SCUTTLEBUTT

NEWSLETTER OF THE CANBERRA MODEL SHIPWRIGHTS' SOCIETY

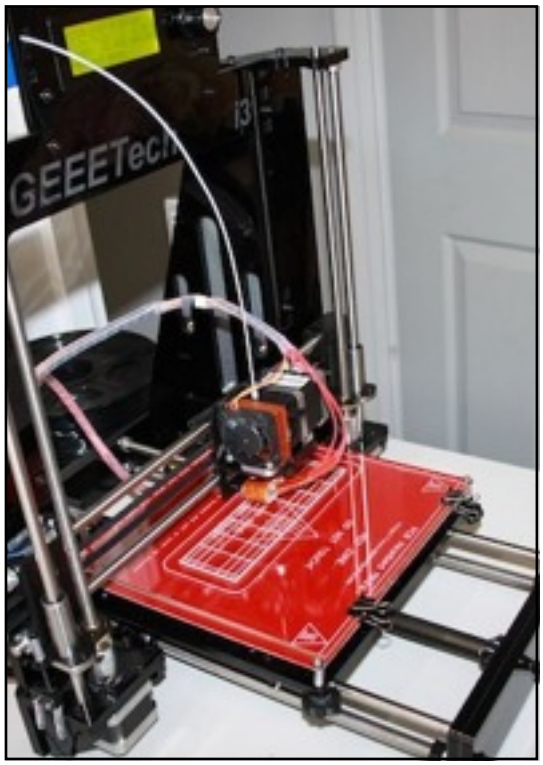
March 2020

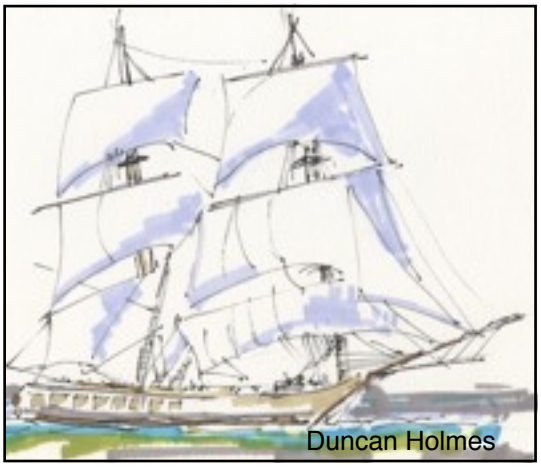
Established 21 April 1988. Incorporated 16 January 1991

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.

Scuttlebutt: *1. A drinking fountain on a ship. 2. A cask on a ship that contains the day's supply of drinking water. 3. Gossip or rumour.*

IN THIS ISSUE





Duncan Holmes

COMMITTEE MEMBERS - 2019-20

President Edwin Lowry
Vice-President Unfilled
Secretary Bill Atkinson
As.Secretary Ray Osmotherly
Treasurer Peter Hateley
Members Bruce George, Bruce Kirk,
Appointments:
Member Liaison Max Fitton
Web site – Steve Batcheldor
Newsletter - Brian Voce

MEETINGS

The Society will meet until further notice, at the Men's Shed at Melba on the third Tuesday of each month (except December and January) commencing at 7.30 pm. Visitors are welcome.

Society Web-page

CMSS members are encouraged to visit our website at:
http:/ / www.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.

Society 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. https://www.facebook.com/canberramodelshipwrights/

Subscriptions

Annual Membership:

a. Canberra Area-Single $30.00, Couple $45.00.
b. Country/Interstate-Single $15.00, Couple $22.50.

Payment Details:
By Cash to Treasurer
Post by cheque/Money Order to PO Box 158, Fyshwick, ACT, 2609; or
Bank Deposit to
Beyond Bank - BSB 325185
Acct Name - Canberra Model Shipwrights Society (or CMSS)
Acct No 03452396.

FROM THE EDITOR


Brian Voce

It seems everyone I talk to has had a close experience with the recent bushfires and/or hailstorm or knows someone who was directly affected. From what I hear that applies across our membership. And one member suffered extensive damage to his home in another incident. It has been an exhausting and worrying time for many of us, our families and friends. Speaking personally, two of our family evacuated their homes which in the event survived and a beach-house we built in the 70's, if no longer owned, was destroyed. I'm sure most of the membership will have similar stories. Extreme events like this impact upon us all and the memories, even scars, will remain with us. We all applaud the dedication and fortitude of the fire-fighters and emergency workers, both professionals and volunteers who toiled day after day, week after week, month after month. They were on hand continually, undertaking dangerous and dirty work for the benefit of others. We all owe them our thanks and our ongoing support.

Inside this issue Elizabeth Hodson tells of her interests in CMSS. It is noteworthy that she and Robert travel regularly from Robertson in the Southern Highlands to attend our monthly meetings (2-1/2 hours each way). Those of us who live within spitting distance, but don't make the effort, should examine our commitment. I refer you to Steve Batcheldor's informative article on 3-dimensional printing. Also the River Murray figures in different stories on Paddleboats and Houseboats. Also two models reach completion. I would like to thank Duncan Holmes who, from Vancouver, has sent me more of his ship sketches to add to these pages.

Brian Voce
bvoce@ozemail.com.au

In Part 4 (and the last) description of the building of the Fiji Gas, BOB EVANS describes the finishing touches and explains how the dilemma of delivery to distant places has been solved.

The completed model and its recipient, Bob's son Ian.

A few bits and pieces have been done since September last year in order to complete the Fiji Gas.
Details such as ladders, railings and the awning covers on the catwalk were completed and some touch up paint work done.
The case is of Perspex but the joints were abysmal so I glued 10x2mm planks left over from the Pacific Gas as a "frame" which, whilst not perfect is quite an improvement on nothing at all!
Discussions with our national airline proved quite unhelpful in terms of how to transport a delicate item- "have to go in the hold mate" didn't fill me with joy.
Instead we will now be travelling on the ship "Noordam" from Sydney departing on 2nd April. Taking such an object didn't cause any alarm to the ship and the Customs Officers in Tauranga were most helpful, so the model will be landed there and we will disembark in Auckland.

So there you have it, an enjoyable project, if at times frustrating.
My son Ian is delighted, so a good exercise all round.
Next I will have to progress the Pacific Gas and then the Coral Gas in which my eldest son sailed and would like a model.

I'm not going to be bored!!

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New Life On the Water For Scrapped Flying Boats

ROD CARTER continues his exploration of Dornier flying boats.He discovers that one Dornier, written off by the RAAF, was converted into a houseboat by an enterprising Australian. Later again it was partially restored for display in an aviation museum.

After the RAAF Dornier Do 24s were struck off service, they were ordered broken up for components, but one escaped being scrapped.

The fuselage of one of the Do 24Ks (RAAF A-number unknown) was acquired from a metal merchant by Mr Ron Pickles. By 1950 it was owned by Mr K Osborn, a plumber at Bendigo, Victoria, who rebuilt the forward fuselage into a house boat with an internal engine and steering wheel operated from the original pilot's seat. It was later sold to Hank Horsefall at Echuca, Vic, and was seen at various locations along the River Murray for many years. By September 1976 it was ashore at Echuca on its boat trailer, with all paint removed and the cockpit windows smashed by vandals. In 1988 it was acquired by Gary Wood of Echuca who carried out an external restoration and repainted it green and white. A few year later it was repainted overall cream with the name Dornier on the bow. By 1999 it was on vacant land, parked on its trailer behind the RSL Club at Moama, just across the River Murray bridge from Echuca. The interior retained many aircraft hull features, but fittings and seats were ruined by the effects of weather. The Dornier houseboat was to languish in that spot at Moama until 2010 when it was acquired by the Lake Boga Flying Boat Museum.

Photos - The Dornier houseboat on the water and later in life on chocks.

This last relic of the RAAF Dornier Do 24s was moved to Lake Boga where museum volunteers began work on it. The museum is established on the site of the Lake Boga RAAF Station and the underground communications centre has been re-opened. A large hangar has recently been built to cover the museum's Catalina, a composite assembled from Catalina sections salvaged from local farms, painted as RAAF "A24-30".

Detailed information about the Lake Boga Aviation Museum can be found at: https://acesflyinghigh.wordpress.com/2017/04/03/lake-boga-flying-boat-museum/

Apart from the Dornier, other aircraft were converted to houseboats in Australia.

