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December 2022 Vol.72 No.865

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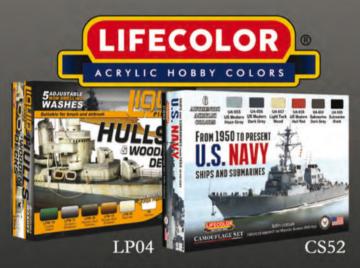
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WELCOME TO THE DECEMBER 2022 ISSUE OF MODEL BOATS...

eeing as this is the December issue, we're kicking off the 2022 festive season slightly ahead of the period officially recognised as Advent. For this I make no apologies, as considering the relentless doom and gloom in the 1:1 scale world right now, we're probably all, whatever our religious/spiritual beliefs, in need of a bit of comfort and joy. A big shout out, then, to the two fun-loving Harrys who have helped us get into the spirit of things, i.e., interviewee Harry Houdini – for being such a good sport and agreeing to pose as our cover star in his Santa hat, and contributor Harry Hitchenes for following up the 'twas the night before Christmas' tale he penned for us last year with another little light-hearted little yarn (albeit with a Jedi-style underlying message) entitled Sail Wars. Likewise, my thanks to Glynn Guest for allowing us to treat to you to another mini pull-out plan, to ELEGOO for so generously donating the fabulous Mars 2 Pro 3D Printer and resin package worth a whopping £243.98 to be won in this month's exclusive prize draw, and to author Gordon Longworth for kindly consenting to sign the copy of his new book, Building Scale Model Electric-Powered Boats, that we also have up for grabs. And, actually, while I'm clinking virtual glasses, whether you're a reader, contributor, work in the industry that supports the hobby, or are one of our lovely new colleagues at Mortons, cheers, too, for making this such a memorable year in all the right ways.

In the next issue, we'll be celebrating New Year with the first issue of 2023, which will include a free full-size plan, another exciting prize draw and lots more besides. If you're not a subscriber, though, a quick heads up... This will hit the newsstands on December 23, so be sure not to miss it in all the madness of the pre-holiday rush.

Enjoy your read! **Lindsey**



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- BY CHRIS WATTON -

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was a typical exan ple of this type of vessel. She was built at Barking in 1864, and was 74ft. 3 incl overall. These vessels could sail to wind ard faster than any vessel then afloat. With such a perishable cargo as fish, minutes counted d the weather least desired was calm or light airs.

Those that survived into the steam age enjoyed new careers as fast yachts.

Ranger is the final historical fishing vessel for now, bringing the total to six in this collection.

HMS Sphinx - 20 gun 6th Rate. 1:64th Scale



Length Overall - 797mm

Hull Length - 604mm

Height Overall - 627mm

Width Overall - 332mm

Price - £710

VM/40a Thomas Cochrane (1:64th) £10.00 VM/41a Lord Nelson (1:96th) £8.50 VM/41b Lord Nelson (1:72nd) £12.00 VM/41c Lord Nelson (1:64th) £12.50

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VM/63a Ships Cook (1:96th) £3.00 VM/63b Ships Cook (1:72nd) £3.50 VM/63c Ships Cook (1:64th) £3.80 VM/63d Ships Cook (1:48th) £4.80 VM/63e Ships Cook (1:32nd) £8.50

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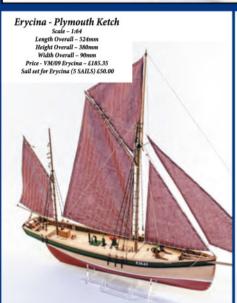












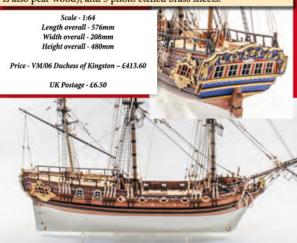




Designed, developed and produced in the UK

The royal yacht built for The Duchess of Kingston

This very popular kit has been developed using the original plans, and developed to be as easy to build as it can be, while keeping every detail possible. To achieve this, there are almost 20 separate laser cut sheets, 9 of which are in solid pear wood (Second planking is also pear wood), and 5 photo etched brass sheets.





The 80Foot Zulu Lady Isabella

Scale - 1:64 Length overall - 600 Width overall - 100m Height overall - 387mm Price - VM/03 Lady Isabella - £184.50 VM/03/Sail set for Lady Isabella (3 SAILS) £36.00

ese two Scottish fishing vessels are the perfect introduction to scale wooden modelling. They include very easy to follow instructions, complete with pictures for every step of the way.

Unlike many 'Beginner' kits, the materials used are the same as the most expensive kits in the range, with lime-wood for first planking and pear wood for second plank ing, plus pear wood laser cut parts, photo etched brass sheet and high quality colour manual and plan set. Als al and plan set. Also as with the rest of the range, each kit has two stands, one for building, and an acetate version for displaying your completed model.

The 70 Foot Fifie Lady Eleanor

Scale - 1:64 Length overall - 380n Width overall - 105mm Height overall - 327mm Price - VM/04 Lady Eleanor - £162.80 VM/04/Sail set for Lady Eleanor (2 SAILS) £28.00

NEW DEVELOPMENT

HMS INDEFATIGABLE - 1794 (1:64th Scale)

Work started on this development back in February. I have designed the model kit as she most likely appeared in 1796-1799. Following on from Sphinx, Indefatigable goes a little further with detailing, with not only scale spaced

upper and poop deck beams, but also lodging and hanging knees, The cabins at the stern will be fully detailed, including sideboard, a table and two chairs. A 3D printed high quality figure of Captain Pellew will be included, with an option for a Hornblower figure.

Her armament will be:

26 x 24 Pounders 18 x 42 Pounder Carronades

2 x 12 Pounder (Long) Chase Guns

Overall length

(With Flying Jibboom) - 1345mm (Without Flying Jibboom) - 1247mm Hull Only - (approx.) 880mm Height Overall - Approx 875mm Width of Main Yard and Stunsail Booms tips- 500mm This is our twelfth (and by far the largest, made possible due to investing in a second much larger laser machine) kit development since 2019, when Vanguard Models was founded, and expect this kit to released between December 2022-Ianuary 2023. The figures and furniture are available to purchase now, though, via our website.

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- BY CHRIS WATTON -

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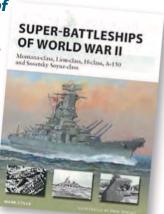
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The Salty Sailor

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Newly added to Timbercraft's range of mechanical model kits made of natural wood is the Salty Sailor kit (Ref. TK/48), which builds a manned sailboat that can be made to move with the waves that surround it simply by the turn of a handle. Carrying an RRP (Recommended Retail Price) of £32.95, the kit includes preshaped and drilled components, sandpaper, PVA glue and wax (to ease joints), along with a parts check list and comprehensive instructions, and on completion results in a display piece measuring 120mm (length) x 180mm (width) x 260mm (height). For further details,



OUT AND ABOUT

Christmas market

Saturday, December 3 and Sunday, December 4 will see the Scottish Maritime Museum, located in the Linthouse Building, Harbour Road, Irvine KA12 8BT, host its Christmas market.

The Christmas Market will be open from 10am to 4pm each day and entry will be FREE of charge.

Goods on sale will include home décor, glass art, handmade bags, Christmas decorations, art and photographs, children's clothes, hampers, jewellery, hand crafted personalised gifts, silk scarves, soaps, candles, Christmas cards, and much more.

If you're going along with the family, you can sign the children up to take part in the 'Make and Take' sessions, where all craft materials will be provided free of charge.

Free parking is available in the Museum Courtyard on Harbour Road and the adjacent public car park and refreshments will be available at the Linthouse Coffee Bar, while a full menu will be served at the Puffers Café just a short stroll away, on the harbourside.

Please note not all areas within the Linthouse Building will be accessible and some museum objects will not be in full view for the duration of the Christmas Craft Market.



Harbour Lights Boat Tours

Boathouse 4 at the Portsmouth Historic Dockyard will be running its popular Harbour Lights Tours again this year on the World War II Seaplane Tender 1502. Tickets are priced at £15 per person, which includes a mince pie and a glass of mulled wine. Tours will run daily from 4.30-5pm from Thursday, December 1 through to Thursday, December 22, but pre-booking your space/s (email BH4@pnbpt.com) is highly recommended to avoid disappointment.



SS Great Britain Victorian Christmas Weekends

This December will see the return of SS Great Britain's Victorian Christmas Weekends, with the Great Western Dockyard at Gas Ferry Road, Bristol BS1 6TY transformed into a winter wonderland and the ship herself decked out so that visitors can experience festive life at sea, from the scent of marzipan to the sight of traditional handmade decorations.

These Christmas celebrations will take place over two weekends December 3-4 and December 10-11. Opening hours will be extended to 6.30pm, and for those who arrive after 4pm the dockyard will be illuminated by lamplight, complemented, just to make things even more magical, by falling snow and music.

Tickets are priced at £19.50, with concessions and family deals available, and bookings are now being at www.ssgreatbritain.org. For further information, call 0117 926 0680 or email admin@ssgreatbritain.org



The return of Will Everard

Billing Boats' 1:67 scale kit for the *Will Everard* is back by popular demand. This follows a three-year break in production, during which time improvements, including laser cutting, have been incorporated into the manufacturing process.

BUILDING SCALE MODEL





You can expect to pay less than £100 (shop around for the best deals) for this kit, which is designed for the 'Advanced Beginner'. A list of worldwide distributors for Billing Boats' kits can be found at www.billingboats.com

BUY THE BOOK

Building Scale Model Electric-Powered Boats

This newly launched title, penned by Gordon Longworth and published by the Crowood Press, (www.crowood.com), details everything you need to know in order to start building scale model boats that can sail under their own power.

The well-illustrated topics covered include:

- A helpful guide to tools
- An explanation of the different types of kits and how to choose one best suited to your requirements/skill level
- Advice on glues, fillers, painting techniques and decal application Reviews and details of how to choose, fit and operate various R/C systems
- Details of how to choose and install components such as drive motors, propellors, batteries and rudder servos
- A useful guide to the design of electrical circuits
- How to add special effect equipment, such as lights, smoke and sound generators
- Step-by-step example builds of an off-the-shelf kit for a steam yacht and a scratch-built RNLI Severn class lifeboat.

The 192-page paperback format book carries an RRP (Recommended Retail Price) of £20 and can be purchased directly from the publisher's website at **www.crowood.com** or ordered from your local bookstore by quoting ISBN 9780719841170.

TERMS & CONDITIONS

Competition closes December 23, 2022. There are no cash alternatives available. Terms and conditions apply. To view the privacy policy of MMG Ltd (publisher of Model Boats) please visit www.mortons.co.uk/privacy

WIN A SIGNED COPY!

Thanks to the generosity of both Gordon Longworth, the author, and Crowood Press, the publisher, this month we're able to offer you the chance to win a signed copy of *Building Scale Model Electric-Powered Boats*.

To be entered in this exclusive prize draw, all you have to do is complete the form below and mail it back to us at:

Building Scale Model Electric-Powered Boats Prize Draw Mortons Media Group, Media Centre Morton Way Horncastle Lincs LN9 6JR

Please note, the closing date for entry submissions will be Friday, December 23, 2022.

Good luck, everyone!

Buildin	g Sca	le Mo	del E	lectri	с-Рои	vered	Boats	Prize	Drav
Name:									
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Dave Wooley reports back from this year's event at the Norbreck Castle Hotel



odel shows, and particularly model boat shows, are thin on the ground these days, as many of the long-established shows have sadly fallen by the wayside. I am, therefore, delighted the Blackpool Model Show continues – although, I hasten to add, not purely as a model boat show. The organisers have been savvy enough to realise that if events such as this are to survive, then they need to evolve and diversify in order to attract a much wider and larger audience.

Blackpool, therefore, now embraces scale trucks, armoured vehicles, heavy plant, etc, as well as various model engineering exhibits. However, while I appreciate both





LEFT: This is how it's done! Some technical instruction on a Shannon lifeboat model.

BELOW: The alure of sail, with J-class hulls and yachts.



The standard of all exhibits on display was extremely impressive. Richly deserving of this year's 'Best Scratch Built Model' and 'Best in Show' awards, however, was Alan Grafton's large and beautifully detailed tug, the *Flying Phantom*. Alan had travelled up to the show under his own steam and had displayed the model that saw him presented with the coveted Tower Trophy on the powered boat modeller's stand, but will no doubt be the toast of his fellow club members at the Eastleigh & District MBC.

BELOW: The Manx MBC display always generates lots of interest.

the commercial reasoning behind this, and the benefits of bringing the modellers of all persuasions together, naturally it is the model boats we shall be mainly focussing on here. I am delighted to report was genuine evidence of renewed interest in all forms of model boats at the 2022 Blackpool Model Show, with a noticeable rise in new builds on display.

Clubs and individual exhibitors

This year Blackpool show hosted 24 clubs and 13 individual exhibitors. As you would expect, given the location, the show has always been supported by clubs in the north of the UK, but this year the Tusker Marine Modellers (Ireland), Stevenage MBC, Southend MBC and the Dover Model Boat Association were amongst the clubs that also attended.

ISLE OF MAN MARITIME HERITAGE
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STERE

13

An attractive 1:144 scale model of the

ocean liner France by Michael Haslam.



ABOVE: Water jet powered sea boarders – very different!

BELOW: Given that the Blackpool show now embraces a whole variety of modelling interests, this R/C Sound of Seil model displayed by Fairhaven MBC (Blackpool) seemed a particularly apt exhibit.

The 'Best Club Stand' for 2022 went to Hooton Park Trucks, which I don't think anyone could dispute hadn't been well earned, considering all of the work that must have gone into the transportation and on-site assembly of its large and magnificent display.

From a personal perspective, I was particularly impressed by the electric/ electronic functions board displayed on the Kirklees MBC stand. For anyone perplexed by the intricacies of the installations within model boats and the jargon associated with electrics/electronics, then this board, assembled by Stan Reffin, explains everything in a very straightforward and easy to comprehend way.

Trade support

2022 saw 16 different traders attend the Blackpool show; interestingly, all of whom were associated with the model boats side of the event. I have to say it's reassuring to see how so many in the trade appear have weathered the storm (brought about by the pandemic and economic downturn) and by adapting to circumstance now appear to be thriving.



The 2022 show proved to be a winner in every department. With the 2023 show already confirmed, however, this resounding success presents a few challenges going forwards, one of these being space. For example, this year the Bring and Buy stand had to be moved from the main hall to a room located off the show's entrance corridor, and although its location

was clearly highlighted in the program, to me, it felt a little off the beaten track. Nonetheless, the RNLI and the Air Ambulance benefited from money raised by this popular stand, which amounted to an impressive £1,410.

MODEL BOAT CLUB

As a final word, I would like to thank the organisers, and particularly David Jones for his help during my visit. Congratulations to you all for putting on such a superb show!





plus instructions for this easy build 1:36 SCALE US ARMY 'ST TUG 1:36 SCALE

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you. Not only does it come with full instructions, but ELEGOO also

provides a YouTube tutorial that will guide you through the set up and

demonstrate just how simple this amazing little device is to use: (you can view this by keying https://www.elegoo.com/products/elegoo-

Here are just some of the features that make ELEGOO's Mars 2

 $mars-2-pro-mono-lcd-3d-printer\ into\ your\ browser).$

Pro MSLA 3D printer a real modeller's must-have:



To further explore the ELEGOO range of 3D printers & accessories visit, https://www.elegoo.com

* Outstandingly accurate prints

The brand-new light source structure in the Mars 2 Pro MSLA provides more even UV light emission and, working together with the 2K mono LCD, results in amazing printing detail and precision.

* Sturdy build quality

The CNC-machined aluminium body makes Mars 2 Pro a very formidable machine indeed. The newly designed sandblasted build plate provides strong adherence during printing, thereby enabling consistent printing success. Added to that, built-in active carbon helps absorb any fumes given off by the resin, making even working in the smallest of spaces an altogether more pleasant printing experience.

* Multi language interface

The Mars 2 Pro now supports 12 different languages, including English, Chinese, Japanese, Dutch, Korean, French, German, Russian, Italian, Spanish, Turkish and Portuguese.

* Warranty and service

ELEGOO provide a one-year warranty on the whole printer and a six-month warranty for the 2K LCD (FEP film is excluded - the Mars 2 Pro, however, comes with two extra FEP films, so you can easily replace the original one if necessary).

HOW TO ENTER

To be included in the draw, all you need to do is complete the entry form included on this page, cut it out (photocopies of the form will be acceptable for those of you who do not wish to deface your magazine) and mail it back to us at:

Mars 2 Pro Prize Draw Model Boats. Mortons Media Group, Media Centre, Morton Way, Horncastle, Lincs LN9 6JR





Please note, the closing date for entry submissions will be Friday, December 23, 2022.

Good luck, everyone!

TERMS & CONDITIONS

N.B. For this particular prize draw we can only accept entries from those residing in the UK, countries the European Union and North America. The competition closes December 23, 2022. There are no cash alternatives available. Terms and conditions apply. To view the privacy policy of MMG Ltd (publisher of Model Boats) please visit www.mortons.co.uk/privacy

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* Light Source: UV Integrated Light (wavelength 405nm)

* Languages: Chinese, English, Japanese, Dutch, Korean, French, German, Russian, Italian, Spanish, Turkish and Portuguese

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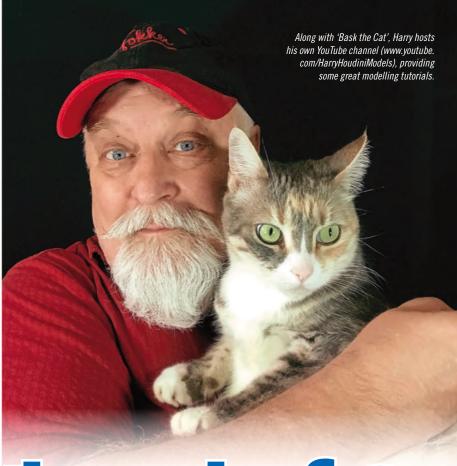
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Shooting the breeze...





The Wizard of Oz

Harry Houdini, the award-winning Aussie YouTube modelling channel host, chats with our Ed, Lindsey Amrani

any of our readers will already be familiar with your YouTube channel and online merchandise store, Harry, something we'll move on to shortly, but to get started, can you first tell us a little bit about yourself, and how and why you got originally got into scale modelling?

Α

My father built balsa wood model aircraft, so even from a very young age I learned to work with wood to shape and create models with him. Then, one day, after school, I was in the newsagent in my little village and saw a rack of the new Airfix plastic model kits. I was fascinated and even though they cost a month's pocket money I decided to lay-by a Spitfire. One month later I eagerly took the kit home and built it in a few hours. I was hooked! Although my father didn't think the plastic kits were much of a challenge, he bought me more as birthday and Christmas presents. One time he brought home the new Airfix 1:600 HMS Warspite kit for me. This ship had special meaning to him because, before serving in the South African Navy, as a boy had walked the deck of the Warspite while it was laid up in Durban for a refit the end of World War II. Ships and boats then became my subject of choice.

