

# VANGUARD MODELS

BY CHRIS WATTON

**\*\*22ft Yawl\*\***

## Recommended tools:

1. Sharp knife such as a scalpel, X-acto or Stanley.
2. Sanding sticks or abrasive papers (110 – 320 grade)
3. Steel rule
4. Needle/jeweller's files
5. Small clamps
6. Small tweezers
7. Masking tape (Tesa, Tamiya etc.)
8. Fine paintbrushes
9. Titebond I/II wood glue
10. Gorilla Glue CA gel

## Recommended Paints etc.

1. Plastikote matt white spray
2. Plastikote matt black spray
3. Vallejo black and brown acrylics
4. Mr Metal Colour aluminium paint
5. Ronseal Matt Polyurethane varnish

1.



2.

All bulkheads are numbered. Each one should now be dry-fitted into the base as shown here.



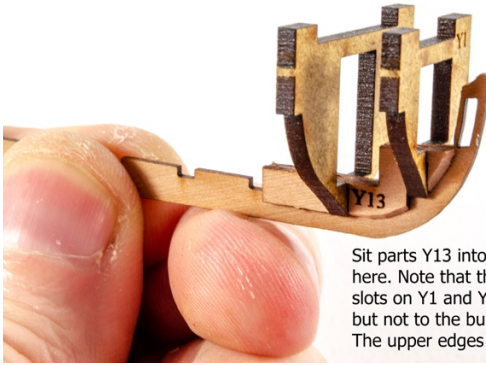
3.



4.

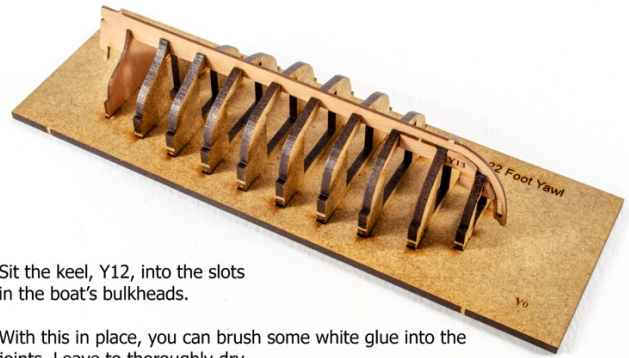


5.



Sit parts Y13 into position as shown here. Note that these parts sit in slots on Y1 and Y2. Glue Y13 to the keel but not to the bulkheads. The upper edges will align with the keel.

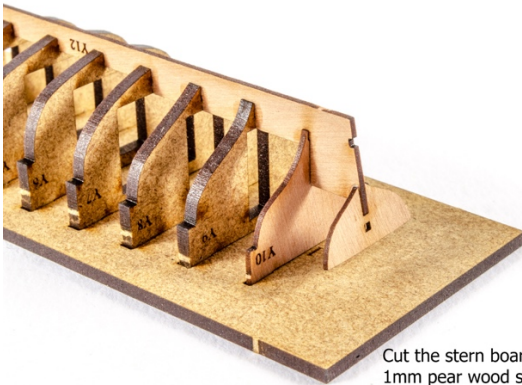
6.



Sit the keel, Y12, into the slots in the boat's bulkheads.

With this in place, you can brush some white glue into the joints. Leave to thoroughly dry.

7. 8.



Cut the stern board Y11 from the 1mm pear wood sheet.

Glue into position on the keel, as shown.



This photo clearly shows the stern board in position. Note that it must be fitted flush and at an angle with the rear of the keel.

9.



Cut both parts Y14 from the 1mm pear wood sheet and bevel the outer curved edge as shown here. This bevel is only a rough guide as it will be bevelled more soon.

10.



Glue the parts Y14 to the keel, between Y10 & Y11.

To help with alignment, the upper straight edge is flush with the same area of the keel.

11.

Sand/fair the hull using sandpaper or a sanding stick. Take a plank to make sure it lies smoothly across all shaped/bevelled bulkheads.



12.



The first planks can first be soaked if you wish, but make sure you allow them to thoroughly dry before fitting to hull.