There were at least three known Consolidated Catalina houseboat conversions. VH-BRI was an ANSETT-operated ex-US Navy Catalina amphibian (PBY-5A) which sank after some hull rivets were sprung in a harsh landing (unknown

A Catalina hull prior to conversion to a houseboat (nose gun turret intact, but waist blisters removed), probably on the Murray River

to the operator) on 8 July 1962. The aircraft was struck off the register and sold to a Vic O'Hara for 5 pounds. Over 12 years, the O'Hara family converted it to a house-boat (below), complete with the original amphibian landing gear, and

operated it out of Shute Harbour. Probably sometime after 1996, it was sold and moved further North to the Home Hill/Bowling Green region in Qld.

Another known Catalina conversion was a Consolidated PBY-4 which the US Navy passed to the RAAF for use as a trainer. When struck off RAAF charge, the flying boat was purchased and converted into a paddle boat by Jim Vale of Mildura. The hull was completely lined with fibreglass to ensure water-proofing. As of January 2006, the "Paddle Cat" was being restored at Nangiloc and at last known report (2006) was based at Mildura.

Paddle Cat

Little is known of the third Catalina houseboat conversion apart from the above photo, reportedly taken at Picnic Point, up-river from Barmah on the Murray River.

Other Conversions in Other Places

The Supermarine Southampton Mark I was a mahogany-hulled twin-engine biplane flying boat operated in small numbers (only 23 built) by the Royal Air Force. N9899 was one of three Southamptons which parted their moorings in a gale on 23 November 1928 and were blown ashore and wrecked on the breakwater at Portland, UK. In 1929 the hull was sold to a Mr Kemp and converted into a houseboat. The top of the hull was cut back and fitted with a clerestory roof and skylights were fitted to the

dorsal gun positions with a large sliding door cut in the starboard bow. A floor, bunks and cupboards were installed in the hull.

One of the Southampton conversions circa 1950s.

Around this time two flying boat hulls, one of them perhaps N9899, were towed from Felixstowe and converted by Bawdsey Ferry resident Herbie Kerry, At least five Flying Boat hulls were in use as house boats in the 1930s, including Vickers Valentia N126 and Fairey Titania N129. By 1951, at least the Southampton was situated on tidal mud flats of the River Deben at Bawdsey Ferry three miles north of Felixstowe, Suffolk. The hull lay on a cradle of old railway sleepers and was let to holiday-makers. Alongside lay the hull of Fairey Atlanta 1 N119 in similar use. This was broken up due to poor condition around 1964. There was also a second Southampton hull which disappeared in 1953 and another hull of possible 1914-1918 date as a `potting shed' (reportedly the hull of a Felixstowe F.5) which disappeared circa1953, gales and flooding of that year having damaged several flying boat hulls in the area. By 1966 the hull of N9899 was owned by Mr Keith Coombs of Felixstowe, and was under threat since the local authority viewed it as an eyesore. Following contact by Mr Coombs, the RAF Museum purchased the hull for £75 and N9899 was taken on charge for restoration as an aviation exhibit at the Royal Air Force Museum.

Illustration Duncan Holmes

MEMBER PROFILE

Elizabeth Hodson tells of her and Robert's long-time fascination with wooden craftmanship and a diverse range of other interests.

The face of CMSS at Expo. Elizabeth and Robert greet visitors.

I was very surprised when Brian asked me to do a member profile for Scuttlebutt as Robert is the modeller, not me. We both love things made of wood, and over the years had been to the Woodcraft Exhibition at the Sydney Opera House and to the Hobart Wooden Boat Show. Robert had started building models quite a few years ago. After many years of doing it on his own he learned about CMSS, and we attended our first meeting in July 2010. I accompanied Robert as co-driver. It is about 2 hours 20 minutes each way (from Robertson in the Southern Highlands), so we do a swap at Goulburn which is about half way. We generally don't attend meetings if the weather is bad. It is usually between 11.30pm and midnight before we get home, and we don't feel like doing that drive if it is pouring rain or thick fog.

Although not a member at first I found the presentations very interesting, and loved seeing the craftsmanship in many of the models. Also members sometimes bring tools or jigs they have made to help in their modelling. Some are utilitarian, but others are little works of art in themselves.

One of Robert's models is Harvey. As I loved her appearance I started doing some research on her, then Baltimore Clippers in general. I was particularly pleased to find a photograph of her, and a second one with a picture and model of her and the ship's bell at the Waterford Museum in Cork. As a result of that research I did a presentation on Baltimore Clippers in November 2012.

After a few years as non-member, the then treasurer thought Robert and I should have couple membership, rather than just Robert as a single, so I became a member.

I have not made models myself, other than hand-sewing the sails for one of Robert's, and dabbling with a cardboard model. My own crafts have been knitting, sewing, patchwork and the like. I also bred and showed cavies, and still judge them, with shows all over Australia, and two in NZ a long time ago. In June 2018 I judged a show for the Sunshine Coast Club. Instead of flying up on my own, Robert and I did a road trip there. On the way home we visited the Ballina Maritime Museum. That is well worth seeing. They are very cramped for all the exhibits they have, but there are plans for expansion. We looked at things until I at least was too tired to do any more.

We have been to the Sydney Model Ship club each year from 2015, with Robert exhibiting, and me just enjoying seeing the models. In 2018 we went to the Wagga model show just for a look. We had planned to go again in 2019, but Robert had an accident in late October which prevented that trip. Earlier in 2019 we had gone to Port Macquarie for

the model show there and also visited the maritime museum there.

Robert and I are reluctant to go on the committee because of the distance, and the chance we won't be able to make it to meetings if the weather is bad. I like to help with things, but due to spinal problems I can't stand for long, so am unable to help the wonderful folk who look after the kitchen at our Expos, other than bringing a few cakes. Instead I have been able to go on the door as it is a sitting job. In 2018 I made some certificates for the place-getters in the voting, and for the children from Mt Rogers School who participated in the model building that year. Last year I did certificates again and took the entries for the expo, as those were things I could do from home.

I still enjoy seeing the models, and the fine work of people like George Crossin, Kevin Hudson and Janos Nemeth, and marvel at Michael Bennett's miniatures. And yes, if you were wondering, we do have Robert's models on display in our lounge room.

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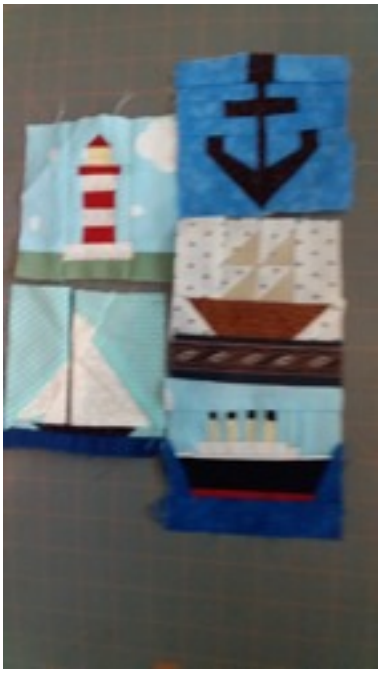
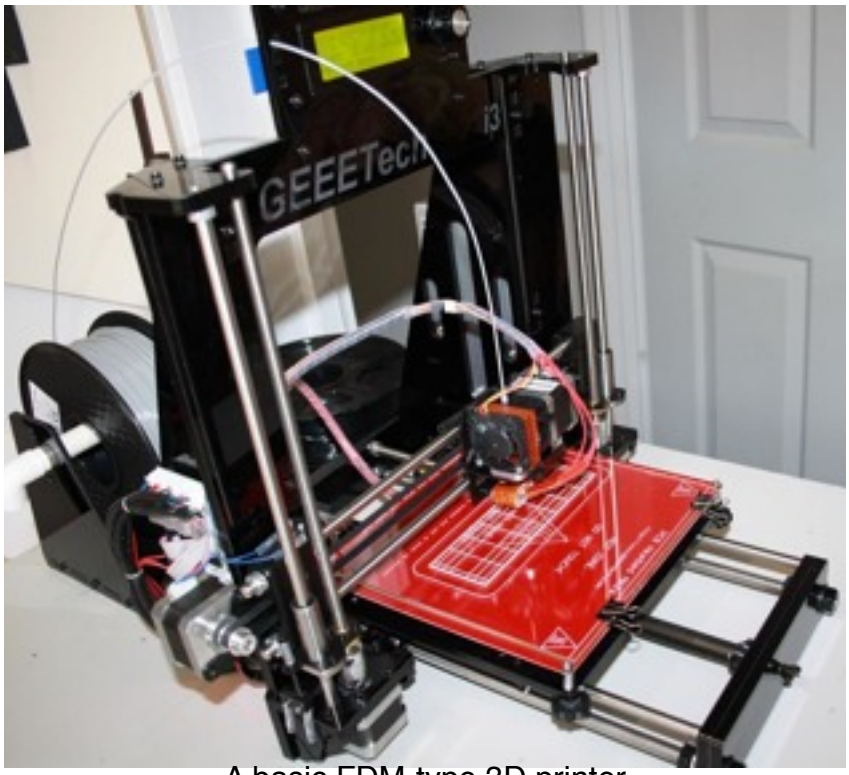
Elizabeth judging cavies - one of her many interests.