Q

How did you go about honing your skills?

Α

As mentioned, my father got me started and taught me to model in wood. My plastic modelling skills, though, were learned from being a sick with bronchitis as a kid, often home from school, so I'd be in my bedroom whiling away the day building and painting models. Those early kits

were not 'shake'n'bake' like many modern plastic kits, but the skills acquired from woodworking transferred easily to shaping and sculpting plastic.

Q

How did your hobby then evolve to the point where you felt ready to turn it into a business?



Currently a work in progress, Harry has decided to build the Airfix 1:600 HMS Warspite kit he originally modelled as a boy in tribute to his late father, but this time with a wood veneer deck, metal barrels and a heap of scratch upgrades.

A

I'd say more cottage industry. I had a break from model kits from my 20s up until my 50s, but still used my artistic skill in theatre and television to craft props and sets, and also while renovating a 100-year-old workers cottage with my wife. I even built 3-D computer models of castles in Second Life for a decade, which was a very successful business – less hands on, but the logic in construction was the same, and I used my computer graphic skills to create all the realistic texture skins for my castles.

YouTube came much later. I returned to scale modelling in my 50s after finding myself alone and at a loose end. After watching the movie Battle of the River Plate, the story of sinking the Graf Spee, I remembered how it was one of the few Airfix ships I hadn't built back in the 70s. So, after searching around, I ended up buying a kit. I was back in the hobby, and with social media I could share my work with friends. They were so encouraging that I started a small YouTube channel just to show off my builds. I never expected it would grow into a major income stream within a decade.

Q

I know you've won numerous awards and trophies in modelling competitions in the past, so were your early wins the catalyst for you becoming such a well-known figure within the community, or would you credit your success to having created a such a huge and dedicated following on social media platforms?

Harry's build of Trumpter's

1:350 scale Graf Spee.



Under construction, Zvezda's 1:350 kit for the Imperial Russian Navy cruiser Varyag.

Δ

My awards were incidental, and often accidental. I never built to win, just for fun. However, friends encouraged me to enter in competitions and I have since won numerous awards. They're nice to have, but not the driving force behind my hobby, nor do I think my viewers really care. Social media, namely Facebook and YouTube, propelled me into the spotlight more than any awards ever did.

Q

For any of our readers unfamiliar with your YouTube channel, can you give us a brief synopsis of what they can expect when viewing the videos you post? And what would you say was your USP (Unique Selling Point) and the reason behind the huge following you've built up and the demand this has generated for Harry Houdini branded

merchandise?

Α

USP... Well, Bask the Cat, is a big selling point. She's my foil on the shows and even runs the Facebook Group, Fokker the Rivet Counters, serving to embody my distain for nit picking and abusive people, who just don't seem to understand the hobby is meant to be fun and enjoyable. My banjo playing is enjoyed and requested often by my viewers, too, although I'd be the first to admit I am a bit ham fisted with it and only do the tunes for a lark.

But in truth, the feedback from my subscribers is that they like the detail I go into about techniques and the problem-solving strategies I feature in my videos. Plus, my light-hearted and often jokey manner help to keep things interesting. I don't rivet count, but I like my models fairly accurate, and with my years of wood working and plastic sculpting skills I'm not afraid to scratch build a missing feature or rebuild a badly moulded part, clearly showing just how easily this can be done.

"Friends encouraged me to enter in competitions and I have since won numerous awards. They're nice to have, but not the driving force behind my hobby, nor do I think my viewers really care"

Shooting the breeze...

"The feedback from my subscribers is that they like the detail I go into about techniques and the problem-solving strategies I feature in my videos. Plus, my light-hearted and often jokey manner help to keep things interesting"

Q
I appreciate that as a modeller you have broad thematic tastes, but when it comes to model ships/boats, do you have any favourite subjects and kit manufacturers? And which are the particular scales you favour/shy away from, and why?

I don't like 1:700 much. My old eyes and fumbling fingers don't cope well at scales that small. For steel warships I like 1:350 scale; it's big enough to cope with, and most models fit on my bench. 1:200 as a warship scale is just too big for me.



Painting and detailing the Airfix 1:140 scale kit for the St Louis, and the magnificent end result.





Easy to follow rigging tutorials can be viewed on Harry's YouTube channel.

However, with sailing ships I favour 1:150, or thereabouts. It's a good scale for most 'ships of the line', and my fingers can cope with the rigging! Also, they're not too huge to paint or display.

Having said that, recently I was gifted some 1:350 old IMAI re-boxed contemporary sailing ships, and surprisingly had a ball building them. I dumbed down the rigging a lot and haven't made tiny sails for them, but they are fun to work with. I would never have known they would be so much fun if I hadn't been given these kits as a gift.

Other things, like motorboats, are better in 1:72 scale for me. Basically, it's usually the 2ft rule. I like a kit, in any scale, to be around 600mm long, as it then fits in my spray booth, on my workbench, and has enough painting and finagling to keep me busy.

How do you decide what you are going to model next?

I do poll the patrons and YouTube members who fund my channel, and give them a list of kits not finished, or which I did a box open video review of but then never actually built. This year I've managed to work on two or three of the ones that have received the most votes. The Rolls Royce Armoured Car, though, was dropped when my father passed away; I decided instead to do a tribute build of the venerable Airfix Warspite for him, but this time with a wood veneer deck, metal barrels and a heap of scratch upgrades.

You must have built thousands of models over the years, so what do you do with all your finished builds? And, assuming you can't hold on to all of them, due to space restraints, how do you decide which ones will stay and which ones will go?

When I was young, due to my father's work we would move every year or two, so I gave away any models I'd built after realising they just got broke and ruined in packing boxes. Consequently, I have none of my builds from those years, and very few photos.

Shooting the breeze...





moves. I only keep on display the last half dozen ships I've built, plus a few old aircraft and armour, mostly award winners with their medals. The rest are in storage and most likely will be gifted to friends and family in time.

As a very experienced modeller, what advice would you give the complete novice and are there any particular kits or brands you would

recommend as first projects?

Just go for it! Find a subject that interests you, have no expectations, and just enjoy the build. The next kit will always be better. You can't expect to achieve perfection the first-time round. Have fun as a priority and ignore

LEFT: One of Harry's battleship kit bashes: showing how he's added extra detail with Plasticard.

BELOW: Harry has very diverse modelling interests, as evidenced by this award-winning build of Hobby Boss's Land Wasser Schlepper.



Since my return to the hobby, I've built a few hundred models, but I've given many away, lost a few to cat attacks, while, again, some succumbed to damage during house

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Also built from a Fujimi 1:1700 scale kit was this cute little Yamato 'Egg Ship'.

the rivet counters. Then you'll have a hobby you truly enjoy, and slowly, slowly, you'll become more experienced and skilful.

Q Likewise, when starting out, what would you say are the most important basic requirements in terms of tools and equipment? And, from a personal point of view, what's the one piece of kit you own that you now simply be without, and why?

I returned to the hobby as I first started, almost, with a nail cutting set (scissors, tweezers, nail file, etc), a stable table to work on and my living room lamp to light it all. Just start small and buy things as you need them. Obviously, you'll need a knife, tweezers,

> Harry's intricately detailed 1:350 scale Nippon Maru, created from an Aoshima kit.



sandpaper or files and some glue, plus a good light source and a cutting matt will help.

Now I have planking tools, contour tools, mitres, specialised drills, hammers and pliers, plus the best sprue cutters I can afford. But that's just the luxury of being older and able to afford such foibles. Use what you have and just get on with it. In time, as needs grow, you can build up your tool set, but in truth you need very little to knock out a fun model.

Q

Do you own and make of use of 3D printer, and, if so, what do find this particularly useful for when modelling ships/boats?

Α

I have been monitoring the whole domestic 3D printing scene, as I have the 3D computer skills from all those years making virtual castles. But, as at first the quality simply wasn't there, so it was far quicker for me to scratch build from plastic card or wood.

I do have friends who are getting into it, and they have sent me railings, cannons and even pulley blocks for my ships. It's getting better and the proliferation of free files to print from is fantastic. But I'm not ready to give up on the skills I've spent years developing when it comes to sculpting, shaping and moulding parts just yet. I like to get my hands dirty!

Q

Do you, or have you ever been tempted to, dabble in R/C modelling?

A

My father and I built control line aircraft models that flew on wires, and we even built an R/C glider. All of those wooden models crashed. However, I found the repairing was more fun and less stressful than the flying.

Q

What's your Achilles heel in terms of modelling skills, e.g., something you've always struggled with or know you need to improve upon?



A

I'm not a happy figure painter, so few of my models ever include figures. My last Spitfire build had the pilot painted by a friend, who loves that sort of stuff. Not my cup of tea, although I did manage to paint the moustache on a 1:72 Porco Rosso figure. Took me a whole day to get it right. I have better things to spend my time on.

The other is getting a shiny glossy car body. Sometimes it works, but more often than not it's so bad I muddy up or crash the vehicle to hide my dreadful paint job.

Q

In terms of marine models, what would be your Holy Grail, i.e., the vessel you'd most like to build a really spectacular model of/see kit manufacturers produce?

Α

I've always wanted to build the Indefatigable class battlecruiser *HMAS Australia*. Combrig do make a resin kit, but I don't like working in resin for health reasons. A plastic injected kit in 1:350 would be wonderful. Maybe one day I will scratch build or kit bash one.

HARRY'S SOCIAL MEDIA SITES

YouTube

https://www.youtube.com/ HarryHoudiniModels

Website:

https://www.houdinimodels.com https://houdinimodels.com/shop

Facebook:

https://www.facebook.com/HHModels

QUICK FIRE QUESTIONS

Q

He's making a list, he's checking it twice, he's going find out who's naughty or nice... Santa Claus is coming to town! So, what do you hope he'll be bringing you?

A

Better glasses and less wobbly hands... I have enough model kits.

0

Favourite Christmas movie?

A

Die Hard, of course. Hippy buy hay muddy trucker!

0

What's the one track you can never resist singing along to loudly if comes on the radio while you're out in the car?

A

I don't listen to the radio anymore. But I stream a lot. I sang in the many bands that I played guitar, piano, and later banjo, for. I even squeak out a tune on YouTube now and then. But honestly, my lungs were damaged from bronchitis, so I don't sing much.

0

If you could take the road trip of a lifetime with anyone (living or dead), who would you choose to be riding shotgun with?

A

Bach... mathematical music! He would be amazing to play with.

Q

Top three pet hates?

Α

- 1. Rivet counters
- 2. Keyboard warriors
- 3. Internet trolls

O

Food heaven?

A

Curry! Hot and spicy, and mostly vegetarian, please.

0

Food hell?

Α

A steak dinner. No can eat due to gout.

Q

Favourite city/place in Australia [Harry's home country]?

Α

I do love it on the Sunshine Coast in Queensland. Facilities are close by if I need them, but a country spin on the motorbike to blow the cobwebs away is just minutes from my door.

O

City/place you've most enjoyed visiting, or would most like to visit one day, overseas?

A

I've been to Bali a few times and really love the less touristy part of the island. But a world tour of the remaining classic museum ships would be my ideal holiday. Someone sponsor me now!

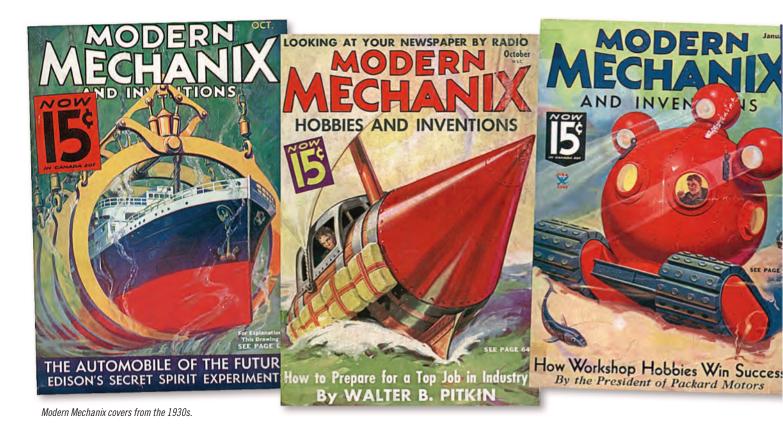
C

If you carried a warning label, what would it say?

Δ

Warning: extreme waffling!





Ancient Mechanix

John Parker showcases some gems from a 1930s' treasure trove of inspiration

he pages of an old magazine can provide inspiration aplenty for modelmakers willing to try something a bit different for their next project, and none more so than the pages of *Modern Mechanix*. Produced by Fawcett Publications, this American magazine underwent a bewildering number of name changes from its inception in 1928 to its demise in 1996, but it's the issues of the 1930s' era we will be looking at here. The magazine started that decade with the title *Modern Mechanics and Inventions*, changed its spelling to *Modern Mechanix and Inventions* in 1932, and then became *Mechanix Illustrated* in 1938.

Amazing covers

Modern Mechanix really excelled with its covers. The full colour artwork, usually by Stewart Rouse, depicted startling machines achieving improbable feats amidst a blur of brightly coloured spherical wheels and naïve structures, with their grim-faced operators bravely forging new paths into a mechanical future. Stewart was a prolific illustrator of the period, whose work appeared in many magazines, including Popular Science and Model Aeroplane News.

Inside, an article would tell of a hardpressed inventor struggling to get recognition for the amazing abilities of his machine; abilities that, all too often, had "Modern Mechanix really excelled with its covers. The full colour artwork, usually by Stewart Rouse, depicted startling machines achieving improbable feats"

never actually been demonstrated but would surely follow once he had the money to build a larger prototype like the cover illustration showed. And there the story would grow cold. We never saw the personal helicopter that you could fit into your garage, or the gigantic liner that skimmed across the ocean at 100 miles per hour. It mattered not. As far as the magazine went, the invention was already a success, in that it stimulated the imagination, got people thinking (and inventing) and helped sell copies at the newsstand. By way of illustration, I have chosen some nautically themed covers.

April 1934

This is one of my favourite covers, showing a 'Submarine Sledge' for hunting sunken gold. The operator, wearing a self-contained diving suit, sits in a metal armchair equipped with runners, rudders and "elevating fins" operated by a lever. The idea is that he would be towed by a surface vessel while

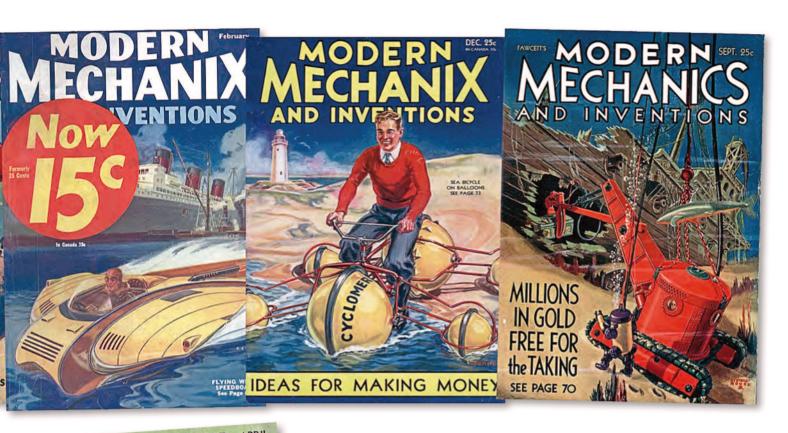
he angles down to scoot along the sea floor, somehow managing to stash his finds along the way in the side panniers that double as convenient armrests.

I'm sure you can see there might be a few problems with the concept. Here's one: visibility in the ocean is seldom as good as it's portrayed here, and the operator will surely get a shock one day when he realises that the shape materialising out of the gloom ahead is the hull of a shipwreck, as he is towed at speed into it, frantically tugging on his elevating lever...

June 1934

A 'Turbo Wheel Liner' skims across the surface of the ocean, its huge diesel-powered paddle wheels thrashing the water to provide lift and propulsion at an expected 100 miles per hour. More akin to an aircraft than a ship, the liner has an aeroplane-like tail whose aerodynamic forces provide control and keep the hull horizontal. As speed slows, the tail gently lowers the rear of the hull down to the water again. Passengers not seated in the front or rear of the cabin would have a view limited to the gigantic wheels thrashing around just outside their window.

Comfort might be a problem, especially if the sea is choppy; the roar of the diesel motors, the impact of the fluted wheels on the water and the wavering up and down





motion of the cabin would combine to make a trip on the Turbo Wheel Liner one you would never forget, even if the wheels held together and their gyroscopic action did not render control impossible.

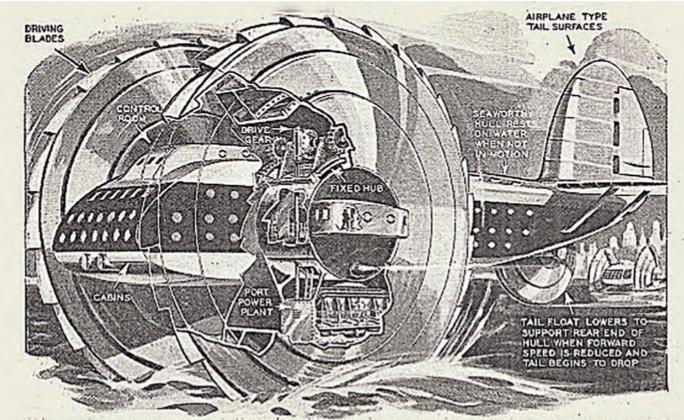
September 1931 and January 1935

The covers of these two issues depict underwater salvage operations using what appears to be adapted road working machinery. September 1931's underwater

Undersea Sledge HUNTS Sunken GOLD



INSET: Submarine Sledge, April 1934 issue. ABOVE: Operation of the Sledge explained.



Curaway drawing above shows location of power plant and gear drive to revolve wheels. Huge fluted wheels propel the liner at 100 miles per hour. At rest the huge cabin hull would float on the ocean as shown in the right background.

Inventions for June

ABOVE: How the Turbo Liner would work. RIGHT: Turbo Wheel Liner, June 1934 issue.

"January 1935's 'Tractor-Sphere' shows an understanding of the best shape to resist the pressure of the depths..."

excavator is shown salvaging a chest of gold from the hull of a shipwreck. After all, the cover promised there was "Millions in gold free for the taking". It scarcely looks any different to its surface counterpart, but the control cab is of heavily riveted metal construction and equipped with a hose supplying air, and presumably power, from the surface. And it is painted in the obligatory bright red colour scheme.

