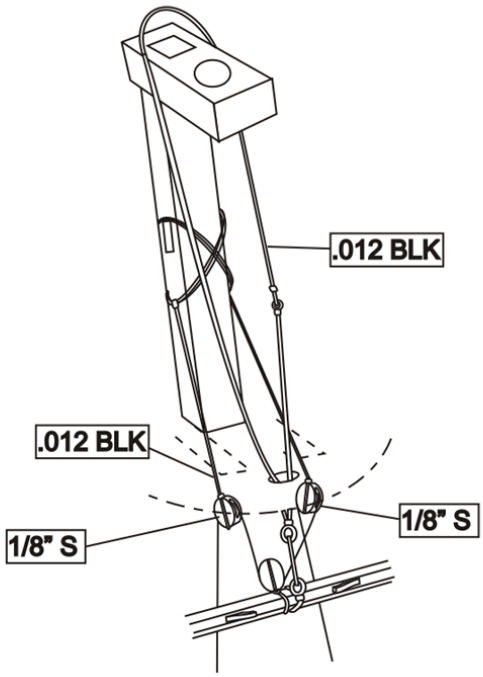
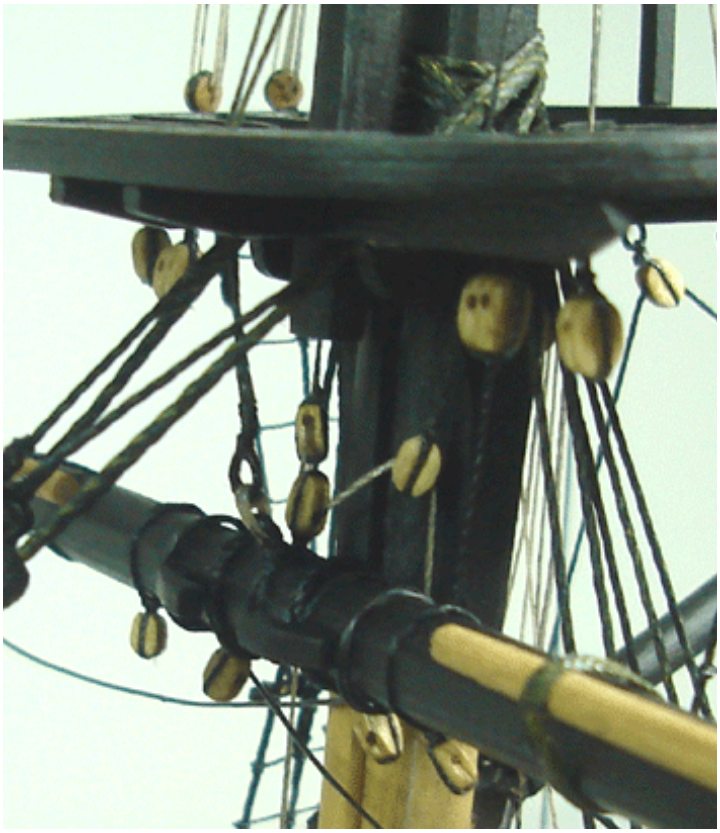
Lower Yard slings and Jeer ties





Chapter Twenty Rigging the yards

Following the plans, add as many blocks and preliminary rigging as possible to the yards before attempting to rig them on the model. This includes the brace pendants, truss, ties and parrels, etc. Remember that the topsail, topgallant, and royal yards for the main mast will have their brace pendants rigged on the forward side of the yards. Examine the plans carefully. Once you have finished preparing the yards they can be rigged on your model. The rigging sequence for all of the yards has been detailed below in the order that was used to rig the prototype. Please note that these instructions are not intended to be a treatise on rigging a tall ship. There are many in-depth books that cover the rigging in detail for a ship during this time period. One such book, "The Masting and Rigging of English Ships of War, 1625-1860" by James Lees is one of the finest written and would be a reference you would return to over and over again.

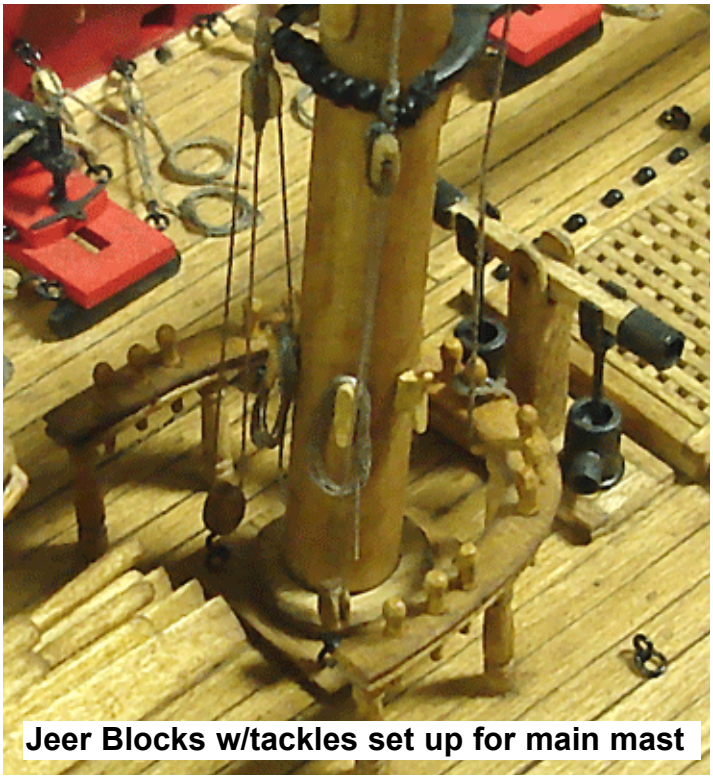
Main (lower) Course Yard Rigging…

Truss (.021 blk) — A simplified truss will be used on the lower yards. It holds the yard securely against the mast. Create a small eye on the end of the rigging line to start the truss by folding and doubling a length of rigging thread. Leave the doubled loose ends of the truss about 8 inches long. This will make it easier to complete the rigging after you pin the yard to the mast. Add the truss to one side of the yard (inside of the sling cleats). This is done by inserting the two loose ends into the eye and cinching it up tightly around the yard. Let the loose ends hang freely.

After pinning the yard on the mast, take the two loose ends of the truss around the mast and set it up on the other side of the yard. You don't have to create an eye on this end of the truss. Just seize the truss closed after wrapping both ends around the yard. Add a drop of glue to prevent it from loosening.

Lanyard for the sling (.008 tan) — You should have already created a simulated thimble and lashed it to the center of the yard as mentioned in the previous chapter. Use some super glue to stiffen the eye as was described many times earlier in the project. Tie a length of .008 tan rigging line to this thimble on the yard. Use a simple overhand knot and apply a drop of glue to secure it. Run the lanyard between this thimble and the other simulated thimble you made on the end of the sling. The sling should be hanging below the front of the top (through the hole you created for it on the platform). Run it through both thimbles a few times and use some glue to secure the running end. Then snip off the excess line. See the detailed drawing provided on the plans.

