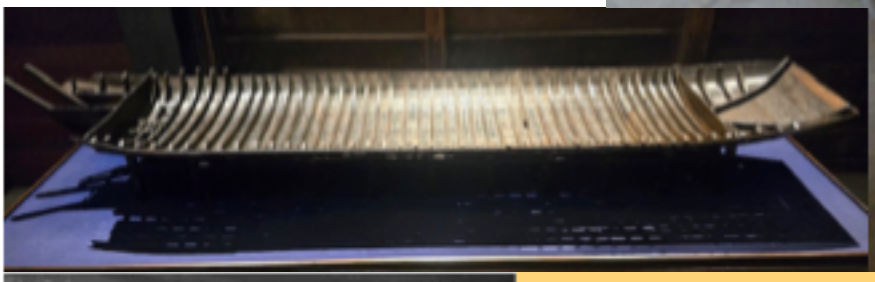
SCUTTLEBUTT

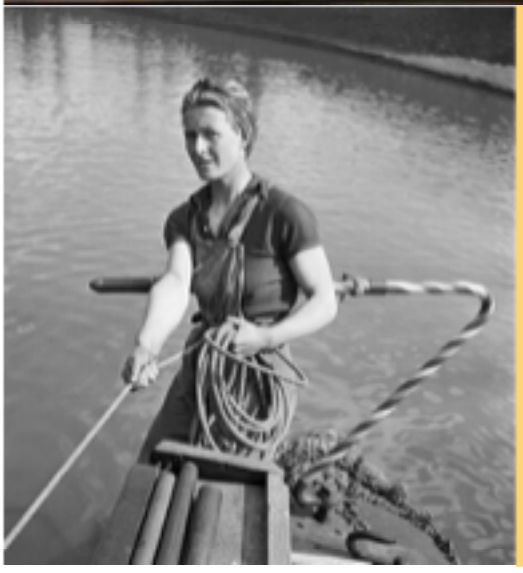
NEWSLETTER OF THE CANBERRA MODEL SHIPWRIGHTS SOCIETY

Established 21 April 1988. Incorporated 16 January 1991

OBJECTIVES: To foster and maintain interest in building model ships, boats, associated fittings, gear, equipment, armaments and relevant items and structures and the pursuit of excellence in this field.

September, 2025





Mount Rogers Primary School Melba

September 13-14 2025

Canberra Model Shipwrights Society

Model Ship Exhibition 2025

Saturday, September 13th from 10am - 4pm
Sunday, September 14th from 10am - 4pm

Mount Rogers Primary School
Alfred Hill Drive, Melba, ACT

Model Ships on display by members of:
Canberra Model Shipwrights Society,
Task Force 72, &
ACT Scale Modellers Society

CONTENTS

A Note from the Retiring Editor

This edition is the 38th issue of Scuttlebutt that I have edited since my first in December 2019. Apart from the regular four issues annually, the number includes a number of 'special' editions.

I have thoroughly enjoyed my time as editor, but for a number of reasons I feel that it is time to hand over the reins. I have notified our President of my intention. I have also indicated that I am happy to edit the December edition, if required, which I trust will give the Committee time to find a new editor.

I must take this opportunity to thank all of you who have contributed articles over that period which have made my life as editor so rewarding. And that includes those who have provided me with such good copy for this latest issue. Many thanks everyone.

This issue precedes Expo 25 which will take place in a couple of weeks and includes an article on Task Force 72 which has featured in many previous Expos, as well as insights into projects undertaken by fellow members, plus a look at some WWII heroines. This edition also presents the third and last in Grant Dale's detailed series on building small ships' boats.

If you are considering an article for the December issue, please let me know - bvoce@ozemail.com.au

Brian Voce

COMMITTEE MEMBERS 2024-25

President: Neville Miller.
Vice-President: Grant Dale.
Treasurer: Peter Hateley.
Secretary: Peter Gaisford.
Assistant Secretary: Bill Atkinson.

Committee Members: Tony Merriott, Robert Hodsdon.
Public Officer: Ray Osmotherly
Liaison Officer: Max Fitton.
Editor: Brian Voce.
Web Master: Steve Batcheldor.

Gatherings
The Society meets at the Men's Shed, Melba, on the third Tuesday of each month (except December).

CMSS Web-page
https://canberramodelshipwrights.org.au
Instructions for using this website are on the site itself where members will need to register. The webmaster will help you in any way possible. We seek content for the website - everything from photographs of your models through interesting web-links and chat.

CMSS Facebook Page
The Society has a Facebook group to promote the society and to attract new members. So please feel free to post items on the page and share it with your Friends.
FaceBook Public Group site that allows people to add content and comment - https://www.facebook.com/groups/871717459629290

FaceBook Page that details what we do, and content can only be added by the site administrators. - https://www.facebook.com/canberramodelshipwrights

Annual Membership
Canberra Area single $35, Couple, $50. Country/ interstate single $20, couple $25.

Payment Details:
By Cash to Treasurer
Post by Money Order to: c/- 5 Stretton Crescent, Latham ACT, 2615, or
Bank Deposit to: Beyond Bank - BSB 325185 Acct.Name - Canberra Model Shipwrights Society (or CMSS) Acct. No. 03452396.
At meetings, payments may be made using an EFTPOS terminal held by the Treasurer.

PRESIDENT'S REPORT

The cold days and freezing nights are slowly moving on and it's time to move back into the shed to work on those models that have been collecting dust over the winter.

The Expo is fast approaching and I have confirmed the dates with the Mount Rogers Primary School to be the 13th and 14th of September, You should have your entries submitted to the Secretary by now. We are expecting a great display of models and there will be some wonderful Raffle prizes.

We had trouble transferring emails to me from the Website, but that problem is now sorted.

I have had a very busy year so far trying to fulfil my bucket list. I completed the Shitbox Rally in May where we drove a two-wheel drive car worth no more than $1500 dollars 3500 kms through the outback to raise money for cancer research. And in August we went to Lightning Ridge to see what the attraction is there and escape the cold. It was Grey Nomad Central there. I hope to return in the future as there was more to do than I allowed time for.

If you have any stories and photos that you would like to share, please email them to Brian our Editor. bvoce@ozemail.com.au

I look forward to seeing you all at the Expo.

Stay warm and happy modelling.

Kind Regards

Neville Miller

What would Expo be like without the imposing displays provided by Task Force 72? STEVE BACHELDOR outlnes some of the history of TF72, its philosophies, growth and how it has partnered with CMSS and other clubs over the years.

Task Force 72 and CMSS Expos

The CMSS EXPO has been a great opportunity for ship model builders in the Canberra region to display their models, skill and passion for many years. Each year the EXPO committee has a big task just to make sure that there are models on the tables for people to view. Most years CMSS invite other clubs with ship modelling interests to display some of their models at the EXPO to add to the variety of the display.

One such organisation is Task Force 72 (TF72). TF72 is a ship modelling club that was founded in the mid 1990's by a group of ship-modelling enthusiasts with the idea of sailing radio-controlled model ships together that are all built in the one scale, in this case 1:72 scale. TF72 has grown over the years and has local chapters (Fleet Bases) in several areas around Australia as well as a few members from overseas.

For a long time, TF72 Fleet Base Canberra has been one of the ship modelling clubs that have been invited each year to support the CMSS EXPO. The first photos that I can find with TF72 participation are from the EXPO in 2009. This looks to be about the time that the EXPO started being held at Mt Rogers School where there was far more room than the previous venue. For many of the early EXPOs held at Mt Rogers School, CMSS models were displayed in the main auditorium with TF72 models filling another room. I should also mention that at the time the ACT Model Boat club also played a big part in providing models for display at the CMSS EXPO. Unfortunately the ACT Model Boat club disbanded several years ago and many of the members then joined TF72.

The majority of the TF72 members who attend the EXPO each year are from the ACT, but most years there are a few other TF72 members who travel from further afield to participate and support both TF72 Fleet Base Canberra and CMSS.

The variety of ship models built and displayed by TF72 members is always interesting. While many TF72 members build model warships, most members have a range of other models in their collections. So along with the warships it is not unusual to see tugboats, fishing vessels or even submarines on display. The other important aspect to recognise with TF72 model ships is that most of these models are radio-controlled so they are intended to sail on the water. This adds a very different consideration when building these models as the hulls have to be waterproof.

I can confirm that many TF72 members are always eager to attend and support the CMSS EXPO each year. The opportunity to display their own models, admire the skill of other ship model builders and share some tall stories is one of the modelling highlights each year. #

From Wardrobe to Benchtop

BOB EVANS Tackles the Victory

Building the Mamoli HMS Victory
Part 1 of many I suspect!

Having sworn and avowed NEVER to build a model of Victory and indeed advised many a beginner to the hobby not to take on a daunting project such as this, why did I fall into this trap myself? As many of our Members would know I have an aversion to rigging in general and the aversion rises to a peak with this model!

Many a fine Victory model has been built by those who are undaunted by the challenge and in fact enjoy it. Top marks to those who fall into this category.

Why then did I get sucked in!?

An acquaintance of mine advised me that she had recently purchased an antique wardrobe and there lurking inside was a complete virtually unopened 1:90 kit of the Mamoli Victory. After settling on a very reasonable price, I found myself in possession of my worst nightmare!

