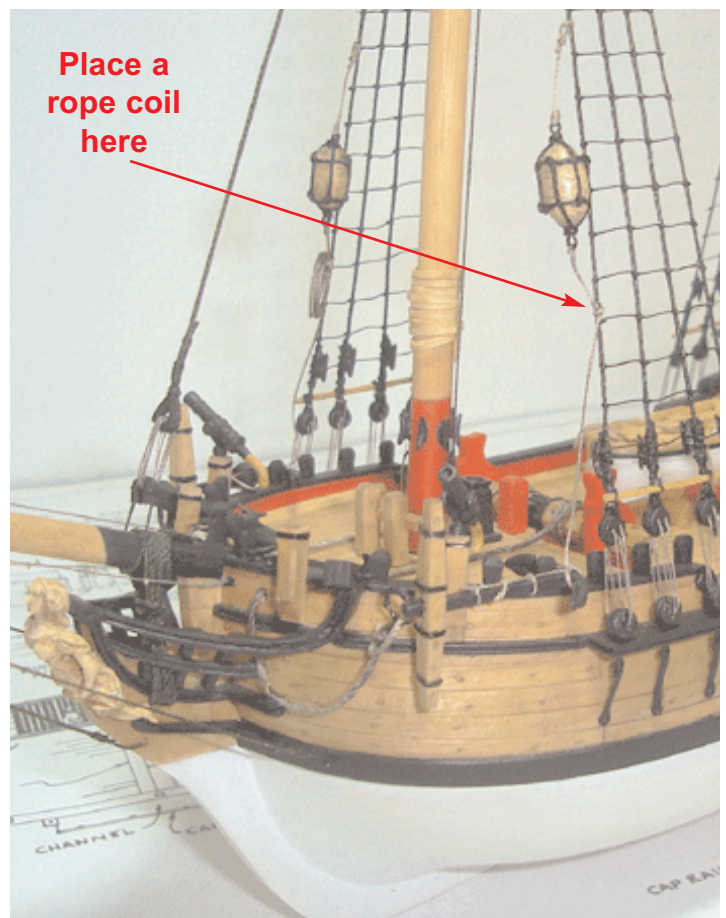


The anchor buoys were made from Sculpey. You could however, carve them from wood but I wanted to continue my experimentation with this material. A buoy from this time period would have ranged from 2' to 4' long depending on the size of the ship. I decided on the smallest size since the Sultana was a small schooner. The Sculpey was shaped into small beads 3/8" long. See the photos above for details. Six were made with the intention of picking the best from the "litter". An eye bolt was shaped and inserted into each end of the buoy. The eye bolts were not inserted fully (1/32" remained between the buoy and eye).

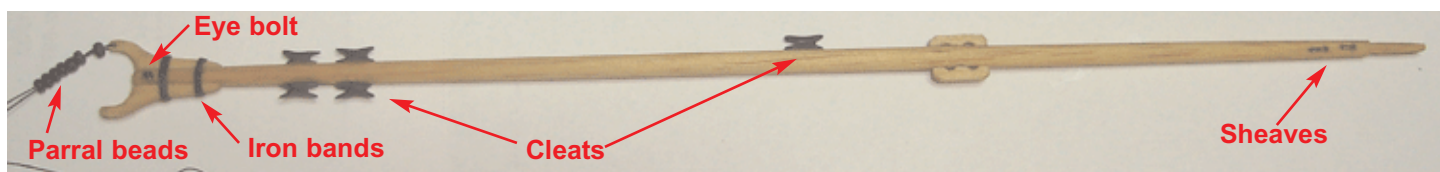
Photo #2 shows how I prepared a harness for each buoy. Two will be needed for each. Three lines were knotted along another length rigging line. It took a little time to space them properly so there was an equal distance between them. The harness was wrapped around the buoy and fused with super glue as described earlier. The three knotted strands are seized at the eye bolt as shown in photo #3. The space between these three lines should be tested before the harness is glued around the buoy permanently. The same process was repeated on the other side of the buoy to complete them. Only this time the three lines of the 2nd harness were run under the existing harness before being seized to the eye bolt on the opposite side. (.018 black rigging lines were used for each harness)

When the buoys were finished I weathered them with some brown acrylic paint so they wouldn't look so new and clean. The photo below shows

how I rigged the buoy to the shrouds first. Then I set up another length of tan (.008) rigging line to the anchor as shown in the line drawing on the previous page. The end was tied to the shroud at the same place where the line for the buoy was fastened. To finish it up I lashed a rope coil to the shroud in that same location. I must mention that I also placed the anchor cable on the ring of the anchor before I placed it onto the model. A generous length of .045 tan rigging line was used. The other end was run beneath the head rails and through the hawse hole. I





