

INSTRUCTION MANUAL

MODELING THE
DESPATCH No. 9
◆ DIESEL TOWBOAT, 1945 ◆

Technical Characteristics

Scale: 5/32" = 1 ft.

Overall Length: 13-1/2"

Beam: 3-3/4"

Height: 7" (top of mast to bottom of keel)



Instructions prepared by Ben Lankford

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Model Shipways Kit No. 2011

HISTORY

The original model plans and kit of the *Despatch No. 9* were developed in 1949 by John Shedd, the original owner of Model Shipways in Bogota, New Jersey. These early plans and the kit have been updated with more detail and reissued by Model Shipways, Inc. and sold by Model Expo, a division of Model Shipways. New instructions are provided along with a more complete set of supplies for building the model. The fittings are now cast from lead-free Britannia metal and laser-cut wood parts have been added.

The *Despatch* was constructed from an Army design; 85' Motor Tug designated Army ST (small tug). The original design plans for the tug are in the Army Transportation Museum in Fort Eustis, VA. The Museum also has a model of the Army tug on display. There are some differences between the Army tug design and the *Despatch*, changes required by the owner no doubt. Primarily, the *Despatch* has a different towing winch and capstan, and some minor differences in the deck house compartments. The Army version also has railings on the pilot house top and two machine guns, and there is a lifeboat carried on the upper deck.

To incorporate the differences between the Army version and *Despatch*, John Shedd obviously has access to plans and information specific to *Despatch*. Unfortunately, none of the original information could be found.

There are two other known tugs built from the Army design. The *Messenger* was built in 1944 in New Orleans as an Army tug, but in 1946 was acquired by the Coast Guard. Likewise, the *Angels Gate* started out as an Army tug, but soon became a commercial tug in California. What is nice about the *Angels Gate* is the fact that it is still around. The tug has been restored and is a floating exhibit at the Los Angeles Maritime Museum. The tug is as built by the Army, except the machine guns have been removed. There are a number of photos of the tug on the Museums web site.

Construction Stages & Table of Contents

Brief History	1	Stage C: Mounting the Hull	
Before You Begin	3	1. Mounting Board with Two Pedestals.....	8
How To Work With The Plans & Parts	3	2. Launching Ways	8
What You'll Need to Start Construction	3	Stage D: Adding the Hull Details	
Painting.....	4	1. General Notes.....	9
Stage A: Shaping the Pre-Carved Hull		2. Windows, Airports, & Doors.....	9
1. Using the Templates	4	3. Running Lights, Flagstaff, & Mast.....	9
2. Carving the Hull	4	4. Ladders, Upper Deck Railing & Hand Rails.....	9
3. Carving the Bulwarks	5	5. Horn, Searchlight, Bell, Ventilator, & Life Ring	9
4. Deckhouse Carving.....	7-8	6. Deckhouse Name Board & Lettering.....	9
Stage B: Completing the Basic Hull Structures		7. Stern Grating.....	9
1. Installing the Keel & Stem.....	6	8. Bow Chock, Cleats, and Manholes	10
2. Installing the Sternpost, Prop Shaft Tube Fairing, & Propeller.....	6	9. Capstan & Towing Machine	10
3. Installing the Rudder Skeg & Rudder.....	6-7	10. Air Vents	10
4. Cutting Out & Detailing the Freeing Ports	7	11. Log Fenders & Bow Bumper	10
5. Installing Bulwark Brackets, Stiffeners, Cap Rail, Quarter Bitts, Chocks, & Hawse Pipe Lips.....	7	12. Anchor	10
6. Installing the Outboard Pipe Fenders	7	13. Final Touches.....	10
7. Constructing the Deckhouse	7-8	Bibliography.....	11

Before You Begin

The *Despatch No. 9* is an interesting model for beginner and expert alike. This kit contains a solid hull, which has been machine-carved from select, medium-hard, fine-grained basswood. This style hull provides a quick and easy lesson in the basic shapes and proportions of hull design and helps to develop woodworking skills. Although the exterior of the hull has been carved close to the hull lines as shown on the plans, further carving is necessary for reasons of accuracy. (Carving and finishing the hull to its final shape are discussed in the instructions.)

Constructing the *Despatch No. 9* model also will provide you with the opportunity to develop some scratch-building techniques. During construction, you may want to substitute some of the kit fittings with your own creations. By all means try them, especially if you think you can improve the model.

If you are a beginner, completing this model will prepare you for a more complicated model such as the *Dapper Tom*, another solid hull model but a sailing ship with rigging to contend with, and eventually a model like *Pride of Baltimore II*, which is outfitted with a plank-on-bulkhead hull. In the meantime, happy modeling!

Working with the Plans & Parts

Before starting model construction, examine the kit and study the plans carefully. Familiarizing yourself with the kit will serve two purposes. First, it will let you determine that all parts have been supplied as listed. And second, you'll be surprised at how quickly handling the parts allows you to better understand the kit requirements. Try to visualize how every part will look on the completed model. Also, determine ahead of time what must be done first. The instructions will help you in this regard, but a thorough knowledge of the plans at the outset is essential.

It is also suggested that all small fittings and hardware be sorted into labeled boxes or compartments to avoid loss during the building process.

Two Plan Sheets and Two Template Sheets are provided:

1. Hull Plan (Sheet 1 of 2)
2. Lines Plan and Details (Sheet 2 of 2)
3. Hull Templates (Sheet 1 of 2 - Profile) on heavy paper stock
4. Hull Templates (Sheet 2 of 2 - Stations) on heavy paper stock

Note: In the process of updating the plans, several new details were added that reflect the real boat construction as well as details for the model construction. The real *Despatch* was

constructed of fairly thin steel plates that would be too thin for a small scale wooden model. So, the model construction is modified on some details. The real ship details provided are interesting to know and they allow you to be creative and possibly modify the model details provided for the kit design to suit your own approach.

In addition to the plans, a set of sketches appears throughout the instruction manual to further illustrate the various stages of construction.

The *Despatch No. 9* kit is manufactured to a scale of $5/32" = 1'0"$ and matches the plans. Consequently, most of the dimensions can be lifted directly from the plans using a "tick strip". This is simply a piece of paper (a roll of calculator paper tape works very well). Mark a dimension from the plan onto the tick strip and transfer it to the model.

The *Despatch No. 9* kit is supplied with Britannia metal, brass, as well as wooden fittings to eliminate problems in making such parts from scratch. Because the Britannia metals contain no lead, there are no possible corrosion problems. Many of these fittings will require final finishing before installing on the model.

Before painting the cast-metal fittings, clean them up by removing all the mold-joint flash. To do this, use a No. 11 hobby blade to cut the flash, then sand with fine sandpaper. It is also suggested that you clean the fittings thoroughly with warm soapy water before applying primer. Make sure they are rinsed thoroughly and allowed to dry before painting.

What You'll Need To Start

The following tools and supplies are recommended for the construction process. Modelers who have built before may have their own favorites. Almost all are available at www.modelexpo-online.com.

A. Knives and Saws

1. Hobby knife with No.11 blades
2. Fine tooth razor saw

B. Files

Set of needle files

C. Sharpening Stone

Necessary to keep the tools razor sharp

D. Clamps

1. A few small C-clamps
2. Several wooden clothespins
3. Rubber bands

E. Tool Set

A small carving tool set or individual hand chisels for shaping the hull.

F. Boring Tools

1. Set of miniature drills: #60 to #80 (you won't use all the sizes in the set)
2. 1/16", 3/32", & 3/16" bits for various

fitting holes

3. Pin vise

G. Miscellaneous

1. Tack hammer
2. Tweezers (a few)
3. Small fine pointed scissors
4. Miniature pliers
 - a. Small round
 - b. Flat nose
5. Bench vise (small)
6. Soldering iron
 - a. Solder
 - b. Flux

Note: soldering is not essential for this particular model if the kit fittings are used.