Remember that there are two Victory Models - one by Mamoli in 1:90 scale and the other by Mantua in 1:98 scale. Of the two, I suspect the Mantua model is the better, although more expensive.

The model comes well boxed with numerous white metal and other fittings. The plans are numerous and well detailed. It pays to have an adequate area to hang or pin these to avoid frustration during the construction process. The photo (top right) shows a stand I purchased some time ago from a source I have long forgotten.

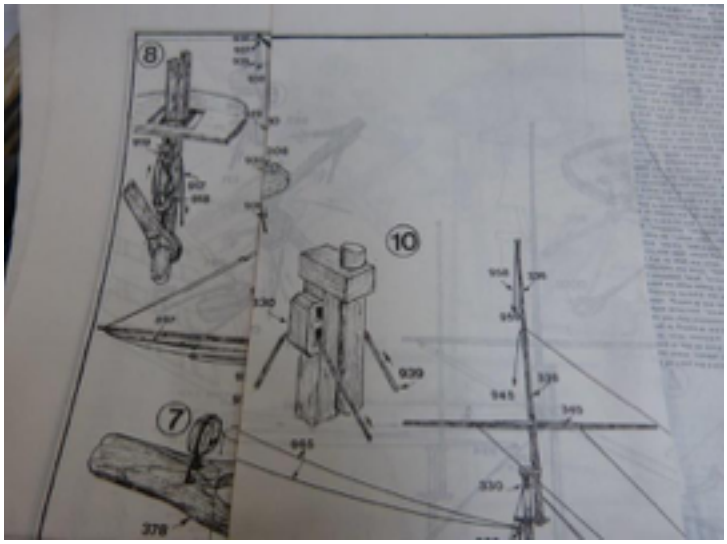
Another very useful addition for those who need to reach above-head storage is also pictured, a sturdy foldable step ladder of adequate height and also light weight, but most importantly equipped with side railings.

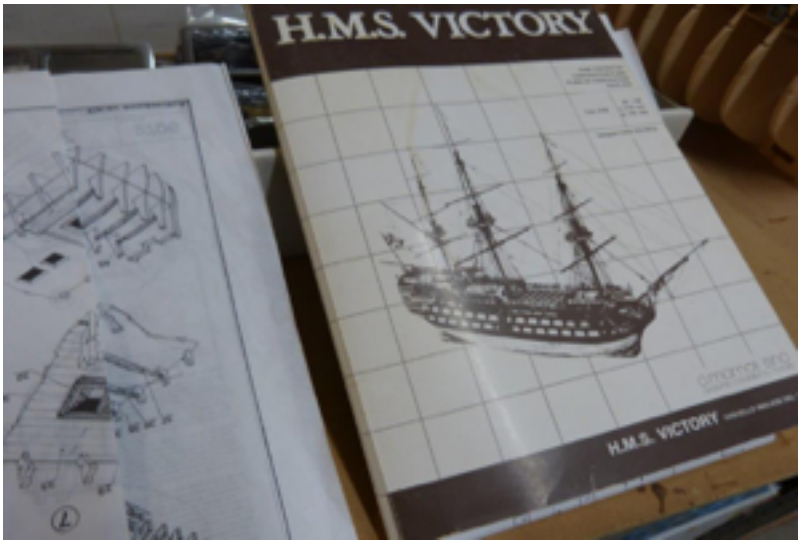
It pays to sort out the gun ports as different parts are required for different sections of the hull.

Port quarter looking forward. Note that the gunports are fixed prior to planking.

You will note that I haven't progressed far with this and it has been added to other models in the same category which I will one day complete, I hope!

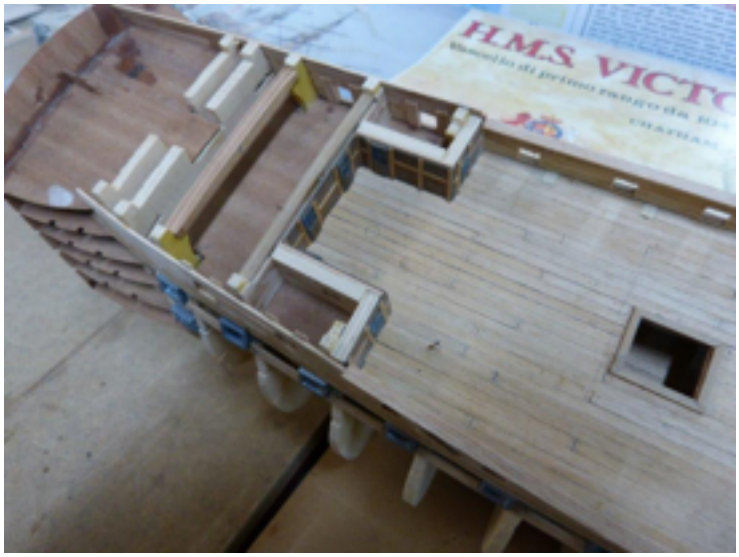
The model comes well boxed with numerous white metal and other fittings. The plans are numerous and well detailed.



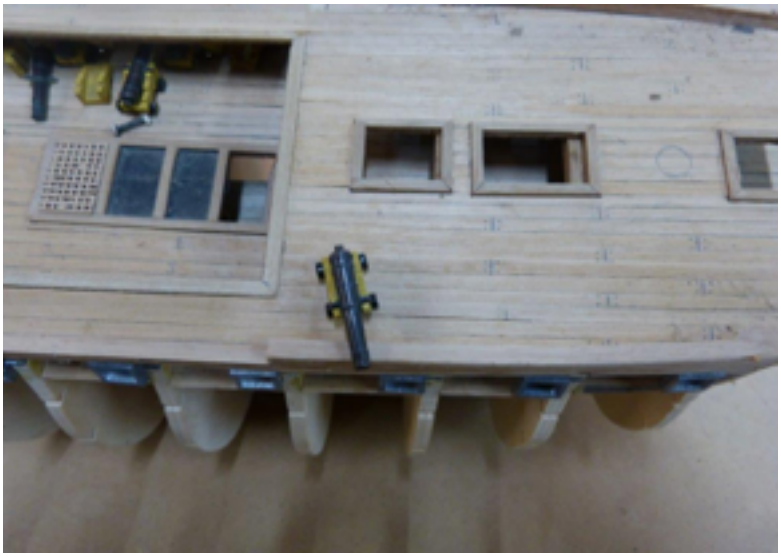


Samples of the numerous plans and instructions. It pays to spend some time studying all the instructions so that the sequence is fully understood. For instance, it is good to have the decks in place, but not before the cannon have been made, painted and fixed!

Main deck looking aft to the quarter deck



Quarter deck from above



Forward hatches

STEVE BACHELDOR admits he has become a bit obsessed with building models of ferrys.

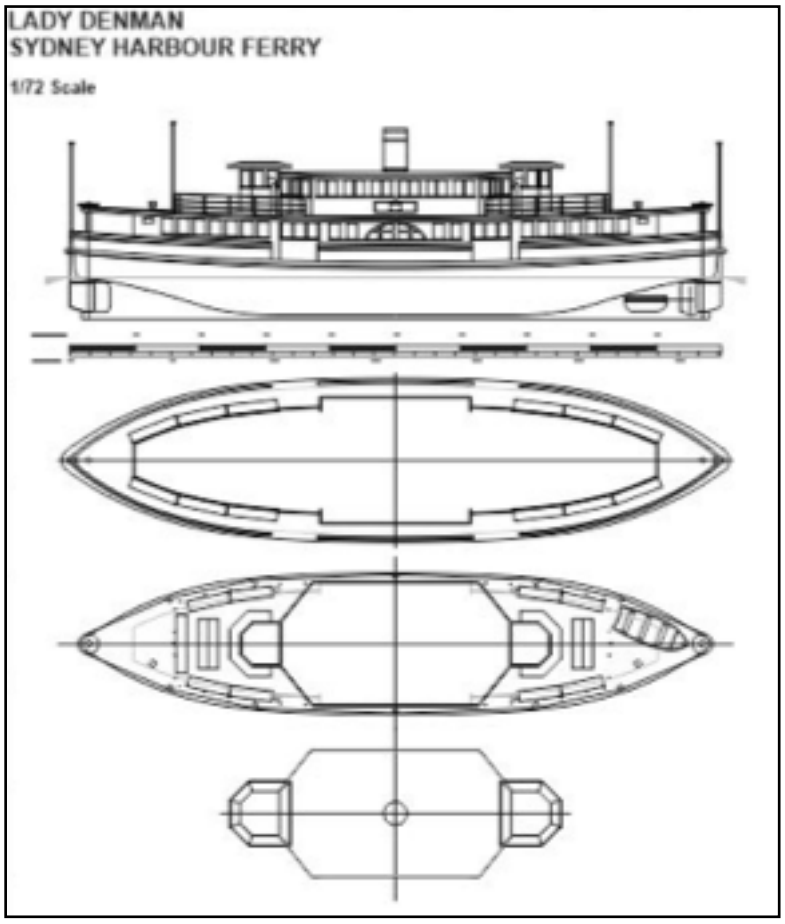
"Research was again the first step in building my model. I was quite surprised at the amount of information that I was able to find on this class of ferry."