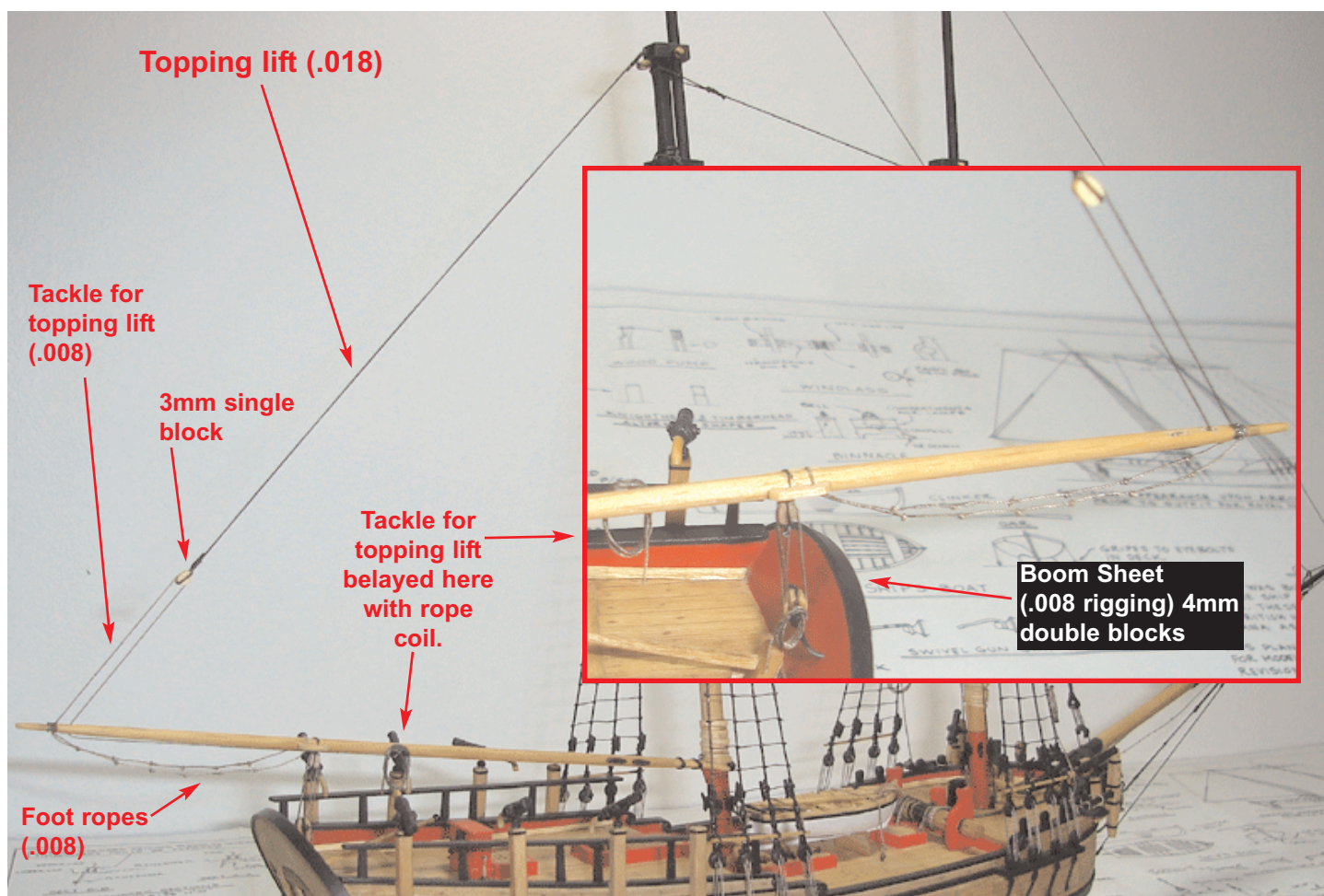


wrapped it three times around the windlass drum. Then I pushed the end of the cable into the corner hole of the hatch directly aft of the windlass. I was careful not to pull any of these lines taught. I painstakingly worked them until they hung loosely and natural. This was not a simple thing to achieve to my satisfaction but was well worth the time spent. Finally, each anchor was lashed to a timberhead as shown in the same photo.

### Boom and Gaffs...

I had to replace all of the dowels provided with the kit for the boom, gaffs and yards. Most were badly warped and open grained. I could have

asked Model Shipways for replacements but I bought some beech dowels at a local hobby shop instead. The boom was assembled first and was very simple. The appropriate sized dowel was chosen by measuring the diameter against the plans. The dowel was tapered by hand as shown in the photo above. The jaws for the boom were traced from the plans and shaped from a bass wood sheet 1/32" thick. Small holes were drilled through the jaw ends so I could string the parral beads. Drill these holes *before* you cut the jaws from the sheet. They will be much too fragile afterwards and the wood will split. These beads allowed the boom to move with less friction on the main mast. They are not supplied with the kit



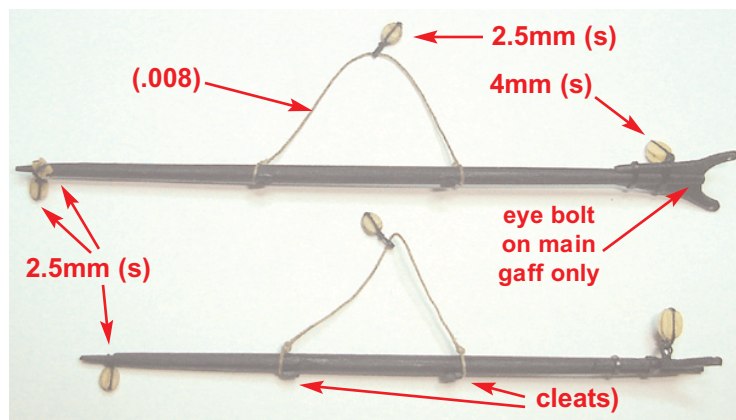
and were purchased separately. They are sold several 100 to each package.