Jeer Ties (.012 tan) — Examine that same drawing shown on the plans before setting up the jeer ties for the lower yards. One continuous length of line runs through the single block on the top/center of the yard. From here, the running ends on both sides of this block are taken through the "jeer blocks" under the top. These are the two single blocks you prepared earlier that are hanging through the lubber's hole from the masthead. Both loose ends are taken down to the base of the main mast and set up with a running tackle. You have created these running tackles before while rigging the backstays. Set up a working tackle after seizing a 1/8" single block to both ends of jeer



Jeer Blocks w/tackles set up for main mast

ties. A hooked single block will be used to complete each tackle. They should be secured to the eyebolts at the foot of the mast. The standing end of the halliard (.008 tan) for this tackle will originate from the upper block. Just seize the line around it and reeve the halliard through both blocks as shown on the plans. Tighten up the tackles after hooking them to the eyebolts on deck. Belay the running ends of these tackles to the mast cleats shown on the belaying plan and finish them off with rope coils.

Lifts (.012 tan) — Seize the standing end of the lifts behind the single blocks lashed to the lower mast cap. The standing ends are actually seized above the blocks on the lashing used to hang them from the cap. From here, run them through the lift blocks on the end of the yard arms. Then take the running end back up through the single blocks lashed to the cap.

The lifts are then taken down through the lubber's hole and set up with another running tackle. Use 1/8" single blocks for these running tackles. The tackles are hooked to an eyebolt on the channels much like the running backstays. Be careful to set up the lifts so the yard is not crooked and angled on the mast. It should be level and horizontal when viewing the model from the bow and stern. Belay the running ends to (4) and finish them off with a rope coil.

Leech lines (.008 tan) — Create a stopper knot on the end of some rigging line. Then run it through the outside single block on the yard arm. See the plans for details. From here, take the running end and reeve it through both single blocks hanging under the top. These are the outside pair of single blocks. Finally, take the leech lines down to the deck and belay them to (3) the pin rail along the bulwarks. Finish them off with a rope coil.

Buntlines (.008 tan) — First, create a block assembly using two 3/32" single blocks. Strop them together end-to-end. See the photo provided. You will need four of these block assemblies to rig the buntlines for both lower yards. Make sure you position the sheave holes for the block properly. The sheave holes should be on the inside of the assembly for both blocks.

Take a generous length of rigging line and create a stopper knot on one end. Run this line through the inner-most single block on the top of the yard. Take the line through the inner-most sheaves of both double blocks under the top. From here the running end should be reeved through one of the blocks on the block assembly you created. Then take the line back up through the remaining sheaves of the double blocks beneath the top. The running end of the line is brought back down to the yard arm and through the remaining single block (middle one) on the top of the yard arm. Pull the line to establish the correct height for the buntline block assemblies off of the deck. The double block assemblies should be positioned about 2 ¾" to 3" from the deck. Once you have established the correct position for the block assemblies, you can lock it in place by applying a drop of glue to that last single block on the yard arm. You can tie a stopper knot onto the line once the glue secures it in the sheave. Snip off the excess line.

The falls for the buntlines (.008 tan) are run through the bottom block of the block assembly hanging free at the moment. Take one end of the line and secure it to the fife rail adjacent to the belaying point (1). Just wrap the standing end once around the rail itself and apply a drop of glue to secure it. Then take the running end of the fall which runs through the buntline block and belay it to the pin on the rail (2). Finish it off with a rope coil.

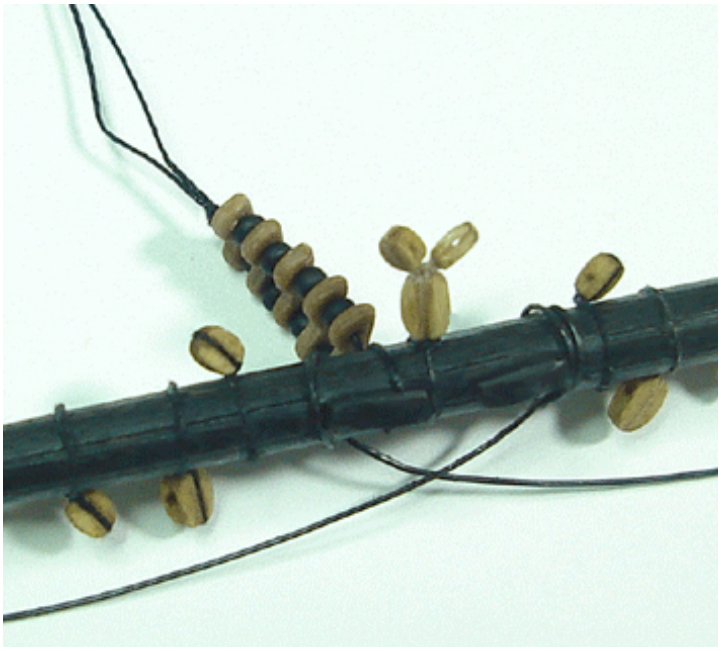
Braces, Clew lines, sheets and tacks — These rigging lines for the main lower yard will not be completed at this time. If they were rigged now, they would certainly get in the way while trying to belay the other lines for the topsail, topgallant and royal yards. We will come back to these after the other yards have been successfully rigged in their entirety.

Fore (lower) Course Yard…

The rigging of the fore course yard is basically the same as described for the main course yard. There are only a few differences worth noting. Check the belaying plans for all of the correct belaying points. The leech lines will be taken through the outer-most sheaves of the double blocks hanging beneath the top. If you recall, the leech lines for main course yard were taken through a single block. But this time, a double block is needed because the additional sheave will be used for the spritsail yard braces.

The lifts will be set up with tackles that are hooked along the fore channels. This time however, you will belay the running ends of those tackles to the timber heads along the cap rail.

Main Buntline falls with block assembly



Topsail yard parrels

Main Topsail Yard Rigging…

Parrel — Before you pin the Topsail yard to the mast, the parrel should be added as shown on the plans and the photo provided. Use some .018 black rigging line to string the parrel with the ribs and little beads supplied with the kit. The line is first seized around the yard inside the sling cleats. Keep the line doubled after you seize it with two long lengths so you can string your ribs and beads onto them. You will use five ribs separated by the beads on each topsail yard. Then seize the opposite ends together. Once the yard is pinned into position, you can bring the loose ends around the mast and secure it to the other side of the topsail yard.