7. 1/2" or 3/4" masking tape
8. Wire cutters (for cutting fine wire and strip metal)

H. Sandpaper

Fine and medium grit garnet or aluminum oxide sandpaper (#100 to #220 grit)

I. Finishing:

1. Paint brushes
 - a. Fine point for details
 - b. 1/4" to 1/2" flat square for hull

J. Supplies: (will be covered in detail in the Painting section and throughout instructions)

1. Paints
2. Primer
3. White or Carpenter's (yellow) Wood Glue
4. Five-minute epoxy
5. Cyanoacrylate (Super) Glue

Note about glues: White or Carpenter's yellow wood glue will suffice for most of the model. Five-minute epoxy provides extra strength for gluing fittings. Cyanoacrylate (Super) glue, called CA glue for short, such as Zap is excellent for quick adhesion. The best CA glue for most applications is a medium viscosity gap-filling type. The watery-thin type is recommended only to fill a narrow crack by capillary action. For CA glue, you can also purchase a liquid accelerator such as Zip Kicker. A spray or drop of the accelerator will instantly cure the glue. This is handy to eliminate clamping parts for long periods of time waiting for glue to harden.

Use CA glue with caution. You can easily glue your fingers or eyelids together and the fumes can burn your eyes. It would be a good idea to have a bottle of CA debonder on hand. This product will dissolve the glue if you do get it on your skin.

Painting

It may seem strange to begin an instruction manual with direction on applying the finishes to the model. Not so! Much time and effort can be saved and a more professional result can be obtained if the finishing process is carried out during construction. Proper timing in application of finishes and the use of masking tape to define painted edges should eliminate unsightly glue marks and splotchy stained surfaces. In the end, following these general suggestions will be to your advantage.

Paint Colors:

The color scheme for *Despatch No. 9* is as follows:

Hull Above the Waterline - Medium Gray

Hull Bottom Below Waterline - Dark Green

Decks - Light Brown

Deck House, watertight doors, skylight, masts, life ring and air vents - Aluminum

House Border Trimmings (top moulding on house, engine room skylight), search light, horn, grating at stern, inside bulwarks, and ladders) - Red

Bits, chocks, cleats, capstan, and towing engine - Black

Ventilator - Aluminum with inside of cowl Red

Smoke Stack - Black with White "S"

Airport frames, Window frames, and pilot house doors - Dark Brown

Running lights - Light boxes, outside and top of the light fixture - Red, Aluminum inside. **Port light glass** - Red, **Starboard light glass** - Green

Paint:

Use a flat-finish paint. Model Shipways line of acrylic paints are available in the recommended colors. You may also purchase an already assembled *Despatch* paint kit from Model Expo at www.modelexpo-online.com.

Primer:

Use a grey primer (one is provided with the Model Expo *Despatch* paint kit). The grey color will highlight sanding scratches and other defects better than white primer. Prime all woodwork to be painted, and prime all metal fittings. Lightly sand the primed items. Use a spackling compound such as Pic-n-Patch brand to fill any scratches and defects, then re-prime.

Brushes & Procedures:

Use good quality soft sable or synthetic hair

artist's brushes. A small pointed brush is good for details. For the main hull areas, use a 1/4" to 1/2" flat brush.

Before painting, clean the model with a tack rag. Apply your paint in smooth and even strokes, overlapping them as you go. Thin the paint enough to eliminate brush strokes, but not run. You will need three or four coats of the light colors to cover the grey primer and maybe only two coats of the dark. Check your finish between coats and sand and add spackle as necessary to get rid of any blemishes.

You will be told how to mark the waterline location in Stage A. At this line, and anywhere else two colors meet, use masking tape. Electrician's black plastic tape or any of the hobby tapes made of plastic film are ideal. They leave a nice edge and are not overly sticky. Do not use drafting tape unless it is Chart-pak brand. The edges are somewhat wrinkled and paint may run under them. A good trick; seal the edge of masking tape with a clear flat finish and let dry thoroughly. This will really prevent paint from running under the tape.

STAGE A: SHAPING THE PRE-CARVED HULL

Sanding alone will not shape the hull enough to precisely match the hull lines. Some carving is required, especially at the rail, keel, bow, & stern areas.

1. Using the Templates

For exact carving to hull lines, a template is required for the hull profile and each of the 12 stations. You will find a template set printed on heavy stock paper in the kit. Cut the templates out carefully with a No. 11 hobby knife. Do not use scissors! You will want a nice smooth edge.

Option-The profile template can be cut at Station 6 to make fitting easier. Just make sure you have the keel straight and don't build in a knuckle. Likewise, the station templates can be cut at the bulwark. If you do this, mark the width of the hull at each station on top of the bulwark beforehand and carve to these marks.

Note: The profile template shows a notch forward and one aft at the keel and stem. These notches are where the heavy stem pipe and the rudder skeg are glued. The notches can be added as you carve the profile shape, but probably better if you wait and file these notches in when you are ready to install the

stem pipe and rudder skeg.

2. Carving the Hull

Cut a wooden block from scrap to about 3" x 1" x 3/4" thick. Screw the block to the deck so the model can be held in a bench vise for carving. First, check the accuracy of the profile and correct it as necessary, using a long sanding block.

Next, mark the centerline, rabbet lines (where hull meets keel) and station lines on the model (Figure A-1). Place the station marks on the center of the hull bottom and on top of the rails so the marks won't be carved off as you work. Also, add the breadth marks on the rail if you elected the option noted above.

Note: The width from the port to starboard keel and stem rabbet is 3/32" wide from the rail at the bow and all the way back to the end of the keel. You will be fitting a 3/32" wide keel strip to this flat area back to Station 10. From Station 10 to the end of the keel is where the rudder skeg will be fitted. At the sternpost, carve this area down also to 3/32" wide where the stern post will be fitted.

Start carving approximately at Station 6 (maximum beam) and progress forward,

then aft, using chisels and gouges to cut away excess wood. Avoid carving against the grain by shifting forward or aft of Station 6 until you find a spot where you are going with the grain. Basswood carves easily, so you probably won't have much problem with the grain.

Carve very slowly and take off a little wood at a time. Fit the templates as you go. Carve until the template fits reasonably well, then use sandpaper to obtain the final shape. At first the templates will not fit very well. You must compare the template to the hull and visually decide where to remove wood. Cut a little off, then re-check the template.

Finally, draw a few horizontal pencil lines (like waterlines) and the vertical station lines on the hull. Use these to visually check the shape of the hull. Hold the hull at various angles, and look to see if the pencil lines are fair (even). If you have any unfairness, dips or bump, they can usually be found with this visual check. You can also use a stiff stick of wood, about 3/32" square, and lay it on the hull at various locations. Dips in the hull will show up under the stick.

3. Carving the Bulwarks

Make yourself a temporary cradle to secure the hull while carving. This cradle also will serve to hold the model for most of the remaining work. Make the cradle so the model sits in it with its waterline parallel to the baseboard and table. The tops of the cradle should be below the waterline. Later, when you are ready to paint, attach a pencil on top of a wooden block and slide it along the table to mark the location of the waterline.

The machine-carved hull has bulwarks thicker than scale so they won't break while inside the kit box. The upper surface is cut to the underside of the cap rail. After you carve the outside of the hull, the bulwarks will be thinner. If more than 1/16" thick it will be necessary to carve the inside of the bulwarks. This is the most difficult part so work slowly as you carve (Figure A-2). After carving, sand the surfaces smooth. If you happen to have or want to buy a powered rotary tool like a Dremel, there are many cutters available to quickly reduce the bulwark thickness.