The boom will be left natural and not painted. Eye bolts and cleats were attached as shown on the plans. I also added some black pinstripe tape to simulate iron bands around the jaws. This detail is not shown on the plans. Two sheaves were also simulated at the end of the boom as shown in the 2nd photo above. It shows the boom completed and ready to be rigged on the model. The sheaves are created by drilling two small holes about 1/32" apart. The space between them was recessed with the tip of a pin vise.

I secured the boom to the main mast so it sat on the boom rest. The mast hoops should sit on top of the boom jaws. Then I rigged the topping lift first. A 3mm single block was seized to the end of a generous length of .018 black rigging line. The other end was seized to the eye bolt on the aft side of the cap. See the photo on the previous page for details. I carefully adjusted the length of the topping lift so the single block was approximately 1 1/2" from the end of the boom. You will have to hold the boom tip above the transom in order to check that the distance looks correct. Check the plans to obtain the exact angle and distances. The tackle for the topping lift was rigged using .008 tan rigging line. After running the loose end through the aft-most sheave of the boom it was belayed to the cleat on the Starboard side of the boom. It was finished off with a rope coil.

The boom sheet was rigged as shown in figure 34 of the kit-supplied instructions. It is an accurate diagram however it shows the traveller on deck which is incorrect. A 4mm double block was seized around the boom for this tackle. See the detailed photo provided on the previous page. The running end was belayed to the pin on the double block (seized to the traveler). A small rope coil was hung on this pin afterwards. I used .008 tan rigging line for the boom sheet. Knotted footropes (.008) were added to the boom to complete the boom rigging. The knots were placed the same distance apart as those for bowsprit foot ropes.

### **Main and fore gaff construction**



The main and fore gaffs are constructed using the same methods described for the boom. In this case they were both painted black before attaching the blocks and eye bolts. Please note that the main gaff should have an eye bolt glued into the underside of the jaws. This detail is not shown on the plans. It will be used for the throat downhaul. The fore gaff will not have this feature. See the photo above for details. After they were completed to the stage shown in the photo I placed them onto the model. They were secured around the mast with black parral beads strung through their jaws. I rigged the main gaff first.

**The rigging for the main gaff was completed in the order shown below. See the accompanying photos for details. Also examine figure 33 in the kit-supplied instruction manual.**

**-Peak Halliard-** It will be set up with a tackle on the starboard side and belayed to a shroud cleat. I seized a 2.5 mm (S) block onto the end of a generous length of .008 tan rigging line. The other end was run through the double block on the mast head. I pulled it through the starboard sheave until the single block was positioned at a pleasing height off of the deck. Then I glued the peak halliard in the double block to maintain that position. It will make it easier to set up the tackle which was completed next. The other end of the tackle will be a 2.5 mm (S) block that has a hook drilled into it. This block will be hooked into an eye bolt on deck. The position for the eye bolt was taken from the plans. The hook and eye bolt was shaped out of 28 gauge black wire. I seized another length of .008 rigging line to this block to use for the tackle. This line was run through the

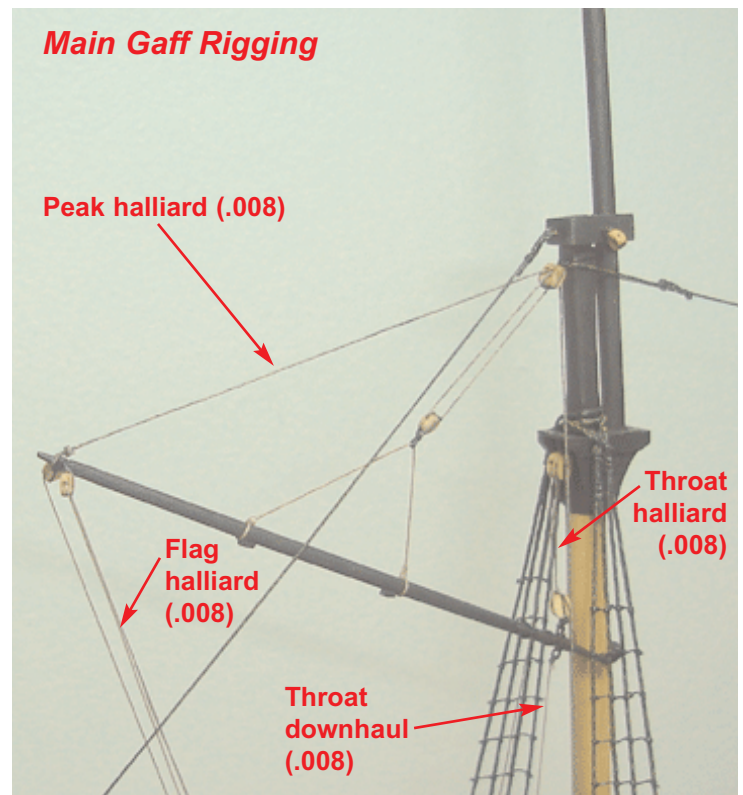


single block on the end of the peak halliard and back down through the hooked block on deck. The running end was belayed to the shroud cleat and finished off with a rope coil. The other end of the peak halliard was run through the single block rigged to the gaff. Then it was taken back up through the double block and seized to the tip of the gaff as shown in the photo.

