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The World's

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Vol.64 No.768

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Columbus

Paul Blyth's superb 1:96 model of the US Navy's guided missile cruiser





Bark Endeavour

James Cook's converted collier A free sailing masterpiece!



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Brad Gibson

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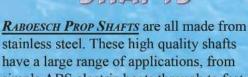
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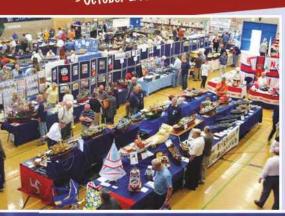
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COMPASS 360

General items, what's on, comment and SWA News

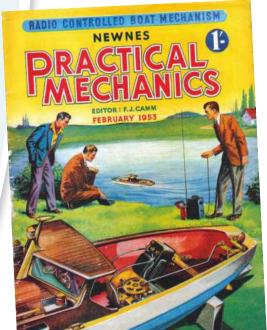


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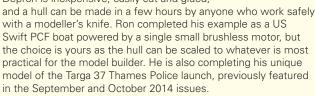
Roger Stollery reports from Furzton Lake, Milton Keynes

WINGS AND WHEELS 2014

Dave Brumstead visits this popular Essex modelling extravaganza for all hobbyists

Bow piece

his issue includes a Centrefold FREE PLAN designed by Ron Rees for 'The Amazing'. This is a universal hard chine hull made from Depron, that can be easily adapted to suit the huge range of modern, and not so modern, fast boats. Depron is inexpensive, easily cut and glued,



USS Columbus is a unique American warship model and it is featured in depth in Range Finder. 2014 is the 70th anniversary of D-Day in 1944 and to celebrate that a group of Model Boats' readers who are regular 'posters' on our Free Forum, organised a successful event at Bushy Park in early June and a report is included in these pages. 2014 has also been a great year for British model yachtsmen, with Brad' Gibson winning once again the World Radio Controlled Marblehead Championship, held this time in Holland, so 'Well Done' to him for that achievement.

In Readers' Models there are a range of your inspirational craft featured, including a fine free-sailing model of HM Bark Endeavour and in Around the Clubs, the Victoria Model Steamboat Club are celebrating their 110 years of existence this year.

So together with the usual regular features, there is hopefully something for everyone in this issue to inspire and motivate readers to pursue this great creative hobby of ours.

Paul Freshney - Editor

Compass 360

Model Boats notice board for your news

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HMS Trafalgar -Tony Dalton

Sorry! This was due in this issue and was all ready to go, but has had to be held over to the December issue because of space considerations. This is the first time in seven years, I have to 'hold' a promised feature article, so 'sorry' again about the delay. Paul Freshney - Editor

WW1 E Class Submarines

In the September 2014 issue of MB, there was an article by John Parker about Australia's first submarines. Martin Garnett wrote to us in September and

mentioned that the (UK) Imperial War Museum has an excellent 1/24 scale sectioned model of E-29, made for the Museum by Armstrong Whitworth in 1921 as presumably they had access to a set of scale drawings at the time, having made the original vessel. He suspects the model is currently out on loan or perhaps in storage and access a little difficult, but the IWM's Collections-on-Line website is: www.iwm.org.uk/ collections/item/object/30018130 (Thank you Martin for this info' -Editor)

Steve Stoner

We welcome Steve to these pages as the new regular designer for Model Boats magazine. Steve

is an experienced designer and has previously designed the Colin Bishop edited 'Specials' and stood-in for Richard Dyer when he has been on holiday. Richard has designed the magazine for 17 years, but I am not sure if Steve will manage quite as long as that, since like myself, for him the age of 65 is not too far away and although retirement is no longer compulsory, one does tend to think of all the things that one could do if there were the free time available! Anyway, I am sure he will do a very good job for the magazine and our readers.

Paul Freshney - September 2014

International Model Boat Show

A final reminder to note the dates of Friday 7th to Sunday 9th November 2014 for this annual major three day model boating event, to be held as usual at the Warwickshire Exhibition Centre, Fosse Way, Nr. Leamington Spa, CV31 1XN. Website is: www.modelboatshow.co.uk for more information, or tel: 01926 614101.