In the March 2025 edition of Scuttlebut I presented the construction of my first Sydney Harbour ferry model, a 1:72 scale model of a modern Lady Class ferry from the 1960s/70s. I also mentioned that this was the start of a bit of an obsession with ferry models and nothing has changed with several more models in the early stages of research or construction.

This time I would like to share the construction of an older wooden Lady Class ferry of the early 1900's. Again this is more of a representation of the type of ferry rather than being an accurate model of any particular ship of the class. My model is loosely based on the Lady Denman and her sister ships.

The wooden Lady Class ferries were a group of five small craft constructed between 1910 and 1914. The hulls were all built on the NSW South Coast and then had the machinery fitted at various shipyards in Sydney. These ships were lightly constructed as they were not expected to be in service for very long given that a bridge across Sydney Harbour was being proposed. The Lady Class ferrys were a little unique in that to keep the machinery simple and reduce the stress on the hull, they only had a single propeller at one end of the ship. The propeller pushed in one direction and then pulled when going the other way so manoeuvering was very different to the more conventional double-ended ferries of the time.

All of the class ended up having a far longer service life than was originally planned. Each ship was converted from steam to diesel in the 1930's and each went through several refits during their life. Most of



The simple general arrangement that I drew for this model and (left) my 3D drawing of the model.

the class continued in service until the late 1960s, with Lady Denman continuing until 1979 and Lady Edeline finally being retired in 1984. While four of the five ships have been scrapped, the Lady Denman survives and has been preserved as a museum ship at Huskisson on the NSW South Coast.

Research was again the first step in building my model. I was quite surprised at the amount of information that I was able to find on this class of ferry. Several general arrangement drawings and quite a few photos were found making my early progress with this project easier than I had expected. My approach to this model was similar to how I went about building my initial ferry model. I wanted to use modern technology and less traditional materials in the construction of this model both to speed things up and to improve repeatability as I knew of several others who were interested in getting their hands on a semi kit of this model if I was able to develop one.

From the information that I had collected I drafted my own simple model maker's drawing at 1:72 scale. While not super detailed, this drawing was the basis for both 3D drawings of the model and the physical construction of the model.

An initial 3D drawing was developed of the hull so that I

could 3D print a hull using my FDM (plastic) 3D printer. This plastic 3D-printed hull was then sanded and filled several times to get a smooth finish. Once prepared this was used to make a fiberglass mould of the hull. The fiberglass mould was then used to make a fiberglass hull.

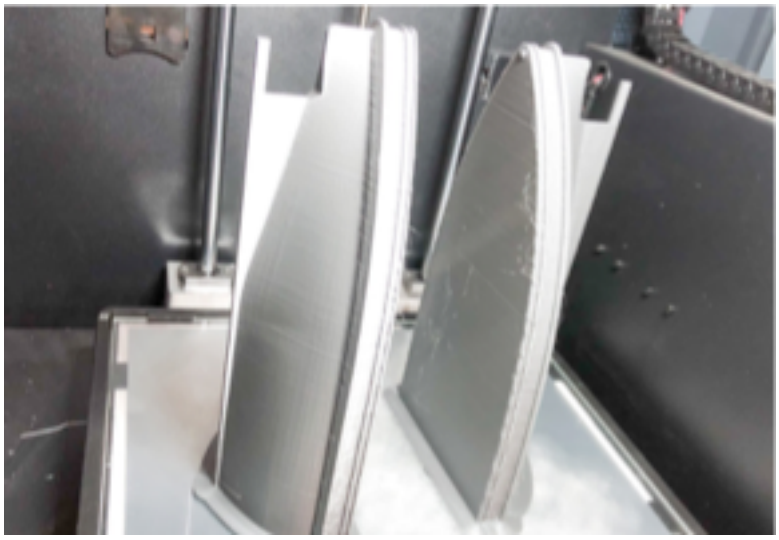
The decks and superstructure were made from styrene sheet. I drafted some 2D drawings for each styrene part and used my laser cutter to cut the styrene sheet to the desired shapes. With the hull and the major parts all produced, initial construction progressed quite quickly. In a short time I had a basic model that looked like a ferry.

Producing the detailed parts for this model revolved around developing a 3D drawing for each part then 3D printing the required number of each part with my resin 3D printer.

While this sounds easy it is quite a complex process. Each 3D drawing can take several hours, then setting up the file for the 3D printer is another challenge that takes considerable experience to get right. Unfortunately none of this is as simple as just pressing a button and having finished parts miraculously appear. 2D drawing, 3D drawing, laser cutting and 3D printing are all skills that take many, many hours to learn and master. Just like the more traditional hand skills used in model building, considerable practice and skill development is required. The tools and materials are different, but the end result is still to produce a model of a ship and hopefully get better at it with each attempt.

As I progressed with the construction of my model, a fellow model ship builder asked if I could make a hull and parts for him so that he could start his own model of a wooden Lady Class ferry. At the same time another collector also asked if I could provide him a partly completed model with the deck fitted and the superstructure put together. So all of a sudden there were three models under construction.

I finally finished making all of the parts and was able to paint and complete my own model. While I am happy with the result, it is only a basic model as I intended it to be. I was also able to provide the partly completed model to the collector who I am sure will complete his model in due course. The model produced by my fellow ship modeling friend has also now been completed and it is just magnificent. From the basic



The two halves of the 3D printed hull still on the printer.

The 3d printed hull, the fiberglass mould and the fiberglass hull.

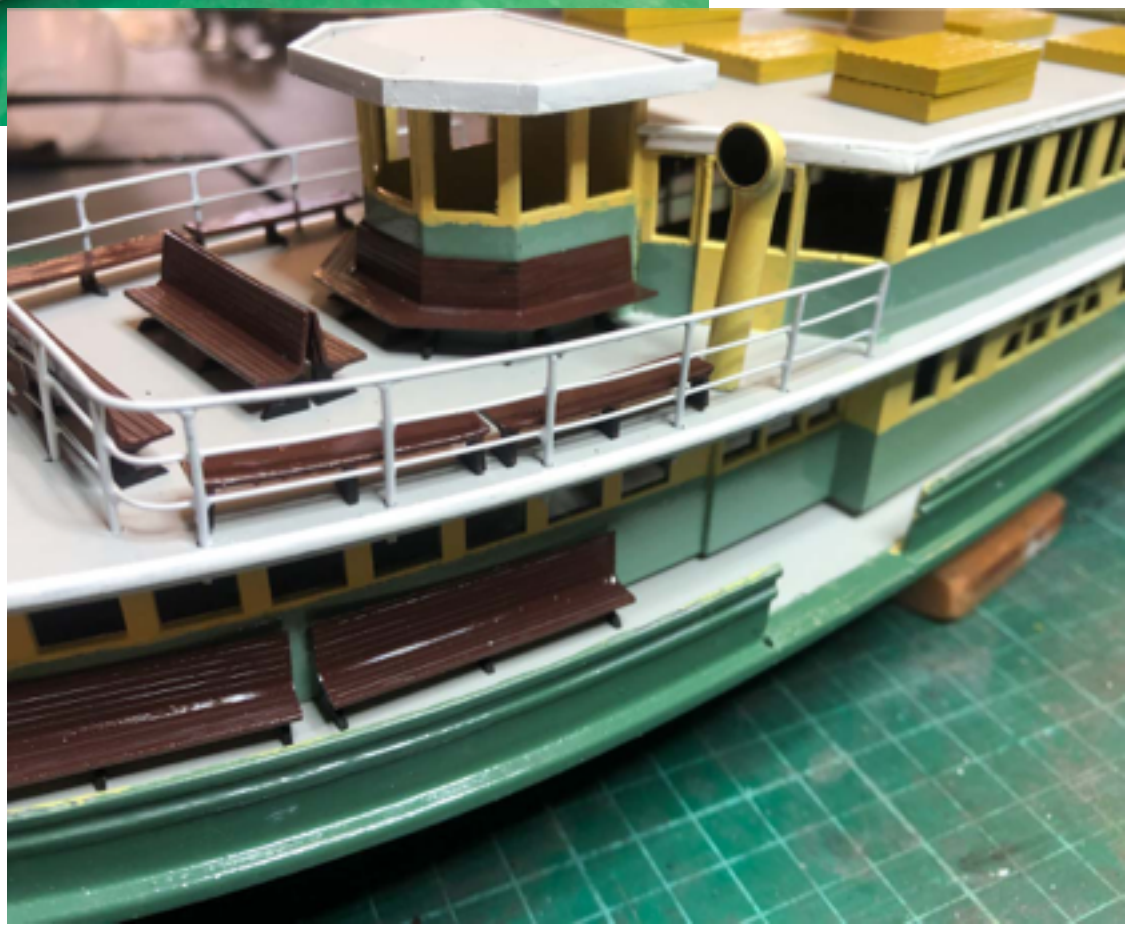
The styrene superstructure and deck fitted to the hull.

parts that I was able to produce he has added a significant amount of detail to come up with a model that certainly does stand out.