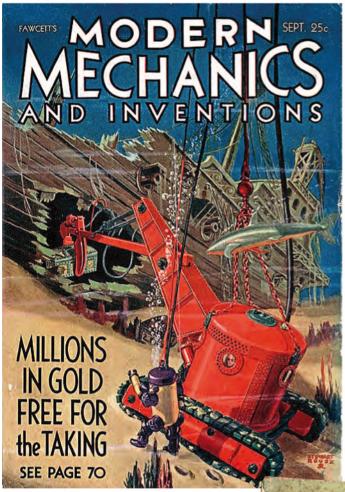
January 1935's 'Tractor-Sphere' shows an understanding of the best shape to resist the pressure of the depths (if carried to excess with the shape of the searchlight housings). But there is no manipulator arm to examine the findings and very little space given to the batteries that would have to power the craft's caterpillar tracks. In case it runs into trouble, the text explains, an emergency buoy would be released that would summon chain hoists to automatically couple with the lifting rings provided to haul the tractor sphere to the surface – simple really!

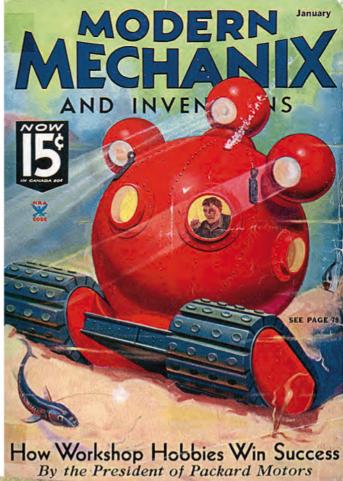
December 1934

Here is a return to the super ocean liner idea in the form of a 'Sea Glider' that would cross the Atlantic in 2½ to 3 days. It had high



Model Boats





ABOVE LEFT: Underwater excavator, September 1931 issue. ABOVE RIGHT: Tractor-Sphere, January 1935 issue. RIGHT: 100mph Sea Glider, December 1934 issue.

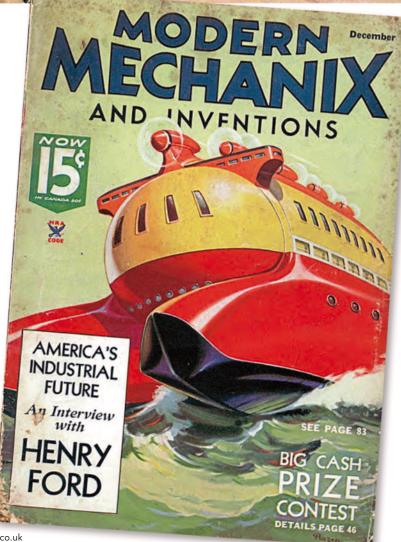
speed hydroplane type hulls with aircraft engines and propellers mounted atop the cabin to provide the propulsion. I don't think the half dozen or so 1930's aero engines would have provided anywhere near enough thrust, though their noise would have been deafening. The *Queen Mary* liner would soon enter service and cross the Atlantic in four days, in comfort.

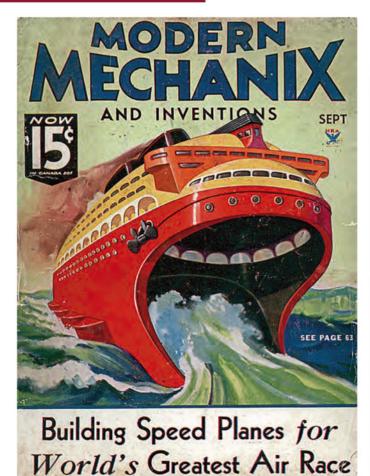
September 1934

This ocean liner, which resembles a sea monster ready to devour anything in its path, was put forward by a German engineer to "use the sea's unlimited energy as a propelling medium". A diagram shows how water taken in at the bow is drawn by a huge suction pump into a series of discharge tubes along the ship's sides and stern. In other words, water jet propulsion. How this used the "sea's unlimited energy" is not made clear; you still needed huge engines to drive the suction pump, while sacrificing much of the hull's interior volume and streamlined shape to fit this less efficient propulsion system.

January 1936

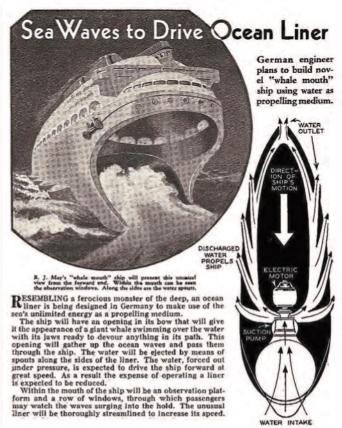
A 'Submarine Treasure Dredge' is depicted unloading from the bow of its mother ship. The lure of finding lost treasure on the ocean floor clearly occupied much of inventors' time in the 1930s, but in fact there wasn't





LEFT: Water jet propelled liner, September 1934 issue.

BELOW: Internals of the water jet propelled liner, September 1934 issue.



much to be found at the shallow depths their inventions could plumb. The craft depicted here is a more plausible one, being equipped with a manipulator arm, collection nets and wheels for travelling on the ocean bed.

March 1930

The cover here depicts an earlier version of the fast liner concept, this time consisting of a threepoint hydroplane hull supported by stepped hydrofoils and powered, once again, by aircraft engines, this time in tandem push-pull paired nacelles. It's a much less fanciful concept, and one that would be fascinating to see as a model, rising off its outrigger floats and climbing its stepladders to skim across a lake.

But could it work?

It is easy to make fun of some of these schemes, especially with the benefit of hindsight, but they can form the nucleus of a scratch-built project if you don't take them too seriously. For example, the Submarine Sledge idea could be used in model form by having the sledge radio-controlled and fitted with a waterproof camera. That way, while one person controls the towing vessel, the other can send the sled down dynamically to look for model shipwrecks or lost propellers on the bottom of the lake.

LEFT: Submarine Treasure Dredge, January 1936 issue. BELOW: Another fast liner, March 1930 issue.



STEPLADDER SHIPS TO SKIM OCEAN Can a model craft be supported on the water by simply spinning its wheels furiously instead of relying on buoyancy? Or could that craft have large buoyant wheels to support its body out of the water while it motors around a lake? There's only one way to find out: build a test model.

Not all models need be serious, as a regular contributor to Model Boats Ashley Needham has demonstrated with the many unorthodox models he's brought into the world, any of which would have made a fine cover illustration for Modern Mechanix.



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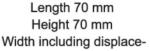


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Matched to MSM 2" **Boilers**

Harry Hitchenes treats us to a tongue-in-cheek tale set not so long ago on a lake quite nearby...

y name is Solo, Saily Solo. I travelled to this lake to watch serious model yacht racing. With me were my two companions, Mrs Leia Table and Luke Around. Mrs Leia is a keen yacht person and a bit of a speed freak where powered boats are concerned. She is also a kind of Mother Hen at the lakeside; always ready to bring you a hot cup of tea or coffee when the cold numbing winds of Tyneside decide to freeze your fingers off. Luke will build and sail any kind of model boat and, like myself, is highly un-competitive. We sail for fun!

Today, we have with us three entirely different yachts. Mine is a two masted fore and aft schooner. Mrs Leia has a one metre (roughly) racing yacht of indeterminate design. Luke has a newly finished copy of a classic 36-inch yacht from the 1920s/30s era. We will be sailing them later.

But first, some serious racing...

By the time we arrived there was only one heat left to run. There were about 15 one metre yachts at the starting line ready to go. At the whistle off they flew, heading for the first marker. The usual mayhem occurred as they all jockeyed for position. We could hear lots of noise from various skippers. It sounded like some of them were shouting "Water!, Water!", which seemed a bit strange as the lake was full to the brim after the deluges that had followed our hot, dry summer. As the race progressed there seemed to be a lot

Trilogy tribute

Please note, any similarity between the characters in this feature and those in the three best films ever made is purely subliminal. The films referred to are fantastic adventure yarns, devoid of sex, bad language and gratuitous violence. They are also a great tribute to model makers worldwide. Long may their stars shine! Harry Hitchenes

of talking going on between the competitors. Some of the older ones must have been a bit deaf as there was a lot of shouting.

The race finished with the fastest half dozen boats quite close to each other. We had a coffee, then walked over to where the owners of the yachts were talking to the race referee, a chap called Obi Quiet. He was calmly listening to their various enquiries. One skipper was complaining that another yacht had cut in front of him when he was on the port tack and the other skipper was on the starboard tack. And apparently this is not legal when the wind is from the northeast and the moon is in the third quarter. At least that's what it sounded like to us. Various other complaints and questions were dealt with using relevant references in the very precise rule book.

Then came the post-race measuring of the models. This was to be dealt with by Darth Rulechecker. It was obvious from his demeanour that *nobody* argued with his decisions! The winning boat was measured first. Oh dear! It was 7mm too long. The owner tried to argue that the new rubber bumper on the bow must have swollen when it got wet. The withering look from Darth Rulechecker was more expressive than any collection of four-letter words ever spoken. Exit race winner. On to the second boat. Everything measured out spot on. Until it was weighed. 25 grams too heavy, or something like that. On inspecting the underside of the keel there was to be seen a thin layer of lead stuck to it with double sided tape. Exit second place man. Third place chap was quaking in his boots as he presented his boat for scrutiny. Everything measured and weighed out perfectly. But then, in came Obi Quiet, and informed Darth Rulechecker that the objection from one of the other skippers about his overtaking manoeuvre had been found to be correct and was upheld. Exit third place.

Mrs Leia remarked that at this rate the eventual winner would be one of us! As it happened, there were no more problems and the chap who finished fourth actually was declared the winner. Hooray!!!

Time for another coffee. We sat alongside a long-term member of the host club, Jabba Chairbreaker. He was quietly shaking his head as he had seen this scenario many times before. "I wish I had a pound for every time I have seen one of these skippers spit the dummy out". We enquired if this was normal procedure. It appears that a lot of these skippers take their sailing very seriously and are very, very competitive. Each to their own I suppose.



Racing rebels

Now it was our chance to sail. We selected three close markers to race around – and these need to be close or we can't see them. Don't laugh, you'll get old, too, some day!

The first thing we do is toss a coin. Jabba asked what this was for. I explained that we had our own form of racing determined by a coin toss. Heads means that we sail around the course in a clockwise direction, but we have to round each marker in an anticlockwise direction; tails, vice versa. Simple. No other rules. Collisions are to be avoided



watching. Three boats in the water and with a shout of "Ready, Steady, Go!" we were off.

Even though the boats are different sizes they tended to even out speed wise when each boats characteristics are taken in to account. Mrs. Leia's boat is the fastest in a straight line, but it has to rely on her eyesight to get round each marker the right way for this race. First marker she missed completely. Luke's boat is an old design, which was originally a vane steered yacht. These boats were designed to hold a straight line until turned at the bank. This means that, even under radio-control, it doesn't exactly turn on a sixpence. My schooner actually turns quite sharply and has a good turn of speed when she catches the wind right. It also helps that I have the best eyesight and can usually turn close to any marker. Racing is quite close most of the time.

There are a couple of things we have to watch out for. Luke's' boat is heavy and has a long bowsprit. When she gets the wind up her tail she goes like a rhinoceros with a migraine. Get in her way at your peril. My boat has a shorter bowsprit but can still get caught up on somebody else's rigging. Mrs. Leia's' boat can turn very sharply, so beware being around her near a marker.

Rules of engagement

By the end of the first lap we had quite a crowd of skippers from the 'proper' racing fraternity watching in fascination as we barged our way around the third marker with all three boats in contact.

They all stayed to watch the second lap. This is actually the last lap, as it usually takes us a bit of time for each lap. Mrs. Leia had to go around

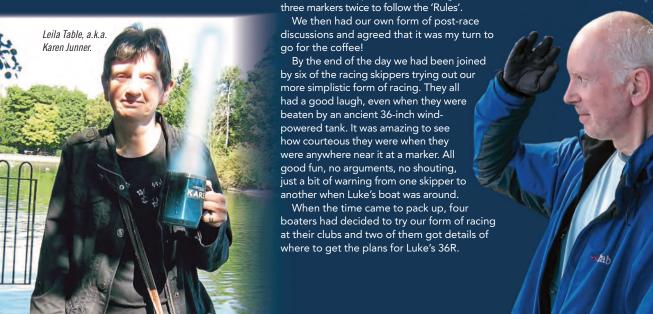
All in all, a very good day out. We had learned a bit more about sail setting and use of the wind. Others had a reminder that we sail model yachts for fun and it's important to try to go home with a smile on your face. Give it a try on your lake and "May the wind be with you!" 🍨

Star turns

Thanks to Mrs Karen Junner (Mrs Leia) and Geoff White (Luke Around) for letting me use their photographs and for joining in the fun/insanity!

> Luke Around, a.k.a. Geoff White.

> > 33





hile pondering my next build and rummaging through my now way too thick 'possible projects' file, along with having ideal proportions for a working model, the interesting history behind, and attractive appearance of, this class of vessel quickly saw it become my preferred choice.

You may well question why the US Army needed tugs of its own during World War II. When, however, you consider virtually all of its troops and their equipment had to cross oceans to get to the combat zones this makes perfect sense, because, of course, mass transportation such as this required not only ships but also auxiliary vessels to support them. The tugs employed were of steel construction and originally powered by a 100 hp engine – although this proved marginal and eventually 400 hp units became standard. The size and weight of these tugs was modest enough to allow them to be transported by rail; quite handy if they were built on one coast of the USA but were needed on the other. Like a lot of wartime products, they were built to be durable and so, after hostilities ceased, many were sold on for commercial or private use.

Shrinking plans

The simple and obviously American appearance of this tug was attractive. My original plan was to build to a scale of 1:18, which would produce a model measuring 30 inches (76 cm) in length. However, the collection of balsa offcuts I had left over from other builds, that I'd previously had no use for but which had been too big to easily dispose

"If you have the wicked habit of discarding all the stuff left after completing a project, then some new material will be needed.
Luckily, though, this model isn't going to consume much of the world's forests!"

of, were crying out to see some action. This, therefore, led to the idea of reducing the scale by half, i.e., working to 1:36 scale, and creating a 15-inch (38 cm) long model.

My first R/C build at this size, the result of a subliminal suggestion by a devious magazine editor, had been way back in 1985. I distinctly remember the challenge of trying to squeeze the standard R/C gear of the day into the hull while still achieving a practical working model (as opposed to something only fit for the proverbial 'mill pond'). Nowadays, much smaller stuff is readily and economically available for us to use. Good design is, however, still needed to cope with rough conditions and perhaps those who would happily sail their creations into your model! Also, most of the smaller models I've designed have featured very simple hulls but, while these work OK, for this one something a touch shapelier was called for.

My hope for a quick and easy build proved a tad optimistic and quite a few changes had to be made to the original draft design. Somewhat paradoxically, this challenge seemed to make the process more rewarding. This does fit in with people pointing out that I get bored if things are too easy, and that doing the same thing time after time would be the worse punishment possible for me. Having said that, the resulting design ought to be straightforward for someone with experience.

Materials list

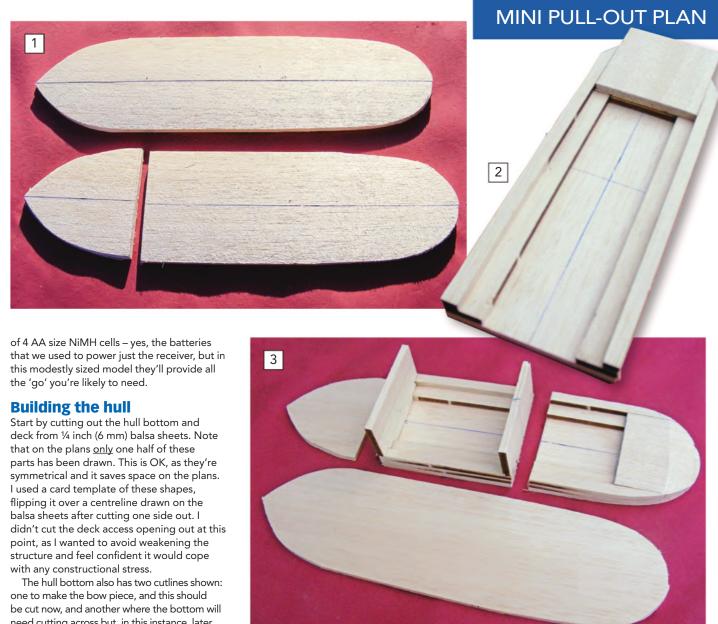
If you have the wicked habit of discarding all the stuff left after completing a project, then some new material will be needed. Luckily, though, this model isn't going to consume much of the world's forests! You will require:

* Two sheets of $\frac{1}{4}$ x 4-inch (6 x 100 mm) balsa * One sheet of $\frac{1}{8}$ x 3-inch (3 x 75 mm) balsa

That should cover the basic hull construction. I used card used for the superstructure and coaming strips but alternative materials can, of course, be employed.

The motive power was produced by a RE 360 motor driving a 40 mm diameter three-bladed propeller on a 5-inch (125 mm) tube and shaft assembly (a Radio Active brand product). An RE 385 motor, which is a shade more powerful, could be used, but **not** the similar looking RE 380 or Speed 400 types, as these will be much too powerful for this model.

The prototype's R/C gear came out of an old glider model, which after landing in trees too many times now seems happier afloat. The rudder servo was a small 'micro' type, which despite its small size is perfectly capable of operating in this model. The speed controller was one of the excellent Mtronics 'microViper' ESCs. Power comes from a pack



need cutting across but, in this instance, later (see Photo 1). Doublers, also made from 1/4 inch (6 mm) sheet, need to be glued to hull bottom, as shown on the plans. Use slightly oversize pieces and then trim and sand them to match the shape of the curve around the edge of the bottom sheet (see Photo 2).

Next, the hull bottom and doublers should be cut where marked and the two bulkheads glued in place (see Photo 3). Note that these bulkheads are slightly different heights, the first one being taller than the second.

Before gluing anything else, a dry run using pins to hold the parts together, is a sensible precaution. Working upside down, the bulkheads are placed on the underside of the deck, then the spacer, bow and two stem pieces are fitted (see Photo 4). Any mismatch between these parts can be corrected either by removing excess or adding additional strips of balsa. Only once happy should they be glued in place and left until securely fixed.

Before the rear part of the hull bottom can

butt up firmly against the second bulkhead and where it meets the underside of the deck at the stern. The side view on the plans shows the shape needed to achieve this. Using a suitable size of sanding block is a simple way to produce the flat surfaces needed. Should you remove too much or make the wrong shape, then just stick some scrap balsa in place and, when dry, try again (see Photo 5).

Only when the glue has fully hardened should the next stage be carried out. No matter how careful you have been, there is







the edges of the hull bottom, doublers, bulkheads and decks. While the hull sides could perhaps be successfully glued in place, it's much better if these 'steps' are removed to produce the strongest possible glue joint. Again, a sanding block that covers hull, deck and bottom edges at the same time is the way to achieve this.