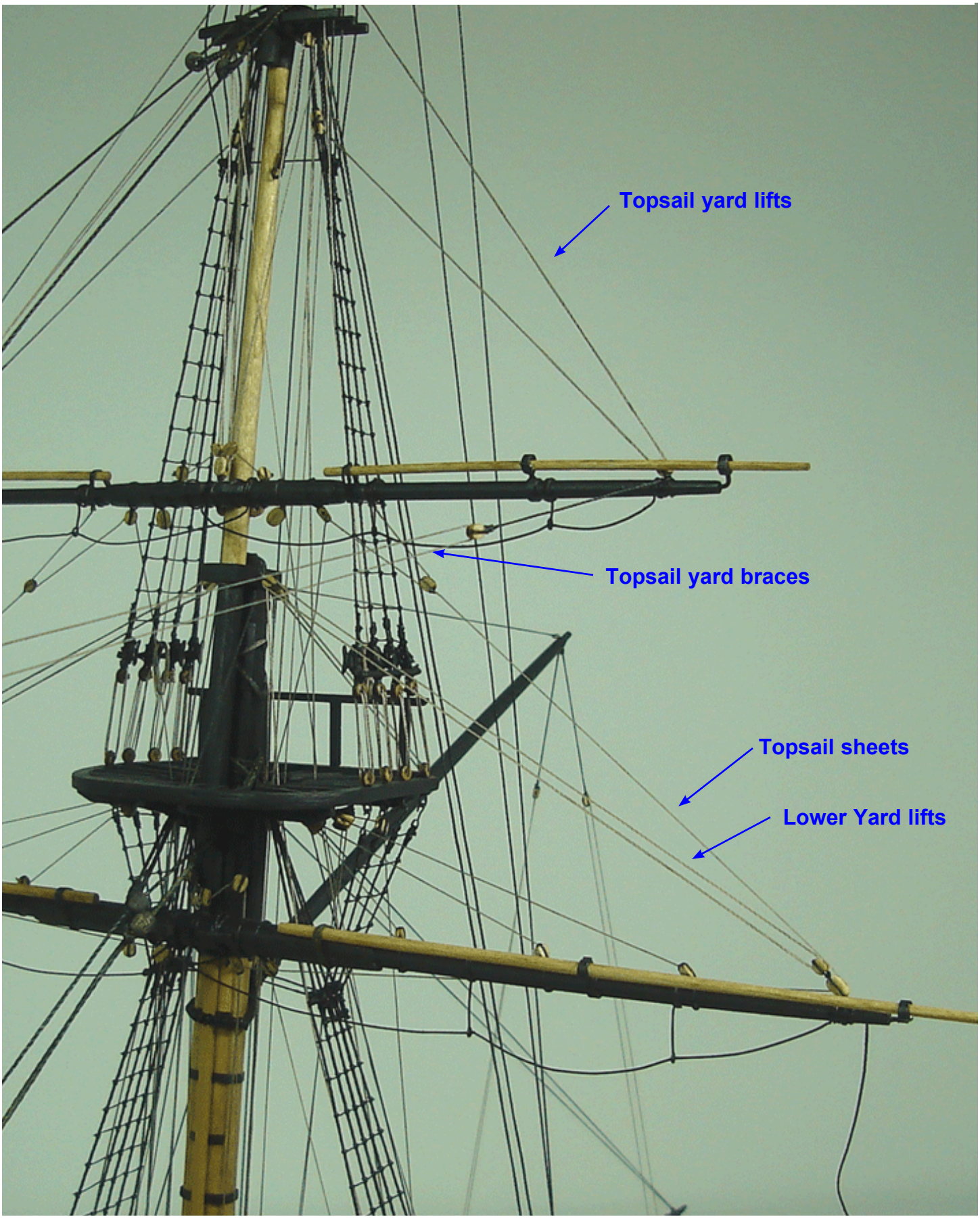
Topsail yard Jeers (.012 Tan) — With the yard pinned to the mast and the parrel completed, the jeers can be rigged. Take a generous length of rigging line and run it through the 1/8" single block on the center of the yard. You will see a detailed illustration on the plans that show the jeers/ tie for the topsail yards. Make sure you have two equal lengths of line to work with on both sides of the block. Each end should be run through their corresponding 3/32" single blocks hanging from the "center" cross trees. From here they run down the aft side of the mast through the lubber's hole of the main top. Then set up some running tackles aft of the mast for both falls. You have done this before and they are set up the same way as the falls for the lower yard jeers. They will both be hooked to the eye-bolts on deck. After belaying the loose ends of the tackles you can finish them off with a rope coil.

Topsail Buntlines (.008 Tan) — Make a stopper knot on the end of the rigging line. Run the line through the 3/32" single block on the top of the yard. Then take the running end through the smaller block that is stropped to the top of the jeer block on the center of the yard. From here, run the loose end through the 3/32" single block hanging from the aft-most cross tree. The buntlines are finally taken through the lubber's hole and belayed to (34). Finish it off with a rope coil.

Topsail lifts (.012 Tan) — The standing ends of the lifts are seized around the center of the topmast cap. See the plans for details. From here, take it through the lift block on the end of the yard and reeve the running end through the sister block you secured within the shrouds (lower block). Take the lift line down through the lubber's hole and belay it to (26) along the bulwarks. You should rig the lifts on both sides of the yard before belaying them. Then work them both (by pulling on the running ends) in order to establish the correct orientation of the yard. When you are satisfied, you can lock the yard in position by applying a drop of glue to the lift blocks.

Topsail sheets (.008 Tan) — Seize a 3/32" single block onto the end of a generous length of rigging line. Run the line through the topsail sheet block on the end of the lower yard. From here, the loose end is reeved through the 1/8" single block hanging below the lower yard as shown on the rigging plan. It is belayed to (5) but do not secure it to the

Details of some of the Main lower and topsail yard rigging completed…compare with the rigging plan



Can you find the buntlines and leech lines for the lower yard?? Topsail Clewlines??

belaying pin yet. Leave the topsail sheets loose for the moment while you rig the topsail clew lines. The clew lines will run through the single block you just seized on the end of the sheets. For this reason, adjustments will inevitably need to be made before you can permanently belay them.

Topsail clew lines (.008 Tan) — Secure the standing end of the clew line to the topsail yard as shown on the plans. Then run the loose end through the single block you seized on the end of the topsail sheet. Take the running end back up through the single block hanging from the topsail yard. From here the clew line is taken through the lubber's hole and belayed to (32). Before doing so, apply some tension to the topsail sheet and the clew line. Adjust both lines to establish the correct position for the block seized onto the end of the topsail sheet. Once you are satisfied, you can lock it into position by applying a drop of glue to the single block hanging from the topsail yard. This will help create the appropriate tension on both lines when you belay them on deck. Finish off both lines with a rope coil when you are finished.

Topsail braces (.008 Tan) — Seize two 3/32" single blocks to the main topmast preventer stay. Check the plans for their location. Then take a generous length of .008 tan rigging line and seize it to the stay just aft of the location of those blocks. The braces are run through the pendant blocks on the yard arms and then reeved through the single blocks on the stay. From here they are belayed to (28). Once again it is recommended that you rig the braces on both sides of the yard. Then work them both to establish the correct orientation of the topsail yard. Once satisfied, you can lock them into position by applying some glue to the blocks seized to the stay. Don't apply too much tension on the braces so that the stay is pulled awkwardly downward. Only apply enough tension so the braces don't appear slack.

Fore Topsail Yard Rigging…

The rigging on the fore topsail yard is virtually identical to the main topsail yard. This is true except for the belaying points of course. The one notable difference would be the braces. Two pairs of double blocks are seized to the main stay instead of single blocks. Use the inside sheaves for the topsail braces. The outside sheaves will eventually be used for the Fore course yard braces. Examine the rigging plans carefully for the placement of both pairs of double blocks.