As with most model building projects there were a few mistakes along the way but I enjoyed the challenge. I feel satisfied that I have been able to make a model of a ship that I was interested in and that it is a reasonable representation of the real ship. I learnt a bit more about what works and what doesn't with some of my tools and I have improved on my previous skill level. Motivation is high to take on the next model ship building challenge, probably another Sydney Harbour ferry.

The model covered in an undercoat.

A close up of my model.



My friend's completed model of the Lady Scott.

IDLE WOMEN

ELIZABETH HODSDON
Canal Boat Women of WWII

Diesel-powered narrowboat towing unpowered butty boat - The Sphere

During WWII the canal boats in England played an important part in shipping goods, mainly steel from London to Birmingham, and coal to London, with loads up to 50 tons. Other cargoes included cement, grain, flour and other foodstuffs. Each canal boat had a diesel powered 'motor' narrowboat and an unpowered 'butty boat' towed behind by 70 ft long rope called a snubber. The canal boats had the advantage of saving both petrol and rubber, and in some cases were quicker than road transport.

Until 1942, being a waterways boatman was a reserved occupation. Even so, there was a shortage of labour as some men signed up for military service and others left for better wages elsewhere. There was a recruiting drive in 1941 which attracted some men, but also had 47 women applicants. At the time the women were deemed unsuitable unless they were members of boating families or already working on boats.

Late in 1941 The Ministry of War Transport approached Daphne March and Frances Traill who had already been using Daphne's boat the *Heather Bell*, to transport cargo since 1940, to see if they would train other women to work the boats. The Grand Union Canal Carrying Company, GUCCC, was involved with that, but the Severn and Canal Carrying Company would not accept the idea, and said "to work canal boats by female labour entirely not a practical proposition." March and Traill brought in Eily "Kit" Gayford, a former ballet dancer, to assist with training others.

The women came from all walks of life, and all places including Australia, New Zealand, Patagonia and Mexico. Naturally there were many who could not handle the hard life, and others who were not suitable, among them two sisters nicknamed the 'Dresden Chinas', who were more concerned with their appearance than working, and Mary, who had been wrongly released from a mental institution. All up there were about 49 women who ended up working the boats.

Training took about six weeks. On the first trip two trainees would work alongside March, Traill or Gayford to see if they were suited for the work and get a general idea of what was involved. The second trip included how to work the boats, operate locks, load and unload cargo, and the geography of the canals.

The canal workers were not given uniforms, but issued with a National Service badge with the letters IW, standing for Inland Waterways plus a list of items they had to provide themselves. From the letters IW they were nicknamed the Idle Women, although they were far from idle. They worked about 14 hours a day, up to 18 or 20 hours, 7 days a week. Pay was £2 a week, rising to a minimum £3 week when they were trained.

The actual pay depended on the earnings for tonnage carried, and was divided between the three crew members. Unpaid leave of 3 to 6 days was allowed after every second trip.

Conditions were difficult. They had to live, eat and sleep in a cabin 10 feet by 6 feet. Two women slept in the cabin on the motor boat, and the other in the cabin on the butty. It was often difficult to keep their bedding dry. A basin was used for bathing, and their toilet was "bucket and chuck it". Unlike other national service organisations such as the Women's Land Army, they received no extra rations, but were said to exist on "cocoa with condensed milk, national loaf and peanut butter". Although they had normal ration cards, many shops were reluctant to provide food to anyone other than regular customers. Locks had to be opened every 10 to 15 minutes. One of the women would cycle ahead to open the next gate. If they were lucky she would manage to get some fresh eggs or milk from farms on her way.

After the war some of the women continued working on the boats for a while shipping vital supplies across the country. In October 1945 The Sphere reported on the opening of the "winter campaign" as the women continued to bring coal to London.

There was not a lot of recognition for the Idle Women. There is a plaque at the Stoke Bruerne Canal Museum, unveiled in 2008. Kit Gayford was awarded an MBE for her work in training the women.

References: Wikipedia, Canalside Heritage Centre, The British Newspaper Archive.

Clockwise from top -
Audrey Harper operates the Barge Pole as Evelyn Harper looks on,
Mrs Helen Skyrme at the tiller of her barge bringing coal to London.
The Girls Who Manned the Canal Boats. Note they are carrying essentials including a boat hook, coils of rope and a fancy tea urn that might have contained cocoa.
Daphne March on board her boat Heather Bell in 1942.

Photos - The Sphere via British Newspaper Archive. Wikipaedia

Ships of Chao Phraya River, Thailand

In this, Part 1 of a series, Tony Merriott visits the Chao Phraya River and Siriraj Bimuksthan Museum

The Chao Phraya River has been a major maritime artery of trade, transport and defence from the Mon Kingdom of the Seventh century, then the Ayutthaya Kingdom of the Fourteenth Century. Then when King Rama I moved the capitol from Ayutthaya fleeing the Burmese invasion, the Rattanakosin Kingdom (modern Bangkok) was created on the site of the then Thonburi city.

The vessel was constructed with a teak keel, frames of iron wood (Hopea odorata) and the hull of Resak tembage/ Khiam wood (Cotylelobium lanceolatum) iriraj Bimuksthan Museum is one of several interesting museums in the Siriraj Hospital campus and Thonburi Railway Station site. I had visited some of these museums before so only planned a short visit until I realised how many different museums were included in the big ticket, so the best part of the day was spent learning about surgery, pathology, anatomy, parasitology, forensic medicine and then we came across another pavilion which housed the conserved ancient boat on the Thonburi Railway Station site.

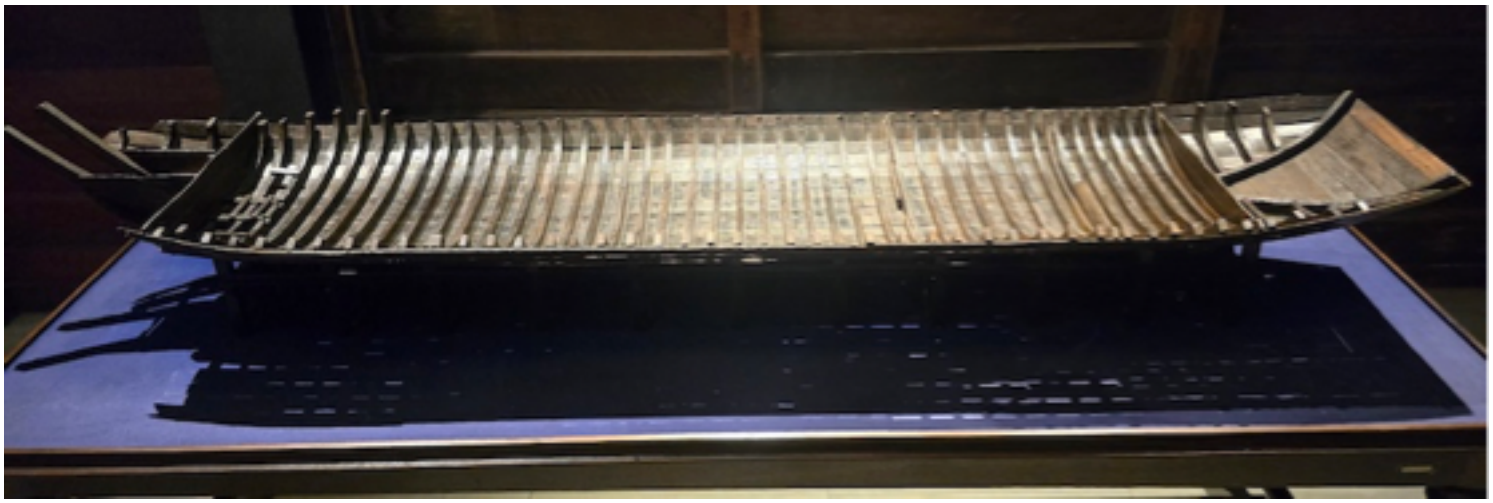
When 33rai (53,000square meters) of land was handed over from Thonburi rail station to Siriraj Medical facility, archaeological excavations unearthed a 5m x24m boat. It was surrounded by a Mud Cradle Dockyard. The area was a dockyard of Prince Isares (later Rama III) 1824-1851 and was also a dockyard owned by Viceroy King Pinklao brother of Rama VI (King Mongkut) 1850-1868 but is uncertain which era the vessel is from. It is presumed the boat had been abandoned and buried when the area was cleared for the construction of the Royal Opium Den 1890 and the Bangkok Noi Railway Station in 1900.

The vessel was constructed with a teak keel, frames of iron wood (Hopea odorata) and the hull of Resak tembage/ Khiam wood (Cotylelobium lanceolatum) held together

held together will “Chinese nails” hand wrought clinch nails and clips. The lower part of the hull was covered with paper and yellow metal. The metal consisted of 60% copper, 40% zinc with trace elements of iron and was stamped with a Muntz 1832 Birmingham Patent, the patent stamp included “18” which indicated 18 ounces of copper per square foot and thickness of 0.66mm . Chalking was also used to fill the cracks and joins. Photos show “Chinese nails”, chalking materials and yellow metal showing the Patent stamp. The exhumed vessel was cut into seven pieces, and the conservation was carried out and completed in 2011 by the Royal Thai Naval Dockyard on the direction/request of HRH Princess Maha Chakri Sirindhorn.