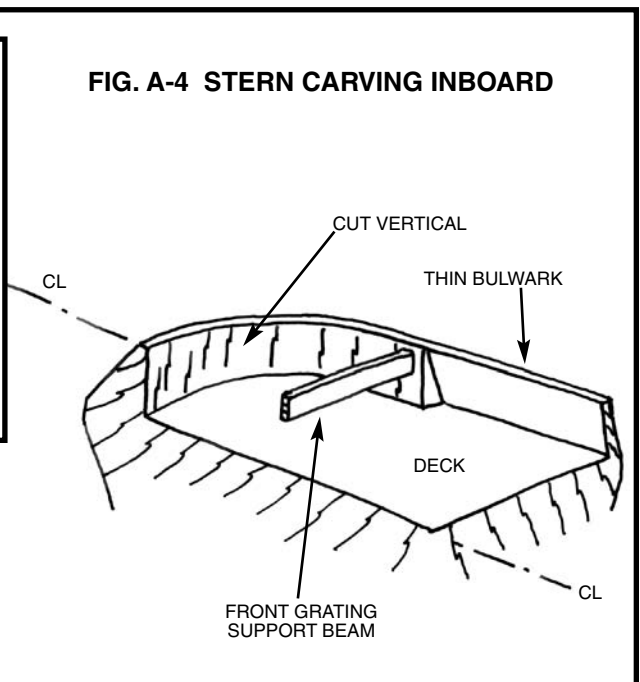
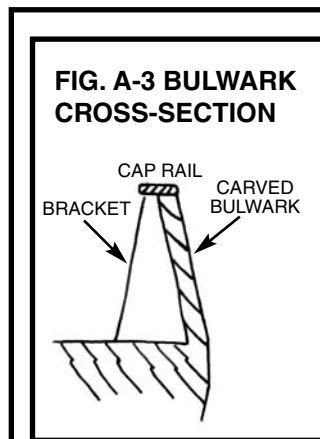
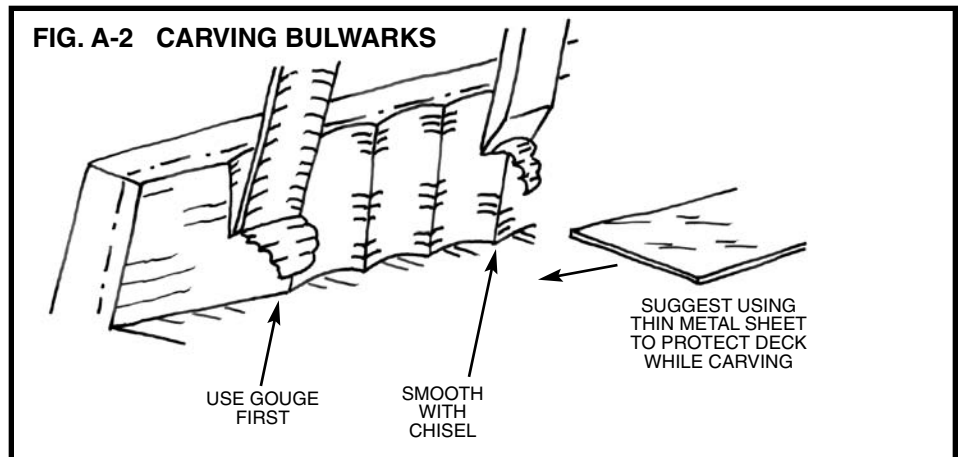
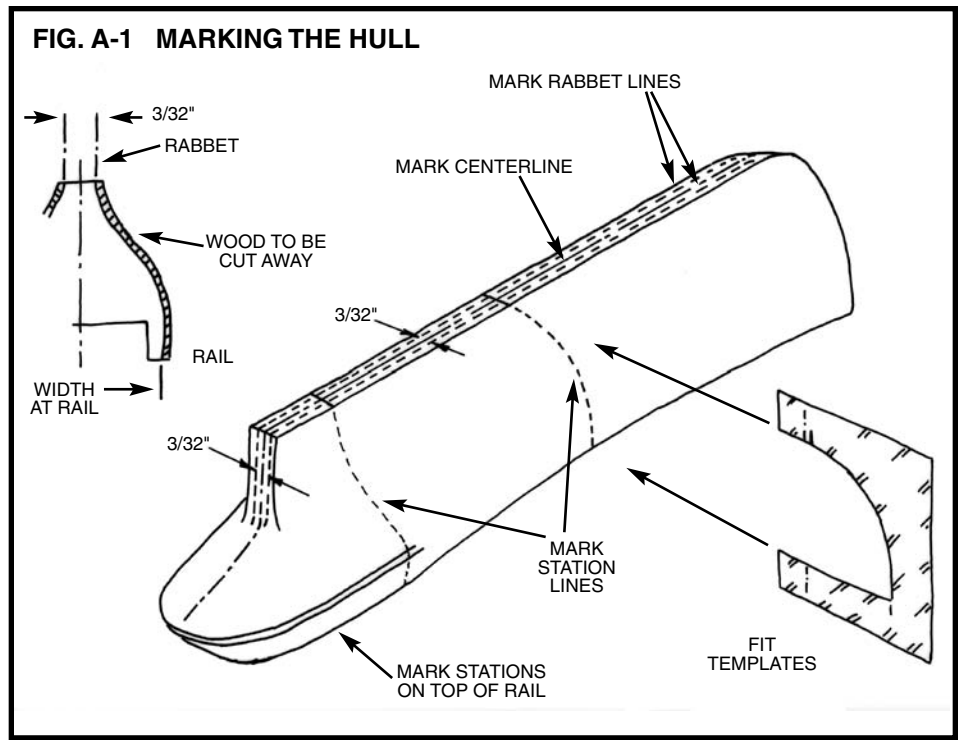
Note that bulwark brackets go onto the inboard side of the bulwarks. The brackets should be 1/32" wide at the top and 5/32" at the bottom. Together with the bulwark, the brackets must fit under the cap rail which is only 3/32" wide. If the brackets will not fit, sand the inside of the bulwark a little more at the top. You can then taper the inside down to the deck without reducing the thickness at the deck. You won't really see that the bottom is thicker than the top. Of course, you could use a wider cap rail but don't get it too wide or the scale will not look proper. Figure A-3 is a cross section thru the bulwark.

Note: As noted earlier, the bulwarks for the model have been modified from the real boat design somewhat. On the real boat the cap rail and bulwark are constructed from 1/4" to 3/8" thick steel plate. At our model scale these would be paper thin and too fragile for a wooden model. The real boat details and the model modifications are shown on the plans.

Carving the Bulwark Around the Stern - The bulwark around the stern slopes forward at a rather large angle. However, on the real boat, the inboard side is plated in way of the grating platform which covers a rudder control quadrant. Carve the inside of the bulwark in this area so the bulwark is vertical (Figure A-4).

4. Deckhouse Carving

The deckhouse construction will be discussed in Stage B.

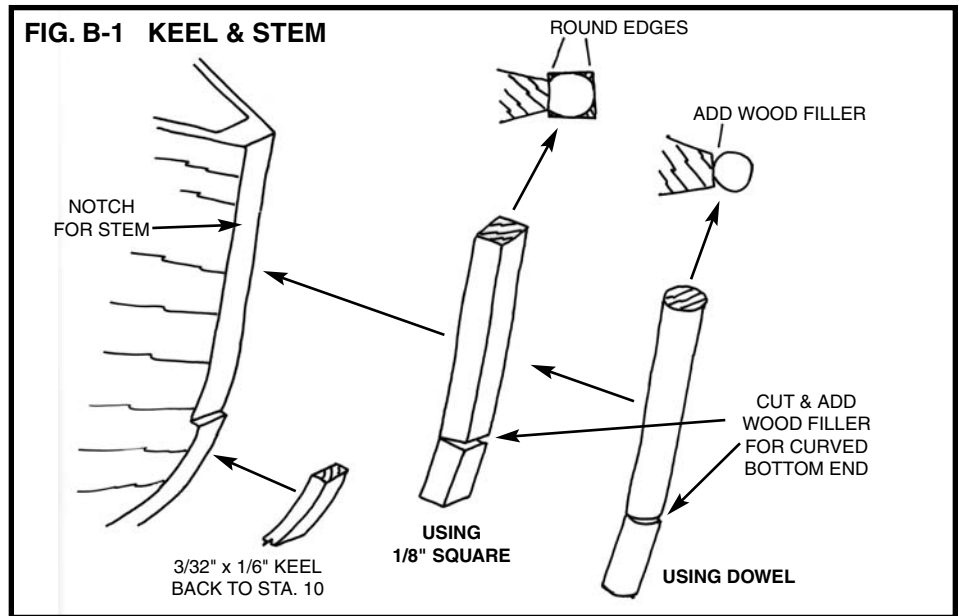


STAGE B: COMPLETING THE BASIC HULL STRUCTURES

1. Installing the Keel & Stem

Like the bulwarks, the model keel is modified from the real boat as can be seen on the plans. The model keel is 1/16" deep x 3/32" wide basswood. Fit it from Station 10 forward up to the heavier pipe stem piece which starts just below the waterline. For the curved portion of the keel, steam bend the strip or cut it out of a wider sheet of 3/32" thick wood.