Left - Another side to the Hodson's - dressed up for the 2018 Lithgow Ironfest.
Below - some of Elizabeth's patchwork pieces for a larger work with a maritime theme.



WONDERING ABOUT A 3D PRINTER?

STEVE BATCHELDOR shares his thoughts on the place for 3D printing in model ship building.



A basic FDM-type 3D printer

Several years ago I purchased a cheap 3D printer to see if it could be a useful tool for my model ship building endeavours.

From the outset I must say that it has been, and continues to be a challenging journey learning how to get the best out of my printer. I have recently purchased another far better quality 3D printer which I am only just starting to work with and I can certainly see the possibilities for making far better quality parts with this new machine.

With my original 3D printer I have been able to produce some unique printed parts for various model ships, but it is not quite as simple as I originally thought that it might be. There were quite a few aspects that I needed to learn about 3D drawing, the different computer programs to use and the set up or adjustment of the printer before I was able to produce useable parts.

3D Printing - 3D printing is becoming quite a large and varied field with the technology being used more and more across many industries as a manufacturing process. With the right equipment a wide variety of materials can printed such as metals, plastics, resins, food and even human tissue.

All 3D printers produce objects by utilising a digital 3D model which is first prepared on a computer. This model is then run through a computer program which slices the 3D model into layers. The resulting slicer file is then used to tell the 3D printer how to construct the physical 3D object. The physical object is built up layer upon layer by adding material in a specific pattern as captured in the slicer file.

3D printing is a fundamentally different way of producing parts compared to traditional subtractive (machining) or formative (injection moulding) manufacturing technologies.

In model making, 3D printing is usually restricted to the use of plastic and resin as these are reasonably cheap mediums and can be used in benchtop printers at home.

3D Printers For Home - There are two basic types of 3D printers that are suitable for the hobbyist at home.

The first and most common type is the Fused Deposition Modelling (FDM) printer where plastic filament is heated and extruded through a nozzle into a specific shape on to a build plate or on to previous layers of plastic. Each thin layer of plastic builds up and eventually creates a finished 3D part.

The second type is the Stereolithographic (SLA) printer which uses an ultraviolet activated resin to build up each layer. An ultraviolet light or laser is projected through a mask onto the next layer of resin so that only specific areas are hardened.

Cost - 3D printers for home use can range from a couple of hundred dollars to several thousands of dollars. The price is coming down all the time making these machines much more affordable but

like many things you get what you pay for as far as features and quality.
The consumables for 3D printers also need to be considered. Filament for FDM machines is usually about $20 to $50 per 1Kg roll whereas the resin for an SLA printer start at about $70 per Kg. 1 Kg of filament or resin goes a long way when you are only making small parts.

Things To Make - You can print just about anything for a model ship with the 3D printing process. There are a couple of major issues to think about though before 3D printing. One is quality of the print. This is mostly a function of the type of printer and the resolution (layer height) of the printer. SLA printers usually have a far better resolution than FDM printers so generally produce much higher quality prints. The other issue is sourcing or producing the 3D drawing of the object that you wish to make. The 3D drawing is a whole topic in itself that I will discuss anther time.
While it is possible to make whole models with 3D printing, I have found the process more suitable for building small parts for my models. 3D printing is particularly useful for items that require a repeatable high level of dimensional accuracy.
Some of the parts that I use 3D printing for are ladders, stairs, railing, bollards etc. I have made some far more complex shaped items such as ships boats and propellers but these generally require a little more post printing finishing.

Worth The Effort - I would say that 3D printing is not for everyone. There is a lot of effort required to draw and produce each small part. For one or two simple parts traditional construction methods would be far easier. For a large number of the same part or for complex objects 3D printing can be very useful. If you need to make the same part in different sizes again 3D printing can be very useful. With practice and understanding, 3D printing can produce some impressive model parts.
I have found that the biggest challenge is being able to accurately draw what you want to print. The drawings can take quite a while to develop and get to a point where the items are printable. If your printer is set up correctly and you have an understanding of how the slicing software works the printing itself is not that difficult. For those who want to have a play with 3D printing, I would suggest that a ready to go printer would save you some frustration. For the more technically minded people, a cheap 3D printer kit can be a challenge and can still produce acceptable parts.

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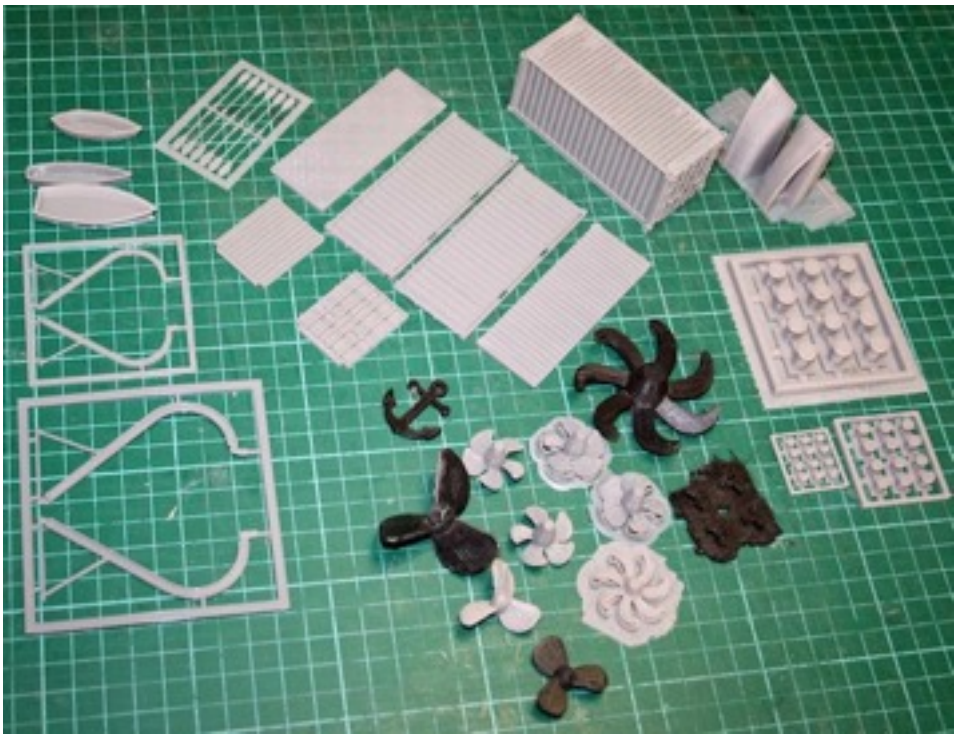
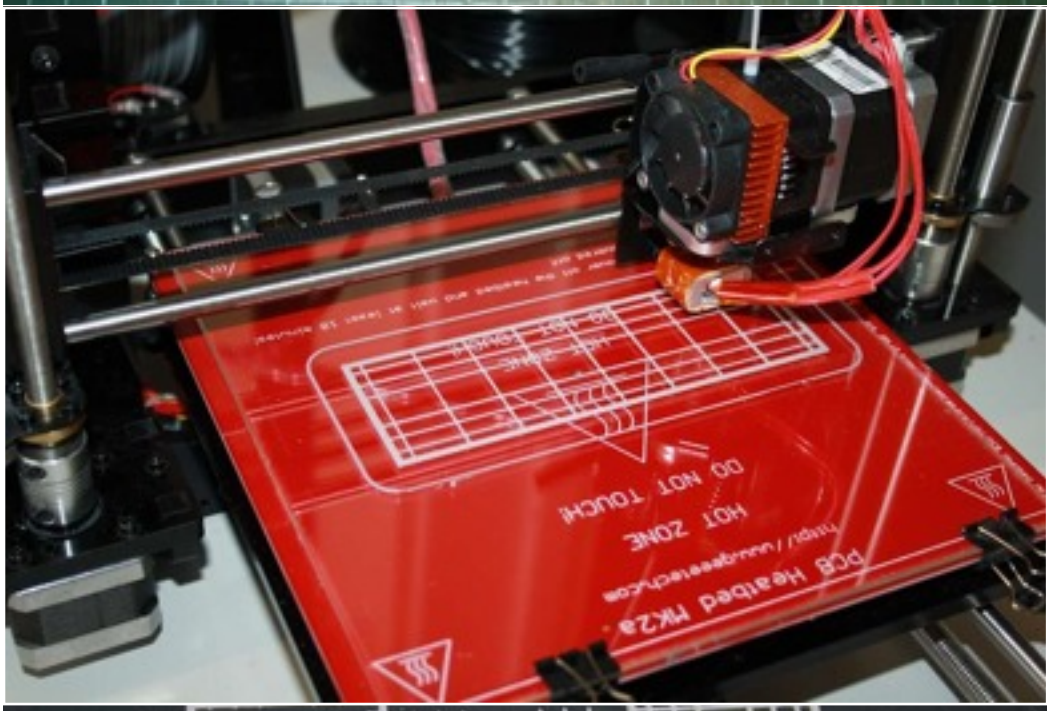