The Museum housing the vessel is located in the Siriraj hospital campus and the Chao Phraya River Express boat is the easiest transport to the “Tha Rot Fai” pier. The Royal Barge Museum is also walking distance away and this will be covered in a later issue.

Accompanying photos show restored vessel and model (next page).



Model of ship

Left - Muntz yellow metal stamped 18 (centre of photo).

Below - Wrought Chinese Nails.
Chalking materials.

Scratch-building Ships' Boats – Part Three

Cutters

In this final in the series GRANT DALE provides step-by-step instructions and notes some lessons learnt

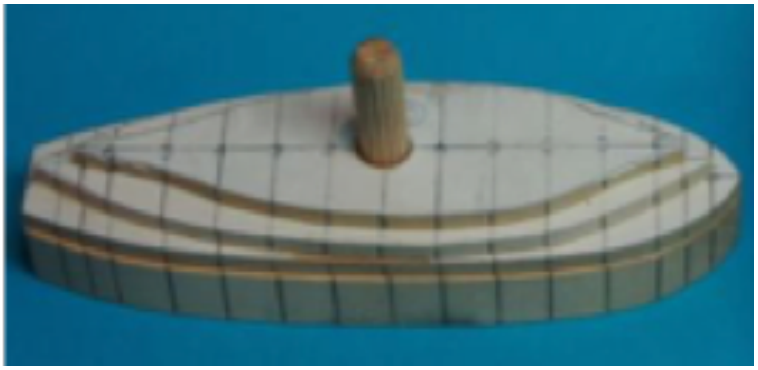
This is the third and final article in this series on scratch-building ships' boats and will cover the building of two 25 ft Sea Cutters at 1:90 scale to go with my model of HMS Victory.

For reasons I won't go into here, I discovered that the methodologies used for the Launch and Pinnace was simply not going to work for a clinker-planked hull. Trust me on this – I tried and failed – quite spectacularly! Even so, it took more than one attempt to get this right, as will be revealed…

Searching for a new methodology, I recalled a tutorial written by David Antscherl when he was offering a 1:48 scale 18' Cutter kit. I decided that I would follow his method with a few necessary modifications along the way - some because of the scale differences, and some because his kit offered a pre-made resin plug with features that I would be unable to replicate.

For this method, I needed to make a plug (well, two actually - one for each boat). I went back to my drawings/plans in my Warrior Practicum, scanned these into TurboCad and re-scaled them to produce the appropriate size. By the way, at 1:90 scale, a 25' Cutter is just 3.3" long (or about 85mm).

I printed the waterline templates on to sticky label paper, cut out the waterlines from stock of appropriate thickness and assembled the basic plug. The dowel is to assist in aligning the plug components. Each waterline component uses a different timber. The purpose of this is that the different colours of the timber show clearly where each waterline is.

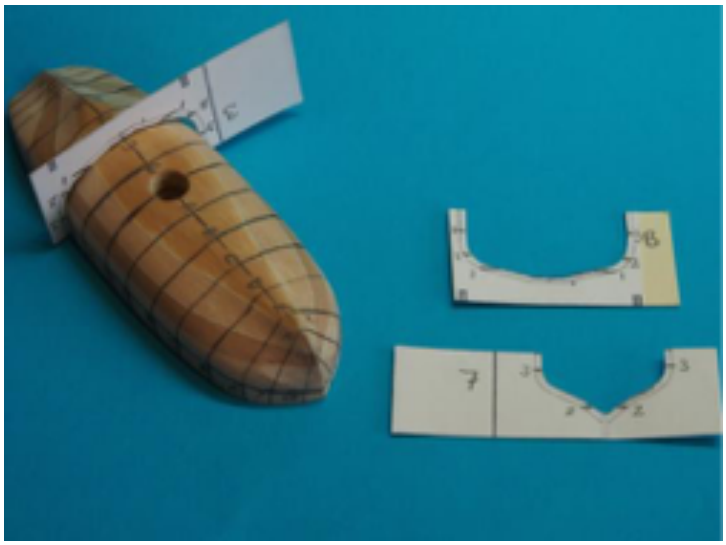


I then scored the station lines into the top and bottom paper patterns (using an Exacto knife) before removing the paper patterns. The scored lines are then easily traced over with pencil to show the station lines again:

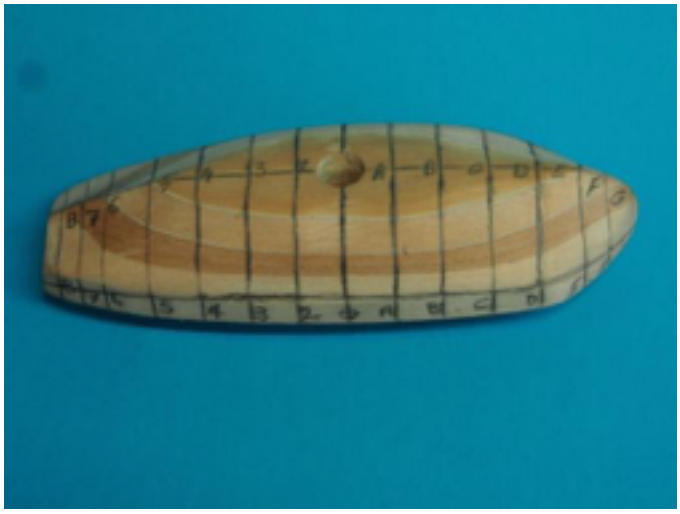
I also used a template to mark in the Sheer Line, and scored this as well:

The plug was then shaped roughly using a sanding drum in the Dremel and finished by hand to 600 grit. In the above picture, you can see the effect of the different timbers in showing the waterlines.

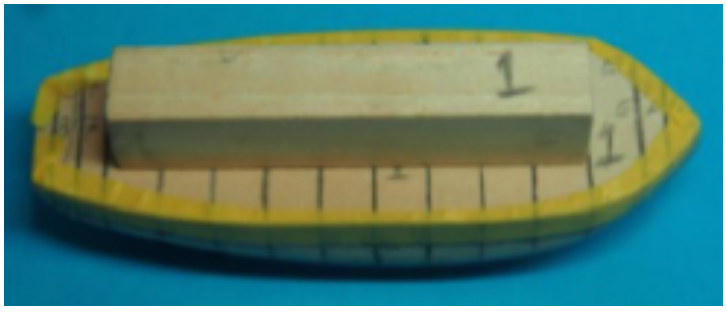
Templates for the frames were printed on to sticky paper and attached to card stock to check the shaping of the hull at each station line, and along the keel. The numbered lines on the frames represent the water lines, with the number 3 representing the Sheer line.



The station lines and Sheer line were then re-marked:

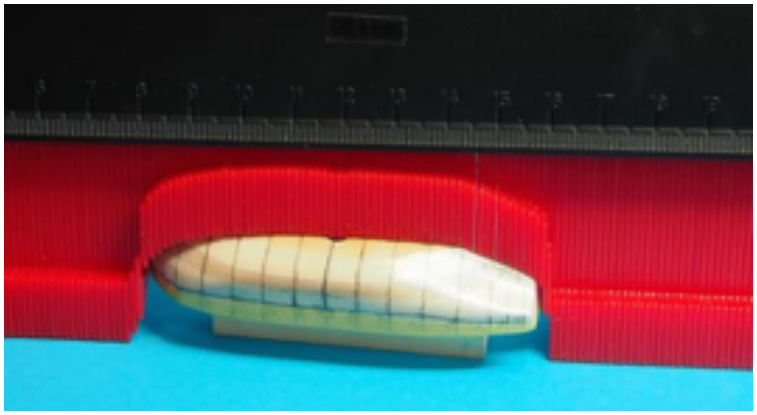


A piece of Tamiya masking tape was then applied to the excess plug above the Sheer Line before the hull was given several coats of sanding sealer. The purpose of this is help prevent the frames from sticking to the plug (some wax would also help), while the masked off part will provide a good surface for the frame ends to adhere to the plug (they will be cut off later on). I also attached a piece of scrap stock to the top of the plug to be used as a "handle" for holding the pug in the vice during framing and planking.



Having completed the plugs, it was time to commence work on the keel.

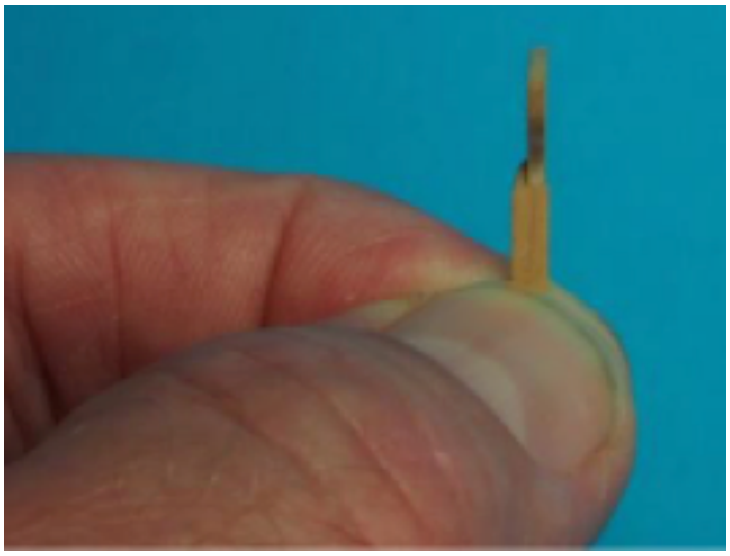
First up, a Profile Guide was used to extract the final shape of the plug along the keel line, and then transfer this to a card stock template:



This was done separately for each plug to account for slight variations in the final plug forms. After several attempts, I had a cardboard template with which I was happy, and I then transferred this pattern to a sheet of 3/64" Boxwood. I decided to cut the stem and main keel in one piece, accepting that the stem would be cut across the grain and figured this would be preferable to trying to make a decent scarf joint in something this small.