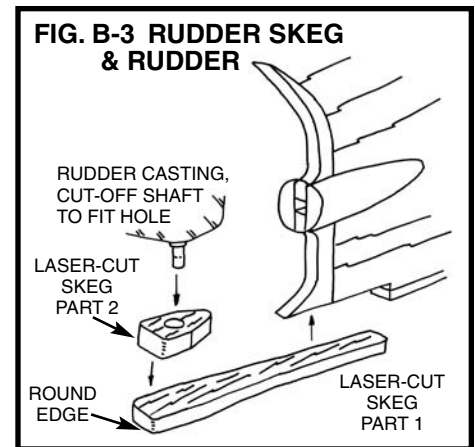
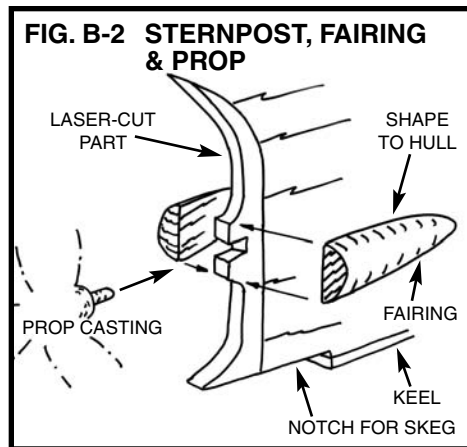
On the real boat the heavy stem is a round pipe. It is actually fitted over the keel bar which goes up to the deck. If you have not done so yet, cut or sand in the notch for the stem, 1/32" deep. For the heavy stem, add either a 1/8" diameter dowel. Or a 1/8" square basswood strip. For the square, sand the forward side round and sand the back edges down to the hull. Use wood filler as necessary to smooth out the joint between the stem and hull (Figure B-1).



2. Installing the Sternpost, Prop Shaft Tube Fairing, & Propeller

The sternpost is a 3/32" thick laser-cut wood part. This is actually part of large forging at the stern of the real boat that includes the stern tube. Glue this part to the hull. If it is not the same width as the hull you have carved from Stage A, sand the hull flush with the laser-cut part, or if necessary add wood filler on the hull so the two will fair. Next, add the shaft tube fairings on both sides. Cut these from basswood. Shape the inboard sides to the hull shape. The outer faces should be parallel to the hull's centerline. On the real boat this is just a hump in the hull plating that covers the stern tube which would protrude thru the hull if not covered.

Install the propeller. The prop has a shaft piece that should fit in the slot in the laser-cut sternpost. You may need to shorten the shaft on the prop, or drill a hole at the slot deeper into the hull (Figure B-2).

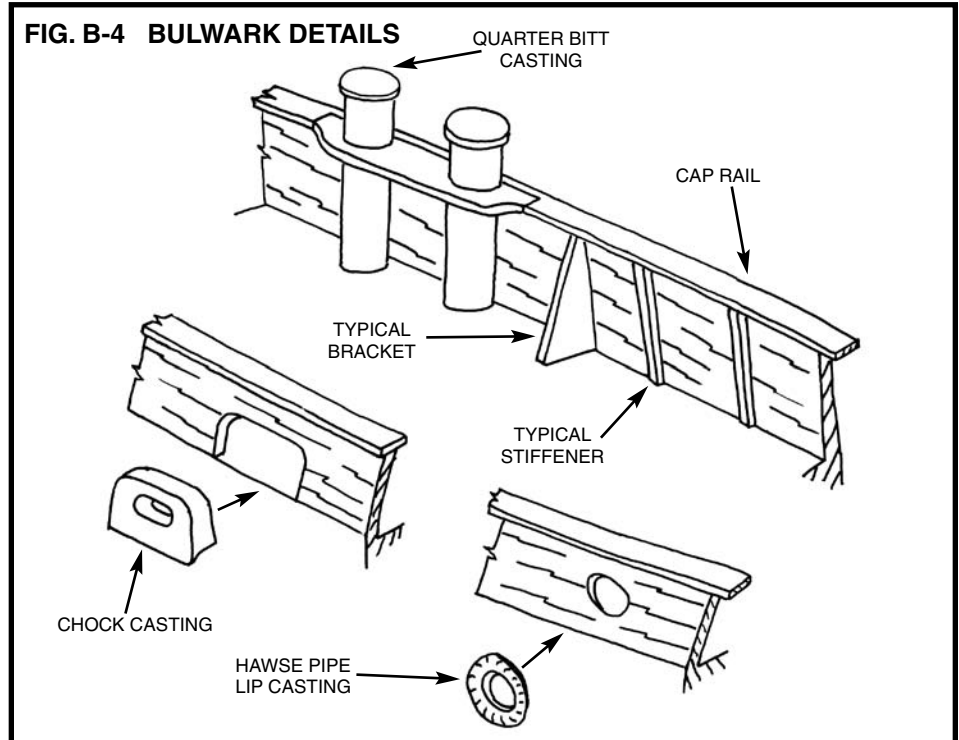


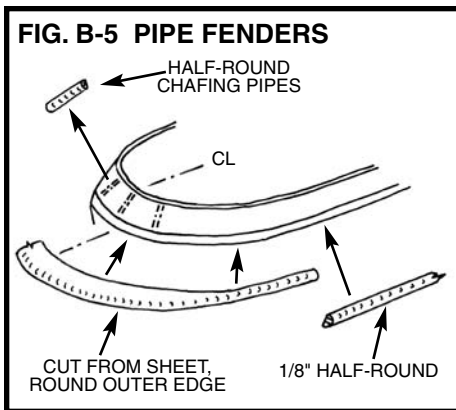
3. Installing the Rudder Skeg & Rudder

As noted in Paragraph 1 above, the keel was installed forward of station 10. Aft of Station 10 you will add the 3/32" thick laser-cut rudder support skeg which extends beyond the hull. If you have not yet carved the notch for the skeg, do so now. The bottom of the skeg should be in line with the bottom of the keel.

Drill a hole in the hull for the upper end of the rudder stock. At the end of the laser-cut skeg (part 1), add the laser-cut block (part 2) which has a hole for the lower end of the rudder stock. Round the outer edges of the skeg per the plan.

The rudder is a Britannia casting with the stock already molded in. Fit the upper end in the hole in the hull, then in the skeg, and finally glue the skeg to the hull. You will





need to cut off the bottom of the rudder shaft as it is too long to fit the hole in the skeg. Sounds complicated in words, but Figure B-3 will make it clear as mud.