I cut out the deck access opening at this stage as the hull structure now felt suitably robust. Another small cut-out, which would later be covered by the towing bollards, was also made. This was to give access into the otherwise sealed rear hull compartment should any ballast be needed to produce the final trim.

It's much easier to fit, but not glue, the propellor tube into the hull before the side sheeting is applied. My method is to hold the whole assembly (including the propeller) against the side of hull to gauge just where the slot needs cutting through the hull bottom sheet (see **Photo 6**). This is transferred to a centreline drawn on the bottom sheet and then the slot is cut out.

Likewise, the position of the hole for the tube through the second bulkhead is located using this method. The slot and hole are then adjusted until the tube can be correctly installed, ensuring adequate clearance for the propeller from the hull bottom. I don't usually fix the tube into the hull at this point. There is still a lot of work needed to finish the hull and then seal the external surfaces. The tube would therefore be a hindrance and also risk damage, so is best installed later.

Achieving the hull shape

The hull's structure is completed by gluing 1/8-inch (3 mm) balsa sheets to the sides (see **Photo 7**). I placed these with the wood grain running vertically and ensuring a well glued butt joint between adjacent pieces. **Note** that while the top edges of these sheets should be at least ½ inch (6 mm) above the level of the decks, at the bows they should step up to a height of ¾ inch (20 mm) above the deck. Also, these sheets extend forward beyond the first bulkhead, but **only** between the deck and bow piece.

Once dry, the excess can be trimmed and sanded from the lower edges of these sheets. The top edge can be tidied up but leave it above deck level. It's likely that despite your careful work, some small 'steps' will exist between adjacent side sheets. Resist the temptation to hand sand them away; you will more likely make things worse. Use a flat sanding block with a medium (not coarse!) grade of sandpaper to get a smooth finish.



"Now for the 'heavy' but nonetheless careful work of producing the final hull shape..."

At this stage, the hull is left with spaces either side of Stempiece B. I filled these with pieces of scrap balsa, putting to good use those awkward triangular pieces we always seem to be left with (see **Photo 7**). When fully set, the excess balsa can be sanded back to match the hull profile (see **Photo 8**).

Now for the 'heavy' but nonetheless careful work of producing the final hull shape. This involves creating the bilge curve between the hull sides and bottom, as shown on the plans cross-section. The doublers will allow you to remove this material without weakening your hull. This 'rounding off' continues fore and aft to create your rounded bow and stern shapes. I did this by vigorous sanding but, be warned, this produces a lot of dust and would be very unpopular indoors!

Minor blemishes can be tackled with some ready mixed fine surface domestic filler, which dries quickly, bonds well to wood, and sands smooth easily. If any cracks or larger defects are seen, then glue, or perhaps a glue-covered sliver of wood, can be used to fill them.

Surface sealing

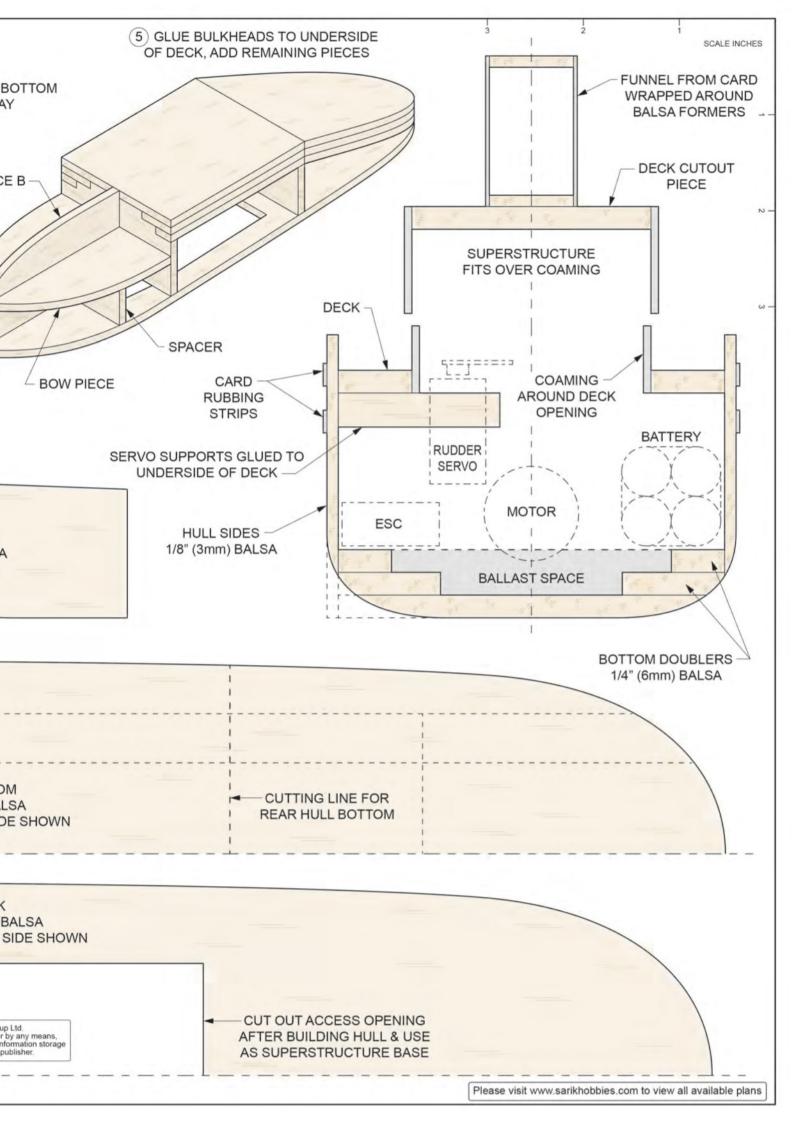
This really comes down to personal choice. Some go for an almost 'armour plated' approach with a coating of glass cloth and resin; others take a more minimalistic approach – hence the models you sometimes see which may be based on a metal vessel but display a distinct wood grain effect.

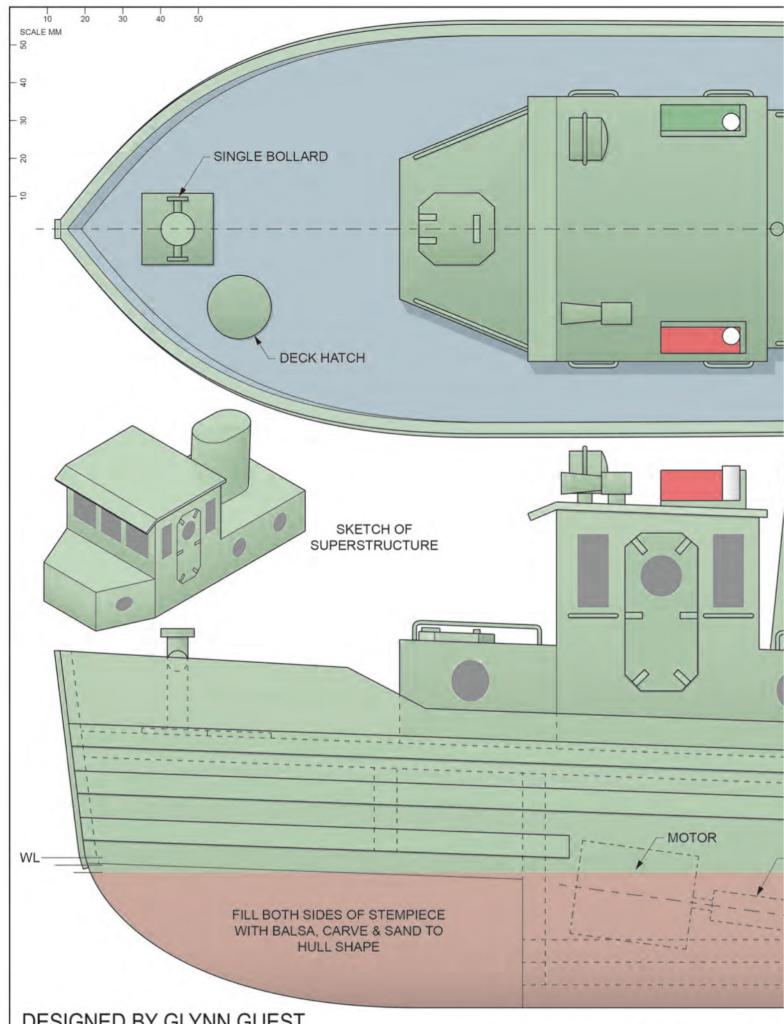
I went for my usual dope 'n tissue surface treatment, which is reasonably quick and does toughen these balsa hulls up surprisingly well. it's not 'bullet proof' by any means, but it's sufficiently 'ding resistant' for the usual sailing (and workbench!) accidents. The fibres in the tissue also tend to limit the impact damage that more serious events can cause.

For this you will need to use couple of coats of thinned dope (50:50 dope and cellulose thinners). Allowing this to dry before lightly sanding between each coat will see it quickly penetrate into the wood and start the sealing and strengthening process. The simple shape of the hull can be covered using several panels of tissue. My method is to lay the slightly oversize panel on the hull, then brush neat dope on top of it, starting at the centre of the panel and working outwards. This reduces the risk of creases forming; but if you find creases do form, just peel the tissue back and relay with more dope.

The tissue panels ought to wrap around the bilge curves and overlap each other. To minimise the creases this would otherwise create, the edges of the tissue can be 'feathered' by cutting slits along the edge before sticking down with dope (see **Photo 9**). A few more coats of neat dope, again lightly sanding between each coat, should produce a good surface finish.

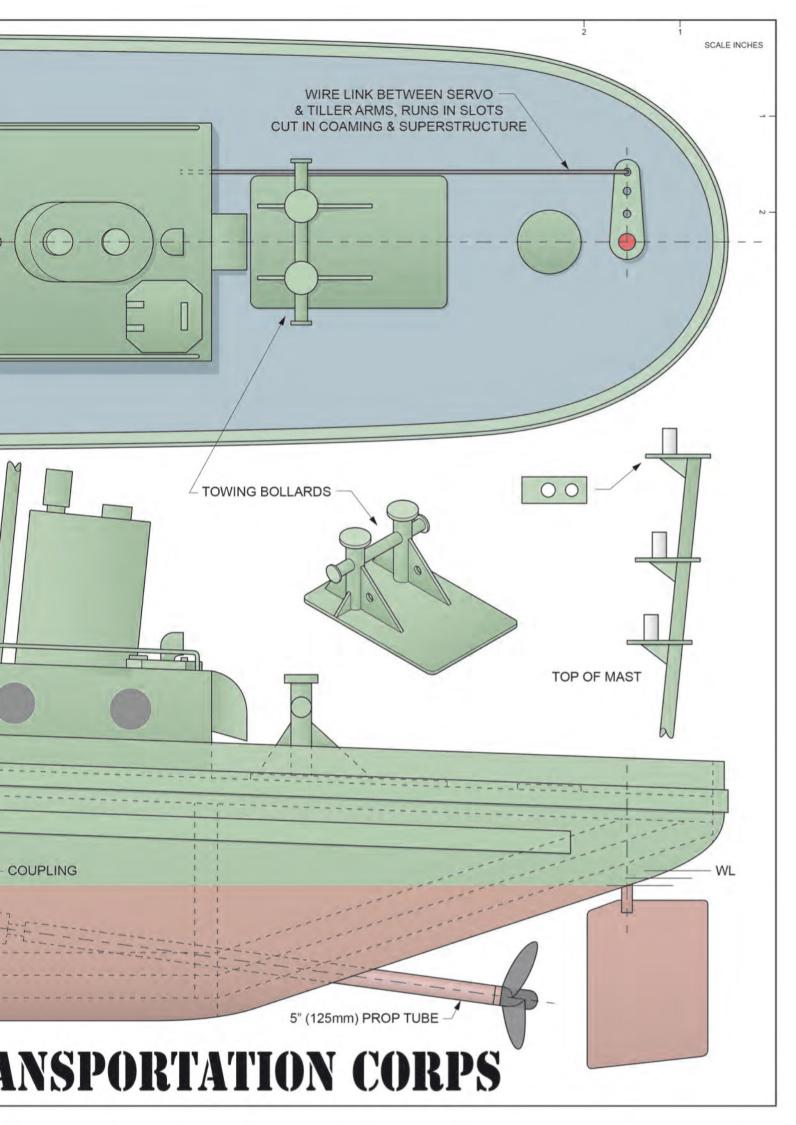
As I said at the start, there are other ways to seal your hull's surface. I'll admit that

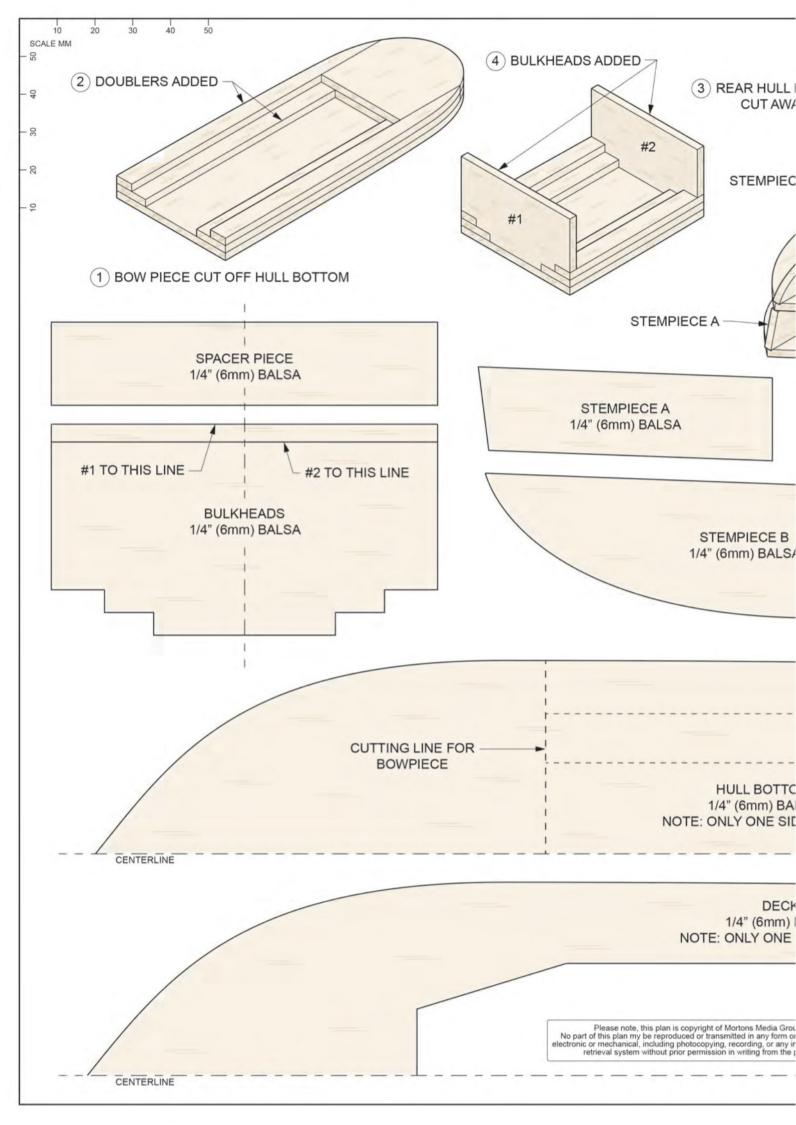


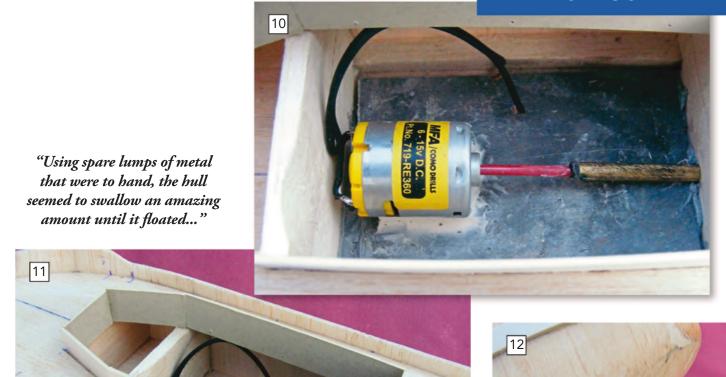


DESIGNED BY GLYNN GUEST

45' HARBOUR TUG - US ARMY TRA







cellulose dope is not the nicest thing to use (you'll need a well-ventilated space where the almost inevitable drips/splashes can cause no harm). Other methods can work well but should someone suggest there's only one way to tackle this, I'd seek a few more opinions...

Early test float

The weight of the hull and the R/C gear was only some 12 ounces (0.34 kg) at this stage. So, with little internal space, a quick trial to establish the amount of ballast and where to place it seemed prudent. This was carried out before adding the propeller tube; the hole in the hull bottom being covered over with some adhesive tape.

Using spare lumps of metal that were to hand, the hull seemed to swallow an amazing amount until it floated on the desired waterline. This was somewhat discouraging, as there seemed to be little space left inside the hull for the motor and R/C gear. Weighing this ballast, it dawned on me that if the separate lumps of metal were replaced with one solid piece, then it could fit on the hull bottom between the two bulkheads in the space created by the doublers.

My box of handy ballast bits contained some lead 'flashing' (thin lead sheet, as used in the building trade). Pieces were cut and flattened to fit in this space, as shown on the plan cross-section. After a re-float to check the trim was still OK, the ballast was secured into the hull with some of that widely advertised stuff that claims to stick everything.

If you don't have any lead flashing handy, then something like steel could be used. A few of my models have been trimmed using pieces cut from mild steel bars sold in DIY stores.

My aim was to fill the bottom of the hull with dense material and produce a reasonably flat floor for the next stage. Alternative methods of ballasting, based upon personal experience and preference, can be used, as long as you can still fit the R/C gear inside the hull, of course!

Drive line and steering

Creating an internal floor of ballast actually solved the problem of motor installation. With the propeller shaft and tube reinstalled into the hull, it was found that if the motor sat on top of the ballast, then it was perfectly aligned.

Your motor could be stuck in place using that aforementioned sticky stuff, but only after making sure that the motor body and ballast surfaces are clean and grease free. The propeller tube also needs to be cleaned before being stuck to the second bulkhead, as does where it passes through the hull bottom sheet. A length of close-fitting plastic tube can be used to keep both motor and propeller shafts aligned and allow for the coupling (see **Photo 10**). You should also check that the propeller can still rotate without fouling the hull!