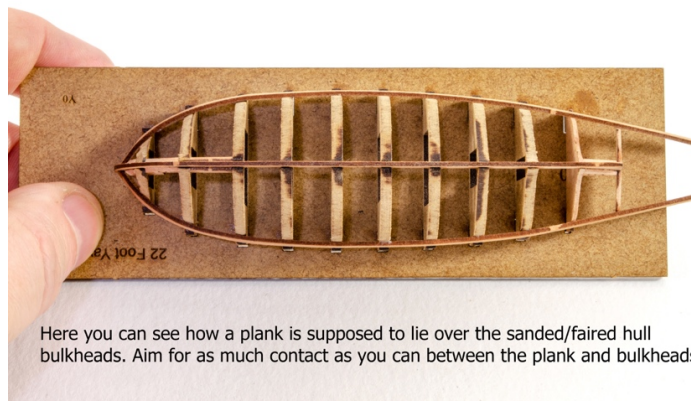


13.



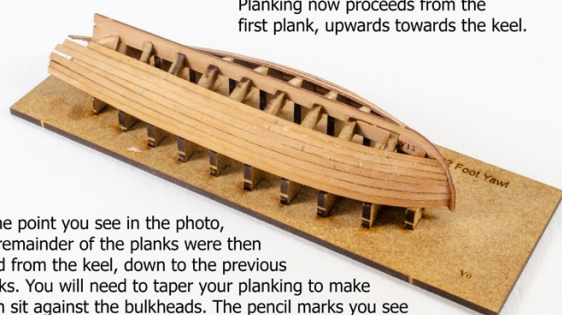
Glue the first plank to the hull as shown here, noting that it lies against the step on each bulkhead. We suggest using wood glue and not CA.

14.



Here you can see how a plank is supposed to lie over the sanded/faired hull bulkheads. Aim for as much contact as you can between the plank and bulkheads.

15.



Planking now proceeds from the first plank, upwards towards the keel.

At the point you see in the photo, the remainder of the planks were then fitted from the keel, down to the previous planks. You will need to taper your planking to make them sit against the bulkheads. The pencil marks you see are where I tapered them from, towards the bow/stern.

16.



You may need to fit 'infil planks' or 'stealers' as you progress. We aim to make such fillers as low as possible so the paint will cover them. You may of course wish to use the tick-strip method to plank, whichever suits you.

17.



Here's another view of the planked hull. Again, you can see the various taper marks and stealers that I fitted.

18.



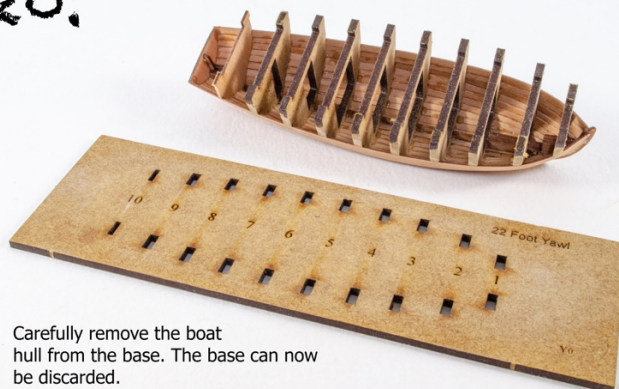
To help in sanding the hull, the protruding parts of the MDF bulkheads are cut away with a sharp knife.

19.



Sand the hull with around a 120 grade paper to begin with, using gradually finer grades to smooth the wood surface. Use an acrylic thinner, slightly diluted, to fill any hollows or imperfections.

20.



Carefully remove the boat hull from the base. The base can now be discarded.



21.

To remove the MDF bulkheads, first snip away the small bridge on each part.