Main Topgallant Yard Rigging…

As mentioned earlier, don't pin the topgallant or royal yards to the masts. This might weaken the masts too much and cause them to break under the pressure applied by the rigging. You can use a simplified truss to secure the topgallant yards to the mast. Use the same truss that you utilized for the lower yards, only this time you should use a lighter (.012 Black) rigging line. Secure one end of the truss to the yard first (inside of the sling cleats). Then bring the loose end around the mast to secure the yard appropriately. Before doing so, the topgallant "tie" should be made fast to the center of the yard before it is installed.

Topgallant Ties (.012 Tan) — The tie for the topgallant yards is made by seizing an eye on the end of a generous length of rigging line. Then cinch up the tie around the center of the yard letting it hang freely. You may apply a drop of glue to the eye to keep the tie from loosening up. After you secure the yard to the mast, run the tie through the sheave you made on the mast. Examine the plans for details. There is a note on the plans which explain how the topgallant and royal ties should be set up on the channels. In this case, the tie will be set up on the starboard main channel. Create a running tackle on the end of the tie using 3/32" single blocks. The lower block of the tackle has a hook glued into it. The hook is made like all of the others you have made for the model (using 28 gauge blk wire). Hook the tackle to the eyebolt on the channel and then tighten it up to achieve the proper tension. Belay the running end of the tackle to (37) the cleat on the bulwarks noted on the belaying plan.

Topgallant buntline (.008 tan or sewing thread) — Make a stopper knot on the end of a generous length of rigging line. Run it through the single block on the center of the yard. Bring the loose end up through the single block hanging from the topgallant mast. Bring it down to be belayed to (54) on deck. Be sure to run it through the lubber's hole of the main top first before you belay it to the rail.

Topgallant lifts (.008 Tan) — Seize the standing end of the lifts around the topgallant pole as shown on the rigging plan. Run the loose end through the lift block on the yard arm and then back up through the blocks on the mast. From here bring the lift line down through the lubber's hole and belay them on deck. Rig them both (port and starboard) so you can establish that the yard is level before you belay them (to the rails along the bulwarks 41).

Topgallant sheets and clew lines (.008 tan) — These two lines are rigged similar to the topsail sheets and clew lines. This time however, the sheet does not have a single block seized to its end. In this case the topgallant sheet simply has a stopper knot on its end. The clue has an eye on its end. Run the sheet through the eye of the clew line until the stopper knot is hung up against the eye. Then take the clew line through the single block hanging from the yard.

Run the sheet through the sheave hole you made on the end of the topsail yard. From here the sheet is reeved through the 1/8" single block hanging below the topsail yard. Work both ends until you establish a good location for the stopper knot and eye connecting both lines. Lock them into position with some glue when you are satisfied.

With the clew line and sheet secured, you can now bring both running ends down through the lubber's hole and


Topsail, Topgallant and royal yards rigging completed

belay them on deck (48) and (30). Finish them off with rope coils.

Topgallant braces (.008 tan) — There are no brace pendants for the topgallant and royal yards. Simply seize some rigging line to the end of the yards and run them forward through a 3/32" single block seized to the stay. You will have to seize two single blocks to the main topgallant stay as shown on the plans. The running ends of the braces are belayed to shroud cleats in the fore top. Don't apply too much tension on these braces because the main topgallant mast is very slender and easily pulled forward. This will cause your stays and topsail yard braces to go slack. Apply only enough tension to the braces to ensure that they aren't themselves slack before securing them in the fore top.

Fore Topgallant Yard Rigging…

Except for the belaying locations, the rigging for the fore topgallant yard is identical to the main topgallant yard. The only thing worth noting is that the tie will be set up on the port side channel rather than on the starboard side. Examine the rigging and belaying plans carefully for all of the details. The braces will also run through single blocks that are seized to the main topmast preventer stay.

Main Royal Yard Rigging…

Secure the yard to the mast with a simplified truss as you did for the topgallant yard. The truss for the royal yard is made using .008 tan rigging line. Before securing the yard to the mast, don't forget to add the royal tie (.008 tan) to the center of the yard first. This tie is also made the same way as the tie used for the topgallant yards. The tie is run through the sheave you made in the royal pole. Be very careful when setting up the tackle for the royal yards. The mast is very slender and will bend very easy under the tension of the rigging. The tie is set up with a running tackle like the topgallant yard. This time however, the tackle is set up on the port side to an eye bolt on the main channel.

Royal lifts (.008 tan) — The standing end of the lifts is seized around the end of the yard arm. From here it runs through the single block hanging from the mast. Bring it down to the deck and belay it to (42). But first, the lifts should also be taken through the lubber's hole of the main top. Finish them off with rope coils.

Royal clew lines and sheets (.008 tan) — These lines are rigged just like the topgallant clew lines and sheets. Take both running ends through the lubber's hole and belay them on deck (51) and (52).

Royal Braces (.008 tan) — Same as the topgallant braces except they will run through single blocks seized to the main royal stay. Belay the running ends to shroud cleats in the fore top.

Fore Royal Yard Rigging…
This is the same as the main royal yard rigging except for belaying locations. Check the plans for details. Brace blocks are seized to the main topgallant stay.

Now that most of the rigging is completed, the braces, sheets, tacks, and clew lines for the lower yards can now be addressed. They will no longer get in the way while belaying any of the remaining lines. But as you are probably now discovering, with each additional line you finish rigging, the next one becomes even more challenging to complete. A web of rigging has slowly developed and it becomes increasingly difficult to navigate through them. Belaying the running ends to the pin rails along the bulwarks gets more challenging with each completed line. A good set of rigging tools (long tweezers or wooden sticks with hooks and forks created in their ends) can assist you with reaching into this maze of rigging. See the illustration provided which shows some examples of these homemade tools.

Main course (lower yard) braces (.012 tan) — These lines will be originate from the hull sheaves at the stern. They are the ones that you made just above the quarter badges. Take a generous length of rigging line and seize it to the ring above the upper sheave. Then run the line through the brace pendant block for the main yard. From here it will be taken back to the upper sheave through the hull where you will insert the end of the line. Apply a drop of glue to the line and push it into the simulated sheave with the tip of an awl. This will complete the outboard portion of the brace rigging. You should have already completed the inboard portion.

Note: It may be helpful to rig the braces on both sides of the hull for this lower yard before you permanently glue the loose ends into the sheaves. This will give you the opportunity to work both lines to establish the proper orientation of the yard. Then you can lock the yard in position by applying a drop of glue to the brace pendant blocks sheaves. This will help you establish the appropriate tension on the braces as you push them into the hull sheaves.

Fore Course Braces (.012 tan) — These braces are seized to the Main stay where you originated the braces for the topsail yard. From here run the line through the pendant blocks on the fore yard. Then the line is taken through the open sheaves of the same double blocks that used for the topsail braces. Belay to (17) and finish off with a rope coil. Rig both sides before belaying them, just as you did for the main braces which help establish the correct position for the yard.