#### **-Peak Downhaul (port) Flag Halliard (Starboard)**

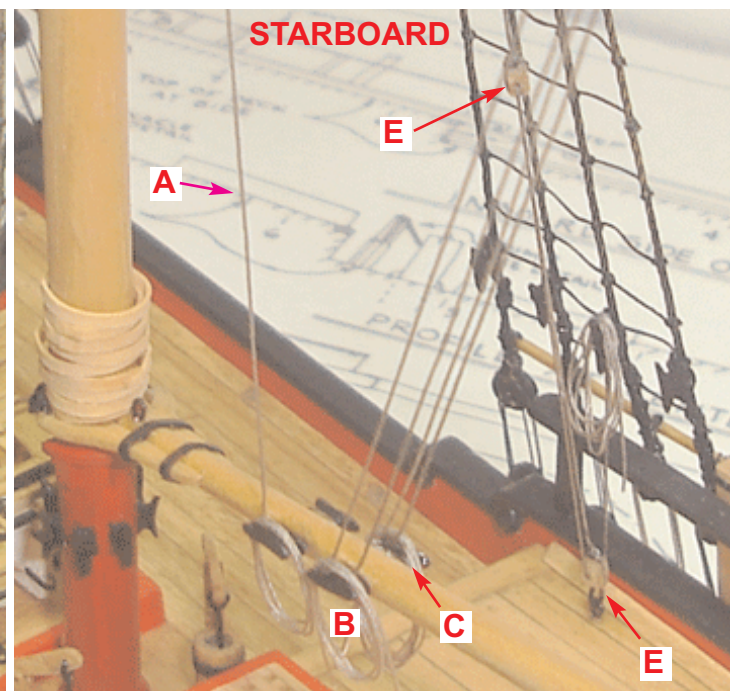
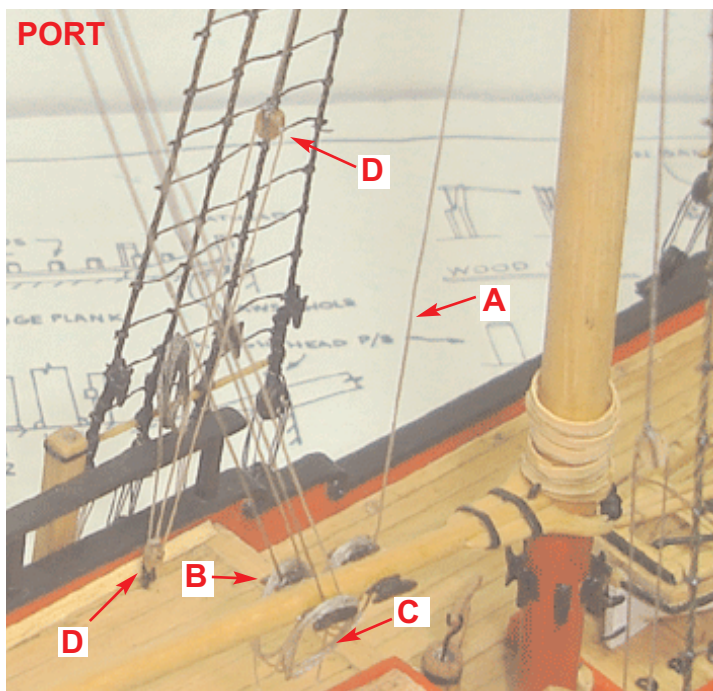
I used .008 tan rigging line for both. They were tied to the boom cleats as shown and then run through the single blocks seized to the tip of the gaff. Their loose ends were then belayed to those same cleats and finished off with some rope coils.

**-Throat Halliard** – Some tan rigging line (.008) was seized to the single block attached to the gaff jaws. This was a little tricky. After a few attempts I was successful. The running end was taken through the double block on trestle tree. Then it was finally brought down to the deck where it was set up in a tackle on the port side of the model. This tackle is identical to the one we created for the peak halliard. Only this time we will need to seize the 2.5 mm (S) block onto the running end of this halliard while it is on the model. I was careful to make sure it was positioned at the same height above the deck as



the block for the peak halliard. See the photo provided.

**-Throat Downhaul** - The throat downhaul was seized to the eye bolt on the underside of the gaff's jaws. It was brought down to the boom cleat shown in the photos provided. Finish it off with a rope coil. I used .008 tan rigging line for the throat downhaul.



**A= Throat downhaul B= Peak downhaul C= Flag halliard D= Tackle for throat halliard E= Tackle for peak halliard**



**The fore gaff was rigged in the same manner.** It was secured to the mast with parral beads. Rigging for the fore gaff was completed in the following order.

**-Peak Halliard** – Was completed as described for the main gaff, only this time the tackle was set up on the port side of the hull. See the photo to the right for details.

**-Peak Downhaul**- The downhaul (.008) was rigged by tying a generous length of line to the mast cleat shown in the same photo. It was run through the 2.5 mm single block seized to the tip of the gaff. Then I brought it back down to the same cleat and finished it off with a rope coil.