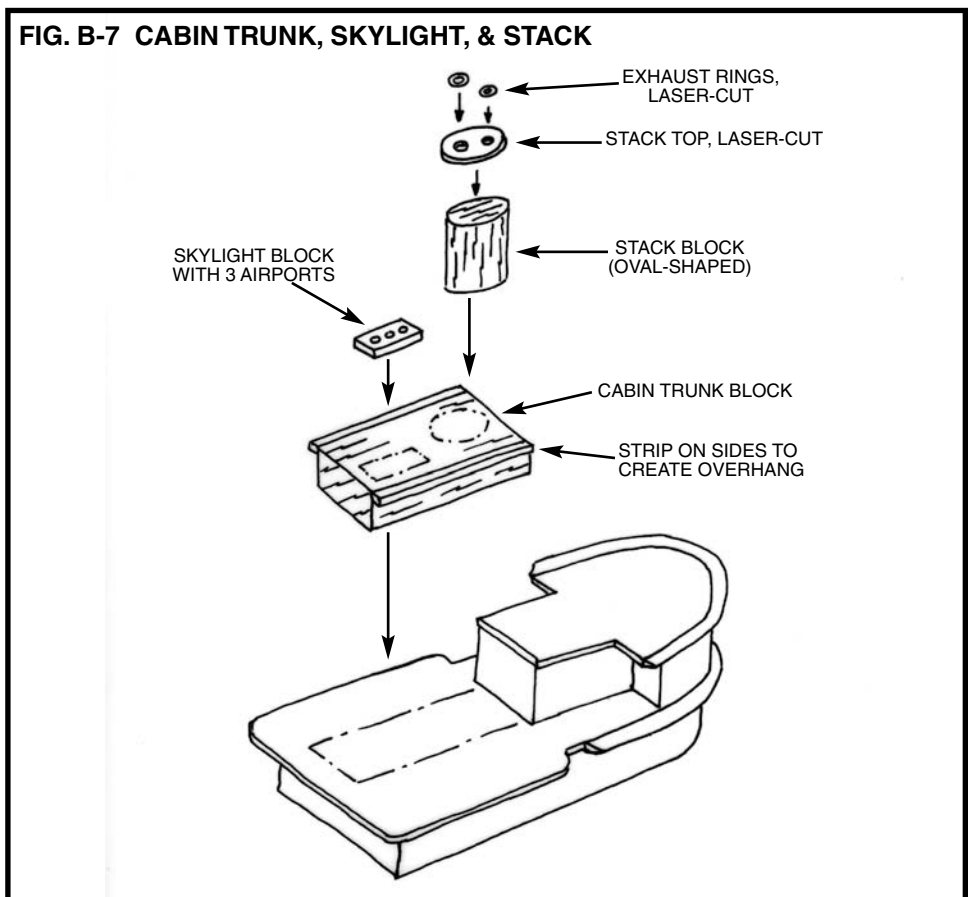
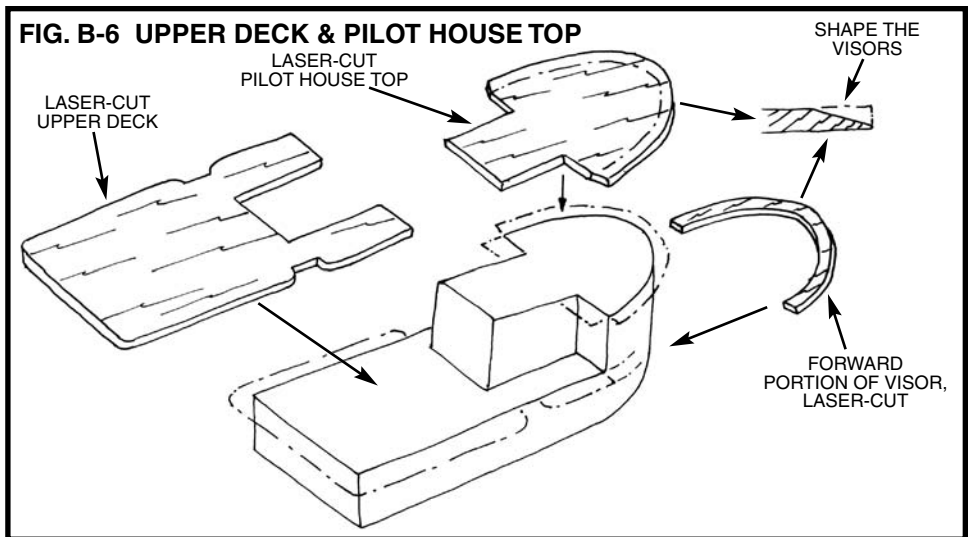
4. Cutting Out & Detailing the Freeing Ports

Layout the freeing ports in pencil first, then drill several holes in the ports and file or saw out the port. The ports have vertical round bars. Use brass wire or pins included in the kit for the bars. Installing the wire or pin is a tricky task, so it is probably easier to drill holes down thru the top of the bulwark and insert the wires or pins thru the holes. Cut the heads off if pins are used.

5. Installing Bulwark Brackets, Stiffeners, Cap Rail, Quarter Bitts, Chocks, & Hawse Pipe Lips

Before installing the cap rail, add the four quarter bitts (Britannia castings - 2 each side). Cut holes in the bulwark, one each side, the shape of the bulwark chock castings and glue them in place. Drill holes in the bulwark and add the Hawse pipe lip castings. The bulwark brackets and stiffeners should be installed next. The bracket locations are shown on the bulwark inboard profile on the plan sheet 2 and the plan also shows details for the brackets as fitted on the real boat as well as for the model. For the model, the brackets are to be cut from 1/32" thick basswood. On the real boat, there is a 1-1/2" diameter pipe welded to the inboard edge of the bracket plate, but that would be a little tedious for this scale model. Between the brackets there are up to three equally spaced flat bar stiffeners. For the model, use 1/32" square basswood to represent the stiffeners (Figure B-4).

Finally, add the cap rail which is 1/32" x 3/32" basswood. At the bow and stern where the rail curves quite a bit, cut the rail from the 1/32" basswood sheet in the kit. From just aft of the aft quarter bitts, there is another rail on top of the cap rail going around the stern. This is apparently a chafing rail for towing lines. Use another 1/32" thick rail for this piece. At the bow add the small platform between the rails.



6. Installing the Outboard Pipe Fenders

The outboard fenders on the real boat are half pipes. For the model, pre-sand 1/16" x 1/8" wood strips to half-rounds and install the strips. From Station 12 around the stern the pipe transitions into a wider plate as can be seen on the plan view. Cut this area from the 1/8" x 1/2" wood strip and sand the outer edge round to match the half round fender forward. Between the cap rail and pipe fender at the stern install the three half round chafing pipes. Figure B-5 illustrates the fender details.

7. Constructing the Deckhouse

General Makeup of the Deckhouse - The machine-carved deckhouse consists of the main cabin and the captain's cabin/pilot house all in one piece. The top of the pilot house including the visor is a laser-cut part in 3/32" basswood. The upper deck is a laser-cut part including a portion of the visor from the pilot house doors aft. The portion of the visor forward of the doors is also a laser-cut part. The raised area behind the captain's cabin (Cabin Trunk), the skylight, and the stack are rectangular wood blocks that need to be shaped to some degree. The top of the stack is a laser-cut part.

Shaping The Machine-carved Block - The block is fairly close to scale except the aft end is about 1/8" too long. You should cut this off so the length of the deckhouse block matches the plan. However, if you don't, it just means that the overhanging deck does not hang over as much.