Having got the motor and prop tube installed (work it's easier to carry out before your coaming strip is added), your coaming strip can now be glued around the inside of the deck opening (see the cross-section of the plan). I used card. If doing the same, card of about 1/16-inch (1.5 mm) in thickness ought to be adequate. I also used card to create the rubbing strips that run along the hull sides; a contact type of adhesive is good for this job (see **Photo 11**). My card surfaces were then given 2-3 coats of dope, and I sanded between each application. This both sealed the surfaces and bonded them into the hull.

Due to the limited space inside the hull, a decision was taken to install the rudder with the tiler arm above the deck. A metal tube was epoxied into a hole drilled through the hull bottom, doublers and deck. A metal rod, which was a close fit inside this tube, was used for the rudder shaft. The blade was cut from metal sheet (about 1/16-inch/1.5 mm thick) and epoxied onto the shaft (see **Photo 12**).

Having the rudder tiller above the level of the deck called for the link between servo and tiller arms to run across the deck. To avoid a messy installation, the servo had to be at the right level too. This was achieved by gluing two pieces of





balsa to the underside of the deck so that the servo would snuggly slide in between them (see Photo 13). To accommodate the wire link, a cut-out was needed in the deck coaming.

Superstructure and details

To ensure a good fit, the superstructure is best built over the deck coaming, but taking care not to glue it to the coaming! To create the simple shape, I used card and scrap pieces of balsa, including the bit I'd cut out of the deck (see Photo 14). The external surfaces of the superstructure were sealed with dope, as were the bottom edges and the inner surfaces which slide over the deck coaming. It's worth remembering that any water landing on the deck could get 'sucked up' in the gap between coaming and superstructure by capillary action. Card, despite its handy virtues in this hobby, has no wet strength worth speaking of.

of these tugs would have been identical when first built and certainly not after they had been in service for any length of time, so, when it comes to detailing, you can pretty much do your own thing..."

The remaining details came out of my boxes of spare stuff and bits n' pieces (see Photo 15). To be honest, I suspect few, perhaps even none, of these tugs would have been identical when first built and certainly not after they had been in service for any length of time, so, when it comes to detailing, you can pretty much do your own thing, provided you avoid the heinous crime of grossly mixing the scales of the items you add. My model is designed to a scale of 1:36, so its crew needed to be around 2-inches (50 mm) tall. For credibility's sake, any figures obviously too large or small ought not to be used.

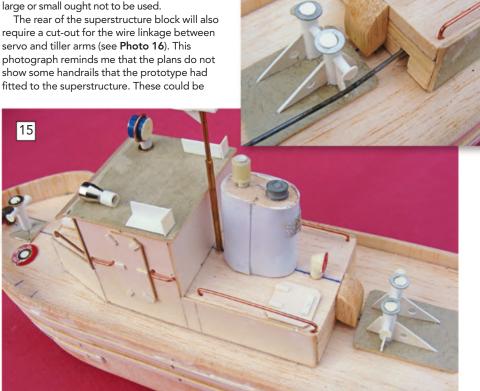
require a cut-out for the wire linkage between servo and tiller arms (see Photo 16). This photograph reminds me that the plans do not show some handrails that the prototype had

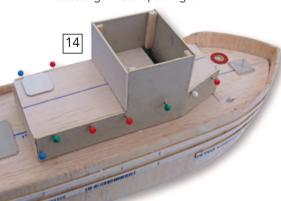
greatly, since there was little to prevent them falling overboard in rough conditions. I used some copper wire to make these rails and glued them into holes.

Painting

The obvious paint scheme here would have been the typical naval grey. However, with these tugs having been used by the US Army, and with armies having a tendency, if not obsession, with painting things in drab greens, I decided to follow suit.

On mentioning this to an American friend, he commented that, while unlikely, it's not inconceivable that a few of these tugs may have worked in forward areas surrounded by dense jungle, in which case green might be a preferred colour to make them less







conspicuous to the enemy. An alternative scenario could be that a grey painted tug had been seen by a passing officer to be in a shabby state and the crew ordered to smarten it up pronto! As the only paint available in the Army stores was green (the Navy refusing to give any of their paint to the Army, of course), that would have resulted in a smart, but green, tug!

On my model, I painted the underside of the hull below the waterline dark brown. In real life they're likely to have been treated with red anti-fouling paint, but perhaps not, I reasoned, in wartime. Anyway, to me, bright red hull bottoms rarely look realistic when sailing models. By way of an experiment, again suggested by my colonial friend, the deck was painted with red primer and then overpainted with dark grey; the idea being that lightly abrading or wiping with a tissue coated in thinners would let the red show through and create the appearance of the wear/scuffing you'd expect to see on a hard-working vessel. I also added some 'rust', using the dry-brush technique, to corners and joints where rust, given half a chance, seems to rapidly appear.

At this stage, without a crew, I felt my model looked a little 'lifeless'. Luckily, being modelled to 1:36, this tug is a close match to the common military plastic kit scale of 1:35, so suitably sized crew figures can easily be found. I placed

"This model's performance and character completely belie its modest size"

a couple in the bows to create the impression they were busy untangling the anchor chain, while a third was stuck to the side of the superstructure walking aft.

Shakedown trials

Some models can require quite a bit of work before they perform with total reliability and satisfaction: this wasn't one of them. Despite the apparently small internal space, everything fitted in neatly (see Photo 17). The receiver slotted into the space ahead of the first bulkhead, with a small piece of foam plastic to stop it moving. The ESC dropped in beside the motor just ahead of the rudder servo, and the battery box (for four AA size cells) neatly slipped into the other side of propeller tube with its end against the second bulkhead. The wiring was tucked out of the way with nothing loose to foul the rotating shafts and coupling. Oh yes, and I did remember to replace the plastic tube used to align the motor and propeller shafts with a proper coupling!

My model floated in a stable fashion but with a slight list to one side. This was corrected with a small piece of lead firmly glued in place. These first test were undertaken on the garden pond, where I'm usually limited to just shunting the model forward and backwards. Not so with this small tug, and it was soon scurrying around in a busy fashion. A turning circle diameter of about 4 feet (1.2 m) was easily achieved. Astern steering, often the Achilles' heel of a model's handling, proved to be OK; just run yours at the 'sweet spot' where the rudder has control, but not so fast that any wayward tendencies take over.

The current draw of this motor/propeller combination was found to be 0.65 A, which gives potential sailing sessions of a couple of hours. Since a 4-cell Nimh battery was being used, this equates to an input power of around 3-watts. This might not seem much but it's more than adequate for such a small model. Its acceleration is brisk, to say the least, and, as I quickly discovered at the pond, the transmitters throttle stick requires care, if not restraint, at times.

More prolonged and vigorous testing on the local canal showed a top speed of just over 2ft/sec (0.65 m/s) which, at this scale, produces the same wave pattern as the full-size vessel would do at 7/8 knots - a reasonable speed for a small tug bustling about its business. When running ahead, the model, despite its 'tubby' hull form, held its heading. Rudder response was immediate and turning circles proportionate to the movement of the transmitter's rudder stick at all speeds. As shown by the pond testing, steering when moving astern needed restraint and care, but it wasn't too hard to keep it on course and correct any wayward tendencies.

My 'Gripe Sheet', a list of problems to be fixed before sailing again, was devoid of any comments after this and subsequent sailing sessions. Indeed, this model's performance and character completely belie its modest size, maybe disproving the saying that "A good big 'un will always beat a good little 'un"?





John Mileson continues his easy-to-follow beginner's guide



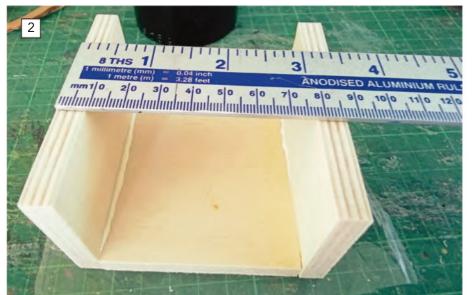
aving purchased your steam plant for this project from Clevedon Steam, first take the opportunity to have a close look at all of the components - but keep them in their separate bags. As you will see, everything comes finish machined. Comprehensive instructions for both the engine and boiler are also supplied - they are simple to build but do follow the instructions carefully. I don't think I can add to these, but in this instalment will be sharing photos of my build as it progresses and commenting accordingly.

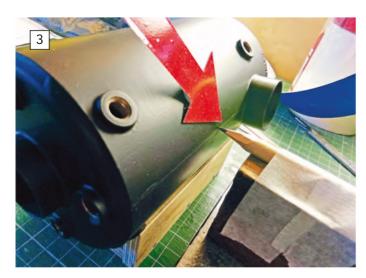
Equipment required

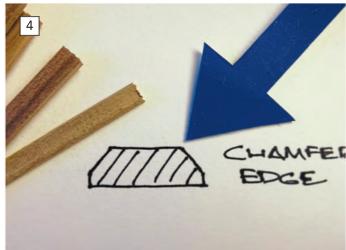
- * Virgo vertical steam plant
- * Small gas tank
- * Gas refill adaptor
- * Butane gas cylinder

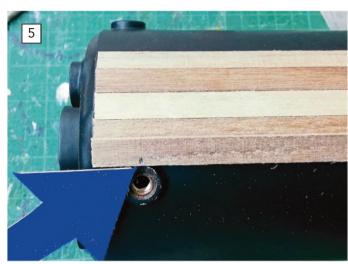
The boiler

Because it's difficult to hold the round boiler when applying the cladding, the small jig suggested in the instructions is worth making. Make up your jig in accordance with Photos 1 and 2, as this will be used to support the boiler later in the build.















You'll then need to mark off your first datum line. With the boiler supported in the jig, and with pencil taped to an appropriately sized block of wood, draw a line along the length of the boiler (as indicated by the red arrow in **Photo 3**). Where you start on the circumference of the boiler doesn't matter.

The cladding needs to be chamfered on two edges (as indicated by the blue arrow in

Photo 4). I found it simpler to employ one of the sandpaper blocks here, as they're easy to use and there's less chance of slicing a lump out of my hand!

Cutting round the bosses can be a little awkward. Start by laying the plank against the boss, and then mark the centre line of your boss on the wood (as indicated by the blue arrow in **Photo 5**). Using this pencil

mark as the centre of the radiused cut-out, use a sandpaper 'pencil' (as described in Part 1) to file away the cut out, checking the fit regularly (see **Photo 6**). The result of filing away the cut-out can be seen in **Photo 7**

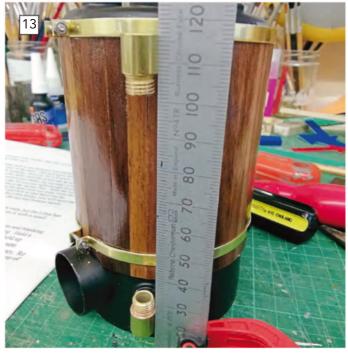
On my build, the fit of the following planks was not so good (see **Photo 8**). Having circumnavigated the boiler I found a small gap was left. This was slightly tapered (as indicated by











the red arrow in **Photo 9**). Using a craft knife, a sliver of wood was cut and glued in.

With all the cladding in place, I ignored the instructions, and simply sanded the cladding with a sandpaper block. If taking this short cut, be sure to sand along the grain of the wood, finishing with some finer sandpaper (see **Photo 10**).

I didn't stain my planks. Preferring the rather pleasing multi-coloured effect of the

natural wood, I opted instead to finish them with a satin finish varnish. A second coat would be applied when the first was dry.

The brass boiler bands are a bit tricky to fit using the screws provided: possible, but difficult. I found some longer ones and used those instead, cutting off the excess length after fitting (as per the red arrow in **Photo 11**).

You're now ready to fit your brass chimney ring. Locate this on the top of the boiler and

place a piece of scrap plywood onto it, then gently hammer home (see **Photo 12**).

Next, check the upper and lower water level fittings are in line in the plane and at 90-degrees to this (see **Photo 13**).

The sequence for fitting the gauge is as follows. Make sure the nuts are the right way round. I struggled getting the black 'O' rings to go up into the nuts and resorted to pushing them in, very carefully so as to

Steamboat tutorial





follow the Clevedon Steam instructions here, as the following notes are simply based on my own limited experience.

Firstly, check all connections are tight, but not overly tight. You can always tighten them if discovering a leak, but it's very difficult to repair a stripped thread!

Be sure to note from the instruction those components that need to be just 'finger tight'. running. Check the position of the jet is set

Remove the safety valve (one of the components that needs to be only finger tight) and fill the boiler to the prescribed level. Don't over fill it, and be sure to use only pure distilled, rather than de-ionised,

Next, fill the displacement oiler with steam oil (do not use ordinary oil here). It's best to drip the oil in to avoid air bubbles. This done,

Make sure all the bearings on your engine have been well oiled (too much is better than too little). I use motor oil or steam oil

Ideally, this should be carried out away from the boat. The gas tank is connected to the gas pipe leading to the burner by a finger tight knurled nut, so is easy to remove for filling. Use a standard propane cannister and attach the adapter to it. Again, only fasten this to finger tightness.

Next, place the gas tank onto a firm surface, insert the adapter into the tank filler and press down firmly. I have found that the gas will tend to blow back occasionally, so be sure to keep your face away from any

"A 'pop' will be heard indicating your burner is alight. Now, adjust the gas until a gentle 'hiss' is heard"

potential harm. When the tank is full, it will blow back intentionally.

Once you've checked the gas valve is closed, you can replace it in your launch.

You can now refit the gas pipe to the gas cylinder. It should be a comfortable fit (no cross threading) and fastened only finger tight. The small 'O' ring should ensure a good, gas tight fit.

Preparing to light the burner

My heart always beats a bit faster at this stage! I suggest you try lighting up outside in the garden before using indoors. Holding a flame (barbecue lighter) over the chimney, open up the gas valve on your gas tank *very slightly*. A 'pop' will be heard indicating your burner is alight. Now, adjust the gas until a gentle 'hiss' is heard. If you open the gas valve too much when lighting up, you may get a flame leaping out of the chimney. Don't panic! Simply close the gas valve and try again.

Keep an eye on your pressure gauge. The safety valve is set to blow off at a maximum of 45psi. If yours exceeds this, allow the boiler to cool down, remove the safety valve and adjust the double lock nut on the valve by undoing it a *small amount*. You can then tighten up the locknut and fire it up again.

Once 25 to 30 psi has been reached there's sufficient pressure to open up the valve on the lubricator (steam in). Move the regulator located on the top of the engine forwards: your engine will then go in one direction, then back to the other. The central position, i.e., 90-degrees to the axis of the engine, is off. Beware: the regulator will be hot!

New engines may be loath to start initially. Spin the output shaft with your fingers. Once running, the engine will gradually bed in the mating surfaces.

You can now allow your engine to run freely and enjoy the excitement!

Keep an eye on the water level gauge, and once the level with the bottom of the gauge prepare to turn off the gas, which will shut down your boiler. Before you do this, however, empty the condenser (as described in the instructions) into a jar. Do this while your engine is still running. Once done, you can turn off the gas.

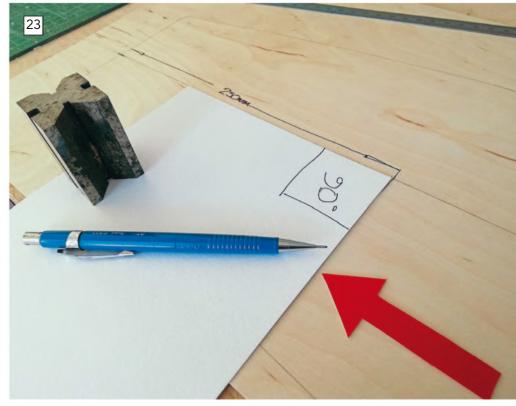
When cool, your boiler can be refilled. Suck out the oil/water residue from the displacement oiler and refill with steam oil. Then, go round the engine with a drop more oil and prepare to relight.

All this sounds very complicated but, trust me, you will very quickly learn the sequence of operations to get things running.

Marking out the deck

Having already marked out the outline of the launch on your sheet of 2mm plywood, the next job is to mark out the deck area in readiness for cutting (please refer to **Photos** 22-32 during the marking out process).





Firstly, mark out the centre line running the whole length of the boat. The stern measures about 140mm across. You need to divide this by two and make your centre line mark 70mm in from one corner of the stern. Check the other side also measures 70mm. At the bow, you will have to estimate where the centre point is. Join up

the marks at the bow and stern. Your pencil line needs to run the whole length of the boat. (see **Photo 22**); this line will be both your datum and centre line.

From the stern, measure up the centre line 250mm and make a pencil mark. At this point, you need to draw a line across the boat at 90-degrees to the centre line.

Steamboat tutorial

A useful tip

Take a sheet of copier paper, or similar, and lay one edge along the centre line, with the corner against the 250mm mark. Then, mark along the edge of the paper (as shown by the red arrow in **Photo 23**). Do the same on the other side of the centre line and join the pencil marks across the width of the boat (see **Photo 24**).

From the bow, measure back along the centre line 250mm. Again, follow the same procedure and mark a line across the boat at 90-degrees.

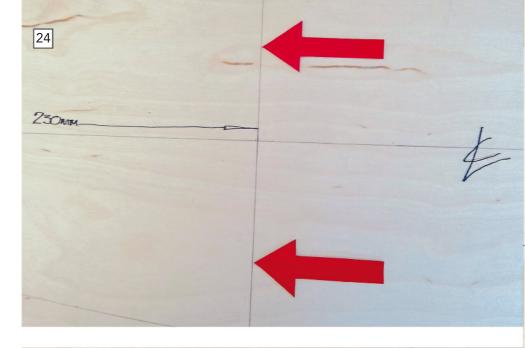
These line across the boat determine the length of the front and rear decks.

Next measure 20mm in from the transom (stern) and draw a line across the boat.

Still at the rear deck, measure in 35mm from the 250mm line back towards the stern (see **Photo 25**).

It's now time to tackle the side decks (these extend between the front and rear decks, which are 35mm wide and follow the original curvature of the boat). There's a very easy way of doing this (see **Photo 26**). The red arrow shows the original outline from which you will need to measure in 35mm, towards the centre of the boat. Work your way round the boat putting on pencil marks (dashes). Don't go over the front deck. Once you have a series of pencil marks, simply join up the dots freehand (see **Photo 27**).

Photos 28 and 29 illustrate the end result of this process. Shade in the areas that are to be cut out and double check against the photos here that your deck looks like mine. All good? Then then marking out is now complete!