I then used the waste piece of Boxwood sheet as a former to bend a piece of 1/32" x 3/32" Pear strip to form the Apron. This was then attached to the inner side of the Stem/Keel and hopefully would give it some extra strength. In the photo below, an extra piece of Pear strip has been temporarily spot glued along the main keel to serve as a spacer for aligning things along the plug. The spacer is the same thickness as the frames would eventually be. This is a major point of deviation/difference from the Antscherl method in that his resin plug had slots cut for the frames to be inserted into. I couldn't see a way to do that easily, so opted for attaching the frames on the outside of the plug, and the keel over the top of that. The spacer would eventually be replaced with short sections of "hogging" strip that would be placed on top of the keel and between the frames, providing a level surface on the inside of the frames along the keel. The keel is left over-length at the stern, to be adjusted at a later point.

Next up, the Transom and stern post were made. Both were cut from 3/64" Boxwood sheet. They were cut separately so that the wood grain would be in the correct direction for each piece. The disadvantage is that there is a very small gluing area joining the two, so they are very fragile.

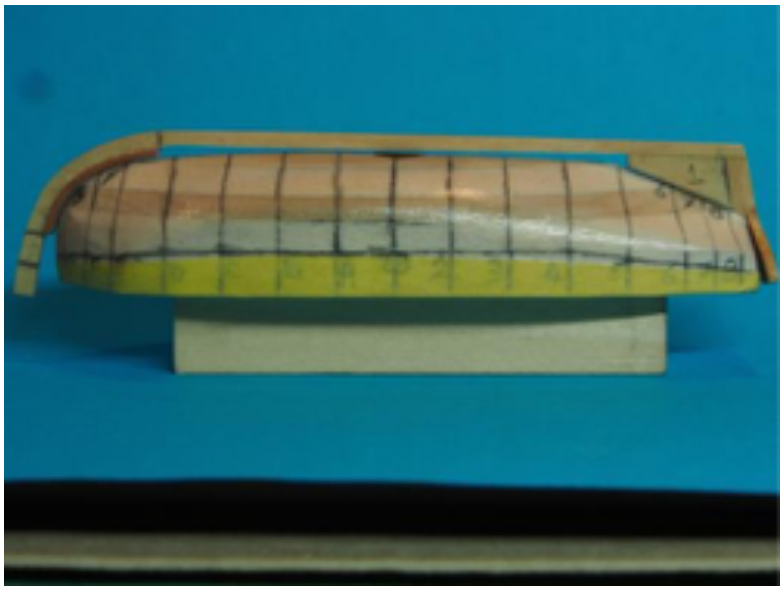


I also cut the basic shape for the Stern Deadwood (or Stern Knee), but this will need to be finessed to fit with the Sternpost/Transom piece.

Here is a picture of one of the completed keel sections. The temporary hogging strip has now been removed.

I then had to cut a slot into the stern of the plugs in order to fit the stern post, which was essential to getting the transom in place:

Finally, here is pic showing a completed keel assembly on top of the plug. The space between the keel and the plug will be filled by frames and sections of hogging strip in due course.



I said previously that I'm basically following the method used by David Antscherl, with some modifications. One of those was to be that I did not intend to carve grooves into the plug for the frames, intending instead to simply bend the frames over the plug lines. I tried this, using a double laminate of 1/64" x 1/16" Holly and found two things not to my liking:

1 - The frames became increasingly difficult to keep straight on the lines as I moved towards each end.

2 - At 1/16" wide, the frames looked too wide for the scale (Antscherl/Herbert used 1/16" square stock at 1:48 scale, so it's not surprising really).

So, there was nothing for it but to scrap another day's work and re-think.

I then decided to have a go at carving grooves into the plug - this to make it easier to keep the frames aligned. At this point, I also modified the framing plan slightly to incorporate a couple of cant frames forward - previously they were all square frames. The grooves were cut by first scoring with an Exacto blade, then working over with a knife edge file, and finally a square edge file.

I also decided to change the dimension of the frames to 1/32" square stock. This would be in keeping with Antscherl adjusted to 1:90 scale. Unfortunately, I didn't have any Holly of this dimension, so decided to use Pear instead. To make it more flexible, I soaked the Pear strips in water until they no longer floated. Then I carefully bent them over the plug and clamped them in place to dry.

Here is a picture of the carved plug with a couple of frames clamped up.

When it came to the last three frames at the stern, even the super soaked Pear wasn't playing the game. After scratching my head for a while and wishing for some Holly of the right dimension, I answered my own question. I took some 1/64" x 1/16" Holly strip and very carefully split it in half to give dimensions of 1/64" x 1/32". By laminating two of these together, I could achieve the 1/32" sq dimension overall, while having the advantage of the very thin and very flexible Holly to bend into the stern frames. The different coloured timbers of the frames won't be seen as the boat will be painted anyway.

A bit hard to see in this picture (above right), but there is a laminated pair of Holly frames being formed under the mini-clothes pegs. The pegs gave just the right clamping profile to help with the reverse shape of the frame curve.

Lastly, here is a shot of a few of the finished frames. They have been labelled as they are too small to write on (1/32" sq is about 0.8mm sq for the metric folks). The Holly double laminated frame is in the top left corner (labelled '6').

The next few days were somewhat "challenging" (the air in the shipyard became an interesting shade of blue).

The first issue I had to resolve was how to hold the keel/backbone assembly rigid in the plug while I applied the planking. To do this, I added a pair of “horns” to the plug. It also took me a while to figure out the lining out of the hull, and had been a little stumped by the placement of the Garboard strake. I eventually worked through this and after lining out the plug hull, I gave it several coats of sanding sealer to both preserve the lining out markings, and prevent the planks from inadvertently sticking to the plug.

In these next two pics, you can see both the lining out and the " horns":

One of the issues I had been facing was finding a way to clamp the pieces in place while the glue dried. This had been my single greatest source of frustration , but I eventually managed to find a way using a variety of different sorts of clamps.

Nevertheless, I did find that there was a slight gap in places between the Garboard and the keel. This is partially because I could not see a way to cut a proper rabbet into the keel at these dimensions.

Time then to try a new product..... and the winner is, Superphatic Glue, by Deluxe Materials. It is an ultra-thin aliphatic glue that also has a strong wicking action. I was able to use this to run along the slight gap and wick into it. I was very pleased with the result as it made the bond between Garboard and Keel quite strong (as I found out later.....)

I then went to the next plan, spiling using the tape and pencil method described previously to create a card template before cutting the plank. I used 1/64" thick Boxwood for the planking this time around. It is very nice to work with, and while not quite as pliable as Holly, it's not far off at this thickness.

Before fitting, the upper edge (i.e. closest to the sheer line) of the Garboard plank was sanded to a slight chamfer, and the "under edge" of the next plank was likewise chamfered. This creates a better overlapping join and something of a flat mating surface for the glue to grip onto.

Once again, clamping was a real issue, and the delicacy of the parts was proved several times as I managed to break both stems and both sternpost/ transom assemblies. This was when I discovered how good the bond between the Garboard and keel was, as the "shell" came away from the plug completely, with planks and keel intact.

Here's a couple of pics of the second plank in place. The Apron on the bow is proving quite useful as an

In these pictures (nexr page, column one) you can also just make out the "gain", which is where the overlapping of the planks disappears at the bow so that they are flush to each other along the stem.

As planking progress, things got off to a promising start, however the further I went, the less satisfied I was with the result – mainly with the way the run of the planks was working out. I think I just plain got the garboard wrong, and it gradually snowballed from there. A couple of things I learned along the way……

Lesson No.1 - because of the issues I was having with clamping, I decided to try using thick CA glue instead – never my preference as I tend to suffer an allergic reaction to it if I'm exposed to it for too long. Anyway, it seemed to work well, and of course enabled work to progress a little more quickly than waiting for PVA to dry.

Lesson No.2 - using at least two planks per strake makes it MUCH easier.

Here is the result of one of the Cutters. In this photo, it doesn't look too bad, but viewed from the side, the planks at the bow look pretty ordinary.