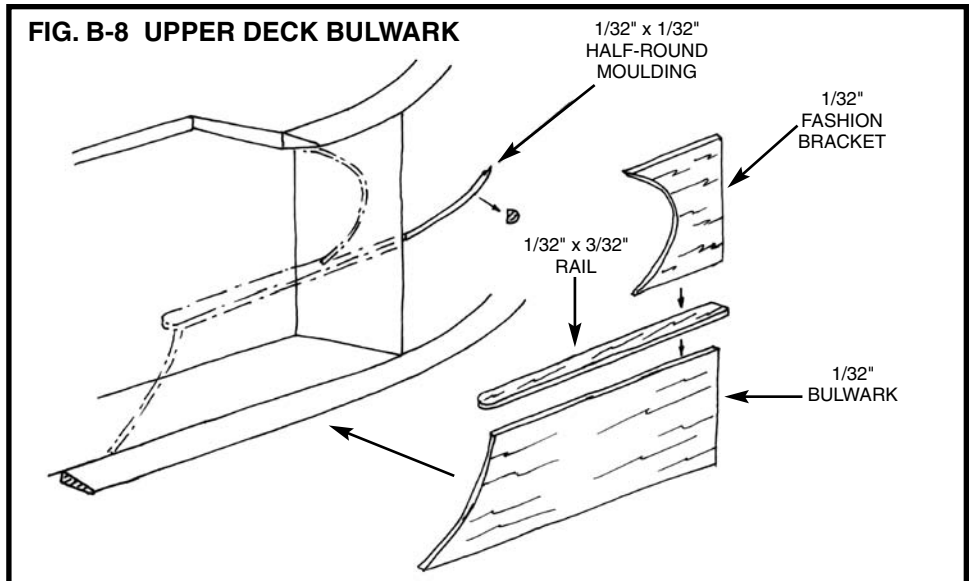
Test fit the upper deck laser-cut part to the block. It may be necessary to carve out around the pilot house and captain's cabin for it to fit. Next, test fit the forward portion of the visor around the front of the pilot house. If it does not fit well, sand the front curve of the pilot house until it does. You could also alter the laser-cut part a bit.

Installing The Upper Deck And Pilot House Top Laser-cut Parts (Figure B-6) - Before gluing the parts in place, cut the taper for the visors on both the pilot house and main cabin tops. You could wait until the parts were glued in place but it may be easier to do it beforehand. When you taper the visor, don't get it so thin at the outer edge that it could get damaged. Note that the visor on the real boat is a plate with plate brackets underneath. A detail of the real boat visor is shown on the plans.

Shaping And Installing The Cabin Trunk, Skylight, And Stack (Figure B-7) - The block for the cabin trunk must be shaped on the bottom to fit the deck. First, use a sanding block and sand the sheer of the deck. You only need to take a little off the forward end to make it fit. Then, sand in the deck camber until the block fits flush.

The top of the cabin trunk has an overhang

FIG. B-8 UPPER DECK BULWARK



about 3/32" on each side. Add a piece of basswood on each side to form the overhang, then glue the block in place.

For the skylight block there is not much to do except check the length and width and drill holes for the airports.

The top of the stack is a laser-cut piece. There are also laser-cut rims for the two exhaust holes in the top. Glue these rims over the holes. The stack block must be shaped into an oval and the shape is just slightly smaller than the laser-cut top, so use the top as a guide while carving the stack shape.

Installing The Bulwark And Fashion Bracket Pieces (Figure B-8) - Use 1/32"

thick, basswood and cut out the fashion piece and bulwark at the pilot house. Install the bulwark first and add a 1/32" thick x 3/32" wide cap rail on top. When you get to the pilot house, the outer edge of the rail goes all around the front of the pilot house as a moulding. Use 1/32" square strip for this.

Add the fashion brackets on each side of the main cabin supporting the aft upper deck overhang. Use 1/32" basswood for this bracket.

Most of the remaining details on the deckhouse can be added before the deckhouse is installed on the deck. These details are discussed in Stage D so look ahead.

STAGE C: MOUNTING THE HULL

Before proceeding with additional work it is best to mount the hull. This step will help prevent details from becoming damaged during handling and will allow you to make any alignments that require a true waterline. Proper mounting of the hull is very important and will allow the accurate building and aligning of the remainder of the model. The kit does not include any parts for mounting. However, the following suggestions are provided.

Mounting Board With Two Pedestals - A common mounting for ship models is a wooden baseboard with two wooden or brass pedestals. For a homemade board, a nice looking hardwood such as cherry, walnut, and maple would be ideal. You can round the top edges of the baseboard, or cut a simple chamfer. If you own a router, or can borrow one, you will be able to cut a nice fancy edge on the baseboard. Stain the base if necessary and give it a few coats of varnish or finish like Minwax.

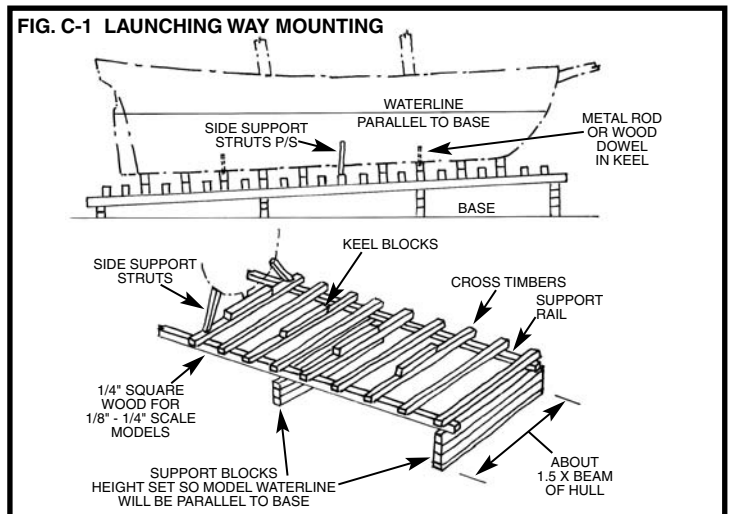
The pedestals could be wood or brass. One pedestal needs to be longer than the other because you should have the model mounted with the waterline parallel to the baseboard.

If you decide on this type mounting you should already have drilled pilot holes for the screws as noted earlier. For *Despatch No. 9*, the pedestals should be located near station 4 and 7. If something went awry and the waterline is not level, you can add a brass shim under one pedestal to correct it.

Baseboards and pedestals are available from Model Expo (www.modelexpo-online.com).

Launching Ways - A second type of mounting that can be employed is the launching ways, which are most suitable for models without sails. Drilling of the keel is still required to insert rods that anchor the model to the ways. The launching ways should be

FIG. C-1 LAUNCHING WAY MOUNTING



mounted on a baseboard or could be placed in a diorama comprised of boatyard ground activity.

Launching way designs can be found from photographs of ships and boats in shipyards. A design for a simple launching way is shown in Fig. C-1. You'll adjust the size needed for *Despatch No. 9*.

STAGE D: ADDING THE HULL DETAILS

1. General Notes

Don't forget to file off any flash on Britannia metal fittings, clean the fittings and then prime them with grey primer before final paint.

Locate deck fittings and mark their position. This can be done by measuring from station lines and centerline (tick off from plans). Before permanent installation, paint them according to the *Despatch No.9* color scheme or your choice of color.

If parts are not painted prior to installation, at least make sure you have the part sanded and ready for painting in place. Use as little glue as necessary on parts. Watch out for that glue squeeze-out. It's hard to remove if left to harden.

2. Windows, Airports, & Doors

The window frames are Britannia castings. Glue them in place. Painting first would be advisable. Since you cannot actually see into the windows, paint the area inside the frames a semi gloss black.

The airports are brass fittings. You will need to drill holes in the deckhouse blocks for inserting the fittings. A 3/16" bit is required for the large airports and 3/32" for the smaller. After drilling the holes, paint the inside black, then paint and glue the fittings in place.

The deckhouse doors are Britannia castings. Paint first, then glue in place.

Note: One port and one starboard watertight door at the galley has an airport in the door. Drill and add the airport, then install the door.

3. Running Lights, Flagstaff, & Masts

Paint, then glue the running lights atop the pilot house. Make the flagstaff and mast from dowels supplied. Taper the dowels. Glue the three light castings on the mast. Drill holes and insert the staff and mast.

4. Ladders, Upper Deck Railing & Hand Rails

The ladders on each side of the deckhouse, and back of the pilot house are Britannia castings. Cut the castings the correct length as shown on the plans.

The rail stanchions on the upper deck are Britannia castings. Holes are already present in the laser-cut deck. Glue the stanchions in the holes, then use the brass wire in the kit for the railings.