20 MM 26 20 MM 20

Cutting out the deck

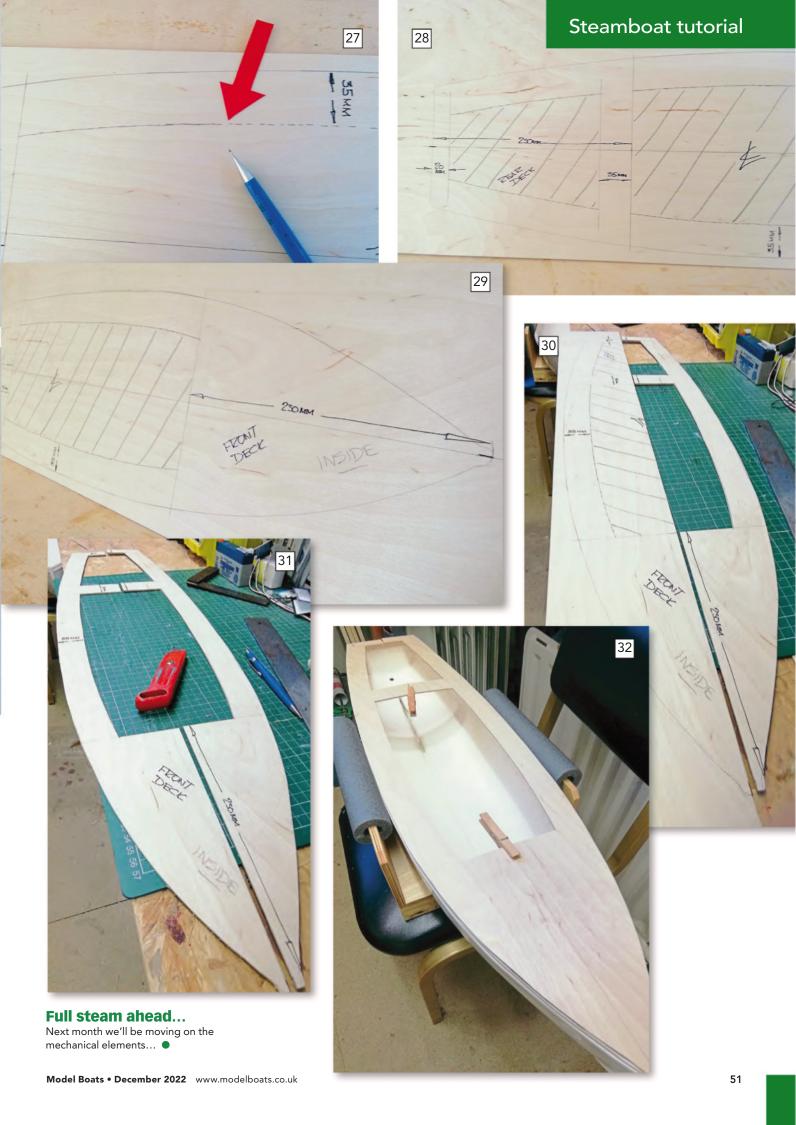
The first thing to do here is put a new blade in your craft knife, as you are going to be cutting through 2mm thick plywood, using a straight edge, and sometimes working freehand.

Remember to score your wood gently on the first cut, holding the knife at a shallow angle. It will probably take you seven or eight strokes to cut through your plywood.

I find it's easier to cut the deck along the centre line first. You may, however, decide to leave it in one piece, cutting out the outline of the boat and shaded areas as one.

Whichever way you choose, however, be warned: this is a time-consuming job, and hard work! **Photo 30** shows one of my halves cut out, with the other half awaiting the same treatment, while **Photo 31** illustrates the cut out of the second half.

You can now try fitting your deck onto your hull. Remember to turn your deck over as all your marking out has been on the underside (see **Photo 32**). All being well, you should have a reasonable fit.







The Finnish Navy ensign.

Dave Wooley shares some useful transferrable tips and tricks used during the build of this 1:48 scale Finnish coastal missile corvette

efore moving on to the preparation for air brushing, I feel it's worth first covering some methods I used to construct various fittings such as cordage reels, ladders, small armament and RHIBs, as these may prove useful not just for this build but for various other projects.

One of the primary tasks I usually undertake is what I'd term as a 'dry run' fitting of all the components thus far constructed, i.e., before they are painted and installed into their respective locations on the model. Knowing all the necessary adjustments have been made gives me confidence that, when all the fittings are removed for air brushing, they can just as easily be reinstalled in the exact same location with no further work required – more on this later (see **Photo 1**).

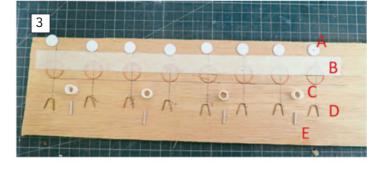
Cordage reels

All vessel, from the smallest to the largest, are fitted with cordage reels, which in earlier times used sisal or hemp for mooring rope as cordage. Today mooring rope would be made from a man-made material such as polyester fibres but it



Installing the fittings for a so-called 'dry run', which includes the cordage reels.





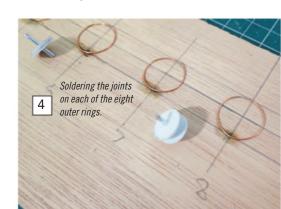
ABOVE LEFT: A small jig for forming the cordage reel support legs. ABOVE RIGHT: Preparing component parts for each of the four cordage reels.

is the latter material that would most probably be coiled onto our cordage reel aboard the Tornio.

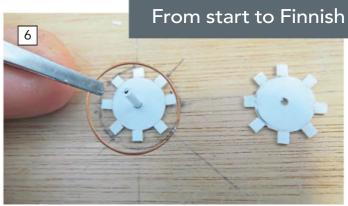
A slight departure from my usual presentation here shows first the two reels minus their cordage, as fitted forward of the turret housing. Making these reels is a straightforward exercise involving brass wire, aluminium tube, copper wire and styrene. First a small jig was made to ensure that each of the U-type support legs are identical (see Photo 2). With these prepared, the next step was to generate the eight inner disc, identified by the letter A. in Photo 3. Next, eight outer rings were formed from extruded copper wire and shaped into a circle with the aid of a section of styrene tube, as indicated by the letter B. The inner core tube formed from styrene tube is indicated by the letter C. The support legs and the spindle onto which each side of the reel is fitted is marked as D.

And, finally, the centre shaft of aluminium tube marked as **E**.

Using solder paste, each outer ring's joint was soldered forming a complete ring (see **Photo 4.** Around the circumference of each disc, I placed eight square sections onto which the outer copper wire rings was fixed. To enable an accurate fixing, a simple jig was made to ensure each square section was the same. These where then transferred to the inner disc, which had been laid out on a







ABOVE LEFT: Consistency is the key to generating the cordage reel inner rings, hence the jig. ABOVE RIGHT: Here the copper outer ring is added to the inner disc.



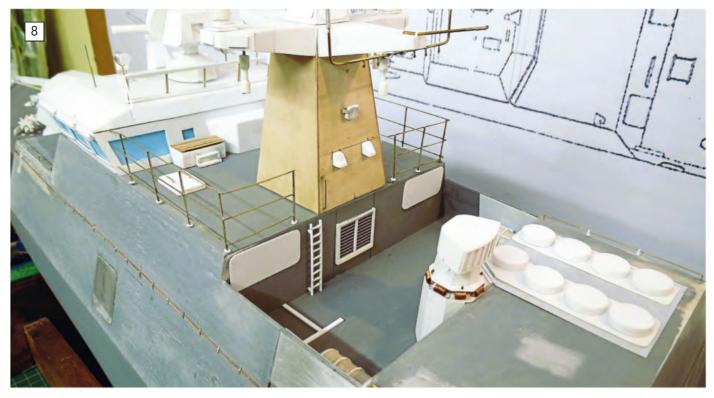
marked timber surface: this allows the styrene parts to be accurately lined up and fixed without adhering to the surface (see **Photo 5**).

With the outer copper ring fixed into place, assembly could begin, as shown in **Photo 6**, with the end result evident in **Photo 7**.

Ladders

Usually, we don't give ladders much thought as they're readily available commercially, yet they can be scratch built to any length or scale using a very simple method (see **Photo 8**). For the Tornio these are a box section type, which lends itself well to the method described here.

To commence, yes, you've guessed it, a simple jig was made, which can be set to suit several scales and can serve two functions: cutting to size each ladder rung and positioning into place each side rail (see **Photo 9**). The latter were cut to an approximate length and fitted into the jig. Added across the top of each rail was a rung



ABOVE: A view of the amidships well, which shows one of four ladders. ABOVE RIGHT: A basic two function jig, with the rung cutter and jig for maintaining consistency when inserting the rungs between the lengths of the ladder.

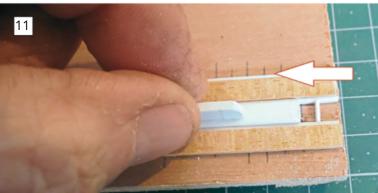


tool which slides between the two timber sides of the jig, facilitating accurate fixing of each rung (see Photos 10-15).

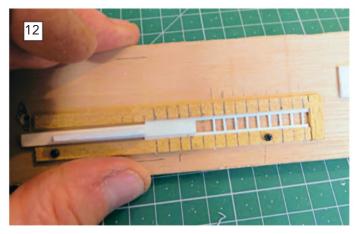
Forming the 12.7mm MGMounted either side of the sensor tower are two 12.7mm machine guns (see Photo 16). I managed to acquire a single image of the MG, which made modelling the gun possible. Although only 1:48 scale, there was plenty of scope to incorporate sufficient detail to conform quite well with the image I had, which shows the breech, barrel and mounting.

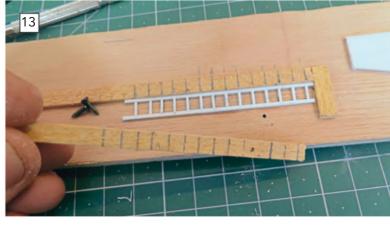




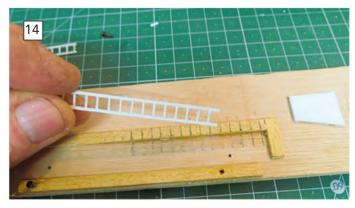


ABOVE LEFT: Using the jig to cut to the length of each rung of the ladder. ABOVE RIGHT: Additional to the jig, is this rung slide, which helps maintain consistency.

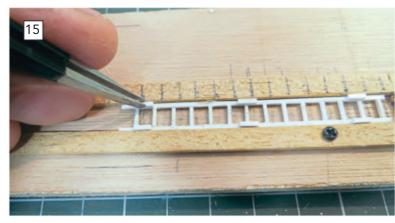


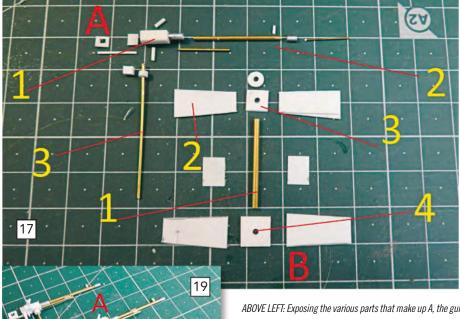


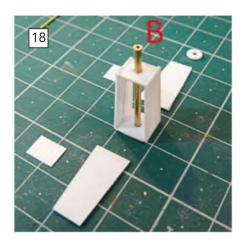
ABOVE LEFT: A length of ladder almost completed with the aid of a simple jig. ABOVE RIGHT. Removing part of the jig to avoid damaging the ladder when removing it in its completed form from the jig.



ABOVE: This method can be applied to any scale. RIGHT: Adding the fixing points.







ABOVE LEFT: Exposing the various parts that make up A, the gun, and B, the mounting. ABOVE RIGHT: Constructing the gun mounting.



ABOVE: The gun ready to be joined with the mounting.





ABOVE LEFT: The completed 12.7mm MG ready for painting. ABOVE RIGHT: Using spacers beneath the after bulwark to enable consistency of fitting.

The gun was first divided into two distinct fittings (see Photo 17 – the letter A. denoting the gun and the letter B. the mounting plinth). This was then subdivided into the various parts: A1 indicating the breech and firing handles; A2, the barrel parts and foresight; A3, the swivelling pin; B1, the tube to retain the swivelling pin: B2, the mounting plinth sides; B3, the top of mounting plinth and B4, base of mounting

plinth. The assembly of the mounting plinth in shown in **Photo 18**. In **Photo 19** the gun and mounting can be seen fully assembled. Once both the gun and mounting were joined, the height of the swivel tube was adjusted (see **Photo 20**).

After bulwark

There's a simple method of ensuring the space between the deck and bottom of the bulwark

remains consistent when locating a bulwark. As a matter of interest, the area marked O in Photo 21 is a removable overhang covering the two water jet drives; this allows access to the stator and buckets of the drive unit should the need arise to remove or adjust either of these two parts of the jet drive. As mentioned above, if there are any anomalies or problems, it's at this 'dry run' stage they can be identified and rectified (Photo 22).

BELOW: A full 'dry run' of all the fittings, which will reveal and allow you to rectify any potential problems prior to air brushing.



From start to Finnish

RIGHT: Identifying each of the fittings during the 'dry run' assembly.

BELOW: The RHIB proved to be straightforward to construct using Evergreen tube for the collar.





ABOVE: Halfords white primer was used for the hull and superstructure, while Tamiya flat white primer was applied to the fittings. BELOW: The lightest of the four shades of brown that make up David's camouflage scheme was applied to the hull, superstructure and fittings first.

Installing the fittings aft

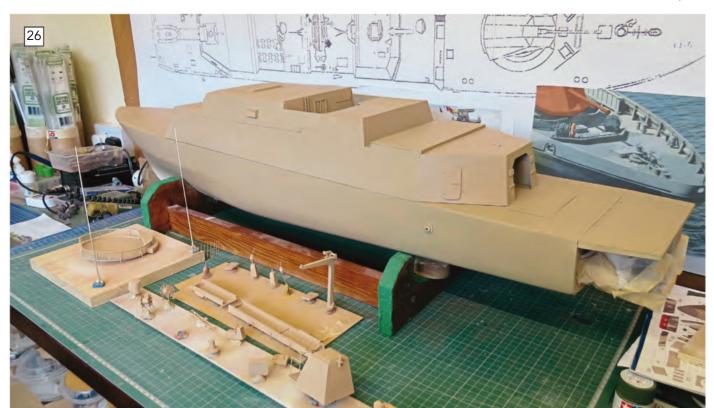
The after section of similar corvettes usually accommodated a small flight deck. Here, however, while there is an enclosure it houses an RHIB rather than a helicopter. Within this covered space there's a raised track to accommodate direct/crane launching and retrieval of the RHIB. Central to this is the RHIB, but there are other notable fittings, as you will see highlighted in **Photo 23**: with the letter **A** indicating the RHIB; B, the stowage and launch rail; **C**, the cordage reels; **D**, the scrambling net and retrieval pole; **E**, the bollards; **F**, the after winch; **G**, the wipe aerials and **H**, the life ring and fixing.

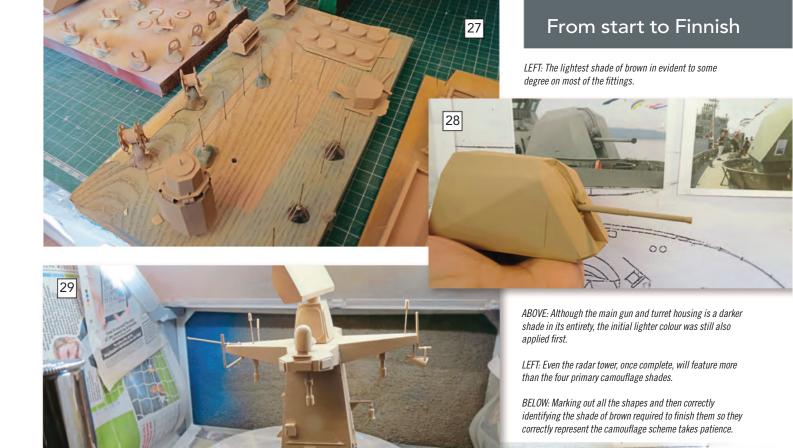
The RHIB

Having now made several RHIBs at various scales, I have developed a method for construction that I find really works. The primary material used is Evergreen styrene tube. Once the angle of every joint in each segment of the collar is determined, the process is straight forward. The out-board motor I made from Jelutong, a fine grain timber used by pattern makers, which is easy to sand and shape (see **Photo 24**).

Preparation for airbrushing

It's often noted that preparation, especially when it comes to paintwork, is of vital importance in achieving a really pleasing end result. As large amounts of timber were used for this build, much of which features as part





of the finished surface, I knew prep would be paramount. So, first and foremostly, all the exposed timber was given three coats of sand seal (which was rubbed down between each coat). The styrene surfaces required only a wipe down and a surface primer.

My primer of choice for the hull was Halfords white primer, ideal for large surface coverage, while all the fittings received a Tamiya flat white. White was ideal for the colours that would follow, as it highlights better than grey or red primers any minor flaws in the surfaces. Given the mix of browns and the type of application that was to follow, it was essential the primed surface was free from marks, indents or overspray marks. Following the final primer coat, a rub down using 800 wet and dry ensured a well-prepared surface for the finishing coats (see Photo 25).

The camouflage scheme I used here is a construct of four shades of flat brown (which one could describe as a splinter scheme) and was created using Tamiya XF79, XF57, XF 72 XF 78 (XF denoting flat colour paints). The starting point for a multiple colour scheme using shades of the one colour is to apply the lightest shade first as the overall base (which for the Tornio was Tamiya XF78) and then progress forwards using that formula. The airbrush used for my first coating was an IWATA Neo pistol grip with its compressor set to 22 psi (see Photo 26-29).

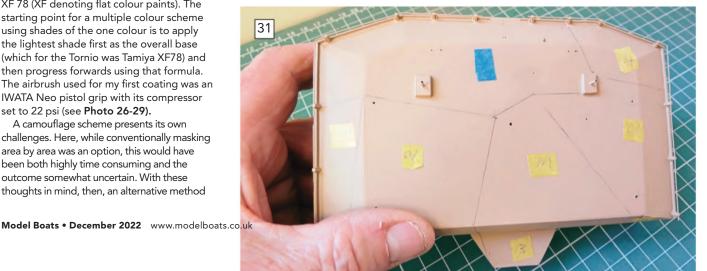
A camouflage scheme presents its own challenges. Here, while conventionally masking area by area was an option, this would have been both highly time consuming and the outcome somewhat uncertain. With these thoughts in mind, then, an alternative method

was called for. So, before any additional shades of brown were applied, the entire model, hull and fittings, were marked as per the shapes on the full-size vessel. For example, each specific area was given a number that denoted which shade of brown was to be applied to a given area/shape (see Photos 30-31).

Next month...

In Part 3, we shall be looking at applying multiple area masking, a very different approach to creating camouflage schemes, enlisting the crew, and, to close this brief series, we shall be seeing the missile corvette Tornio take to the water.

BELOW: The rational of marking out the shapes of the camouflage and applying numbers to each shade of brown will be explained and demonstrated in Part 3.



Memory Lane



Dennis Allen's AM10 model diesel alongside a 50p coin to give you an idea of scale.



Refuelling!