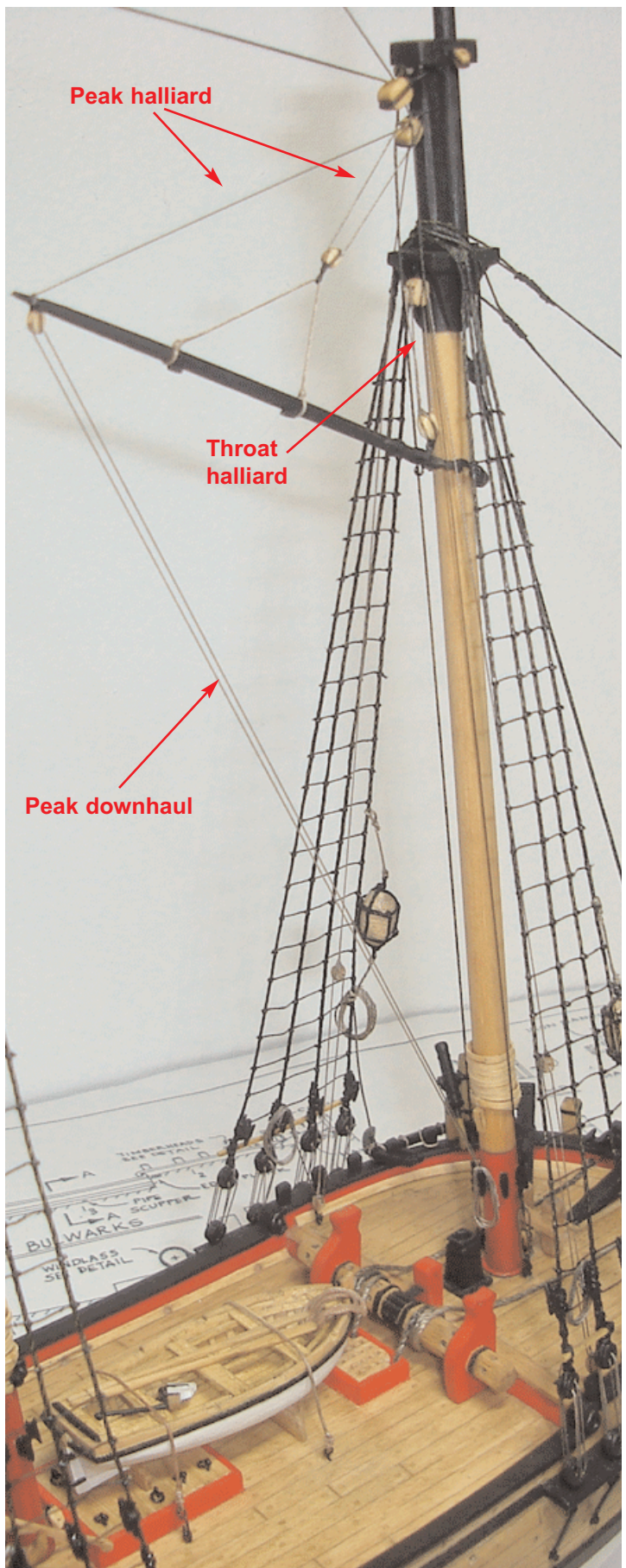
**-Throat Halliard**- Rigged as described for the main gaff, only this time the tackle is set up on the starboard side of the model.

**-Vangs**- I will hold off on rigging the vangs until after the yards are completed. They will just get in the way and make rigging the yards more difficult. I will describe it in detail afterwards while finally completing the back stays as well.

## The Topsail Yards...

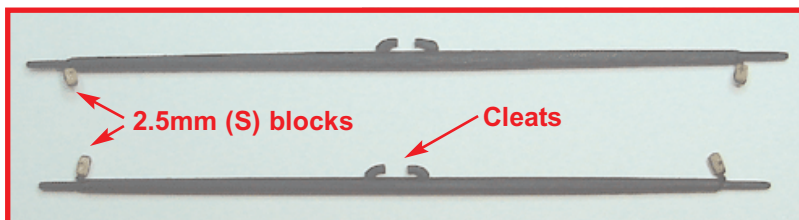
The topsail yards were cut to length and tapered by hand. The measurements were taken from the plans. If you examine the plans, you will notice that the yard on the fore mast is longer and slightly thicker in diameter than the yard for the main mast. I took this into consideration when I was constructing them. The tips of the yard arms were carefully shaped with a #11 blade in my hobby knife. I scored each end of the yard by rolling it under my blade. Be sure not to apply much pressure because you don't want to cut the dowel straight through. I only wanted to create a shallow cut all the way around the yard. Then I whittled small shavings of wood back to this line.

Two small cleats were shaped from a strip of wood 1/16" x 1/16' thick. See the photo on the next page for details. After they were assembled I painted both yards black. To finish them off I seized 2.5 mm single blocks to both ends of the yards for their braces.

