With the hull fully prepared, we can now add the deck furniture and other fittings. Unfortunately, this is where things begin to go badly wrong with this kit. If you compare the AL plans to the plans in Jenson's book, you'll see some major differences. For example, the aft cabin is much longer on the real Bluenose II. AL shows portholes on the cabin on the foredeck, that don't exist on the real Bluenose II. The main bitts and fife rail (the structure around the main mast) are badly out of scale and the bowsprit bitts are the wrong shape altogether. AL's anchor windlass looks nothing like the one on Bluenose II. There are a number of other less-critical problems as well.

Many of these problems can be corrected to some degree. All of them could be corrected, of course, but that would require building every cabin, hatchway, etc completely from scratch – something I won't put you through on this model. Still, we'll make our own bitts and the anchor windlass from scratch and, hopefully, have a bit of fun doing it.

Cabins and Hatchways

Start with any of the deck structures (cabins or hatchways) that suit you. If your kit is like mine, you'll find that the pre-cut plywood pieces don't actually match the plans – especially the hatchways and the steering box. Apparently the kit used solid blocks of wood for these structures at some time in the past and, although these blocks were replaced with pre-cut plywood, the new plywood pieces don't match the plans. Bottom line – go with the shape of the pre-cut plywood and forget what the plans show. The steering box (part number 121), however, is radically different and you'll want to modify the pre-cut parts to make the steering box look something like the plans as well as the box on the real ship.

I generally followed the assembly drawings provided on plan sheet 4. Once I'd assembled the side walls of a structure (a cabin for example), I decided where on deck that structure would be located and, using a sharp pencil, marked the inside of the walls on the deck. I then drilled holes in both the deck and the structure for a couple of pins (usually on opposing corners) so I could easily locate the structure back to the same spot in the future. I used .020 in. diameter brass wire for the pins. Don't glue on the pins until the structure is finished – they'll just get bent as you work on assembling the rest of the structure. These pins not only help locate the structure, but also help to hold it to the deck when the structure is glued on later.

You'll notice in Photo 1 that I planked the walls and tops of the cabins. I used the mahogany planking that was intended for the second-layer planking on the hull. An alternative would be to use the deck planking material for the cabin tops. At one point the real Bluenose II had her cabin tops painted the same light blue color as her waterways. The choice is yours.

In most cases, I was able to apply a full-width plank, then score it to give the appearance of narrower planks. I also added corner posts, brass bars and hinges on the skylights, and plastic "glass" in the skylights. I didn't add coamings at the joint between deck and cabin sides, but they would look good if you chose to add them. You can customize as much or

as little as you like with these structures, however I'd recommend planking at the minimum – the raw plywood really wouldn't look good. I stained all the cabins and hatchways with red oak stain and finished with a coat of satin varnish. This helps to darken and hide the ugly edges of the plywood on the hatch covers and cabin tops. I chose not to put the railing on the main cabin, by the way. The kit-supplied stanchions are badly out of scale. Making a properly scaled railing would not be an easy task for a first time modeler and I don't recommend that you attempt it.



Photo 1: Forward deckhouse

Making the Bowsprit Bitts

As I mentioned earlier, there are a few deck structures we want to make from scratch. "Building from scratch" may sound a bit scary to the first-time modeler, but the structures we're going to build are quite simple and fun to build. We'll start with the easiest – the bowsprit bitts. The drawing below shows all the measurements. There are only four pieces. Simply cut out the pieces and glue them together. Pin the joints once the glue has set – this is a fairly fragile structure. Finally, paint the bitts white. On the real Bluenose II, the legs of the bitts are a natural finish, so you may choose to finish yours in that way as well. There you have it – you've built your first structure from scratch! Not too difficult, right?



Dia 1: Bowsprit bitts (not drawn to scale)

Making the Anchor Windlass

The windlass provided in the kit is nothing like the real windlass on Bluenose II, neither is the windlass on Bluenose II anything like traditional windlasses used on 19th century fishing schooners (including the original Bluenose). It is a much more modern, powered windlass. Refer to the drawings on page 111 of Jenson. Making a simplified model of this windlass is slightly more involved than the bowsprit bitts, but still not difficult and it's guaranteed to look better than the kit piece.