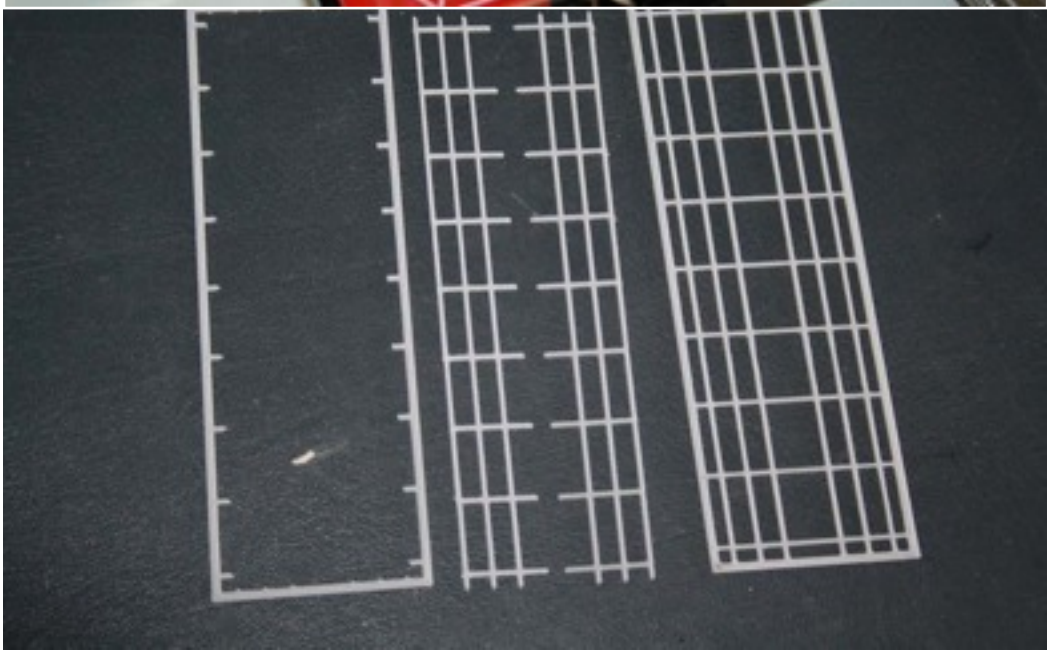
A variety of model parts printed on an FDM 3D printer

More photos next two pages.

Wheels in different sizes print well. It would be very difficult to make these with traditional modelling methods

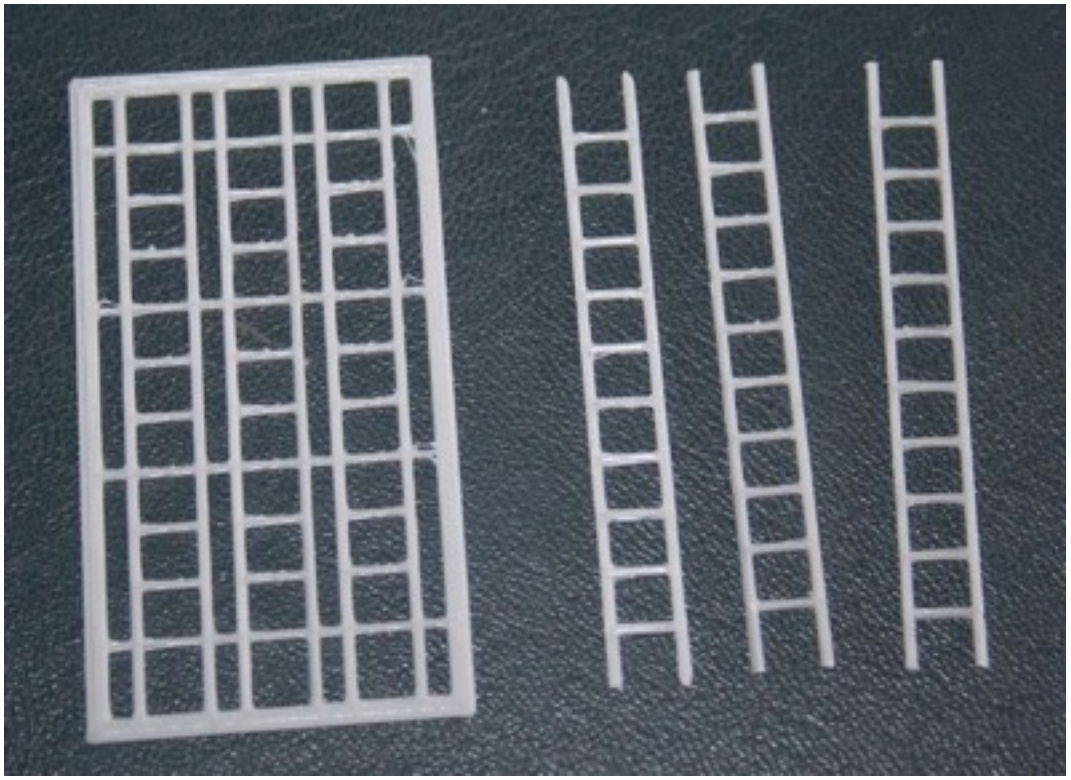


Railings being printed. The uprights and rails are printed at 0.8mm square.



Railings are printed on a sprue then are cut out.

A variety of 3D printed model ships



A set of three ladders printed in a sprue

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River Paddle Steamers' Rich History

Bruce George

PADDLE STEAMERS OF THE MURRAY RIVER- ECHUCA (VICTORIA) AND MANNUM (SOUTH AUSTRALIA).

PART ONE

Paddle Steamer reference material

The paddle steamers of the Murray/Darling Rivers complex are a unique part of Australian inland maritime history. Over the years many authors and researchers have written numerous books and articles on the subject.

I've collected a few of the many reference books/DVD/photographs and a plan of the PS Adelaide, this represent a very small section of information and stories of the "river boat family". The listed references outline the history, development , early construction details of these vessels and represents a handy reference source of maritime history. They are particularly informative for those involved in scale model paddle boat construction.

A selection of these books, a DVD and a plan held by the this author are noted :

(a) Australian Riverboats A pictorial History by Peter Chrisopher

(b) PS Enterprise by John Clarke and David Wardle

(c) Paddle Steamers and Riverboats of the Murray River - Australia by Pete Dobre

(d) Paddle Steamer Adelaide (1985) by Helen Coulson

(e) Paddle Steamer Adelaide (updated 2016) by Helen Coulson

(f) Paddlesteamers and Riverboats of the Murray River by Peter Christopher

(g) DVD - Source to Sea The story of the Murray Riverboats

(h) Float A Boat Plans of the PS Adelaide.