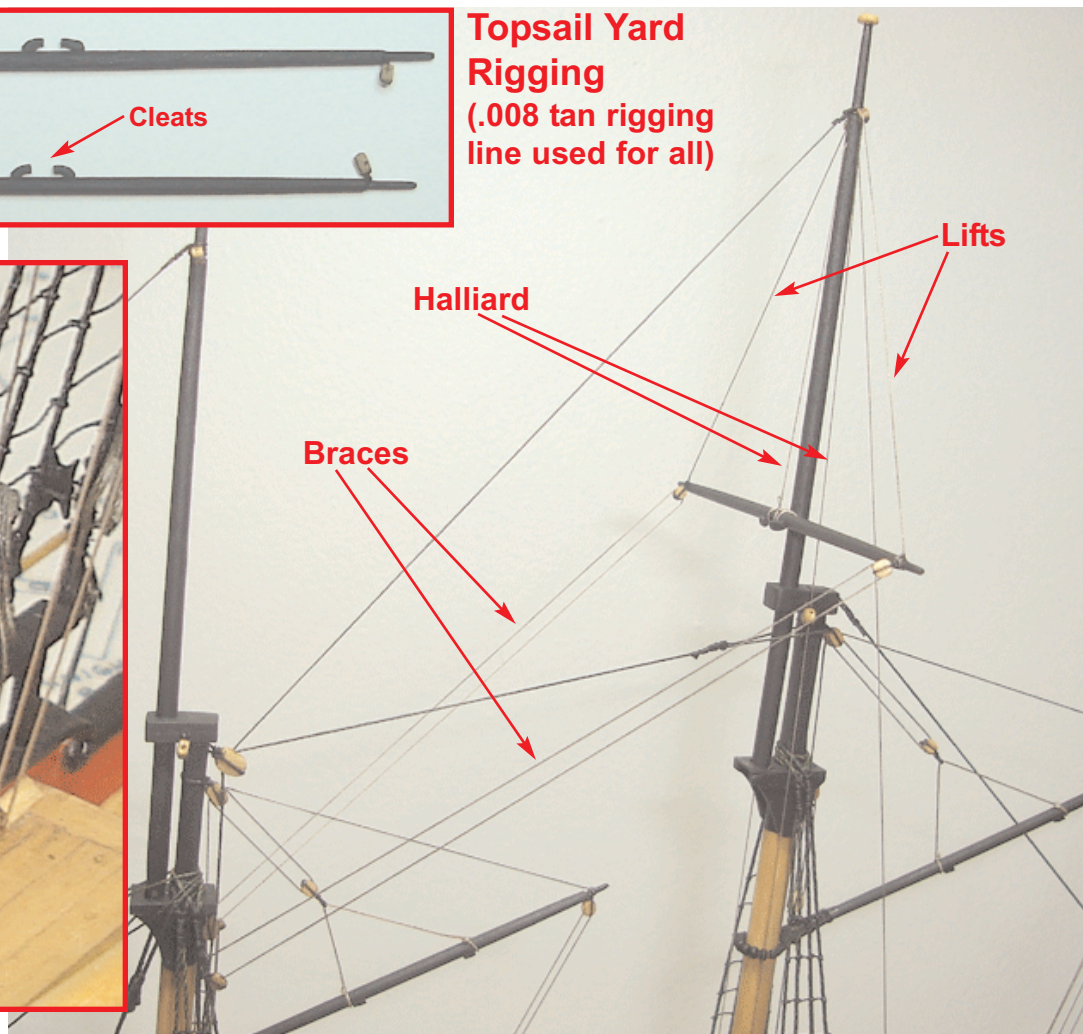
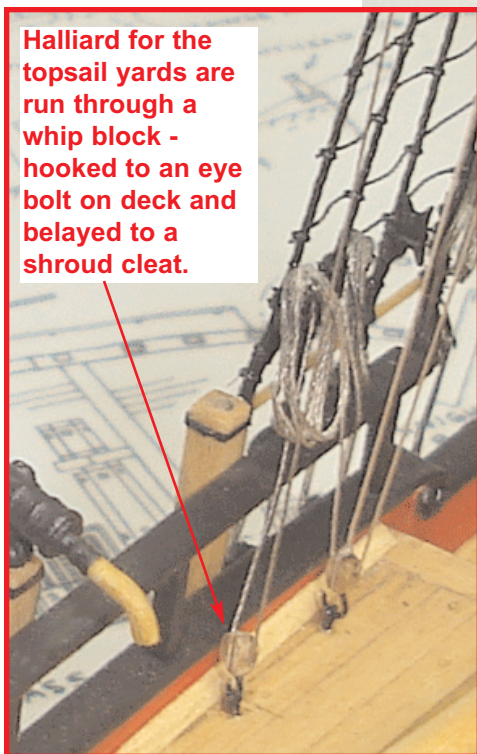


**Details of the fore gaff rigging**





**Topsail Yard Rigging**  
(.008 tan rigging line used for all)



The halliard was rigged to the topsail yard using the "sheet bend" shown in figure 31 of the kit-supplied manual. I would like to note that the rigging plans for this kit are outstanding compared to most available commercially. It is a testament to the Model Shipways brand. The illustration clearly shows how to rig the halliard to the center of the topsail yard. After a generous length of (.008) tan rigging line was secured to the yard as shown, I rigged them to the model. I will describe in detail how I completed the rigging on the topsail yards. Each line was rigged in the order presented below.

- **Halliard for the topsail yards** - The loose end of the halliard was run through the sheave created in the topmast. I adjusted the position of the yard and then glued the halliard into the sheave so that position could be maintained. The topsail yards will be placed in their lowered position about ½" above the cap. Then it was run through a whip block on deck. This block is a

2.5 mm single block hooked into an eyebolt on deck. A hook was shaped from 28 gauge wire and glued into a pre-drilled hole in the block. There is no tackle used for this halliard. After running the line through this block it should be belayed to the aft-most shroud cleat. The halliard for the main topsail yard was set up on the port side with a whip block while the fore topsail yard was belayed to starboard. They were finished off with a rope coil.