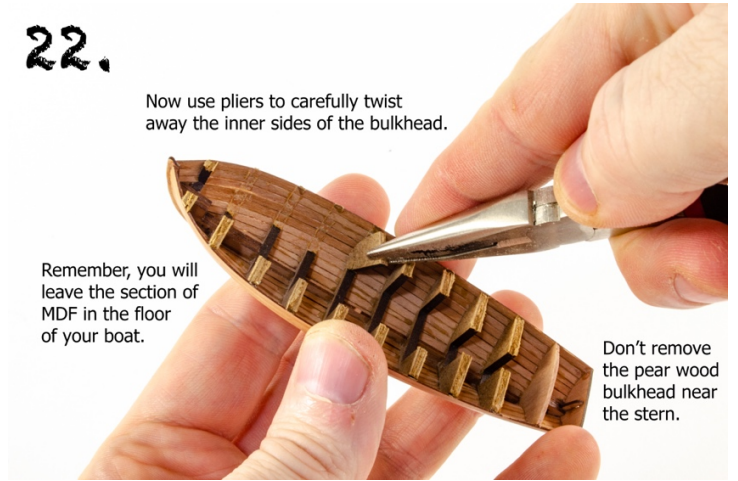


22.

Now use pliers to carefully twist away the inner sides of the bulkhead.

Remember, you will leave the section of MDF in the floor of your boat.

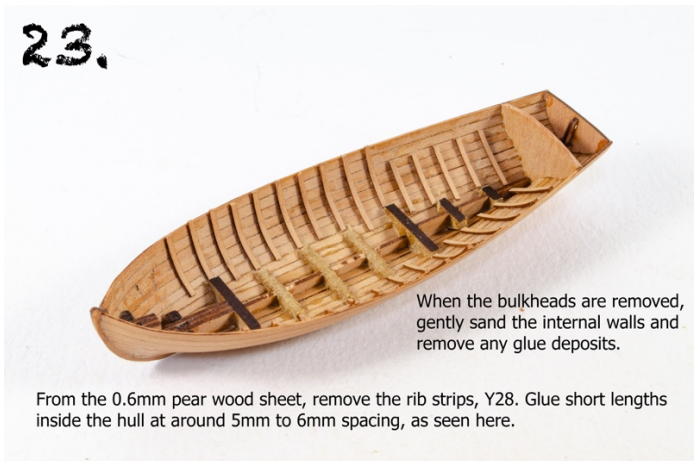
Don't remove the pear wood bulkhead near the stern.



23.

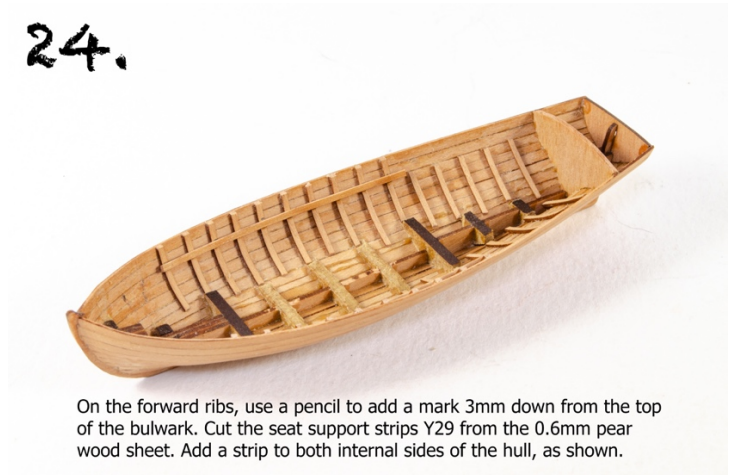
When the bulkheads are removed, gently sand the internal walls and remove any glue deposits.

From the 0.6mm pear wood sheet, remove the rib strips, Y28. Glue short lengths inside the hull at around 5mm to 6mm spacing, as seen here.



24.

On the forward ribs, use a pencil to add a mark 3mm down from the top of the bulwark. Cut the seat support strips Y29 from the 0.6mm pear wood sheet. Add a strip to both internal sides of the hull, as shown.



25.

OPTIONAL: To create a wood finish to the PE floor sections, you can first apply a coat of Tamiya XF-59 Desert Yellow.



On top of the paint, you can now apply a very thin coat of Raw Sienna oil paint, using a piece of foam.