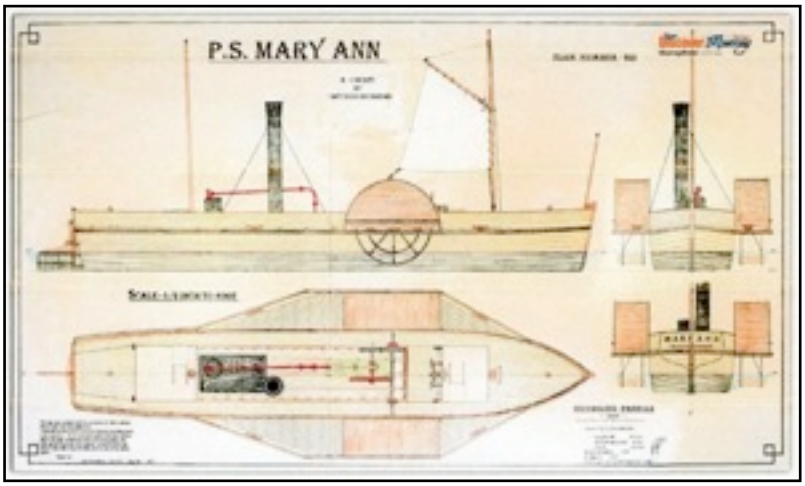
(i) Internet downloads of historical accounts, pictures of paddle boats , details of individual existing and past paddle steamers.

NOTE; Contained within these publications are a number of lists of paddle boats, built at various locations and over varying periods of time. Close scrutiny of these lists show that there are a number of contradictory details relating to these boats and as a result it is not known if there is a truly accurate and complete list of all details of the boats

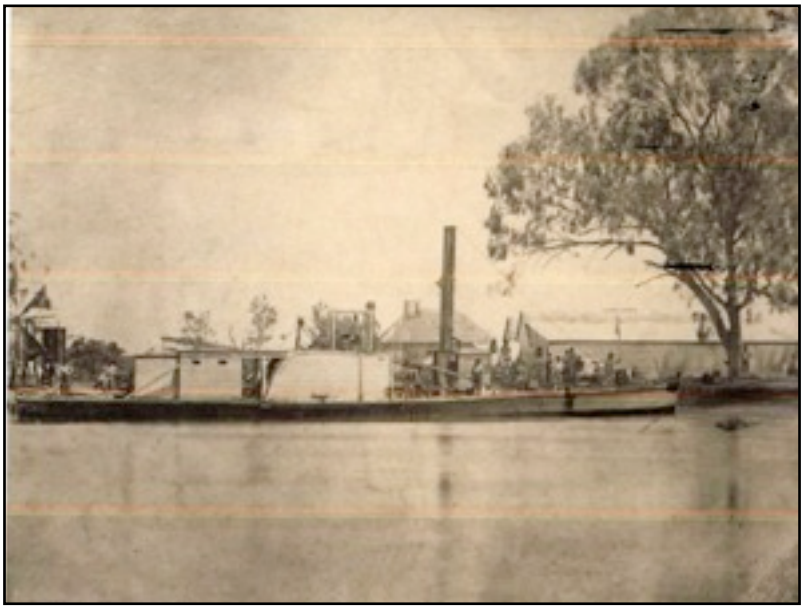
built. Not withstanding , Wikipedia also has a fairly comprehensive list at "List of Paddle Steamers of Australia"

Start of Paddle steamer history (Murray River)

Well, how and why, did paddle boats become such an important part of the Murray River means of transportation? In Reference (a) above, it is noted that "The growth of the colonies of New South Wales , Victoria and South Australia brought the need for efficient movement of vast quantities of produce. The waterways of the south east of the continent were the obvious choice for transportation, but the ocean-based vessels of the day were unsuitable for commercial use on the extensive river networks". This was probably because of their overall length, deep draft and means of propulsion and many vessels would have still been sailing ships. The Murray River is well known for its twisting, shallow water levels (particularly during drought years) and a river with numerous snags. Another factor was that "the lack of roads and the limited capacity of horse-drawn wagons meant that water transport was really the only option for commercial viability" .



P.S. Mary Ann and P.S. Lady Augusta.



So what was the solution? In June 1850 the South Australian Government offered a reward to the first steamboat to travel upstream along the Murray River to the Darling River junction, in an effort to encourage the development of the river trade. Port Elliot near the Murray mouth town of Goolwa was designated as the outlet for the River Murray trade by the South Australian Government in 1851. A public railway was subsequently built to link the river port of Goolwa to the ocean port of Port Elliot, with horse-drawn carriages operating on a single pair of rail tracks.

"In May 1851 Captain Francis Cadell put a proposal to the South Australian Government for a three component payment totalling 2,500 pounds ($5000) if he was to bring a paddle steamer into the Murray, and take it and a barge to the junction of the Darling River and to continue to operate it on the river for a year. The offer was accepted by the South Australian Government which was keen to encourage the start of a commercial river trade".

In 1853, the 55-foot "Mary Ann" built by Captain William Randell and his brother Thomas, was launched near Mannum and made ready to

undertake the trip. As much as any interest in the reward the commercial prospect of profit from delivering essential supplies to the Victorian goldfields also drove the enterprise.

Prior to August 1853 , Captain Cadell had the 97-foot "Lady Augusta" built in Sydney and was overseeing the build of the barge "Eureka" at Goolwa". After steaming and sailing from Sydney, the "Lady Augusta" entered the river through its mouth on 16 August 1853 and took the Goolwa barge "Eureka" in tow on 25 August..

Now the race was on. On the 15 August the "Mary Ann" with Captain Randell again steamed up the river from Mannum. "The captains of the two vessels first saw each other three days downstream from Swan Hill, with the "Lady Augusta" reaching Swan Hill only hours ahead of the "Mary Ann" on 17 September 1853."

The pay off. Captain Cadell received the payment as arranged and Captain Randell received 300 pounds ($600) and a public subscription of some 400 pounds ($800) not an unsubstantial sum for the times.

It can be stated with some confidence that these initial actions effectively triggered the commencement of the Murray/Darling paddle steamer era, the establishment of a number of towns along the Murray River and created an active and important trade link to the sea and supply line within the States.

Building of paddle boats 1853 to 1866 and onwards . Between these years something like 54 paddle steamers were constructed and plied their trade on the Murray/Darling Rivers. In 2007 26 of those noted as built during 1853 to 1866 still existed; some are operating steamers others are "static displays" .

Active steamers currently operate out of Echuca, Mannum, Goolwa , Mildura, Yarrawonga, Cobrum, Swan Hill, Murray Bridge, Wentworth and Renmark. Subsequent to this period many more paddle steamers and barges where constructed, some were new construction and many were converted from existing barges previously used to haul cargo. A number of these paddle steamers are still operating along the rivers in the tourist industry. Other paddle steamers are privately owned and used as residences or holiday house boats.

Cargos for Paddle Steamers. Downstream steamer's cargo was red gum timber, logged from the Barma**h** Forest and Echuca areas. With the development of the sheep industry, wool also became a major cargo. Other cargoes were wheat, flour, building materials and general stores.

Upstream cargoes included tobacco, tea, beer, stoves, galvanised iron, wire, dried fruit, cheese, pickles, pipes, drapery, sewing machines, sugar, hay, kerosene, candles, vinegar, boots, saddlery, nails, iron products and every thing conceivable needed to help develop and maintain towns and the families living on the river system . In later years even automobiles were also shipped upstream on barges/paddle steamers.

Barges . Most paddle steamers were of moderate size, so to move greater volumes of cargo (for greater profit margins), river barges were constructed. Barges are primarily open hulls with several holds (compartments) separated by bulkheads, most barges were steerable. In some instances space was provided for the single crewman, who steered the barge when it was towed. The helmsman needed knowledge of the river, the ability to know and anticipate the paddle steamers captain's moves as the steamer moved along the river. Another practice was to lash the barges to the side of the steamer. As the height of the cargo was raised the steering wheel was also raised so that the helmsman could see above the cargo load.