Main course sheets, tacks and clew lines (.008 tan) - These three lines will be rigged together. All three come together in a block assembly hanging from the yard. Examine the plans carefully for all three lines. Please note that the block assembly is shown hanging from the clew line on the plans. It is shown hanging very low. This would not be the case and it was only shown this way because there was room in that section of the plan sheet to do so. The block assembly should be pulled up closer to the yard as shown in the photos of the prototype provided.

The first thing you should do is create four block assemblies. You will need four to rig these lines on the main and fore yards. Each assembly made with two 3/32" single blocks and one 1/8" single block. The larger block is for the course sheets. Start the assembly by seizing a toggle onto the end of some .008 black rigging line. The toggle is just a small length of wood (very small) that can be made by shaping and sanding a toothpick. You can see the toggle in the photos provided. You can get a sense of its size by comparing it to the blocks also shown in those photos. The rigging line should be kept doubled after you seize the toggle to it. Then create another seizing about 1/8" away from the toggle. You can just tie a simple overhand knot and apply a little glue to secure it. You will be sliding two stropped blocks onto the assembly shortly as shown in that photo.

To create the stropped blocks, simply create a small eye on the end of some rigging line. Then secure a 3/32" block against the eye with a drop of glue. When it dries, bring the two loose ends of the strop around the block and tie an overhand knot on the other end of it. Secure that knot with a drop of super glue (CA) and snip off the excess line. Do the same using a 1/8" single block also. Then slip both onto the toggle as shown in the first photo.

To complete the block assembly, add the remaining 3/32" single block to it. Just secure that block with the two loose ends from the toggle the same way you did it for the other two blocks. Glue it against the seizing and bring the two

Fore Course sheets, tacks and cluelines

loose ends around the block to be knotted off. Snip off the excess when you are done. Make four of these block assemblies.

Cluew line for the main course (.008 tan) - Seize the standing end of the line around the yard. You can find the location by examining the plans. Then reeve the loose end through the 3/32" single block of the assembly. Use the block that is attached to the toggle. From here, bring the loose end up and through the block hanging from the lower yard. Pull the loose end until you are satisfied the block assembly is positioned at the appropriate height below the yard. Then lock it in position by applying a drop of glue to that block hanging from the yard. Belay the loose end of the fall to (6) and finish it off with a rope coil. The block assembly should now be hanging free below the yard.

Main course sheets (.008 Tan) — Run a length of rigging line through the 1/8" single block on the block assembly. Make sure the rigging line is long enough that you can take both loose ends to the remaining hull sheave at the stern. Seize one loose end to the ring beneath that sheave. Then pull the other loose end and glue it into the false hull sheave. Don't pull it so tightly that you pull the entire block assembly towards the stern. You should in fact hold the block assembly directly under the yard while you push the loose end of the sheet into the sheave. Apply a little tension to the line while doing so. When you finally let go, the entire assembly will go slack, but this is OK. When you rig the Tack next, it will create the opposing tension needed. The inboard portion of the main course rigging should have been completed earlier.

Main course Tacks (.008 tan) — Seize one end of the line to the iron ring on the side of the hull. Examine the rigging plans for its location. Then take the line through the remaining single block of the block assembly. From here the line is glued into the false sheave through the ship's hull. This is the sheave located just aft of the fore channels. Apply enough tension on the line as needed so that none of the sheets, clew lines or tacks go slack. Just push the line into the sheave with the point of an awl after applying some glue. Keep pushing it into the sheave further until the appropriate tension is created on all of the lines.

Fore Course Clew lines (.008 tan) — Same as the main course clew lines. Belay to (16) and finish it up with a rope coil. Try and establish the same distance below the yard for the block assemblies with toggle.

Fore course sheets (.008 tan) — Examine the rigging plans. Same as the main course sheets.

Fore course tacks (.008 tan) — This is a little different than the tack for the main course yard. You must first seize a 3/32" single block to the end of the bumpkin. The bumpkins are the long spars resting on top of the head rails. Examine the rigging plans for details.

Seize the rigging line to the end of the bumpkin (just behind the single block you just seized to it). Then take the line up to the remaining block of the assembly hanging from the fore yard. From here it runs back through that single block on the bumpkin where the loose end is taken inboard and belayed. Belay it to (18) and finish off with a rope coil.

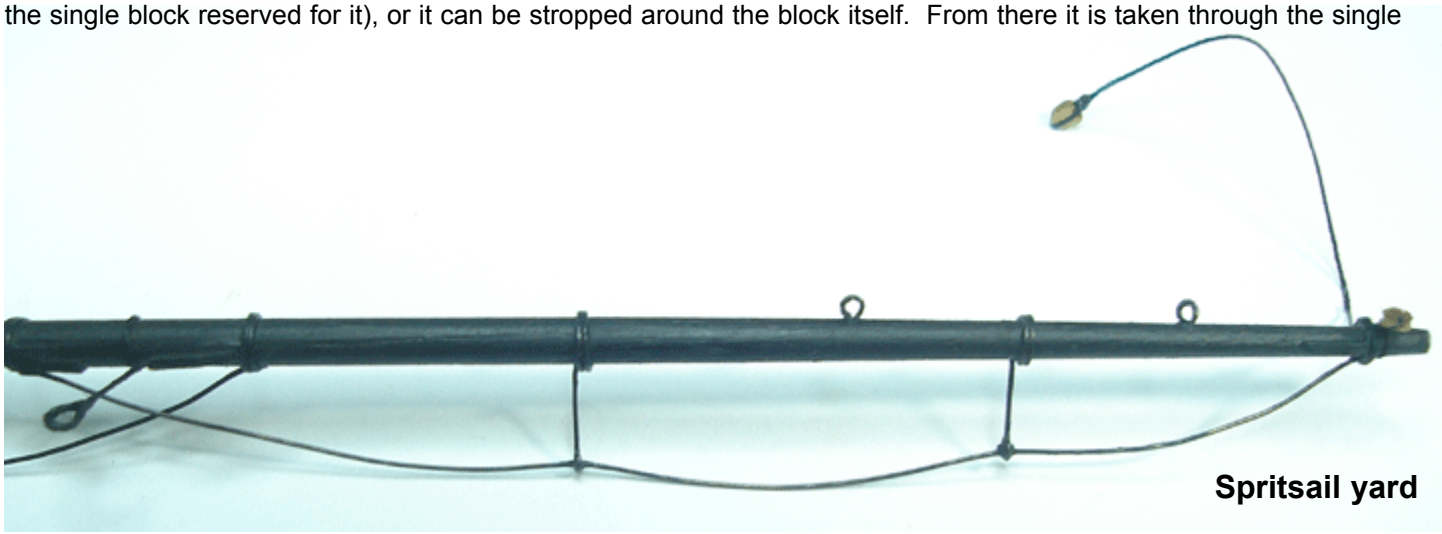
The Spritsail Yard Rigging…

The spritsail yard is made just like all of the others. Follow the plans to taper a 1/8" dowel. Add all of the sling and yard arm cleats. The spritsail yard will also need stirrups with footropes. In addition, there are four eye bolts (fairleads) positioned along the top of the yard. These will be used for the guy rigging. Add the brace pendants and lift blocks prior to rigging the yard on your model. You will use the same simple truss/sling to secure the spritsail yard under the bowsprit. The yard is positioned just below the sling saddle on the top of the bowsprit. After the yard is secured under the bowsprit with the sling/truss you can rig the short length of line that runs from the center of the yard to the eyebolt on the bottom of the bowsprit cap. This line can be seized around the center of the yard ahead of time so after the sling is completed you only need seize the other end of it to the eye bolt on the cap. Use .012 tan rigging line for these.