Spots of Raw Umber oil paint can now be randomly applied to the previous oil paint covering.



Using your foam sponge, drag the dark oil paint spots into the lighter layer below. Keep doing this until you achieve the desired result.



You can make your wood effect as subtle or coarse as you wish.



A fan brush could also be used to create knot effects and a more natural flow to the grain.



26.



Once you have painted your photo-etch floor sections, set them aside and allow to thoroughly dry. If you used the oil paint technique, you should leave the parts between 24 and 48hrs.

27.



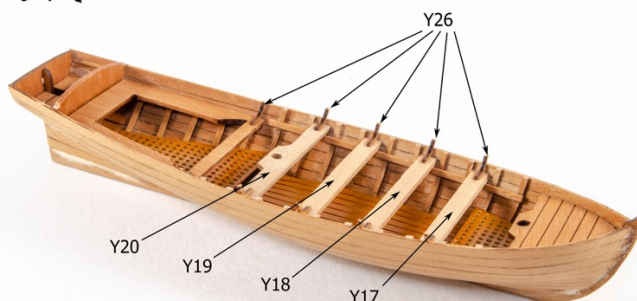
Use CA (superglue) to fit the floor sections into position inside the hull. Also fit Y22 into position as shown.

28.



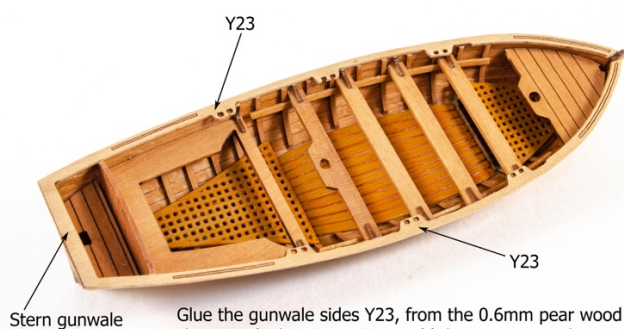
Glue parts Y16 and Y21, from the 1mm pear wood sheet, into position. You will need to bevel the underside edges to get a good fit.

29.



Fit the seating Y17, Y18, Y19, and Y20 from the 1mm pear wood sheet, and then add the knees (Y26) from the 0.6mm pear wood sheet.

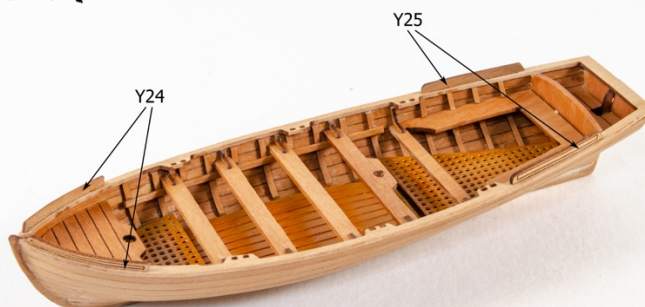
30.



Stern gunwale

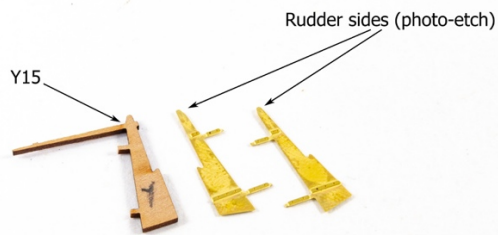
Glue the gunwale sides Y23, from the 0.6mm pear wood sheet, and when in position, add the stern gunwale. The gunwales should overlap the outside edge by 0.5 to 1mm

31.



Glue the fore and aft boards, Y24 and Y25, into position over the engraved position markers on the gunwales.

32.