The correct management of a barge required correct loading methods, to prevent capsize and loss of the cargo; no cargo could be loaded higher than two thirds of the width of the barge. Bales of wool were loaded in a pyramid shape with a single row of

Hawker paddle steamer

bales on the top. Each layer of bales was firmly secured by wire cables and the cargo securely lashed all round.

Mission Boats and Hawkers. In the heyday of the Murray River trade most paddle steamers were used to transport cargo, but some vessels followed a somewhat different use. The mission boats "Eltona" and "Glad Tidings" brought religious comfort to small settlements and stations where the population was too small to support a church. More importantly were the hawker boats, which operated general stores. Randell and Cadell both operated in this fashion until it was realised that it conflicted with their supply of goods and provisions to storekeepers in the settlements. The "Prince Alfred" built in 1867 was the first vessel specifically built for this trade with the "Pyap", the "Queen", the "Marion" and the barge "Flo D"; the "Kookaburra" succeeding them up till 1956.

Milk Boats were also common along the Murray, during the first half of the 20th century. Usually motor launches and some paddle steamers were engaged in the business of transporting milk churns from the dairies to the processing plants at Murray Bridge.

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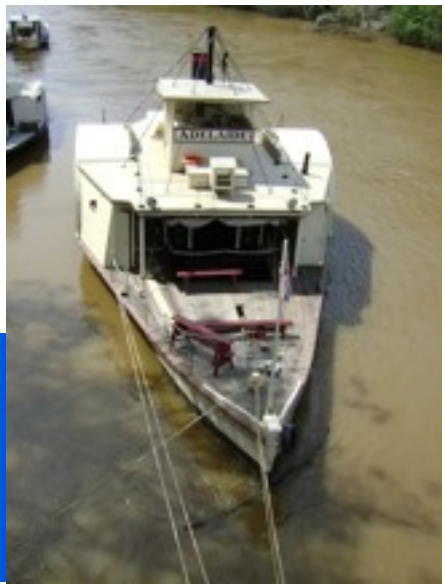


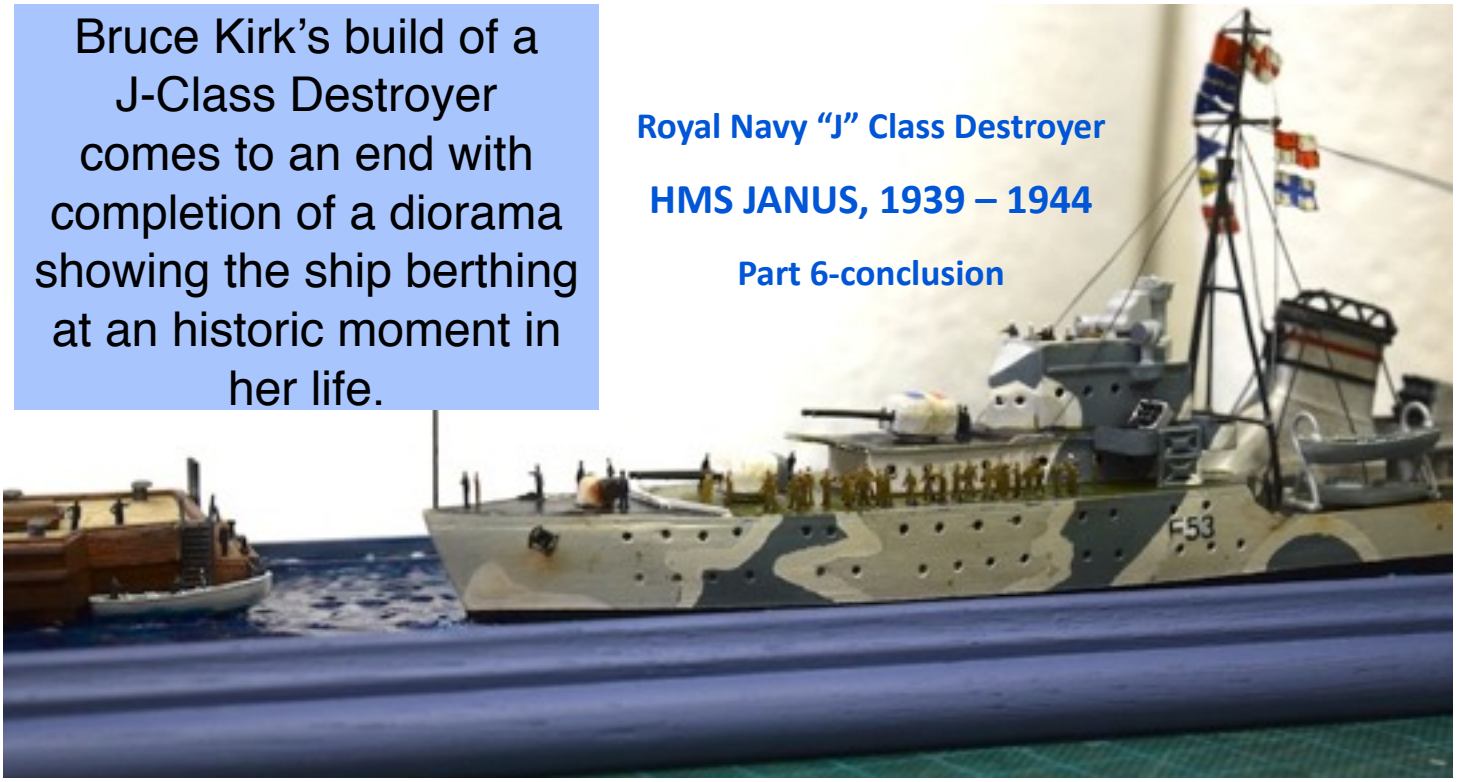
In Part 2 we will look at more details relating to PS Adelaide (right), PS Pevensey, PS Murray Princess, Echuca River Boat Museum and Paddle Steamer Scale Modelling.

Bruce Kirk's build of a J-Class Destroyer comes to an end with completion of a diorama showing the ship berthing at an historic moment in her life.

Royal Navy "J" Class Destroyer

HMS JANUS, 1939 – 1944

Part 6-conclusion



A diorama setting was chosen because *HMS Janus* would probably look a little forlorn just sitting on pedestals. Much better to reflect a historical aspect in the ship's life.

To start, a base is required. This can be sourced from any range of materials – timber, foam sheets, cardboard, glass or whatever else can be found in the hobby room or workshop. The spare parts bin or box is a good place to start.

In this instance, I used a piece of off-cut engineered blackbutt floorboard and attached picture moulding as edging.

The unprepared base with a trial positioning of a partly built *HMS Janus*.

How you site your model on the base depends upon its relationship with the other included features and the perspective you want the viewer to see – in my case the added wharf.

In helping to understand this relationship, it can be worthwhile first drawing out your diorama arrangements on paper. This also has the benefit of ensuring your base is of an appropriate size. One then just shifts the key pieces around on this "temporary" base to make the best composition. In my case, I also allowed *HMS Janus* a 5:1 ratio bow:stern distance from the front and rear diorama edges.

Unless there is a particular reason with a single ship only diorama, it is probably better to avoid absolutely centering the model on the base. Better to off-centre the ship(s) (either straight or angled) with any other diaroma features, thus drawing the viewers eye around a more integrated display. In addition, this helps ensuring the correct scale for sea states, bow waves and wakes.