Jib Guys (.012 black) — The guys are seized around the tip of the jibboom and flying jibboom respectively. From here they are run through the eyebolts (fairleads) on the top of the spritsail yard. "Stiffened" eyes are made on the loose ends and they are lashed to the eyebolts on the fore side of

the cathead. They are essentially set up the same way as the martingale stays at the bow. See the photo provided and examine the rigging and belaying plans for details.

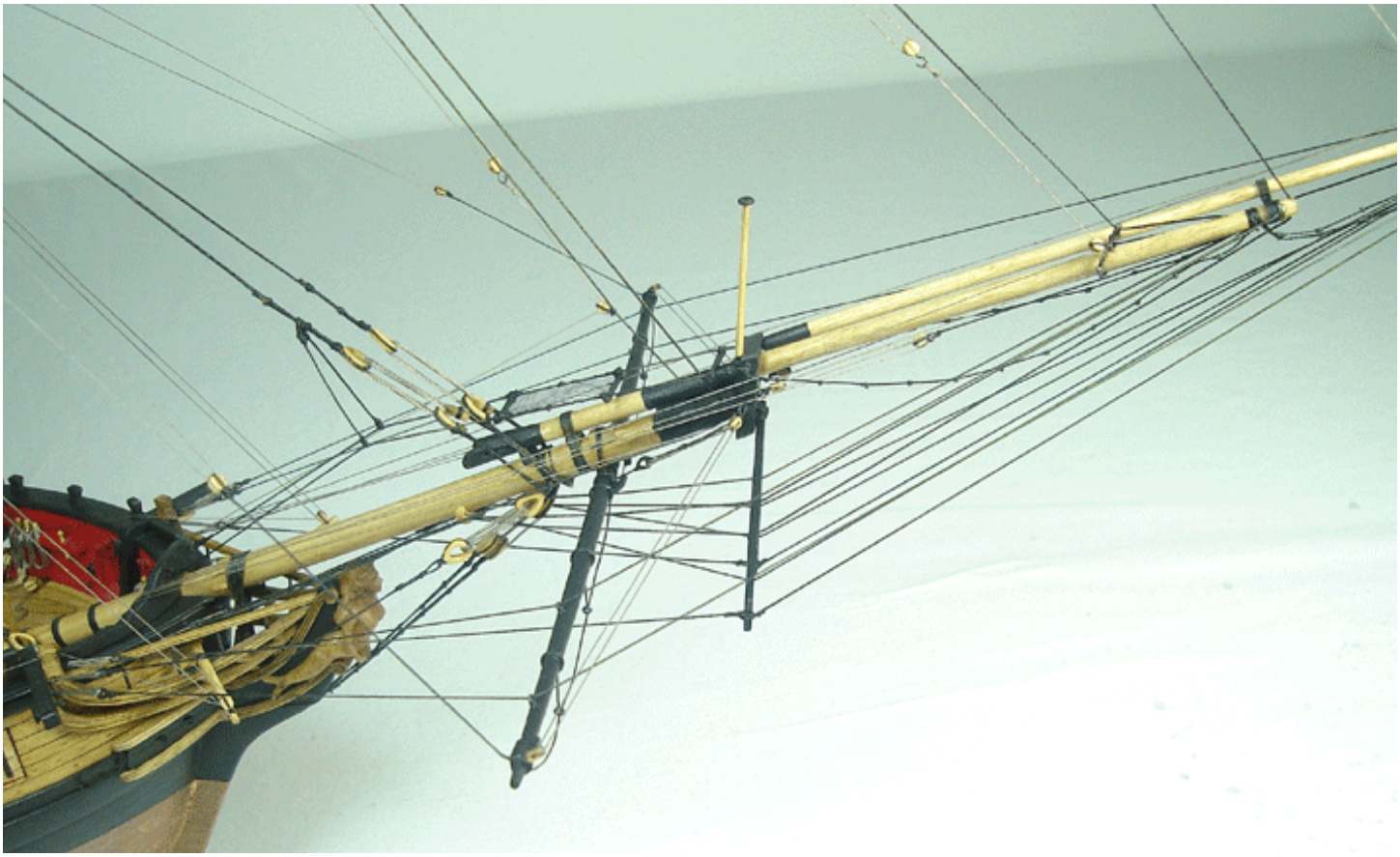
Spritsail Lifts (.008 tan) — The standing end of the lifts is either seized to the eyebolt on the bowsprit cap (just behind the single block reserved for it), or it can be stropped around the block itself. From there it is taken through the single



Spritsail yard

block ob the yard arm and back through that block secured to the cap. The loose end is then taken inboard and belayed to (20). Finish them off with a rope coil.

Spritsail Braces (.008 tan) - The standing ends are seized to the fore stay (above the mouse). The loose end is run through the single blocks of the brace pendants. Then, they are brought up to the fore top where they are run through



Chapter Twenty One Anchors and Flags

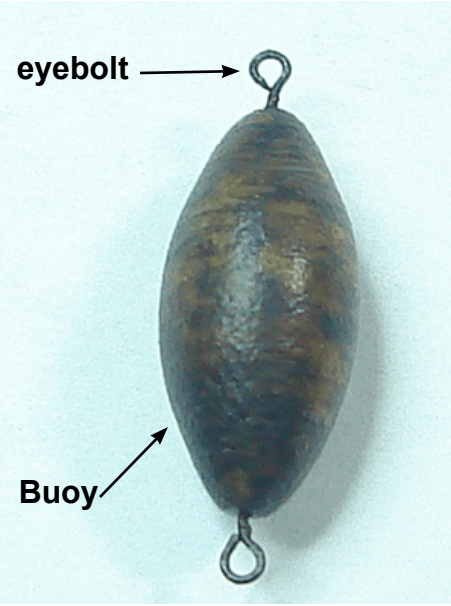
Two cast Britannia metal anchors are supplied with kit. The anchor and anchor stocks are both cast and need to be glued together. Examine the plans for details. One alternative can easily improve the results. The Anchor stock is a simple element to make from scratch. Use the appropriate size wooden strips to create both halves of the anchor stock. Not how the stock tapers on three sides. The top of the anchor stock is not tapered. It is easier to complete the tapering of the anchor stock after the halves are glued together. Notch out the center of each half so when they are joined the anchor can be slid through the stock. See the photo provided. Wrap some 1/16" wide black pinstripe tape around the stock to simulate the iron bands. Several treenails can also be simulated on both sides of the stock between each iron band. The look of a wooden stock will improve the overall look of your model. Paint the anchor black.

