect it while you drill. Also, be careful not to damage the stanchions with the edge of the drill bit.

After you've drilled all the holes, use your hobby knife to cut out the slot in between (this is most easily done from the outboard side). Finally, square up the holes with a small flat file. One of my needle files is 1mm by 5mm in cross section and that turned out to be perfect for this task.

Now is the time to finish off the transom. First, cut and sand the bulwarks at the stern to match the plane of the transom. Then, cut a piece of 1/16" sheet basswood to the general shape (but larger) of the transom. Pay attention to the grain of the wood as you cut it. The grain should be running up and down because this transom cover piece needs to bend from side to side. If you like, scribe some lines in the sheet basswood to represent individual planks (inside and out). This piece should be large enough cover all the side and bulwark planks. Glue the transom cover in place using medium CA. You may find it helpful to add a bead of yellow glue to the inside joints between the transom and the bulwarks. This is a pretty weak joint with not much gluing surface and the yellow glue

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dries to form a strengthening fillet. Once all the glue is dry, shape the transom. The top of this transom piece should follow the camber of the deck, so it will be slightly higher in the center than on either side. As mentioned earlier, the transom curves from side to side. Because you shaped the transom bulkhead earlier, the basswood cover will also curve, but you'll also want to sand the edges down to the side planking so the two blend into a narrow joint.

The Breast Hook and Poop Cover

Now, we're ready to finish off the rails, breast hook, and poop cover (also called a stern seat). You should go ahead and paint the inside of the bulwarks and transom at this stage. It will be harder once the rail cap, poop cover, and breast hook are in place. If you're following the paint scheme of the real Bluenose II, the bulwarks and stanchions are painted white.

Let's make the poop cover. We can't use the piece supplied in the kit because we've modified the transom. But this is simple to make out of 1/16-inch sheet basswood. Cut it a bit oversize so you can sand it to fit later. The projecting "arms" of the cover should come just up to the second stanchion. Make sure they are wide enough (about 7mm) to accommodate the belaying pin holes that will be drilled later. Add thin strip wood around the location of the hole the main sheet block will go through and then cut the hole after adding the strips (refer to page 112 in the Jenson book). Before gluing the poop cover in place, drill a hole and glue in an eyebolt at the junction between the waterway and the transom (the main sheet block will be attached to this eyebolt later). Be careful not to drill all the way through the transom! Photo 2 shows the poop cover fitted and in place.



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Before adding the main rail caps (you can use the kit-supplied material for these) to the bulwark, you'll want to bend them more or less to shape as you did with the waterways. There would be too much stress on them if you didn't pre-bend them first. Turn your boat upside down and draw an outline of the bulwarks on a large sheet of paper. Fasten the paper to your kit box top and, following the line, hold your soaked rail caps down to the box top using T pins. It's best to bend the caps a bit farther inward than necessary – they will spring back a little when they are released.

Allow the rail caps to dry thoroughly before removing them (such as over night). Start at the stern and fit the rail cap against the poop cover, then work your way forward. Align the inboard edge of the rail cap so it slightly overlaps the stanchions. Most importantly, there needs to be about 1mm projecting on the outboard edge. The joint at the bow should be in line with the keel. Don't round off the inboard edges of the rail cap yet – you need to glue the pin rails in place first.

You can use the kit-supplied breast hook material (cut down to size) if you wish, although I just made mine out of sheet basswood. As you can see from Photo 3, the breast hook sits inside the rail caps, not under them as the AL plans indicate. You may find it helpful to put small pieces of scrap wood under the rails at the bow to make it easier to glue the breast hook in place, but be sure you put them far enough forward that they won't show.



Photo 3: Breast hook

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The Pin Rails

With the main rail caps in place, this would be a good time to add the pin rails. (I confess, I left mine until later and, while it was no problem on the foredeck, it was harder on the afterdeck because of the taffrail.) Once again, we're going to deviate slightly from the AL plans in determining where to place the pin rails. The location of the pin rails is directly related to the location of the deadeyes. The way AL wants you to lay out and rig the deadeyes is quite different from the way it's done on the real Bluenose II. But it's easily corrected.