Dave Wiggins flags up some 'more miles per gallon' collectables

for fellow vintage enthusiasts

n previous instalments of 'Memory Lane' (and indeed in several earlier series in Model Boats, and elsewhere) I've presented many miniature two-stroke British model diesel engines, and here is yet another. Until now, however, never have I delved into the means of powering these once essential propulsion devices.

Since I first began to collect and restore model internal combustion engines and electric motors (vintage radio gear, too, for that matter) prices have risen steadily. Certainly, the sort of exotica that I once purchased and restored when prices were manageable (Taplin twin cylinder diesels, Channel Islands and Gannet petrol engines, for example) are now way beyond my retired income. So, what to do? Well, I've mentioned before that attractive yet 'minor' accessories and tiny items such as model sized glow and sparking plugs are still modestly priced and, in a few cases, even cheap: could they, therefore, offer the possibility of getting ahead of the pack...

Collecting fuel cans (aka 'Trinketry'!)

Having decided to move into collecting less expensive 'essentials', I began with vintage diesel fuel cans. I've watched and enjoyed popular daytime TV programmes that focus on full-size (more often than not motorcyclerelated) memorabilia – something, rather delightfully, referred to by the various presenters as 'Trinketry'.

There is, of course, a world of difference in price between what these pleasant guys feature and *model* fuel cans and accessories, but, even by 2021 when this feature was planned, prices for empty model fuel cans had already begun to creep upwards, reaching a silly 'fantasy land' in a few cases (fellow TV viewers 'getting rich quick', no doubt!)

After looking online for a few months, I eventually bought the pair of Keilkraft fuel cans pictured. One cost me just a tenner but the other was 30 quid, which was a bit daft of me. Having said that, I spotted an identical example listed on a well-known auction site

NITRATED DIESEL FUEL
HIGH PERFORMANCE FUEL
FOR ALL DIESEL ENGINES

ABOVE: A vintage KeilKraft 1-pint size diesel fuel can, c. 1960. RIGHT: A nice pair of vintage fuel cans from KeilKraft.

"The sort of exotica that I once purchased and restored when prices were manageable are now way beyond my retired income. So, what to do?..."





ALTITUDUM THE DESIGN and manufacturing standards of present-day engines are extremely high, few engines escape criticism on some point or other. Every so often a particular engine comes along which, as far as can be assessed on the several hours test-running given it, just cannot be faulted on any acore. It is in this latter class we unhesitatingly place the new Allen Mercury "10". Not only was it a delight to handle, and perfectly consistent in performance, but its power output approximates closely to the best of the 1-5s. In fact, at the upper end of the speed range it is beating most 1-5s and not a few engines of more than twice the capacity. Physically the "10" is a bit big for a 1 c.c. engine, but its displacement checks out at exactly that figure. It is built rugged and tough and therein probably lies the secret of its outstanding performance. In other words it is a rigid engine which is less likely than most to suffer from cylinder distortion and resulting internal losses.

This is apparent on taking the engine to pieces, The cylinder is a really massive affair, 190 in. thick

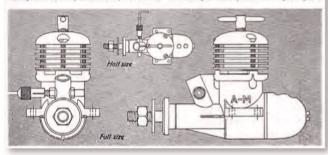
at the bottom end and ·134 in. thick at the top, but still weighing only a shade over half an ounce. The crankshaft is ½ in. nominal diameter, with a crank pin diameter of ½ in.—sizes in excess of those normally employed on an engine of 50 per cent. greater capacity.

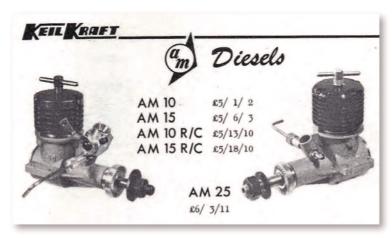
The resulting stiffness would certainly appear to pay dividends. Good workmanship also plays its part. The piston is a very nice fit in the slightly tapered bore (relieved slightly at the lower end) without the slightest signs of tight spots. Both the main bearing and the shaft are honed and individually matched for fit, the canakcase alloy (LAC 112A) being of a recommended type for plain bearings with steel shafts. Both the piston and cylinder are of Mechanite, which in itself is more free from heat dissortion and internal stresses than plain steels.

specification and each is, to a large extent, a hand-made engine.

In order to accommodate the rather higher than average labour time and still keep the cost down, machining on the crankcase itself is reduced to a minimum. It is not, for instance, machined either where the cylinder fits, or faced off to take the back cover. In both cases gas-right seals are obtained with the use of gaskets.

The contra-piston is of generous size, lapned





LEFT: A 1956 review of this month's featured engine by Aeromodeller magazine. ABOVE: A nice old ad run by the distributor KeilKraft for the pictured engine duo, in both standard and R/C versions.

"Non-diesel boaters of today may be a little bit surprised to learn that all model diesel brands consist of paraffin, castor oil and ether (in equal measures)" fashioned' are the pair of side-ported engines made by Mills Brothers. A Mills is very typical of the very first model diesel engines in this regard, being slow revving, long stroke and easy starting, with the emphasis more on handling than performance. Hugely popular, these little engines were sold in big numbers and have been reproduced both in the UK (the Irvine-Mills) and overseas in recent times, a bit like Royal Enfield motorcycles.

The hugely popular 1cc 'Bee' from E.D. Ltd had rear disc induction but was equally easy starting, with just a bit more horsepower than a Mills. Like the Frog also mentioned, this AM, however, was different and rather more 'modern' trending to an 'over square' (shorter stroke) design, enabling higher revolutions and more power with its front rotary valve induction.

Like its blue headed 1.5cc sister (previously featured in this column), the little AM10 was a reasonably easy to start and handle twostroke that really lived up to the 'good buy for novices' claim promoted by designer Dennis Allen and retailer Henry Nicholls (Allen and Mercury). Lots and lots of these engines were consequently sold and, as a result, examples are still very easy to find today, as are the AM10's 2.5 and 3.5cc bigger sisters. My advice would be to find one that's not been too mangled by young and overly enthusiastic previous owners and to watch out for things like drilled out mounting lugs, replaced or bent needle valves and missing fuel tanks.

intended for R/C use but rather for small control line or free flight model aircraft of the balsa and tissue variety. That said, one can find examples made that bit later on (late 1960s) that are fitted with simple R/C throttle valves and even crude silencers. Mine is missing its fuel tank, as you can see, but I believe someone 'out there' is making replacement replicas now. Marine versions are harder to find, but they are about.

Such little motors were, of course, never

See you on the other side... Next time out, and for my first column of 2023,

I'll be whisking you off to enjoy some New

Year's California sunshine, so, until then,

enjoy the holidays wherever you are.

for double that elevated price just a few days later (although, admittedly, it remained unsold for very many months thereafter). My point is that model fuel cans still be obtained at sensible prices (if you can call buying an empty, rusty fuel can sensible, that is!)

In the 1960s, back in the heyday of the model diesel engine, there were not many fuel brands on the market. Most of the British engine manufacturers (MILLS, ED and FROG included) and distributors (Veron, K/K) sold their own fuels, either bottled or canned, in 1/2- and 1-pint sizes. Why the big difference between diesel and glow engine fuel container sizes (glow fuel was mostly sold in half and I gallon sizes), you may ask? Well, model diesel fuel was manufactured in much smaller capacities, as little diesels between 0.5 and 5cc are very much less thirsty than an 8 or 10cc glow-plug engine – simple as that.

Allen-Mercury

The little AM10 (green head) I feature here is a good example of a small engine that would run all day long on half a pint of fuel; indeed, you'd very probably have some left over at day's end.

My two examples of AM engines were both sold by distributors KeilKraft of Wickford, but the other big distributors (Veron, Frog etc) also canned up model fuels, and some of their cans are much more attractive/colourful. As you can see, the two cans shown differ slightly, which is why I bought the two. When I first started power boating in 1963 K/K fuels were the number one brand seen at the south Essex pond side where I boated, for the simple reason that

Eddie Keil's factory was 'just up the road' in Wickford and every hobby shop in the county sold his branded fuels. Later on, I switched to using ED 'Super Zip', which I always found to be a very reliable fuel.

Non-diesel boaters of today may be a little bit surprised to learn that all model diesel brands consist of paraffin, castor oil and ether (in equal measures). The 'nitrated' logo on these tins refer to a fuel additive then in use: Amyl Nitrate - quite dangerous stuff but, let's face it, all model fuel constituents come with some risk if misused. One guy I knew used to run his 'ETA' racing engines on a Benzene mix. Nitro Benzene is really nasty stuff, and the methanol that glow engines run on isn't exactly good for you either! I intend to try to buy a couple more cans, so you may see more on this topic one day.

The 1cc engine class

Encouraged by model magazines and popular writers of the 1950s, beginners almost invariably chose a 1cc diesel for their first engine purchase: in my case, a Frog product. Made in very large numbers at affordable prices by all of the rival British engineering manufacturers, virtually every book or magazine feature on 'starting out' recommended something like an ED 'Bee' (at least 300,000 of these were made and likely many more), a Mills 0,75 or 1.3cc, a Frog 100 or 150 or - yes - this smart little 1cc offering made in London by A/M (Allen Mercury).

I've listed the example engines above for a good reason, as, although they are all in the same size range, they are very different designs as regards induction. The most 'old



cropped up many times over the years and I'm still surprised at the divided opinions on the subject, as well as how little understanding of the process some show. I think a lot of this may stem from the fact that when I was young it was a normal practice to carefully run in a new vehicle engine for the first 500 to 1,000 miles of its life, slowly increasing the revs and load over time, whereas nowadays significantly more accurate manufacturing tolerances and more forgiving materials have almost removed the need for the procedure entirely. Most guidance from vendors tends to be something along the lines of "Just take it easy for a couple of hundred miles, change the oil, and you'll be fine". The majority of model steam engines, though, definitely seem to benefit from a period of running in, for reasons that we will look at here. This process will help you enjoy many years of trouble-free running. I would certainly

recommend that this is something done with

a new engine, whether it's a manufactured

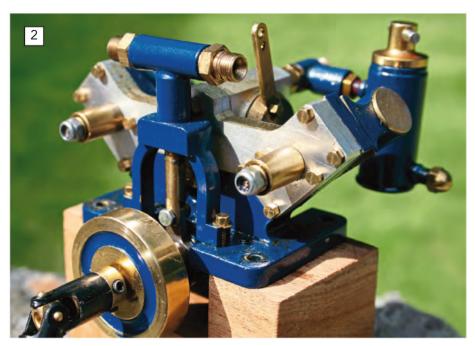
engine or a homemade one (see Photo 1). There will always be some modellers who'll tell you they didn't bother with this and that their engine runs just fine; whether they've reduced the life of their engine or whether they simply haven't noticed they now have a slightly less efficient engine is open to

"This process will help you enjoy many years of trouble-free running" debate. I do think, however, that any newly manufactured engine can feel a little tight when you try to rotate it by hand, and, personally, I'd feel uneasy putting it straight into operation on steam in such a condition.

Why do we 'run in' an engine?

When the component parts of an engine are manufactured, they're machined to as close a tolerance as possible. Items that run together, such as shafts in bearings and pistons in cylinders, can be machined to such close tolerances that they're just on the edge of being resistant to movement. A new engine will nearly always feel just that little bit tighter to rotate when you turn it by hand. Another concern this generates is that there's such a small gap between components there can be very little oil between the sliding surfaces, so overheating, thinning the oil and subsequent scuffing of the surfaces is possible when it is first run. What we want to do, then, is carefully, and in a controlled manner, open out the gaps between these surfaces to allow easier and smoother running by slightly easing out the fits and allowing a better film of oil to keep the components apart.

Basically, 'running in' is a deliberate process of accelerated wear, so it must be controlled carefully so as not to overdo it, and the consequences of what we are doing understood. If you've done a good job of running in the engine you should feel that it rotates by hand much more freely and smoothly and so, consequently, will be more reliable and efficient in operation. This will have the added benefit of using less steam and, therefore, gas when the engine is first used in your model boat, so that its duration on the water should be much better.



Frequently you'll find an engine with a water pump fitted, and often the displacement lubricator is fitted to the steam inlet port.

These are best removed as the pump will be running dry, which does it no good and the lubricator doesn't work with compressed air.





ABOVE LEFT: Running in by using a lathe to turn the engine is a perfectly acceptable method of doing things, provided a longer engine is supported at both ends of the crank shaft and the paintwork is protected from damage. ABOVE RIGHT: A typical 9-litre reservoir home workshop compressor fitted with a drier ensures you're not putting moisture through your engine during the running in, and a pressure regulator will enable accurate speed control.



Making up a block of wood to hold your engine is not a difficult task and makes maintenance in the future that little bit easier. The screws here are simply tapped into close fitting holes with two-part epoxy around them.



Now that we have a better idea of why we are doing it, we're much better prepared for what we need to do through the process. What we're basically going to do is to run the engine manually, while continually oiling it, but bearing in mind a couple of things...

The first thing is that we're going to manually run the engine cold, so it won't actually be running in exactly the same conditions as it will when it gets into the boat and runs on steam. Secondly, steam oil is designed to be a high viscosity when cold, so it reduces to a more normal viscosity when it is heated up. Using steam oil cold will prevent the running in process from doing anything, so steam oil is not the best oil to use here. Finally, because the displacement lubricator uses condensed steam to force the oil out and into the engine, if we're running the engine manually the lubricator will not work, so we must use some other means. There are a number of different ways of manually rotating the engine, some perhaps slightly on the 'Heath Robinson' side, but there are two main approaches that modellers tend to use. Consequently, to prepare the engine for running in, I would remove any displacement lubricator units, and any engine driven water pumps if they're also fitted (see Photo 2).

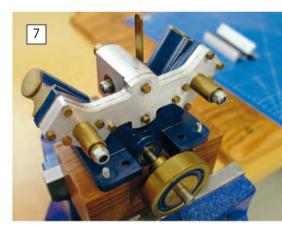
One popular technique for running in an engine is to rotate the engine in a lathe, if, of course, you're lucky enough to have one. The end of the crankshaft is gripped in the lathe chuck and the frame of the engine



The wood can them be clamped into the vice, providing a perfect means of holding the engine securely and safely without damaging it.

rested against the tool post to prevent it turning (see Photo 3). A longer engine may also need support at the other end, either by means of a rotating centre fitted to the tail stock in the end of the shaft or a support mounted on the lathe bed. A piece of wood or some sort of packing will be needed to protect the paintwork. The lathe is then used to rotate the moving parts of the engine while oil is admitted through the steam inlet port. This could be done with a syringe or even a funnel. For any engine with a built-in control valve, the valve must be in the open position, otherwise the oil will not go into the engine. The speed of the rotation can then be controlled by the speed control system of the lathe.

Probably the most common method of running in an engine is to use compressed air. A small compressor would make this considerably easier, but be careful as some compressors, especially airbrush compressors, are not designed for continuous operation. This process is actually going to use guite a lot of compressed air so a workshop compressor would be better, preferably with a fitted reservoir, such as the 9-litre unit illustrated (see Photo 4). The compressor also needs to be fitted with a reducing valve and a moisture trap. The engine can either be clamped in a vice or, as I much prefer, secured on a wooden base (see Photo 5) by its normal holding down points, with the wooden base then being held in the vice (see Photo 6). This latter method,



When fitting or removing pipework and frequently injecting oil into the air line it's so much more convenient to have the engine securely held in a vice. Here the nuts have not yet been fitted, but these are simply stainless steel M3 nuts and washers.



Here the air line is fitted and ready to go. In this case a hard flexible tube has been used, meaning the fitting will need disconnecting to add some oil to the engine, which can be a bit of a chore. You only need low pressures to run in, though, so even pushed on silicone tubing will do the job.

while keeping the engine held securely in place and unable to come adrift, again, ensures your paintwork doesn't get damaged (see **Photo 7**).

The airline is somehow connected to the steam inlet port and the air pressure set to an initial low pressure at the reducing valve (see Photo 8). The speed control is therefore achieved by adjusting the pressure at the reducer. Admitting the oil needs to somehow be arranged via the inlet pipe. One method is to shut off the air, remove the pipe and pour some oil into the port. Another is to shut off



process. Just don't do it with pressure on.

the air and use a syringe with a needle fitted to inject oil into a section of soft flexible silicone tubing (see Photo 9). Silicone tends to self-heal when the needle is removed, although it will eventually start to leak. A word of caution here: if you're tempted to try to speed things up by injecting the oil while the supply air is still open, there's a very real danger the pressure will go up the needle, into the syringe and then blow the piston out of it, closely followed by the oil being liberally deposited all over you. I won't make that mistake again!

As regards the oil, as already mentioned, steam oil should not be used for running in. I use ordinary vehicle engine oil as I find it's a perfect viscosity for running in. If the oil is too thin, such as a very light machine oil of the type we used to know as 3-in-1 oil, then the wear could be excessive, and you'll end up doing more harm than good (see Photo 10).

Steam oil is way too thick when cold, while household light oil is way too thin. Common or garden engine oil is fine for both the internal surfaces and the external surfaces of your engine during the running in process.

The process

As we have mentioned, the process is a controlled wearing of the running components of the engine. Consequently, start off nice and slow and admit fresh oil every five minutes or so for the first half an

11

If you're lucky enough to get your hands on a beautiful engine, which is likely to have cost you quite a bit of money, it makes sense to do everything you can to ensure it enjoys a long, reliable and efficient lifetime of running.

"After the running in process has been completed, the next step is a very thorough cleaning up to remove all the metallic particles created as a by-product of the process"

hour. Feed the oil into the inlet port and apply liberally all over the external running gear, such as shaft bearings, piston rod seals, valve rod seals and any reversing mechanism. After that, speed up a little and then add fresh oil every ten minutes for another hour. Finally, speed up a little more and add fresh oil every 20 minutes, again, for another hour. You will see metallic particles in the oil discharge from the exhaust port and possibly running off the running gear; you don't want this to be excessive (if it is, use more oil at more frequent intervals) but you do want it to happen. Also, note that every time you stop to add more oil you should also reverse the direction of the engine to ensure the wear you are introducing is done evenly on all sides of the running gear.

After the running in process has been completed, the next step is a very thorough cleaning up to remove all the metallic particles created as a by-product of the process. There are some who would advocate a complete strip down and some who would suggest a thorough external clean up with a solvent and brush, but either way you need to get your engine as clean as possible. If you opt for a solvent and brush, I'd recommend then completely immersing the engine in a small bath of engine oil and leaving it overnight so the oil soaks into every running face. There's no doubt that ideally the best procedure would be a total strip down, a detailed clean-up and a thorough oiling of every component on reassembly.

Once the engine cleaning is complete, and in the case of a strip down has been reassembled, you should then be able to feel the difference when you rotate the engine by hand. It should feel noticeably easier, and possibly smoother, to turn.