- **Truss** - Once again the drawing for the topsail yard truss is shown in figure 31 of the instructions. I created an eye on the end of some .008 tan rigging line. The truss was rigged as shown in that diagram and it would be difficult to describe it better than it is displayed there. The truss will hold the yard securely against the top mast.

- **Braces** - The braces were also rigged using .008 tan rigging lines. I seized the end of these





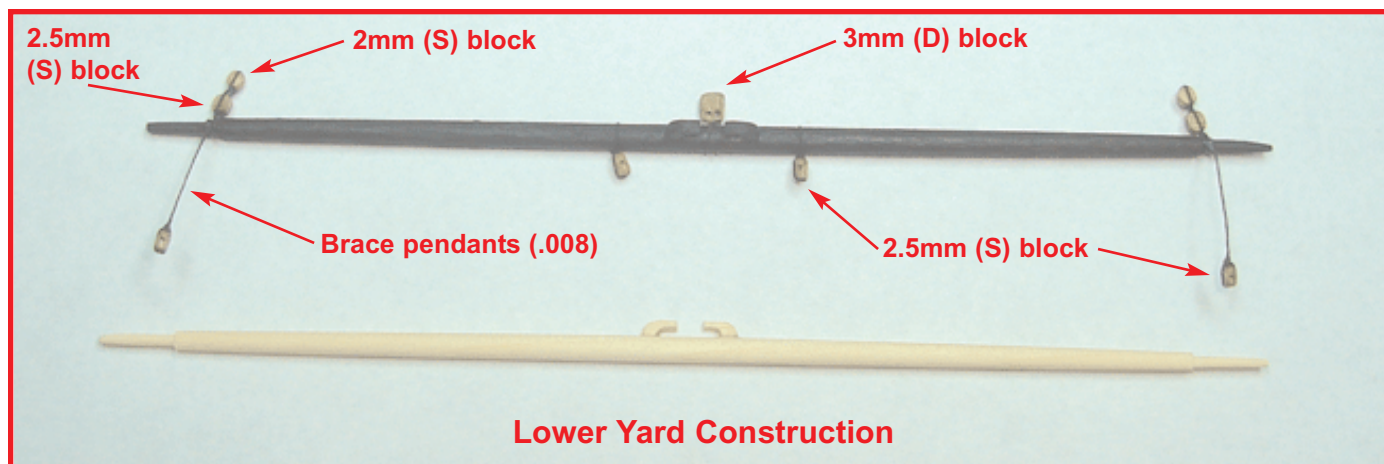
lines to the shrouds as shown in the photo above. Then they were run through the single blocks on the yard arms. From here they were brought back to the shrouds where I had seized a 2.5 mm single block. These blocks were placed just below the initial starting point for the braces. After running the line through the block they were belayed to a shroud cleat as shown in the photo above. Finish it off with a rope coil. The braces are rigged identical for both the fore and main topsail yards.

- **Topsail yard lifts** – Once again, tan rigging line (.008) was used to rig the lifts. I seized the end of the lifts to the yard as shown in the photo above. Then they were brought up through the single blocks secured to the topmast. They were brought back down to the cleats at the base of the mast and belayed there. Before doing so, adjust the lifts so the topsail yard is level and positioned correctly. Finish them off with a rope coil. The lifts were rigged identical for both the main and fore topsail yards.

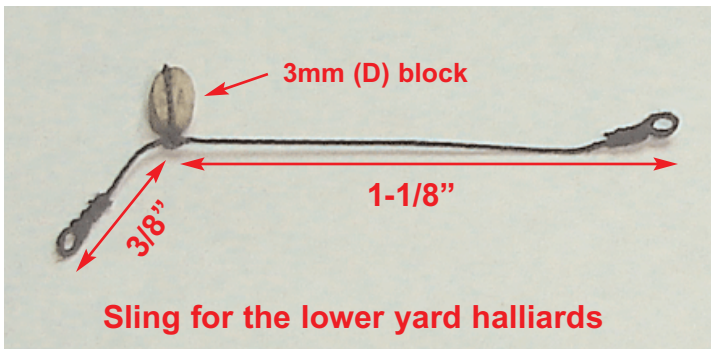
## Lower Yards...

The lower yards were cut to length and tapered as previously described for the topsail yards. The lower yard for the fore mast is also slightly longer and thicker in diameter than the one for the main mast. The photo below shows the lower yard completed for the main mast with all of the blocks attached. Both yards should be virtually identical when finished. After painting them black I rigged the blocks. Please note that black .008 rigging line was used to secure the blocks to the yard. The brace pendants are ½" long and I used 2.5mm single blocks seized to their ends. A 3 mm double block was lashed to the center of the yard as shown in figure 32 of the kit-supplied instructions. It will be used for the halliard.