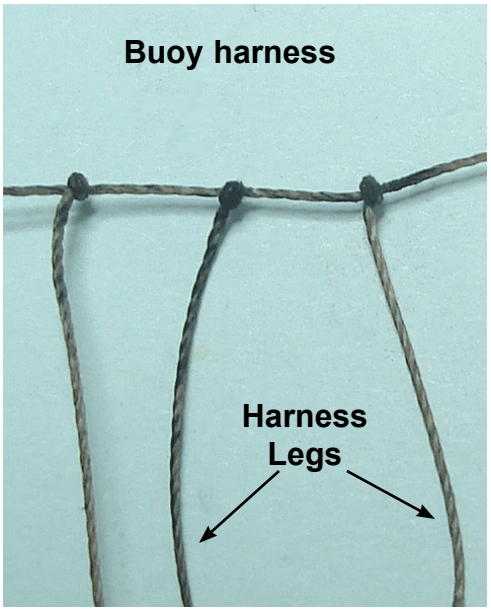
Then create the iron ring using 22 gauge black wire. Place the ring through the hole on the end of the anchor. Depending on your level of experience, the ring could be wrapped (served) with sewing thread to add another optional detail. This is shown on the plans.

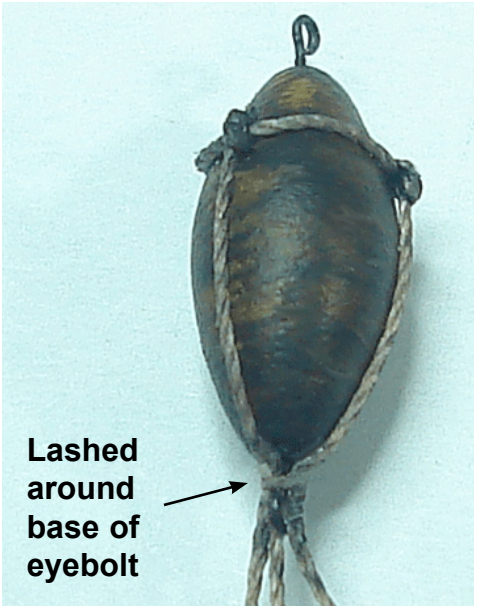
While examining the plans you will also notice the anchor buoy. These were used to mark the location of the anchor and anchor cable so ships could navigate safely around them. You will need to make two. They can be shaped from wood or you could use polymer clay to sculpt them. Clay was used to make the two buoys on the prototype. They should be painted a muddy brown color afterwards. The buoys would have been tarred to preserve them. See the step-by-step photos provided. Note in the first photo that two eyebolts were inserted on each end of the buoy. Don't insert them all of the way. Leave about 3/64" between the eye and the buoy. You will be seizing the rigging harnesses around the base of each eye bolt and you need to leave a bit of the stem of the eyebolt exposed. Each buoy is about a ½" long (not including the eyebolts).

While you wait for the paint to dry on each buoy, you can start creating the two rigging harnesses needed for each of them. Four in total will be needed. The second picture shows three knotted lines on another length of rigging. The line used was tan .018 line that was also muddied up to look weathered. Don't apply too much glue to each knot. You will need to slide these three lines to adjust their locations on the buoy. If you add some glue, immediately slide the knot back and forth to insure they remain moveable.

The harness is wrapped around the buoy and secured with an overhand knot. (Third photo) Apply some super glue (CA) to secure that overhand knot. Then slide the three







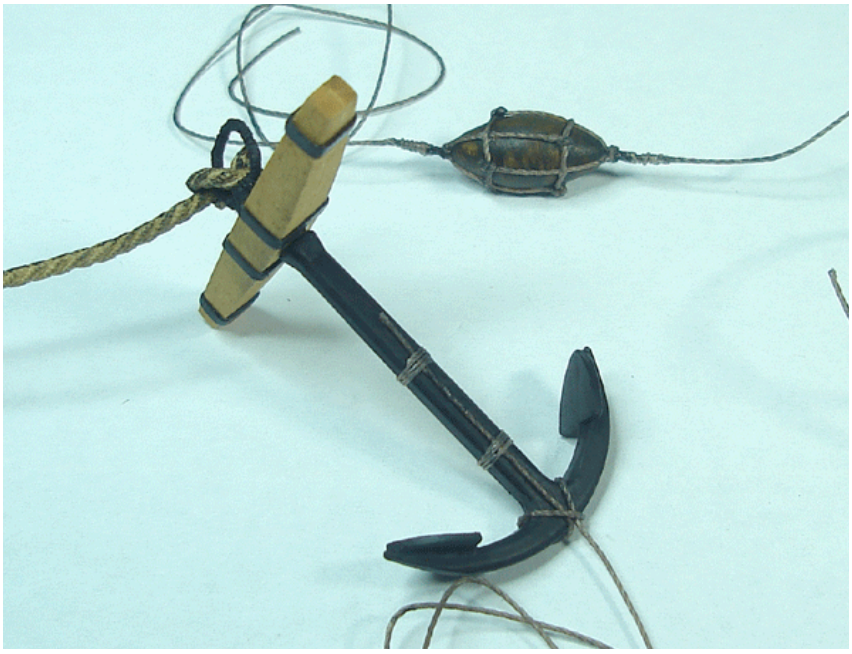
knotted lines into position around the buoy. Space them evenly around the buoy. Then take the three legs of the harness to the eyebolt on the opposite side. Seize them around the base of the eyebolt with some rigging line. Cut off the excess of the three harness leg strands after applying some glue to the knot to secure them.

Then repeat the process for the other side of the buoy (fourth photo). Note that the three legs of the second harness should be led under the first harness before you secure them around the base of the eyebolt. This detail is shown clearly on the plans. With the anchors and buoys completed you can prepare them for rigging on the model.

To prepare the buoy, seize two lengths of .018 rigging line to each end of the buoy. Both lengths will be seized to the shrouds later. For the anchor, rig another length of .018 tan rigging line to it as shown on the plans. The rigging is glued to the shaft of the anchor and the loose end is clove hitched around its base. Examine the drawing on the plans carefully. It would be better to clove hitch the line around the bottom of the anchor first and then glue the end to the anchor shaft afterwards. Wrap two lashings around the line and shaft to complete it.
Finally, add the anchor cable (.083 tan) to the anchor. Use a generous length of line because it needs to hang gracefully at the bow after you run it through the hawse holes. Then it will be wrapped around the riding bits before it works its way down the holes in the hatch grating mid ship. A simple, loose overhand knot can be used to rig the cable to the anchor ring.

Glue the anchor in position to secure it on the cap rail. This will make it easier to create the lashing around the anchor and timberhead. See the photo provided. Once the anchor is held firmly in position, seize the loose end of the buoy line to the forward-most shroud. Seize it just above the second row of ratlines. Add a drop of glue to the seizing and cut off the excess line.
Then take the buoy and secure it to the shrouds. Seize the upper buoy line first. Place it high enough on the shrouds that the lower buoy line can be seized to the exact spot where the line from the anchor was seized. See the photo provided. Create rope coil and lash it to the spot where these two lines are secures to the shroud. This will hide the fact that these two lines are actually two separate pieces. The line from the anchor to the buoy was actually quite long. It had to be long enough to use in fairly deep waters. So don't be shy with that rope coil. It must be large and contain quite a few coils of rope. A smaller rope coil can be made and lashed to the upper buoy line to complete this step. This coil is smaller and was only used to secure the buoy to the shrouds and fish the buoy out of the water. An additional photo shows the model after the rope coils were added.