Life choices

As mentioned, running in is not for everyone. There are steam modellers who've had engines they've used for years that were never run in and who would suggest that not only is this a waste of time but that there's also the danger of doing some damage. As with everything else in life, we all make up our own minds and do what we feel comfortable with. Personally, having spent 40 years as a marine engineer, during which time I religiously undertook a careful running in process with every single piston I was ever involved with changing, I can't imagine overlooking the reasons behind such practice, but that's just my take on things. When you factor in the cost of a newly manufactured engine, though, surely it makes sense to do everything possible to ensure it has a long and reliable working life (see Photo 11).

10 Hatch Coaster / 4 Hatch Coaster







Scale: 1:50

L.O.A. 41.25" (1005 mm)

Beam: 8" (204mm) Displacement: 10kg



Built in 1968 -1973 for service in the North Sea and Baltic seaports.

The kit is to the usual high standards and includes building manual, GRP hull, lifeboat, other materials; CNC cut styrene decks and superstructure, full size plan, resin and white metal fittings.

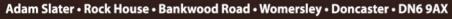
Price £340



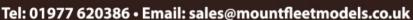
















Whether you're highly skilled and experienced or completely new to the hobby, you're definitely invited to this launch party! So please keep the contributions coming by emailing your stories and photos to editor@modelboats.co.uk

African Queen

My congratulations to the lucky person who wins your November Prize Draw for the Billing Boats' 1:12 scale *African Queen* kit.

The African Queen was my first working model and she's given me many hours of pleasurable sailing on our lake at Kirklees. As you will see, I did add a few refinements to my model. Charlie (Humphrey Bogart) is holding a glass of gin, and Rose (Katherine Hepburn) a cup of tea; obviously, he's represented before the point in the film where she throws all his gin overboard! I did have to re-dress the figures used. For example, the lady came with a black dress, whereas in the film, although in mourning for her brother, Rose always wore white – so it was back to the old sewing machine again. A few other shipboard tools were also included.

She sails well and is very responsive to the tiller.

LIONEL BROADBENT EMAIL





For anyone who has seen this brilliant film, with the Charlie and Rose figures added she's instantly recognisable as the African Queen, even from a distance, but

I love all the extra little tools, the gas cylinders later use to create make-shift torpedoes, etc, that you've included, too, Lionel. **Ed**





Waterline trio

I am sending a photo which may be of interest in the Readers Model section. Many moons ago Model Boats ran a feature on 1:100 scale waterline models. I think I must have made these in the 1970s! Featured are the *Graf Spee, Southampton Castle* and *Discovery Bay*.

JIM POTTINGER
EMAIL

Delightfully nostalgic! Thanks so much for sharing these little treasures, Jim. **Ed**

Selsey Shannon class lifeboat

I am sending you a photo of the completed lifeboat I found myself planning during the Covid lockdown. I had taken lots of photos when the Selsey MBC were invited to view Selsey's brand new multi-million-pound Shannon class boat, and I felt that our club should reflect Selsey's long association with the RNLI.

I already had a nice blue hull (1m LOA) with a pilot cutter superstructure, which looked a bit sad, and so three years later, and almost by magic, an interestingly fast Shannon model appeared. My apologies, therefore, for the missing 'curvy' Shannon shear line, but my thanks to our chairman who was able to fit two 'out runner' brushless motors, with 3000ma LiPo batteries, which was beyond my previous experience with sailing models.

My thanks also to you, Lindsey, for regenerating Model Boats magazine so effectively.

PETER TBF ('Mr Schoonerman')
EMAIL

Fabulous work, Peter, and I love how your letter highlights some of the very real benefits of model boat club membership.

As for the compliment, bless you – especially considering my recent Swallows &

Amazons faux pas (see Letters)! Despite years of experience as an editor, I'll admit taking on Model Boats seemed a very daunting challenge back in 2020, and I'm still on a very steep learning curve subject matter wise. Fortunately, however, with both readers (like yourself) and contributors being so incredibly lovely and supportive, I can honestly say working on each and every issue is an absolute joy. Plus, of course, I must applaud MB's designer, Richard Dyer, who has, and continues to be, so receptive to trying out new ideas and implementing little changes — I really couldn't ask for a better shipmate. Ed



Your Letters

Got views to air or information to share? Then we want to hear from you!

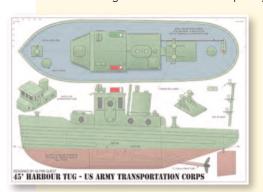
Letters can either be forwarded via email to editor@modelboats.co.uk or via post to Readers' Letters, Mortons Media Group, Media Centre, Morton Way, Horncastle, Lincs LN9 6JR

Mini plans

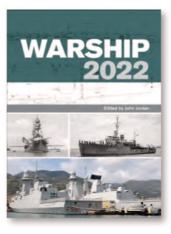
I would just like to say how delighted I am that the centre page plans are making a reappearance in Model Boats. As a digital subscriber I do not get access to the 'free plans; that are included in alternate issues, so I am delighted to get the centre page plans. The choice of Ashley's Bumper Boats and Glynn's 45ft Army tug are also very welcome. Small models with a very wide appeal. Long may this trend continue.

CHRIS EAVES EMAIL

Much appreciated feedback – thank you, Chris! And, yes, we hope to be including lots more of these mini-plans going forward. I've



long argued the case that the full-size free plans should also be made available to digital subscribers, and am continuing to do so under Mortons much more receptive to ideas ownership, so fingers crossed I may have some good news on this front in the very near future. Ed!



Warship 2022 surprise

As the winning entrant in your Warship 2022 prize draw, forgive me for not replying earlier, but other things got in the way, not least our 62nd wedding anniversary. Needless to say, it was a great surprise to receive my copy.

I was also pleased to see, right at the front of this annual, another image of Grenville returning to port (Devonport, perhaps, as the far shore is too near for Portsmouth). While serving in the Royal Navy as a Chief Radio Electrician, my mess was at the back - last three portholes at the stern. There seems to be a lot of extra bits stuck on round the trials mast, it all looks rather untidy. The helicopter flight deck is missing (as is the Bofors 40mm twin mounting and its Type 262 director), but as far as I can remember it was never used during my time on board.

Another snippet has just come to mind. We had a trip to Brest

for Bastille Day (July 14) - lots of red, white and blue bunting everywhere, with exultations for the crew to be on best behaviour. To make it short, myself and one other where on duty and we had to get the ship's side flood lit for a reception for local dignitaries, which we managed with time to spare. It was decided to leave the floods on until sunrise. About 0100 we were informed that two of the floods were not light, so armed with spanner, screwdriver and spare bulbs we ventured out on the quayside, only to find to was raining and that water had got onto the bulbs and caused them to explode. We were, therefore, told to clear them away. It was then that I noticed there was no change in the light level - all the quayside lights had been switched on.

Once again, thank you. This year's annual has several interesting chapters and lots of fascinating photographs.

DAVE FRANCIS EMAIL

You are so welcome, Dave, and congratulations to both you and your wife on that remarkable wedding anniversary! I am, as I'm sure the team at Osprey Publishing will be, delighted the book brought back memories of serving on HMS Grenville yourself, and really appreciate you sharing some of these here. Ed



Four little mites

I've been getting Model Boats magazine since 1968, so you must be doing something right! I enjoyed Dave Wiggins Four Little Mites' feature in last month issue, as I still have four of these actuators.

The first two I bought second-hand, along with a 4 channel REP reed multi in 1968. They

were designed for relay operation and used a centre tapped power supply. I was a far from rich 15-year-old schoolboy in 1968 and took a summer holiday job in a cotton mill to buy my first radio-control set.

The second two were also bought secondhand, along with a 'shop soiled' Ariel 6, in 1971. They were the transistorized ones, like those shown in the article.

The biggest problem that I had with them was that the motor is nose mounted and could come loose; when this happened, the gears would not engage properly, and the large plastic gear would wear out quite quickly. I had to buy several replacement plastic gears. I presently have an actuator that works, albeit with a gear salvaged from something or

another. The others just need new gears. They used a Marx Microperm motor with the old-style case.

The Climax enjoyed two advantages over the Transmite. The first was the fact that the Climax operated from a single power supply, whereas

the Transmite required +3; 0; -3; -4.5 v supply. The second was that the Transmite and the Duramite are each slightly more than twice the size of the Climax.

Both the relay and non-relay versions could be used as progressive actuators by cutting two wires. I did contemplate bringing these out to a relay so that I could switch between modes, but I never did. I always ran my rudder actuators in progressive mode.

By 1977 I had graduated from university and was an engineering officer in the British Merchant Navy, when I bought a nice new Futaba 6 function M series radio. It's not my only radio but my others are also all Futaba M series, and I regularly sail a boat that I built in 1974.

VICTOR CROASDALE SPRING VALLEY, ILLINOIS

Thanks for your lovely letter, Victor – clearly Memory Lane is a very apt name for Dave Wiggins' series – and I'm so glad that you are still enjoying the magazine. **Ed**



Li'l ole bote

The August edition of MB contained a letter from Trish Preston, who needed some help. She had a small model pond yacht made for her by her dad, Don Gordon. Trish used to sail the boat when she was a small girl. Her sister had a similar boat.

As it happened, I knew Trish's dad. Don Gordon was a model boat builder and model engineer par excellence. He had a series in *Model Engineer* magazine in the 1980s called 'High Precision Low Cost', which offered very practical workshop advice and which I read avidly every month.

As well as model engineering, Don also built model ships and boats, including a sailing model Thames barge and a Norfolk wherry. I had an interest in these, as I have sailed in Thames barges, and I was skipper of the wherry Albion for about 20 years.

So, when I met Don at the Model Engineer exhibition in Wembley, we had a long chat. He was very keen to impart his vast knowledge and experience to novices like myself, which was also, of course, the essence of his 'High Precision Low Cost' articles.

Don is, alas, no longer with us, but Trish still has the little boat that he made for her. It holds a special place in her heart and evokes priceless memories. But the boat was in desperate need of some TLC, and had resided in a box for many years. Trish was asking for somebody to bring her back to life (the boat, that is). I contacted Lindsey to volunteer, and soon found myself talking to Trish on the phone and sharing memories of her dad. As a result, I offered to refit the 'Li'l ole bote' for her.

The boat was posted to me arriving a few days later. She is a solid-hull pond yacht, about 12-inches long with a fin ballast keel (excuse the imperial measurements; a meter to me is something you put a shilling in when the light goes out!). A single mast was stepped, carrying a gaff mainsail. A rudder hung on the transom. All was in very tatty condition, and the sail had rotted away.

It was a simple job to strip all down and renew the rigging. A new sail was made and fitted to the gaff, boom and mast. I used the hooks and bowsies made by Don all those years ago. He had devised a simple arrangement to give the boat an element of self-steering. The leeward pull on the mainsheet is used to pull the tiller to windward, helping to counter the 'weather helm', i.e., the tendency for the boat to turn into the wind, or 'weathervane'. I remember experimenting with arrangements like this in pond boats I sailed when I was a kid, at the Nelson Gardens Model Yacht club in Great Yarmouth. I spent hours trying to get a Braine steering arrangement to work, but never succeeded!

The boat was painted in her original colours of orange topsides, blue bottom. I would guess that the colours were determined by what paint was left over in Don's workshop. Her original name was *Jean*, so this was placed on the bow each side.

I haven't managed to sail her, but I posted her back to Trish this week. She is thrilled and this 'li'l ole bote'now occupies pride of place in her house, in a place safe from her inquisitive cats!

This wasn't a huge, or particularly challenging, project, but it did give me enormous pleasure, and brought back some very happy memories.

DAVID BRAY EMAIL



Once more, you've stepped up and so kindly and generously donated your time and assistance, David. I couldn't be happier to learn of this happy outcome for Trish. Bravo! **Ed**





about 10 mins and we'd have to pack everything back into his Cortina estate, LOL!

When he passed, I received Julie, my brother has *Caroline* and *Mandy* is with my brother-in-law. The boats are currently as we inherited them, but, at some point, I'd like to see all three of them sail together again.

So, I am looking for someone like my dad (who always bought your magazine all through my childhood) to help me fix 'em up! We lost mum this year, so it was time to get them out of the loft and try and get them back on the water where they belong!

I think the photos of Julie
I've sent you are from the 60s, because by 1975 dad had refinished her in burgundy and blue and she looked stunning!
Lights, spot lamps, etc, all worked and looked amazing in the dark. Any thoughts on what Julie was modelled on would be appreciated.

Caroline is still in the colours
I remember dad having finished
her in; the paint came from
Plaxtons in Scarborough where
his coach was being painted, and
he insisted on putting the lights,
fittings, etc, back on the bus
himself (he had served in the RAF
and was an amazing engineer and
mechanic)!

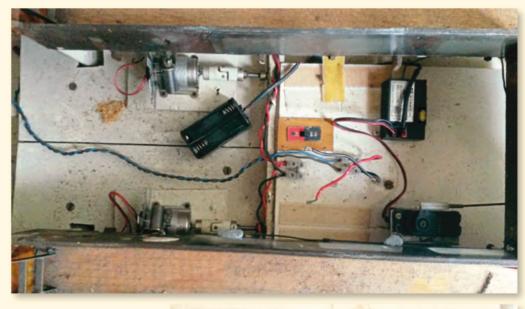
My sisters have no idea of my plans to restore these boats to their former glory, but I am hope they will be delighted when all is finally revealed. In the meantime, any background information on these boats, advice or offers of help would be very gratefully received.

MICHAEL BOGLEY EMAIL

I think it's fantastic you're planning to do this, Michael! All I can ascertain from the script



Views of Caroline



in one of your photographs is that Julie is a Vosper of some description but I am sure Model Boats' readers will be able to provide you with a far more specific identify. You've clearly got your work cut out, so I hope, in due course, that I will be able to forward on some information, advice or perhaps even an offer of some hands-on help. Good luck! Ed





KOONDROOK (VIC.)

Murray River memories

John Parker's Flotsam & Jetsam instalment last month brought back some lovely memories.

In 1998, when I was a vicar in Sussex, I was invited to do a three months' exchange with a parish in Australia. There was nothing glamorous about Albury on the Murray River, but what an adventure! When my wife and I arrived and found out about Echuca we just had to go there. One Sunday, after morning service, we headed west on a not particularly good road, covered the 150 miles to Echuca in 21/2 hours, and only saw one

other car during the whole trip. Next morning, we went to the Wharf and got tickets for a trip upstream

on the Canberra. To our huge disappointment she had been converted to diesel. [John Parker says she is now back to steam.] So, after careful enquiry we booked tickets after lunch on the Alexander Arbuthnot, and at our request the Captain took her downstream, so we saw a different bit of the river.

My picture of her boiler is not very good, but she was woodfired; in John's picture of the

Adelaide the billets of Red Gum (Eucalyptus) on her foredeck are boiler fuel. The trees grow to a huge size and when felled they were simply rolled into the river and moored alongside special barges for towing back to the sawmills, as you can see in my picture. I still have my ticket 24 years later.

Being for passage on

P.S. Alexander Arbuthnot

JOHN MAYNARD **EXMOUTH**

moored alongside special barges for towing back to a sawmill.

Departing Echuca Wharf at 215 I haven't been back to Australia since my 20s, but I know just what you mean, John; if I had to describe my visit in just a couple of words, those words would be 'an adventure!' – although, sadly, I never got to the Murray River (naively, my plan was to see everything – only to have my mind blown by the sheer magnitude of the place and the

> Anyway, so glad John's feature brought back such happy memories, and thanks for sharing your pics. Ed

distances involved).

Thoughts on foam

I thoroughly enjoyed Part 1 of John Mileson's new series focusing on the build of his Victorian Steam Launch and I look forward to reading the subsequent instalments.

While not wishing to detract from John's fine work. however, I would like to add a word of caution regarding the use of central heating pipe insulation in the construction of stands for model boats...

As most boat modellers are already aware, the use of many modern paints is a bit of a minefield, as the chemicals used by one paint manufacturer will often react with paint produced by another. Unfortunately, it's the same with paint and foam pipe insulation. One 'victim' of this was the late Dave Milbourn, who knew a thing or two about model boats and was a regular contributor to Model



Boats (indeed many of his articles still feature on the MB website). As a consequence, Dave had to strip the hull of

one of his models back to the base material and start again.

For some reason I have never used the pipe insulation material and instead use self-adhesive carpet tiles. Many years ago, I purchased a pack of these from one of the Pound shops and now just use strips of this material as required – although it does require putting a little more thought into the design of a stand. When making a stand for any new model, I undertake a longevity evaluation using a painted test sample and a scrap of carpet tile, as the boat hull and the protective material are going to be in contact with each other for a considerable length of time. To date, no problems have been encountered

DAVID MARKS EMAIL

Thanks for flagging up this potential problem, David, and for recommending a tried and test alternative material. It's always great to be able to 'share the learns' on these pages. Ed

Have your say...



Fact and fiction

I was quite put off my breakfast by your thought (Oct.'22) that a hard-chine, white sprit-sail, dinghy model might have been 'inspired' by the pre-war stories of *The Swallows and Amazons*.

I could see some Jack Holt, of Mirror Dinghy and Do-It-Yourself fame, in the use of plywood for the hard-chine construction – but he was a post- war boat builder. The rig, with a 'spritty' main sail, was reminiscent of that used so effectively by our historical Thames Barge fleet.

I have always thought of myself as 'among the chosen' as I learnt to sail, from about the age of eleven, off Felixstowe beach, completely without parental control. Throughout my 'teens', a couple of us lads had the sole use of a 10ft clinker-built dinghy, with a small red balanced-lug sail. We'd never heard of Arthur Ransom, but, of course, since then I have realised how close to the *Swallows and Amazons* characters we were, and my close affinity with sailing, and modelling, has lasted all these decades.

So, perhaps John's fine model can claim to have been inspired by Arthur Ransom's extreme love of sailing small boats and his wish to share the resulting life-changing experiences with the rest of us?

PETER TBF (THE SCHOONER MAN) EMAIL

Fair comment, Peter. I must, however, hold my hands up to the fact that it was my standfirst (introductory line to the feature under the headline) to John's feature The Orphan's Tale that described his build as a Swallows and Amazons-style sailing dinghy (which as you so rightly point out, it is not). In all fairness to John, he simply referred to the fact that the idea for what to do with the old model hull he'd acquired was inspired by memories of his favourite childhood novel. Thank you so much, therefore, for bringing the error to my attention and allowing me to set the record straight.

Your childhood/teens sound idyllic. In so many ways, we had way more freedom than the younger generation do today, and I, for one, wouldn't trade that for all the high-tech gadgets and designer labelled clothes and footwear in the world! **Ed**

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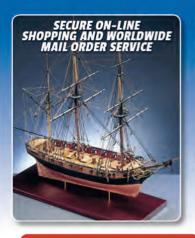
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