Make the hand rails along the sides of the main cabin from brass wire. Drill holes and insert the rails. See Figure D-1 for some railing sketches.

5. Horn, Searchlight, Bell, Ventilator, & Life Ring

All these fittings are Britannia castings. Drill holes as required for the fittings, except the life ring. This is just glued to the railing on the back of the upper deck.

FIG. D-1 RAILING & HAND RAILS

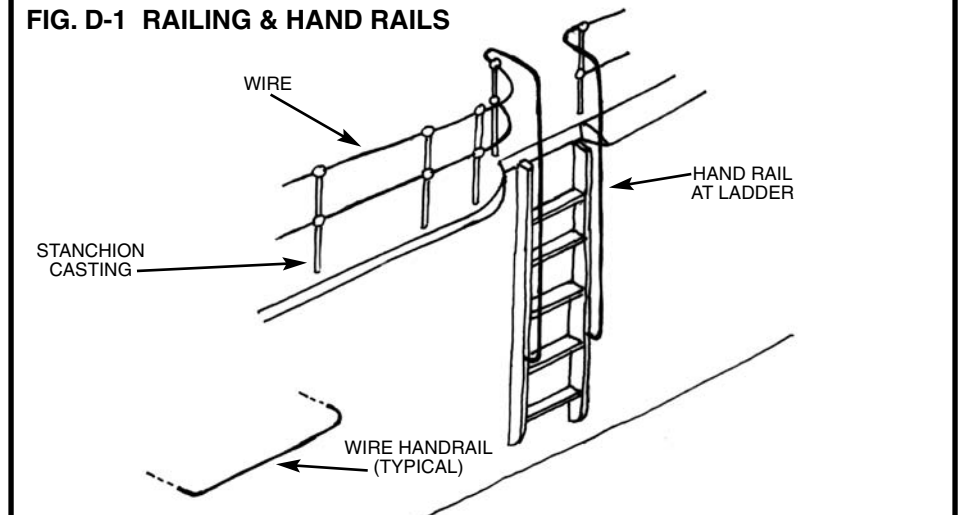
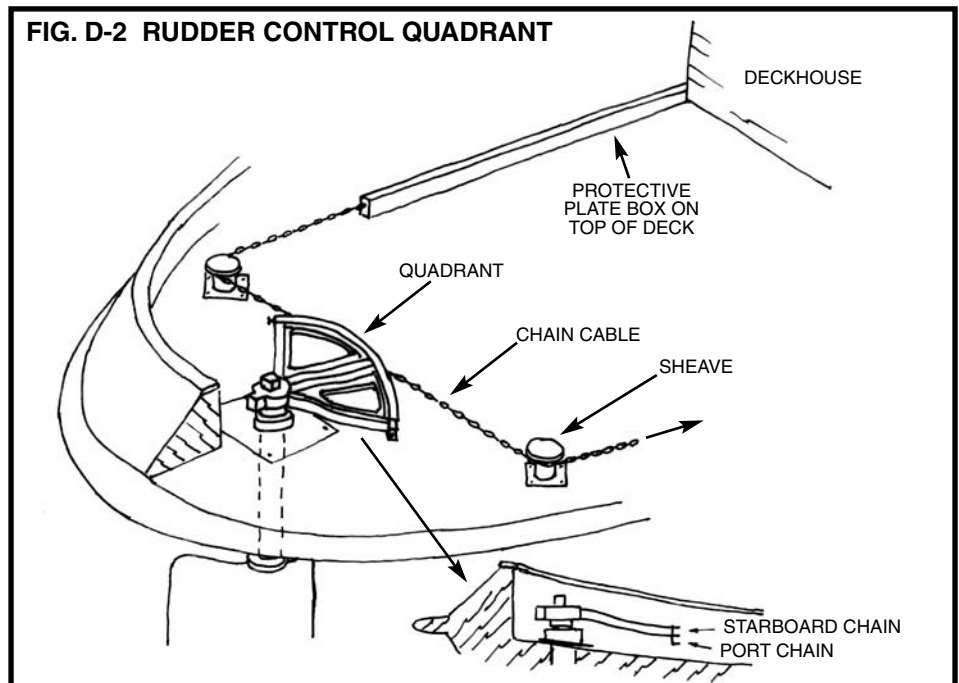


FIG. D-2 RUDDER CONTROL QUADRANT



6. Deckhouse Name Board & Lettering

A name board is located on each side of the pilot house bulwark. Cut this from 1/32" thick basswood. Decals are provided for the boat's name on the deckhouse and hull bulwarks and the "S" on the stack.

7. Rudder Control

This paragraph is strictly for the curious. Under the grating at the stern, the original Army design has a rudder control quadrant. The quadrant is not shown on the *Despatch* model plans and was evidently not intended to be put on the model, or possibly there was a different mechanism installed during construction which was fitted below the deck. The Angels Gate tug at the Los Angeles Maritime Museum had a hydraulic system installed before the Museum received the tug in 1992, so there is no quadrant and cable

above deck. Was *Despatch* so fitted during her construction? There is no information to say one way or the other. But just for interest, Figure D-2 shows what the quadrant looks like on the Army plans.

8. Stern Grating

The grating must be assembled using the cherry grating strips in the kit. Assemble just like an egg crate. But first, cut a pattern from stiff paper from the front of the grating and to fit the curve of the stern. So as not to waste the grating strip, cut the pieces just long enough to fit the pattern. Around the curve fit a 1/32" thick strip. Across the front add a 1/16" x 1/8" support beam. Glue the assembly in place (Figure D-3).

9. Bow Chock, Cleats, & Manholes

The bow chock casting is different from the bulwark chocks as it has a bottom flange. Glue it on the rail forward as shown on the plan. The manhole castings require holes to be drilled in the deck. There are three deck cleat castings. One forward and one port and starboard near the bulwarks in way of the bulwark chocks.

10. Capstan & Towing Machine

Both are Britannia castings. The towing machine is supplied in six Britannia parts. Assemble before installation. A drawing of the machine and assembly instructions are shown on Plan Sheet 1, and Figure D-4 is a pictorial view. For the platform, cut from basswood, 3/16" thick.

The Capstan is a single casting. Install at the location shown on plan.

11. Air Vents

There are two identical castings. Drill holes in the hull deck just forward of the deckhouse and insert the vents. Notice at the top, the vent barrels at the end of the gooseneck should be facing outboard, opposite of each other.

12. Log Fenders & Bow Bumper

Make the log fenders from wood dowels and wrap the area shown on the plan with black sewing thread. Paint the dowel a light tan or brown color. Drill a hole in the top of each fender for an attachment line. How the lines are attached to the hull is unknown. You could put an eyebolt in top of the rail at each fender or just glue the line on the inside of the bulwark (Figure D-5). Rubber tires were also used often on tugs instead of these log fenders. So you have an option.

Now the Bow Bumper is something left to your creative mind. Various types of cheese cloth, wash rags, pieces of real rope cut up and glued together, and the like are just some thoughts. Whatever you come up with, secure it to eyebolts at the rail as shown on the plan.

13. Anchor

The *Despatch* model plans do not show an anchor or any means for handling an anchor. It's possible no anchor was ever carried since the boat was used mostly for towing. However, an anchor has been provided in the kit as a free gift. The original Army tug design has an anchor and a small davit at the bow for handling the anchor. There is a socket in the deck port and starboard so the davit can be used on either side. The *Despatch* has several configuration details different from the original design, probably to accommodate the owners desires when built. Since the original Model Shipways plans had no davit, it was probably not fitted. Another puzzle in the world of shipbuilding.