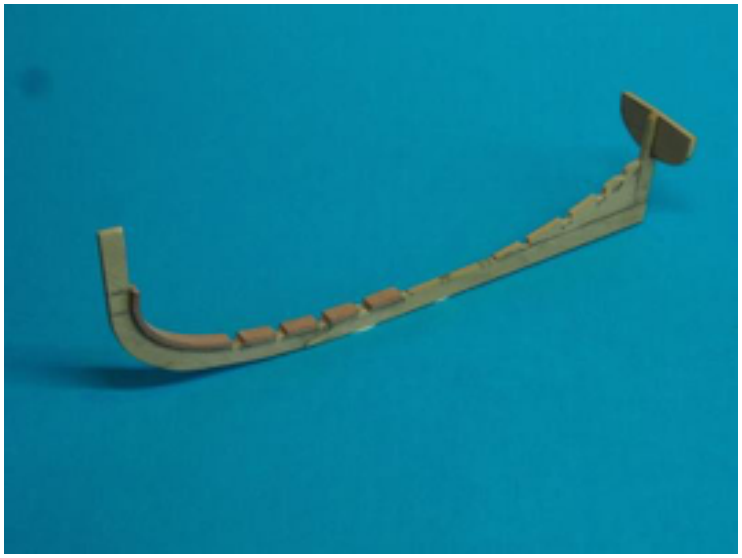
I would probably have used this, had it not been for Lesson No.3…..

Lesson No.3 – No matter how good your preparation, never trust that glue will not stick to your plug. Here is how the second Cutter came off the plug……

Lots of rude words out loud later……..

I thought about this for a couple of days and decided that another attempt was called for. Much of my method for this version was okay but needed refinement.

The first thing I did was to modify the keel assembly. I decided to cut the keel in two pieces so that the stem was cut with the grain running diagonally for greater strength. I even managed to cut a scarph joint! I also decided to go back to my original idea of an extended apron that would become a hogging piece, with notches cut out for the frames. I also notched the stern deadwood for the frames. Here's one of the new keel skeletons:

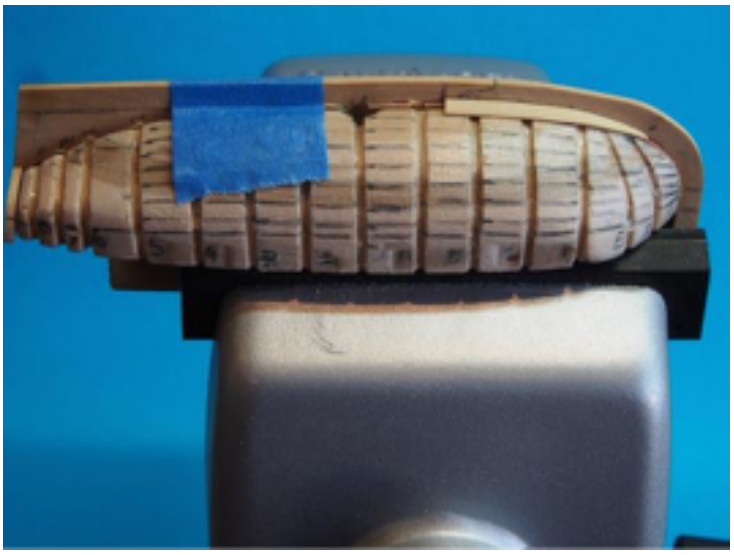


I also decided to modify the plug by carving a groove for the keel/apron assembly:

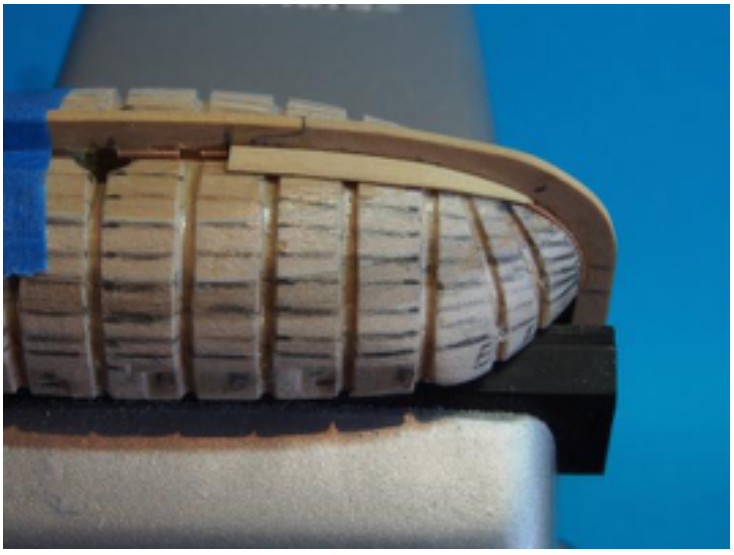
This made the keel assembly almost a "press" fit and certainly provided much greater lateral stability.

Here is a picture of the new keel in the modified plug. In this picture the plug has been marked out for the run of the planks. This worked out to be reasonable guide.

An idea that I picked up from another builder, was to simply use some blue painters' tape to help hold the keel in place on the plug. Because I was using more than one plank per strake, it was easy enough to re-locate the tape for the next plank. This is particularly important because of Lesson No.3 noted above! As soon as a plank was glued in place, I would remove the tape, pop the keel out of the plug and check for any glue seepage before it became a problem. This routine saved my bacon on more than one occasion later. Here you can see the blue painters' tape with the fore part of the Garboard being fitted.



Another thing I changed was the location of the Garboard strake. Here you can see a close-up showing that I have taken it almost to where the keel rises vertically.

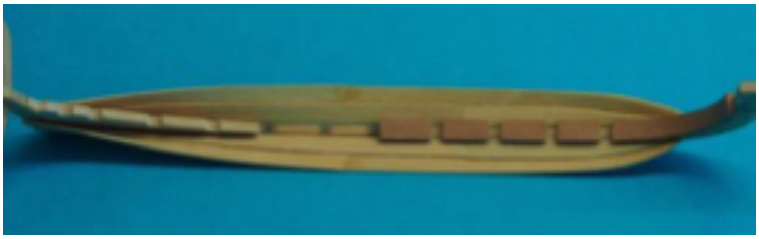


And top next column is a shot showing the entire Garboard strake in place.

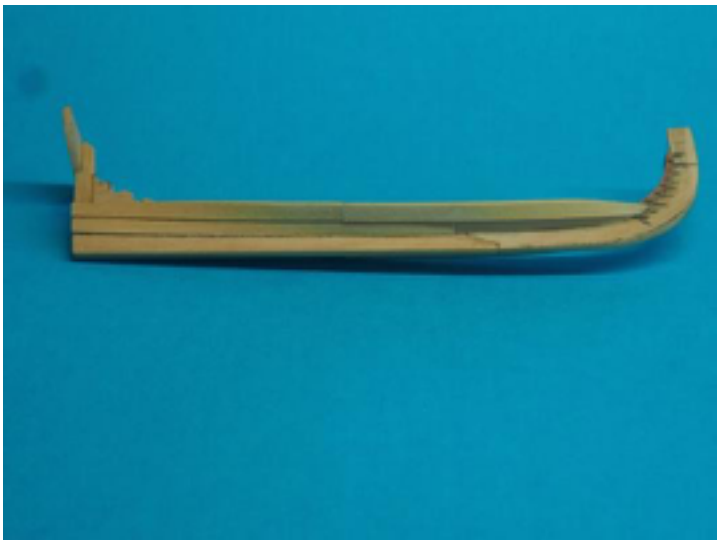
One problem I had with this version was that I no longer had enough sheet stock left to cut planks individually, so was limited to using some strip stock. All of this planking was therefore done with 3/32" wide Boxwood strip (1/64" thick), with the exception of the Sheer strake, for which I used 1/8" wide strip stock. I found that once the planks were shaped, a quick dip in a glass of water (remember not to drink from THAT glass) and the plank could be bent in the fingers to roughly final shape before fitting. The heat from the fingers and the thinness of the planks meant that they dried out during this process.

Here's a picture of the second strake in place:

And here is one showing the hull starting to take shape off the plug (remember to remove from the plug after EVERY plank to check for glue seepage).



One important aspect with this style of planking is the bevel on the edge of the planks. Both mating faces need to be bevelled, and this is best achieved with a small sanding stick (I use a flexible one similar to a nail file) prior to final fitting. The other, somewhat more tricky part is to add the “rolling bevel”. This occurs at both ends of the strake, where the bevel is reversed to allow for the “gain”, which is where at both bow and stern, the planks cease to overlap and lie adjacent to each other. In the next picture you can just make out the bevel on the upper edge of the second strake, with the rolling bevel occurring just as it rounds at the bow.



All progressed reasonably well with the planking from here on, although I did need to make a couple of stealer planks that I would not have needed were I cutting the planks individually from sheet stock. Nevertheless, I think I managed to make them not too obvious. The secret here was to really feather the ends of the stealers so that they blended with the adjacent plank.