The Jenson drawings are not at the same scale as our kit. There's no exact scale given on any of the drawings, but on the drawing on page 111, I've calculated the scale to be approximately 1:84 or 1in.=7ft. It takes a bit of time and mathematics to measure on the Jenson drawing and then convert the measurements to 1:75 (the scale of our kit) so a calculator will come in handy. Or you can just follow my measurements since I've already done the work for you. Don't worry overmuch about accuracy here. In keeping with the general tone of this model, we're making a simplified version, not an exact scale replica.

In Photo 2, you can see all the pieces of the windlass with the following dimensions:

- Base: 3/32" x 7/8" x ¹/2" x 3/32"
- Starboard upright piece: 3/8"(h) x ¹/2"(w) x 3/16"
- Port upright piece: 5/16"(h) x ¹/2"(w) x 3/32"

I used one of the windlass drums supplied in the kit for the central drum. It is just about the perfect width, but the shafts were not quite long enough. To fill out the space between the uprights, I cut some small lengths of $\frac{1}{4}$ dowel stock and glued them onto the upright pieces where the shaft holes would be drilled. The shaft holes are $\frac{1}{8}$ in diameter and I

drilled them ¹/4" up from the base to be sure the large drum had clearance. Start with a smaller drill first (such as 1/16"), then move up to the larger size. Be sure to hold these small pieces in a vise or a pair of pliers – you shouldn't try to hold these in your fingers. Drill down into the dowel piece, going all the way through with your small drill bit. Then enlarge the hole in the dowel piece with your 1/8" bit, but you may not want to go all the way through to the outside. I didn't drill the 1/8" holes all the way through because I didn't happen to have a piece of 1/8" dowel stock for the outer drums. I dug around in my kitchen drawer and found some bamboo skewers that were close, but a bit smaller. So I made the holes on the outside of the upright pieces smaller to match the diameter of the bamboo drum shafts.

The outer drums were made from small lengths of 3/16" dowel stock with thin slices of $\frac{1}{4}$ " dowel stock on either side. After the glue was dry, I drilled holes in the drums for the bamboo shafts (not all the way through) and glued in longer-than-necessary lengths of bamboo. I wasn't sure each hole was drilled to the same depth, so I didn't want to cut the shafts to length first, only to discover too late that one was too short! After the shafts were dry, I cut them off about 3/16" from the end of the drum. When these are glued on, you need enough space (about 1/16") between the outer drum and its adjacent upright piece for the chain to lay into. On top of the larger upright piece are two circular objects. I frankly don't know their exact purpose and haven't been able to discover it. I made these from 3/16" dowel stock sanded down to a bit smaller diameter and topped each with a thin slice of 3/16" dowel.



Photo 2: Windlass parts

That's it for the fabrication. Before gluing the parts together, I painted the inside areas that I knew would be hard to paint later. I also blackened the brass drum. I used a blackening solution called Blacken-It (available from Micro-Mark and many hobby shops) but the drum could be painted black. I assembled the parts of the windlass, gave it a coat of gray paint plus some black on the outer drums, and that's all there was to it. A very easy yet satisfying little project that took no more than a couple hours and some scrap wood.

There are two chain pipes that go behind the windlass (so the chain can go below decks to the chain lockers) but you can add these later, when the windlass is mounted to the deck. They are made from 5/32 in. (outside diameter) aluminum tubing. I wanted to flare the tops of the tubes. I discovered that the running lights provided in the kit were perfect for a die because they have a conical top. I simply inserted a running light into the tube and tapped on the bottom of the light with a hammer until I got the shape I wanted.



Photo 3: Windlass and chain pipes

Making the Main Bitt and Fife Rail

The horseshoe-shaped fife rail supplied in the kit is about twice the size it should be. In addition, it in no way represents the look of the real assembly on Bluenose II (refer to page 110 in the Jenson book). Making a replacement is not difficult and, in fact, rather fun, because we get to try our hand at turning some stanchions. By now, you're an old pro at scratch building, so this should be no real challenge.