If you refer to the L.B. Jenson book (pages 35, 111, and 113), you'll see that on the forward shrouds, there are four deadeyes for the shrouds, each of which corresponds to the location of a stanchion. There is a 5th, smaller deadeye, not located at a stanchion, but between the 1st and 2nd deadeyes (counting aft from the bow). This deadeye is used for the outrigger, which goes all the way to the top of the mast (see page 32 in Jenson's book). AL shows this outrigger connected to the aft most deadeye, which is incorrect. The key point about the outrigger deadeye is that it is located just about at the center of the foremast. The 1st deadeye is actually forward of the mast. So, counting from the break beam, forward, the shroud deadeyes will eventually be located on stanchions 11 – 14. The outrigger will be between stanchions 13 and 14. This now gives us the location of the pin rail, which should extend almost to stanchions 10 and 15. **Note: Don't install the deadeyes and chainplates at this stage – we'll take care of this later.**

For the afterdeck pin rails, we have a similar situation. In this case, we'll need five shroud deadeyes, starting at the 3rd stanchion (counting aft from the break beam). The outrigger will be placed between the 1st and 2nd shroud deadeyes (again, counting aft from the break beam). So, the pin rail needs to extend almost to stanchions 2 and 6.

Don't rely on glue alone to hold the pin rails in place. When the model is rigged, there can be considerable stress on the pin rails. Put three pins in the rails to strengthen them. I used small pins that I already had, but you can use small-diameter hard brass wire. I drilled holes from the outside in, all the way through the main rail cap and the pin rail. Then I cut each pin a wire short so I could be sure it would not protrude once in place. When you cut these wires, please watch your eyes! These small bits can go flying when they are cut and easily wind up in undesirable places. Safety glasses wouldn't be a bad idea for this operation.

While we're on the subject of brass wire, I should mention that I like to keep several diameters of the stuff around. I find it handy for all sorts of things including pinning things in place, making mast and spar fittings, etc. This wire is typically available in 12-inch straight lengths (not coiled). It's harder than coiled wire. I get mine at a local hobby shop that specializes in trains, but I've found it in many other hobby shops and, of course, it's available online.

After the wires are in place, I put a small drop of thin CA in each hole to help the bond, then filled the holes with a dot of wood filler. Once sanded and painted, you'll never know these holes are there. I'd highly recommend using a hand-held pin vise for drilling

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these holes. A powered drill would be very difficult to control. When you drill the holes, it's best not to put a pin at a stanchion location, because the chainplates will have to go through the rail cap at those points. You might also want to drill the belaying pin holes so you can avoid putting a securing wire thru one of the belaying pin hole locations.

The plans show belaying pin holes spaced all along the main rail cap and taffrail cap. Although there are some belaying pins in the rail caps on the real Bluenose II, there aren't as many as shown in AL's plans. I'd advise not drilling any holes in the rail caps at all with one exception. Outboard of the steering wheel are two ring bolts (labeled 139 on the plan, one on each side). Drill a hole in the main rail cap (NOT the taffrail cap) for a belaying pin at this location (port and starboard). It will be used later to tie off the running backstays.

While we're on the subject of belaying pins, I should mention that the ones supplied in the kit are badly out of scale. They would be nearly 3 feet long on the real vessel! Real belaying pins are only about half that length. Strangely, the kit-supplied pins don't actually look bad on the model, so I chose not to replace them. If you want to replace them on your model, be aware that scale-size pins will have a smaller diameter, so drill your holes accordingly.

The Taffrail

Now, we're ready to move on to the taffrail (also sometimes called the monkey rail). The taffrail cap is narrower than the main rail cap. I used 3mm wide stock for the taffrail cap (cut from a piece of 1.5mm by 5mm planking material). For the rail itself, I used the same 1/16-inch by 3/32-inch strip wood that was used to make the stanchions.