"Water, water everywhere

Nor any drop to drink"

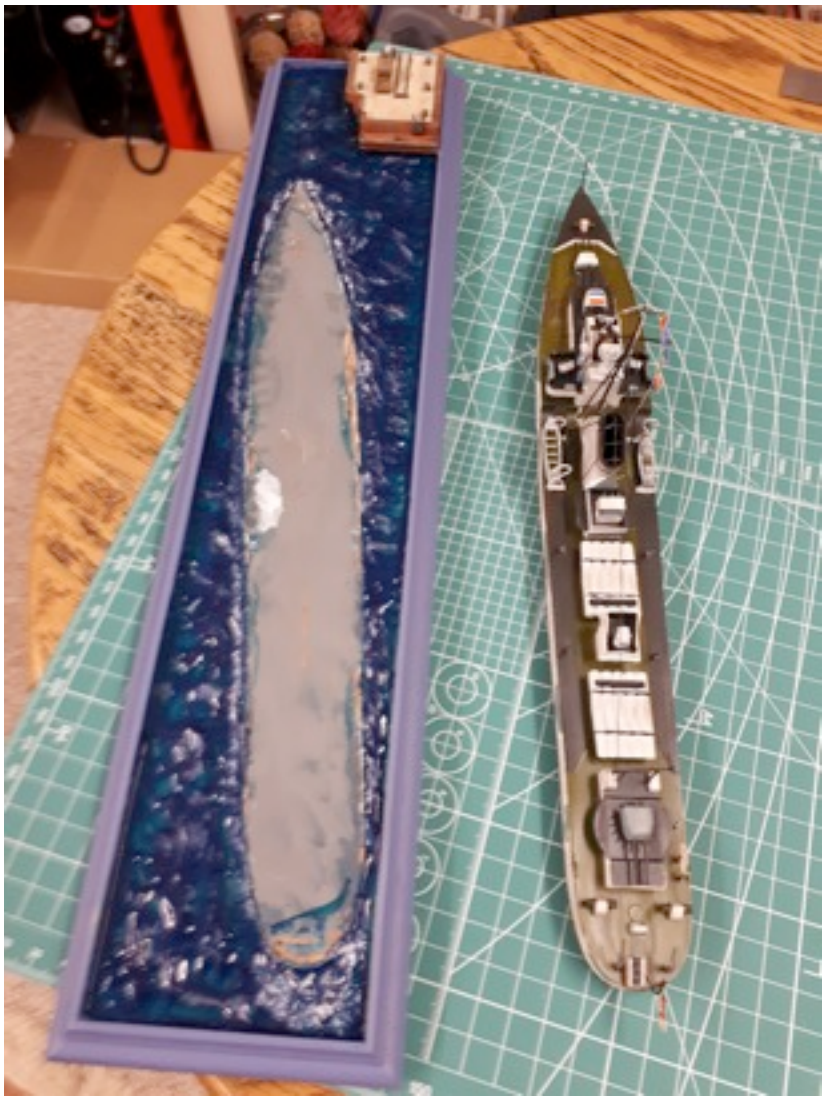
Samuel Taylor Coleridge, The Rime of the Ancient Mariner

How does one attach the ship's hull to the diorama base? Alternatives include:.

gluing the finished ship to the base then preparing water around it;

cut out a "hull block" which is then later removed after preparing the water; or lastly

just taking a deep breath and "plonking" the completed ship onto the still "wet" water.



What materials you use to represent water and the actual physical depth of the water may influence this decision - the choice is yours. In my instance, I used the "hull block" method as seen above

How do you prepare diorama water, whether this is an ocean, bay, river or lake?

I have in the past used Plaster of Paris or Hydrocal Lightweight Casting Powder, forming waves and wakes using moulding spatulas and an old paint brush. I do have Mont Marte Modelling Paste, but as yet have not tried this. Wave tips, wakes, bow waves or infilling any gaps between the hull line and water can either be moulded at the time of "pouring" or, if needed, later touched up with either the moulding material or Realistic Water. Drawn cotton wool has also been be used to represent spray. I have also read that white toothpaste can be used for hull waterline coverage. but so farI have only used this material for cleaning teeth.

Another option is to use a foam base and mould the waves by carving out suitable patterns and incorporating tissue paper to increase wave and sea perspectives.

You can also use aluminium foil which is scrunched up then flattened out with the crease lines forming wave patterns. This can be either glued to the base, covered with a thin coat of plaster first or even the reverse by pushing the foil into a wet paste base and removing once this base is dry.

The interesting part is then to paint the moulded water. You may wish to use an airbrush or hand paint brush or a mixture of both. This is done by layering different "sea" colours to indicate depth, ocean location or current conditions, often finishing with wet or dry brushing wave tops and gullies, as needed. A gloss varnish is usually applied to give reflection to the sea.

Resin can also be used and would be suitably coloured when mixing. Obtaining the correct sea or river shades could be interesting, or alternatively, you could paint the base first before pouring. I must admit to having no experience in using this material, but for *HMS Janus* I used AK Water Gel. This is a pre-coloured acrylic gel which can be painted or

smoothed on to the diorama base. This can be either done as a single or multiple layer and then moulded into appropriate "water" patterns. Some additional minor bow waves, hull/wake, lifeboat and wharf water patterns were added later using a syringe to apply the Gel and a toothpick to shape. Various water colourations were then additionally painted using wet or dry brushing and the finished water given a gloss varnish.

The photo right shows how the water looks as *HMS Janus* approaches the wharf.

With acrylic gels you may wish to experiment with first painting the base a relevant "sea" colour to give additional depth. I have found it better to use dilute rather than full strength paint as this can affect the final relevant Gel colour, but be aware sometimes paint incompatibility can occur. Best to try a small test run first.

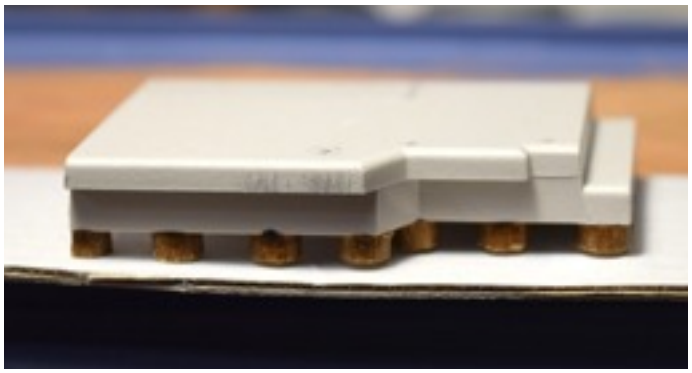
As there is no one correct method for adding water to dioramas, just do what best suits your needs. Useful references can also be found on both YouTube and in modelling books.

Wharf build

The other key diorama component is the wharf. This is made from a plastic part saved when dismantling an old printer, as one always does – you just never know when they come in handy. Of course, Murphy's law usually applies as you remember discarding a more suitable part!

Being an irregular shape makes for a more interesting wharf. I was able to incorporate an "end wharf" which is stepped lower to allow fishing vessels or smaller boats to dock. The main higher river side wharf deck level angles further out into the river allowing for larger ships to dock. The wharf is sited at the top right-hand corner of the diaroma, allowing *HMS Janus* to have a starboard approach.

Using a small pipe cutter and fine saw, 4mm diameter wharf pilings were cut from a timber rod and attached to the underneath of the wharf, allowing it to stand above the river waterline.



The "raw" wharf.

Wooden edging and fender strips were added, while the lower wharf level is planked. Some bump marks were gouged out in the fender strips which were then dry brushed with occasional neutral grey marks (where captains allowed their ships' hulls to rub against the wharf).

As the wharf extends out into water (as one usually does) and to ensure the wharf piles are all actually standing in water, the best option is to take a deep breath and quickly place the wharf into the prepared water surface before it sets. When done, this gives quite a good representation and any waves or turbulence around the piles can be added later. The remaining work on the wharf is done in-situ.

The main deck surface has a "cement" look made from a mixture of Polyfilla, grout and Haynes exterior paint "sandbank" Colorbond. The exposed deck cross sections on the non-river sides were also painted. While satisfactory for this diorama, I would not recommend painting the loungeroom wall with this mixture.

The whole structure was then lightly weathered for additional effect using Tamiya oil, soot and dirt weathering dusts.

A single rail line was added allowing for more efficient movement of ships' stores and equipment. Two 1mm x1mm styrene strips were laid up to a rail buffer sited opposite the narrowing end of the wharf. The ship scale being approximately 1:33 makes the rail line smaller than O scale (1:48) and finding commercially available engines or rolling stock somewhat difficult. Rather than attempting a scratch build, I cheated and took the easier option of just having some stores already set down. But what to use? A dismantled computer circuit board provided a range of suitable parts. However, as these were particularly well soldered onto the mother board, prising them away was difficult and certainly not good for the fingers and knuckles.

Two different bollard sizes were made for the main and lower wharf decks. Made from styrene rod with the bollard heads stamped out of styrene sheet, both completed bollards were painted burnt iron.

One wharf ladder is located from the main deck level to the lower deck level. The other ladder is on the riverside side of the wharf, with an officer from *HMS Janus* preparing to climb up from the lifeboat to provide an urgent briefing to command. I initially scratch built one ladder but discarded it as it looked out of scale. I subsequently improvised by using a narrow tension belt from my "old printer" spare parts bin, slightly modifying the sides and painting them. No one will know the difference.