Completed buoy. Note how the harness legs go under the other harness as the work their way down to be lashed to the base of the eyebolt.



The Flags…

This model of the Syren has two flags. Both are made of regular office-grade paper. You will notice that they are doubled with a mirror image. After cutting them out, fold them along the center line between the mirror images. Glue both halves together using a glue stick. While the glue dries, wrap the flag around different sized dowels to shape it as if it were blowing in the wind. The smaller one is simply lashed to the staff on the bowsprit cap. Drill two small holes on the inside corners of the flag. Use some sewing thread to lash the flag to the staff. Make any adjustments afterwards to make the flag look like it is hanging as naturally as possible. Should you need another set of flags…simply download the full color version of this chapter from our website www.model-expo-online.com You may want to shape more than one flag so you can choose the one that looks best before you place them on the model.

Next, take the anchor cable through the hawse holes. Establish a nice graceful curve outboard and lock it into position by applying some glue to the line inside the hawse hole. The loose end of the cable inboard is wrapped around the riding bits as shown in the photos. Then push the end of the cable into the holes of the hatch gratings. You may need to apply a little glue to the bottom of the cable in order to get it to sit nicely on deck. Especially where it first touches the deck on either side of the riding bits. Note how the cable runs inside of the lashings for the long boat. It should run alongside the forward hatch.

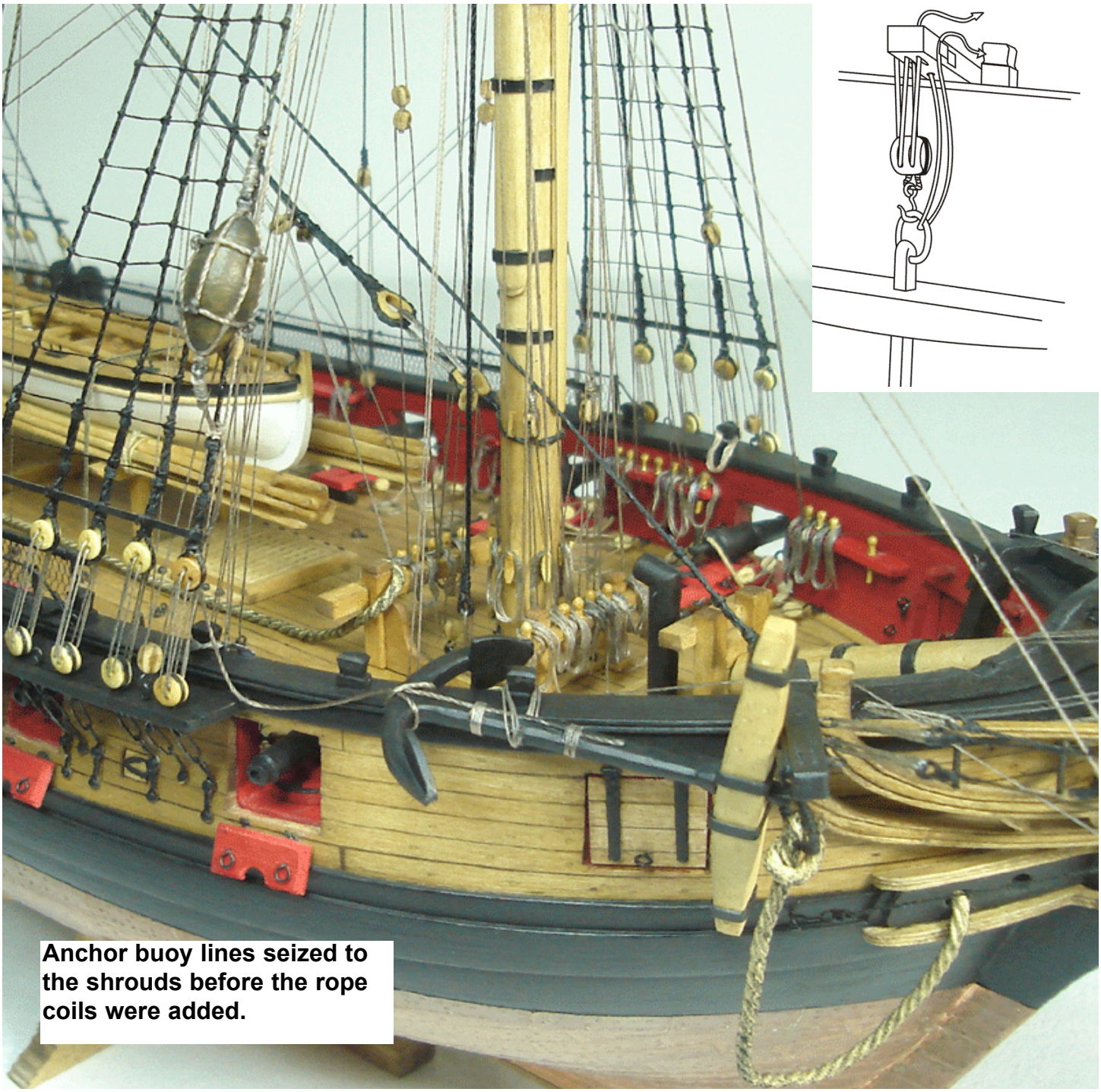
To finish rigging the anchors, two more lines need to be completed. The first is the anchor stopper cable. This line (.018 tan rigging) will have a stopper knot made on one end. Run the line through the hole created on the top of the cathead. Run it through from top to bottom. The line is then taken through the anchor ring and then around the external sheave on the cathead. This is the sheave you made on the aft side of the cathead. You can add a drop of glue if needed to hold the line in that sheave. The loose end is finally belayed to the “taller” timberhead just alongside the cathead. Finish it off with a rope coil afterwards.

The final line is the tackle for the anchor. A hook will be added to a 5/32” double block. Normally this block would have an iron strop. But for our model that detail can be omitted. To create the tackle, seize a length of .018 tan rigging line to the unoccupied eyebolt on the forward side of the cathead. From here the line is taken through the sheaves of the double block and the cathead. Pull the tackle so the block is firmly hooked to the anchor ring. Then belay the line to the inboard cleat on the cathead. Finish it off with a rope coil.

The larger 15 star flag is flown from the gaff. Use some .008 tan rigging line to rig the flag halyard first. Belay one end of the line to the cleat in the inboard side of the stern transom. Then run the line through a 3/32” single block on the end of the gaff. Bring the halyard back down to another cleat on the transom. It really doesn’t matter which one. Finish off both with rope coils. Prepare the larger flag the same way as the smaller one. Drill two small holes through the inside corners of the flag before trying to shape it with the dowels. When you are satisfied with the shape, lash the flag to one of the falls of the halyard. See the photos provided

Congratulations!!!!

The model is now completed.



Anchor buoy lines seized to the shrouds before the rope coils were added.

Anchor cable taken around the riding bits and led into the holes in the hatch gratings.