You'll need to make a decision at this point about how you want to handle the forward end of the taffrail. On the real Bluenose II, the taffrail cap is rounded over in a sharp radius (see page 110 of the L.B. Jenson book). There's no good way to bend this with the small material used at this scale. The only way to make it is to carve it out of solid stock (and this was often done on real ships of this type, by the way). Carving a small piece like this is **dangerous** however, so you need to assess your own skills in working with a very sharp hobby knife. If you are not 100 percent comfortable, don't try this. Better to save the money you'd spend at the emergency room getting stitches for more tools or supplies! Take a simpler approach similar to that shown in the AL plans where there is a cap at about a 45-degree angle covering the end of the taffrail. Doing it this way will look fine and will be much easier. If you decide to carve these pieces, use a moderately hard, tight-grained wood. I used poplar for mine because I had a small piece handy in my scrap bin. Glue the carved ends on top of the main rail cap so they end just about at the break beam. Then glue the taffrails in place.

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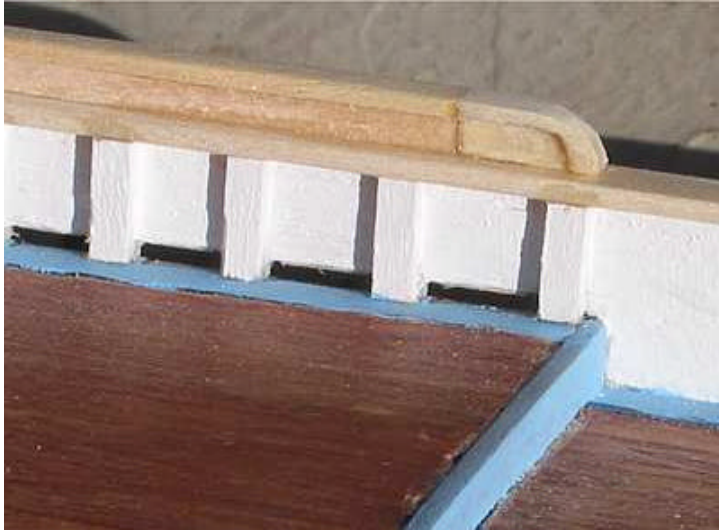


Photo 4: Rail carving

The rails should not be centered on the main rail cap but rather should be offset toward the outside. Place the rail so that when the cap is applied, the outside edge of the taffrail cap is parallel to the outside edge of the main rail cap. The rail on the transom can be made from a pre-bent strip of wood. The rail cap across the transom should be cut from sheet material. Center the taffrail cap on the rails as you glue the caps on.

Finishing Touches

There are just a few more minor steps to finish out this stage. You can add the stem and keel pieces now. You want to strive for a smooth transition between the planks and the keel with no gaps. Add the chock rails at the bow (AL calls these trailboards for some strange reason). The mooring chocks at the bow sit on top of these rails. Refer to page 113 in the Jenson book and you'll see that the chock rails are quite different in shape from what AL shows. I made mine from 1/32-inch thick strip basswood cut to a 2mm width. I centered the chock rails on the main rail cap and ran them back to the 7th stanchion (counting from the bow, aft). There is no taper to these rails. Note also, in Photo 3, the small pin rails with holes drilled for the anchor davits. Note that the hole extends down into the waterway.

You may want to add some cavils (also called cleats). There are two on each side – one aft across the 2nd and 3rd stanchions (counting forward from the stern) and one forward across the 10th and 11th stanchions (counting aft from the bow). You can see the two forward cavils in Photo 3. These cavils won't be used in rigging your model (they were typically used for mooring), so if you want to omit them, go ahead. There are lots of things on the real ship that won't wind up on the model. It's all a matter of personal choice as to how much detail you want to add. One advantage to adding at least the afterdeck cavils is that they will hide the brass eyelet used for the hawse hole. In fact, if you install the afterdeck cavils, they should have a hole drilled in them, located exactly over the hawse hole.

End of Part 4