Photo 4: Main bitt and fife rail parts

Photo 4 shows the various parts of the assembly. In the center is the mast coat (AL calls this a "mast hole cover" - part #148). The main bitt assembly needs to fit around this mast coat, so I used it to mark the inside radius of the fife rail. This assures that the stanchions will fit outside the mast coat. I then moved outward 4mm to mark the outside radius (in other words, the fife rail is 4mm wide). Overall, the fife rail came out 23mm long and 23mm across the outside. I used 1/16-inch thick basswood sheet material to cut out the fife rail. This is actually larger than the scale dimensions of the fife rail on the real Bluenose II (as is the rest of this assembly), but we have to accommodate other parts of the model, which are also out of scale. I made a scale version of the main bitts and fife rail, in fact, but they were simply too small for the model. This represents what I believe to be a reasonable compromise.

The main bitts are made from 3mm or 4mm square stock (whatever you have handy) and the bar between the bitts is 30mm by 6mm (also from 1/16-inch sheet stock). Note that there is a notch cut in the bar for the boom rest (which is 33mm tall). Note also that notches are cut in the bitts for the ends of the fife rail. These notches are about 9mm off the deck – they should be the same height as the stanchions so the fife rail sits level to the deck. To make these notches, mark the width of the notch on the bitt and make two cuts

with your razor saw, just inside each mark (watch your depth). If you have a bit of material left in the middle, just snap this out and clean up the bottom of the notch with your hobby knife.

I made each bitt in two pieces – one piece below the bar and one above. Of course, on a real ship, each bitt would be a single piece with a hole in the bar to fit over the bitt. You can certainly do it this way if you prefer. Once the bitts are painted, you won't be able to tell the difference one way or the other. In either case, the bottom of the bar is about 13mm off the deck. On the real Bluenose II, there are knees behind the main bitts that provide additional bracing. I chose not to make these, but feel free to do so if you want the added detail.

Making the stanchions is the most fun part of building this little assembly. You might think you need a lathe to do turnings, but, in fact, I did mine using a ¹/₄-inch drill. A 3/16-inch dowel was too thick, so I sanded the dowel down to about 5/32" by chucking the dowel in the drill and applying sandpaper while the dowel was spinning. (You'll be doing this same operation later when you shape the spars.) Once I was satisfied with the diameter, I marked the locations where I wanted the rounded parts of the stanchions to be. I made two marks 8mm apart and a third mark centered between those two. Then I used a triangular-shaped needle file to make ball shapes between the marks, leaving about a 1mm wide gap in the center. Once I'd gotten the shape I wanted, I used very fine sandpaper to smooth it all down. I made both stanchions on the same piece of dowel then cut the stanchions off later, leaving a bit of the full-width material on both ends.



Photo 5: Turning stanchions for the main fife rail

Photo 6 shows the final assembly before painting. Drill the holes for the belaying pins before you glue the stanchions onto the fife rail (note also that the hole pattern differs from AL's plans). I suggest as well that you drill and pin the stanchions to the fife rail as well as glue and pin the bitts to the bar. I recommend NOT gluing up the 3 main parts

before you've fitted the mast. It can be a tight squeeze and you stand a good chance of knocking the main bitt assembly to pieces while you're trying to fit the mast. In addition, you may find you have to adjust the height of the boom rest once the fore boom is in place.



Photo 6: Main bitt and fife rail before painting

Ah yes – one last thing. AL's plans show a pump inside of the fife rail. This is clearly a figment of someone's imagination because there is no such pump on the real Bluenose II, which has electric bilge pumps. I did not add the pump to my model. The fife rail and bitts, at least in the 1997 video, were a natural finish on the real Bluenose II. I chose to paint mine white, but, again, the choice is yours.

Quarter Bitts

One last simple structure to make is a pair of quarter bitts. AL calls these "deck cleats" and they are supposed to be made from brass (part numbers 127 and 128). Of course, this is not realistic and making these quarter bitts from scrap wood is easy. The dimensions are shown in the drawing below. Drill a hole through the post for the cross piece and square up the hole with a needle file. The bitts should be painted white and installed outboard of the wheel box in the locations shown on Al's plans. However, don't add "deck cleats" anywhere else on the deck – they aren't there on the real ship.



Dia. 2: Quarter bitts (not drawn to scale)

You can see these quarter bitts as well as the main sheet horse in Photo 7. Note also, the cavils (with holes for the mooring hawsers) attached to the stanchions as well as the pin holes for later locating the wheel box.



Photo 7: After deck with quarter bitts and main sheet horse

End of Part 5