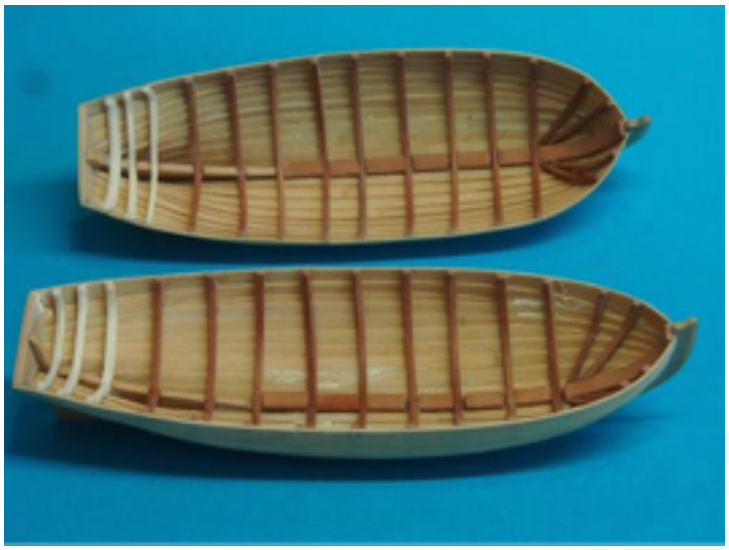
Here’s a few photos of the completed planking. The stem needs trimming and shaping, as does the transom, but the hard work is done.

And just to prove that I was working on two at once:

I thought I’d throw in this photo in to show the real difference in hull shape between the Cutters and the Pinnace (the Pinnace is 3 feet (actual) longer than the Cutters).

I was then able to complete the fitting all of the previously bent frames. This was a relatively straight forward job, although more time consuming than I had anticipated. I was pleased with the way the frames fitted into the hull shells, with only a modicum of persuasion required. The frames are all 1/32" sq Pear stock, except for the last three frames in each boat. These were made of a double laminate of 1/32" x 1/64" Holly stock.

I decided to fit a couple of extra hogging pieces so that these now ran the complete length of the keel from apron to stern deadwood. This should make fitting the keelson/footwalling a little easier later. I also trimmed the stems to shape and sanded back the transoms. In hindsight, I should have left the transoms a little higher and trimmed them after fitting the cap rail. Oh well.....



I also fitted the gunwales:

I then fitted the Risers for the Thwarts in both boats, made the Caprails, and gave the interiors an undercoat of white Gesso in preparation for painting.

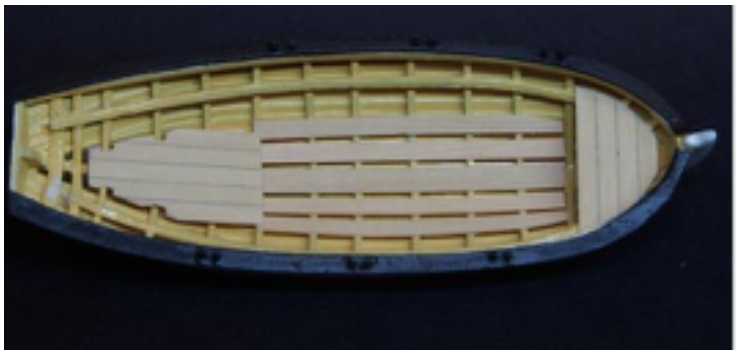
The Risers were relatively simple to install, using a piece of 1/32" x 3/32" scrap Pear stock as a spacer to achieve a consistent distance below the gunwales on both sides. The Caprails were made in the same way as for the Pinnace, cutting them roughly to shape and then spot gluing them and sanding to final shape in situ. The only drawback here was that I had run out of 1/64" Boxwood sheet, so used Cherry instead. There was quite a noticeable difference in how the two woods sand! By comparison, the Cherry tends to be stringy and fuzzy along the edge and is prone to splintering. I forgot to take pictures of the Caprails before I unglued them with Isopropyl Alcohol. Painting with the Gesso gives a good base for the paint to grip. In this case, I thinned the Gesso slightly - I really only wanted to just cover/seal the wood with it.

Here's a couple of progress shots - not very pretty in their "underwear" at the moment.

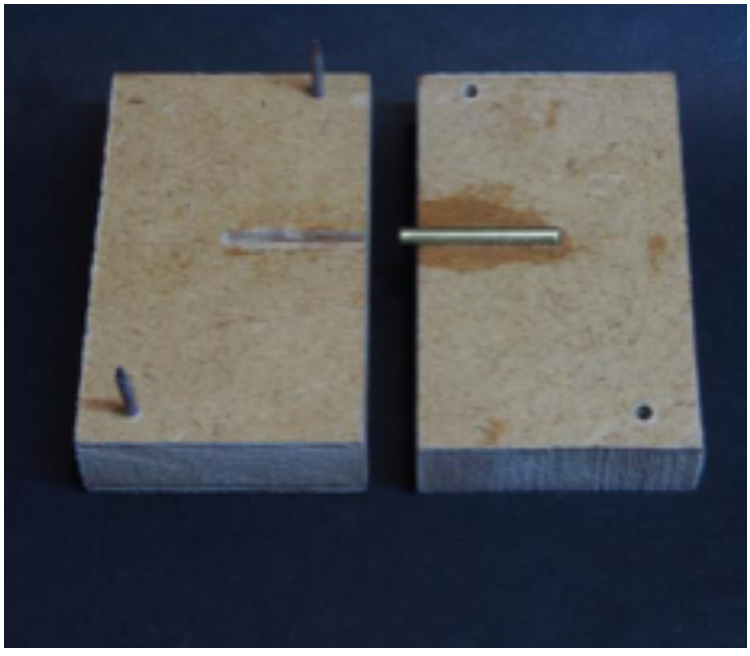
I spent about a week painting the exteriors of these boats. I used an airbrush for this job and after six coats of white paint on top of the gesso undercoat, plus one coat of clear Satincote (one more to come), here's a peek at the outside of one of the hulls.

Once the I had finished painting the hulls I was then able to get on with fitting out.

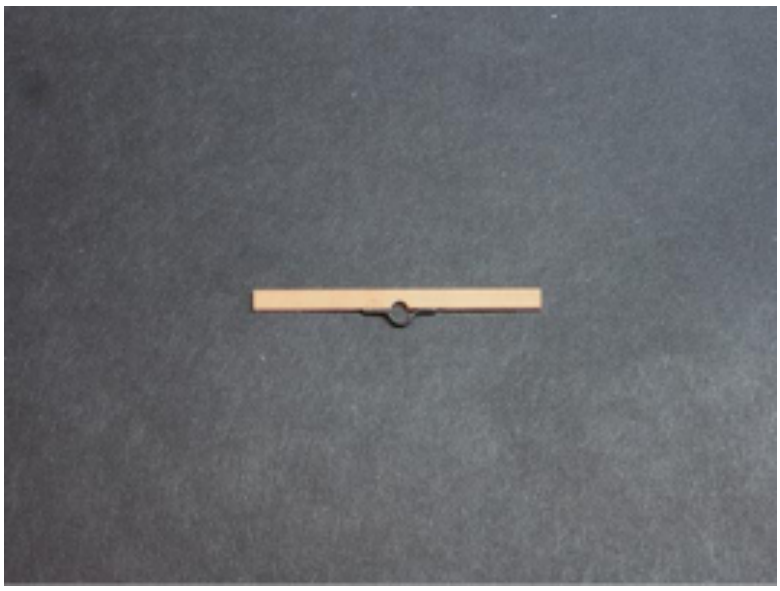
First up was to fit the footwalling, aft platform, forward platform, cap rails and thole pins to both boats. While I've kept the same general colour scheme as the other boats, these cutters will be a little less 'fancy', having planked platforms instead of gratings and a generally more 'working boat' feel to them.



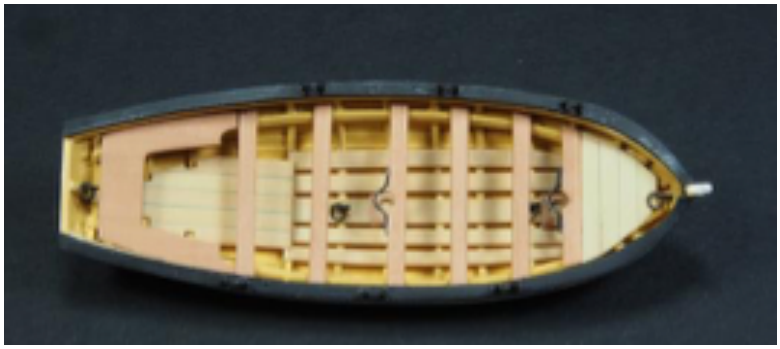
The next step for the cutters was to create some mast support bands to attach to the thwarts. Each cutter has two of these. I used some thin brass strap and bent them to shape by using a jig. The jig is made from MDF for the pressing surfaces, with a brass rod inserted as the former.



After blackening, they were attached to the thwarts, which had been shaped for the other half of the "hole". In this pic, the thwart hasn't been finish sanded yet.



After that, it was a simple matter of cutting the stern sheets, which I did using a paper template and cutting from a single piece of 1/32" pear stock, and then finessed to fit. The remaining thwarts were cut to size and finish sanded, putting a slight bevel/curve on the upper outside edges. The timber was left natural, only polished with successively finer grades of sandpaper. I also installed mast steps under the appropriate thwarts - you can just make these out in the photos. And here is a finished Cutter.



Here's a picture alongside the 28' Pinnace for comparison. Note the very different hull shapes.

And here is a shot of my Lilliputian Fleet. I had to remove the Launch from its home on the "mother ship" for these shots, and was surprised by how large it looks in comparison to the others.

Below - And finally, one last "scaling shot"

I hope this series of articles has been of interest and may even encourage you to have a crack at making your own ships' boats.