FIG. D-3 STERN GRATING

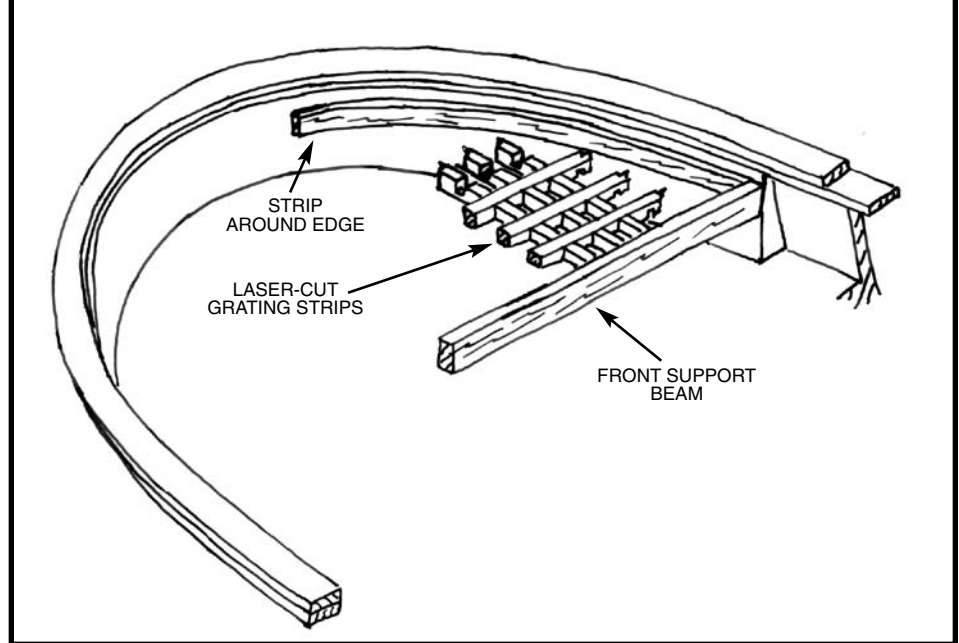
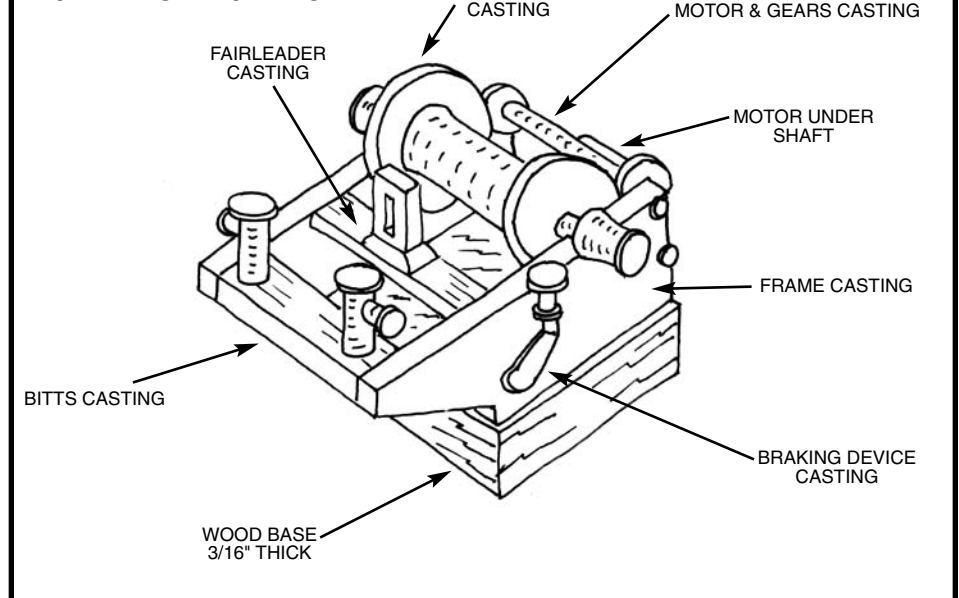


FIG. D-4 TOWING WINCH



14. Final Touches

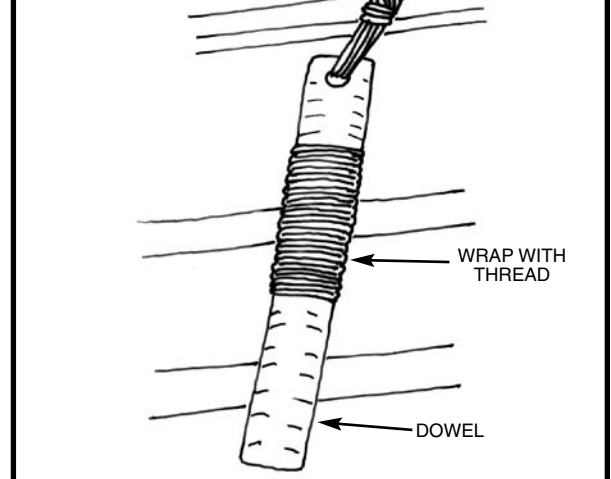
If you have not done so, install the deckhouse on the hull. Again, watch out for glue squeeze-out. You may need to add some wood filler at the house-deck joint.

Touch up paint after the filler is sanded.

Finally, check to see if any of the painted wooden or metal parts were marred or scratched during construction and touch-up as necessary.

Congratulations—you've done it! We look forward to helping you with your next ship modeling project.

FIG. D-5 LOG FENDERS



BIBLIOGRAPHY

1. *Under Tow: A History of Tugs and Towing*

by Donal Baird. Vanwell Publishing 2004.

2. *Tugs: The World's Hardest Working Boats*

by Josh Leventhal. Black Dog & Leventhal, New York 1999. Nothing about *Despatch* but good look at tug boats in general.

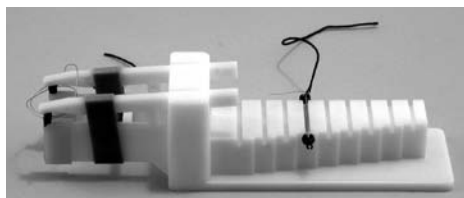
3. *How to Built First-Rate Ship Models From Kits*

by Ben Lankford. Model Expo 2002. Comprehensive reference covers construction methods for solid hull, plank-on-bulkhead, and plank-on-frame kits. The book is profusely illustrated and includes glossary of nautical terms.

Note: Some books are available through Model Expo, Inc. www.modelexpo-online.com.

Please check current catalog or website for availability.

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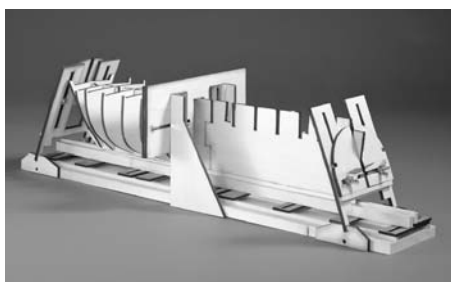


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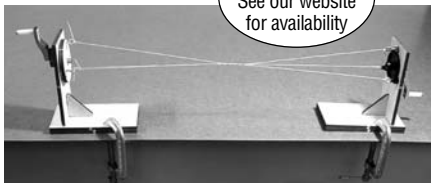
By Ben Lankford. This comprehensive reference discusses how to choose a kit, foreign vs. US kits, materials, tools, hull construction, deck furniture, rigging and masting, finishing and display. Covers hull construction methods for solid hull, plank-on-bulkhead and plank-on-frame kits. Profusely illustrated, the book includes a glossary of nautical terms, tips on advanced research and a list of references for actual ships and ship model techniques. 96 pp, softcover.

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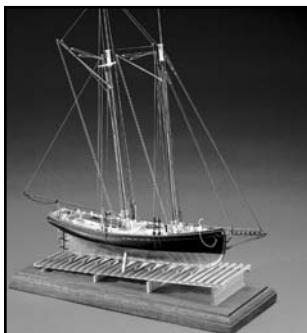
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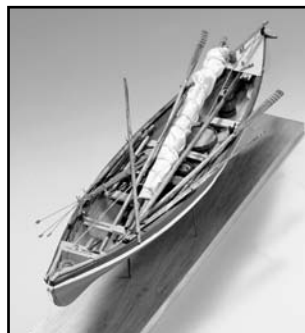
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