Lastly, as I had crew and soldiers (albeit 1 in 350) on *HMS Janus*, a vacant wharf would look rather odd. As I still had a few spare figures, these were painted and added as both stevedores and naval personnel.

Looking to dock

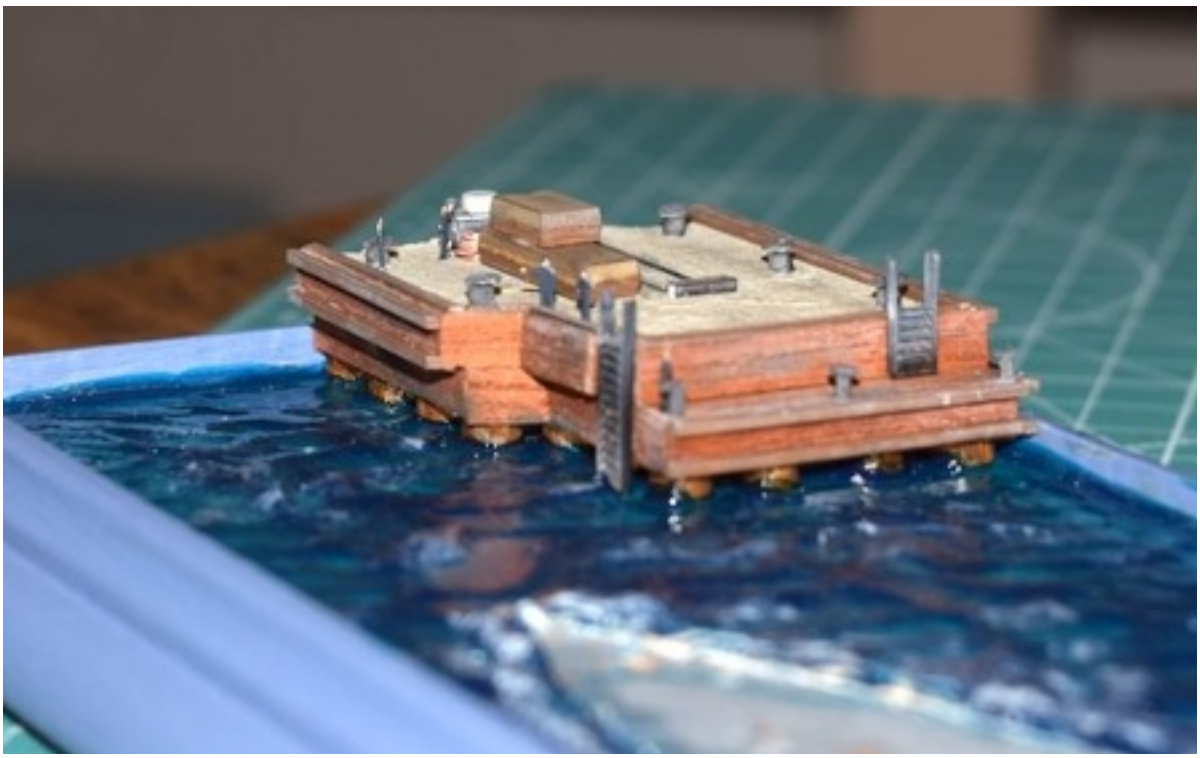
After gluing *HMS Janus* to the diorama base, minor adjustments to bow, hull side and wake waves were made and touched up with appropriate paint colour. The lifeboat was also placed adjacent to the wharf ladder with its crew having secured the painter line and an officer just about to climb up the ladder.

Last Word

HMS Janus is now resting in an acrylic display case which has so far not been dropped. This has been an interesting build, with many problems, headaches and sighs of relief. I just hope the next build is just as easy. Perhaps as a last word:

> *When facing a difficult task, act as though it is impossible to fail. If you are going after Moby Dick, take along the tartare sauce.* H. Jackson Brown, Jr. Quotes. (n.d.). BrainyQuote.com.

The finished wharf. Note hole in 'water' for ship; lifeboat yet to be placed.



Views of the completed model and diorama

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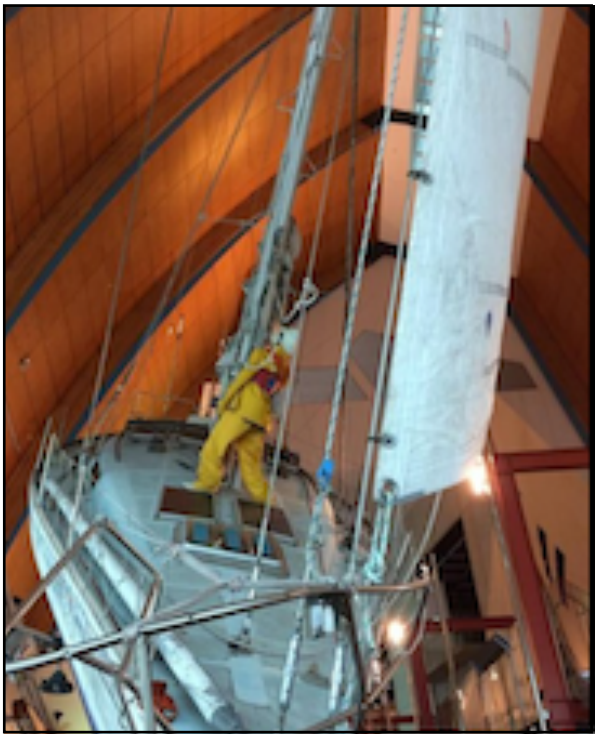

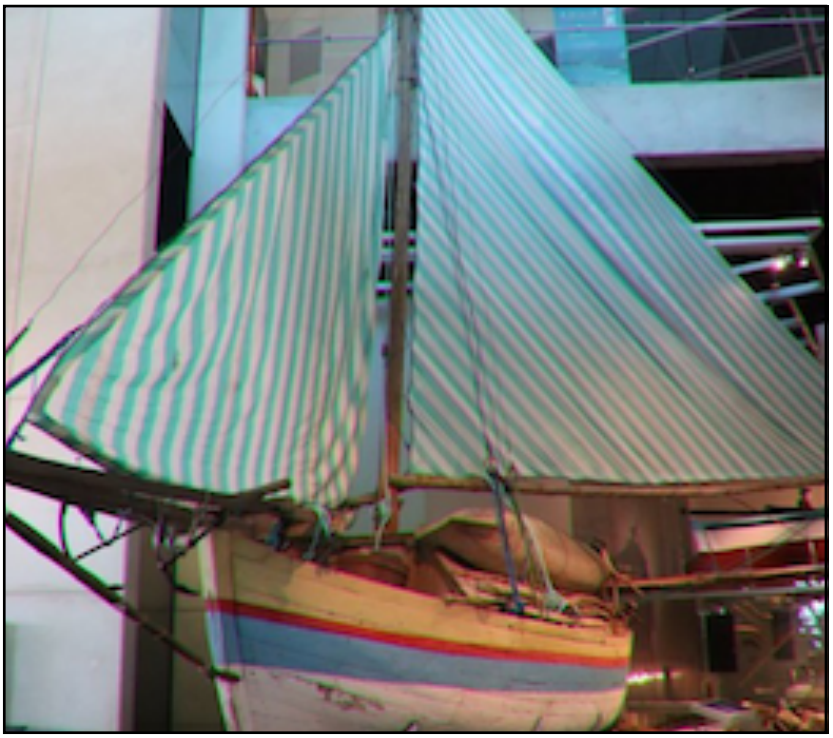

Worth a Visit

The WA Shipwrecks Museum, Fremantle, specialising in maritime archaeology, is well worth a visit any time you're in WA.The Museum is housed in the restored 1850s-era Commissariat building. The galleries house hundreds of relics from ships wrecked along WA's treacherous coastline, including the original timbers from the *Batavia* (wrecked in 1629) and many other interesting displays.

Photos: Doug Voce

A Sailor Went To Sea, Sea, Sea

A sailor went to sea, sea, sea.
To see what he could see, see, see.
But all that he could see, see, see.
Was the bottom of the deep blue sea, sea, sea.

Old nursery rhyme