Two single blocks were seized together and placed on the ends of the yard arms. One of these blocks (2.5mm) will be used for the topsail sheet while a smaller one is for the lifts. The single blocks for the lifts were sanded even





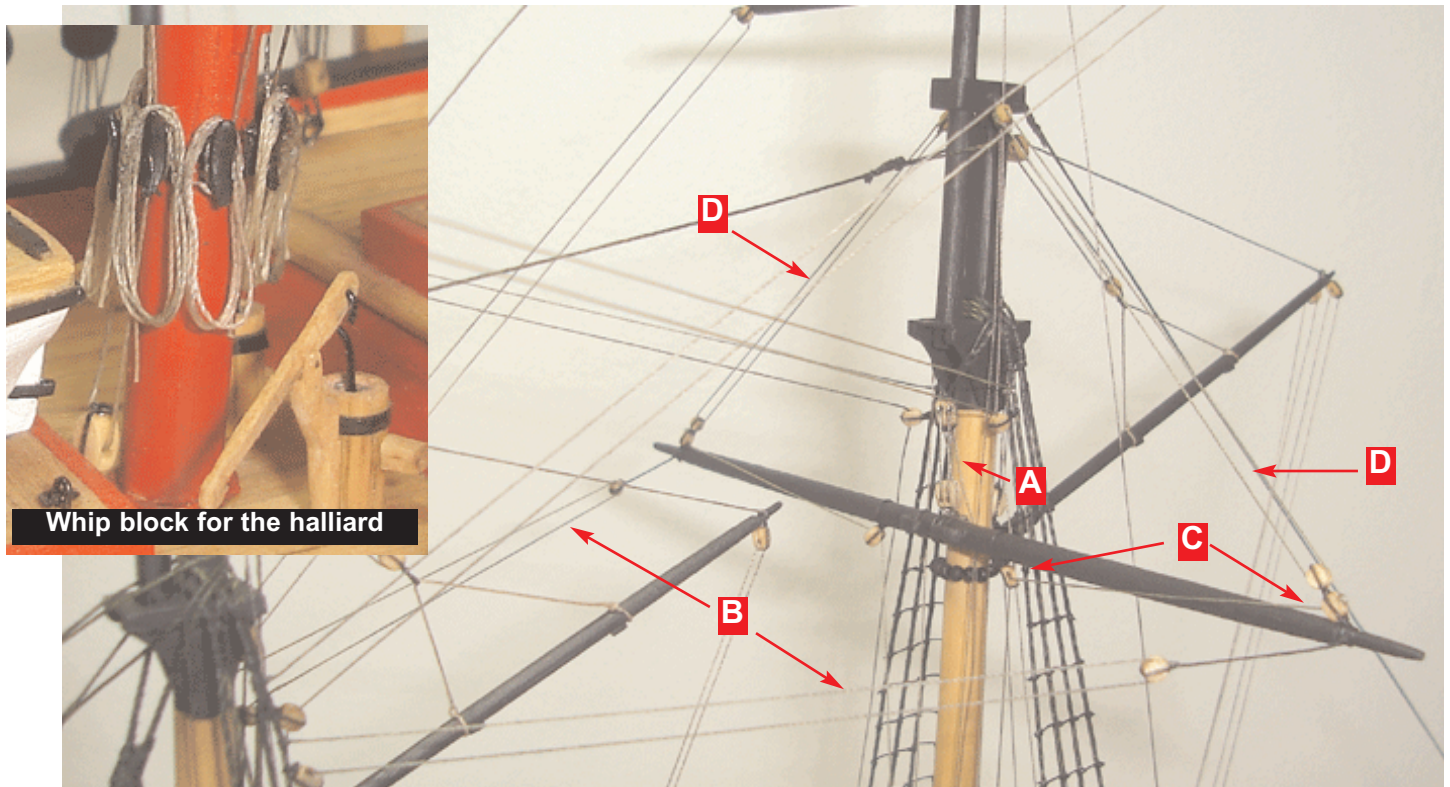


smaller with a finished size of only 2mm. This detail is shown in the same photo. All of the blocks used were modified as discussed earlier in this builder's guide. They were all meticulously sanded to a more accurate round shape. While doing so, I sanded those for the lower yard lifts even smaller. Two inboard single blocks were lashed to the yard and it was finally ready to be placed on the model. These last two (2.5mm) single blocks will be used to take the topsail sheet down to the mast cleats where they will be belayed. When both yards were completed I rigged them to the model in the order presented below.

- **Truss for the Lower Yards** - The lower yard for the main mast will be fitted with a truss. The yard on the fore mast will not. The plans have a

detail drawing for this truss. It shows the loose end of the truss being carried to the trestle trees where it should be belayed. The only problem is that the plans don't indicate where or how the loose end should be tied off. Rather than guess, I decided to use the same simple truss described for the topsail yards.

- **JEERS (Halliards and Slings)** - These yards were lowered to the deck often. The jeers (a combination of sling and halliard) were used to do this on the Sultana. The halliard will be set up with two double blocks secured to the mast with a sling. The sling is pictured above (left). The sling is also shown in figure 32 of the kit-supplied instructions but is not labeled as such. To create the sling, seize a generous length of (.018) black rigging around a double block. Then, an eye was created on both ends of the sling as shown. I will try and save you the grief of determining how long each leg of the sling should be. Those measurements are shown in the same photo. The completed sling was secured around the trestle tree and lashed together through the two eyes with some tan sewing thread. It shouldn't be pulled tight but instead left to hang naturally below the trestle trees.



A= Halliard for the lower yards B= Braces C= Top sail sheet D= Lifts