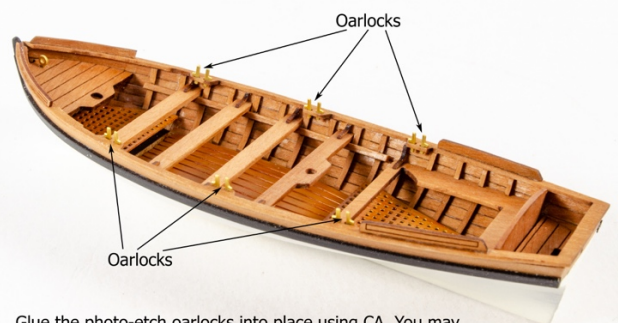
Use CA to glue the rudder sides to the rudder (Y15) from the 0.6mm pear wood sheet. Mask the tiller and paint the rudder in white.

34.



Paint the underside of the hull in white. Before fitting the wales (from the planking sheet), paint them black. When fully dry, fit the wales to the hull. These will fit directly over the plank below the top bulwark plank. Trim the wales at the stern, so they are flush.

35.



Glue the photo-etch oarlocks into place using CA. You may opt to paint these black beforehand.

36.



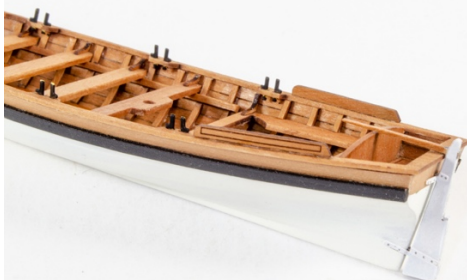
Glue the anchor parts together as shown, using CA. You can either paint these black or use a blackening solution to colour them.

37.



You are given the choice of using either photo-etch or wooden oars. If you use the wooden ones, sand the paddle to shape and slightly round the handle. To paint, we chose white for the handle with a varnished paddle. The paddle tip is painted in copper.

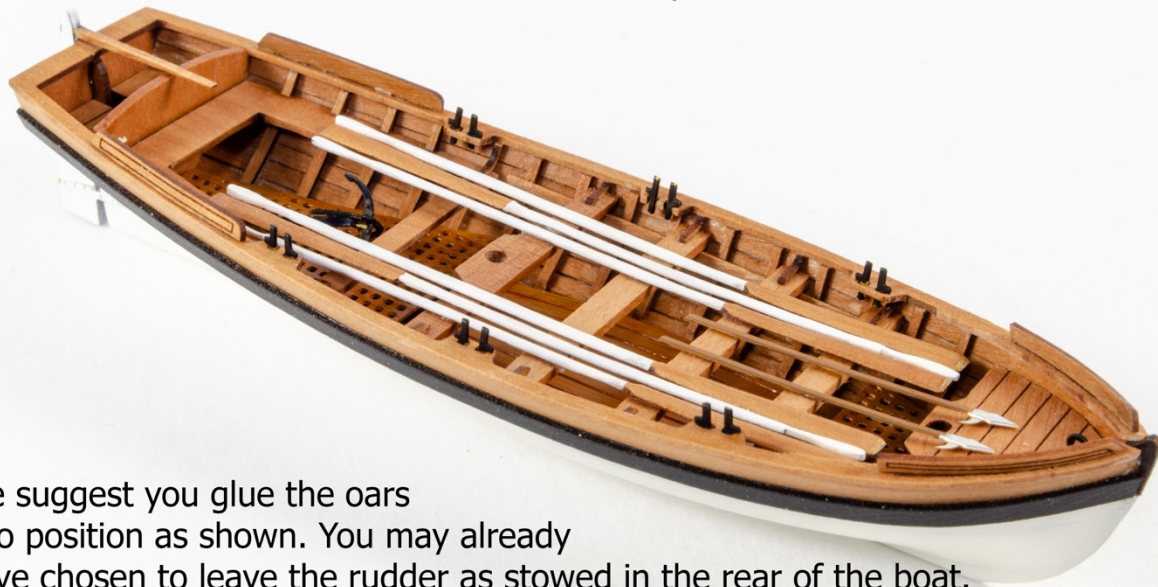
38.



Fit the rudder in position. CA is probably better for this task.



Complete!



We suggest you glue the oars into position as shown. You may already have chosen to leave the rudder as stowed in the rear of the boat. Paint the boat hooks in brown for the handles and with a metal tip. Stow the anchor in your chosen position.