Model Boat Convention 2015

The theme of this event being held for the 26th time at Haydock Park on Saturday 29th and Sunday 30th August 2015, is 'Glynn Guest Models'. Glynn will also be the Guest of Honour for this event and the organising committee have decided that there will be an additional competition for youngsters up to the age of 16 building a model from one of his plans. Full entry information for them is now on the Model Boat

Convention website, together with how to obtain the UTE plan (February 2013 MB), free of charge, from which the model should be built

This is an opportunity for young enthusiasts to demonstrate their skills with a design that is easily adaptable, and of course a wood pack for the hull is also available from MyHobbyStore. Entries must be via the Model Boat Convention, website:

www.modelboatconvention.co.uk

Huddersfield Model Show - 2015

This is being held on Sunday 15th February 2015 at Huddersfield Sports Centre, Southgate, Huddersfield, HD1 1TW. It is sponsored by IPMS Wakefield and District Branch and features all types of model. Visitor entry is Adults £4 and Concessions £2, doors open 1000 to 1700 hours. For further information please contact: Geoff Milnes, tel: 01132 893152 or 07879 446554, or Alan Paul, tel: 07811 358355. Show wehsite is:

www.huddersfieldmodelshow.co.uk

London Model Engineering Exhibition

A reminder to note this early-2015 exhibition in your diary. This event takes place at Alexandra Palace, Alexandra Palace Way, London, N22 7AY from Friday 16th to Sunday 18th January 2015. The exhibition opens from 1000hrs to 1700hrs each day with the exception of Sunday, which closes 1630hrs. For further information please see advertisements or the website: www. londonmodelengineering.co.uk.

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- A Gallery which features photo albums of models, including some under construction by Model Boats readers and being updated as they progress.
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- A Features area that has sections for: **Build Features, Kit and Product Reviews, Hints,** Tips and Technical, Show and Regatta Reports and General Interest Articles on Model Boating.
- A Link to www.myhobbystore.com which has over 3000 plans available and numerous modelling items, books and kits. These can all be purchased online.

SWA News

he Summer 2014 issue of Quarter Deck Ramblings, the newsletter of the Surface Warship Association, arrived recently in the editorial office. This association is a national organisation, its members all having an interest in warships and as a group they support many model boating and general interest events in the UK and Europe. One such event where they were promoting the hobby to the general public was the Armed Forces Day Display at Himley Hall, Dudley, West Midlands, and the following is from an article by Adrian Clutterbuck, first printed in the QDR newsletter.

BELOW: Note the superb diagonal planked deck and locker detail on this MGB.



Armed Forces Day - June 2014

The Surface Warship Association had been asked at short notice to take part in the event at Himley Hall. Unfortunately it was too late to advertise for help in the association's newsletter but SWA members, myself and Trevor Davis, joined Sandwell MBC in putting together a decent warship display, both on and off the water. The display was right next to the Hall Lake, so several warships were on the water during the day. A five foot long tank landing craft was the highlight of this activity when it showed the operation of its opening bow doors and lowering bow vehicle ramp, but also afloat were WW2 corvettes, an aircraft carrier and several MTB's, including PT109, President Kennedy's boat. On the display stand, the SWA and Sandwell MBC managed to display a total of 28 different naval ships including sailing galleons, small naval craft, battleships, destroyers, submarines and a dedicated WW2 RAF Air Sea Rescue Boat display. During the day, Dudley Council (the event organisers) and the Lord Mayor visited the display and



ABOVE: Sandwell MBC and the SWA combined to put on an excellent

commented very favourably about it. Attending the event as a whole were The Military Wives Choir; The Royal Artillery; The Mercian Regiment; several ex-military vehicle re-enactment groups and all three Armed Forces. Notably, Sandwell MBC made the SWA most welcome, particularly with their cakes!

(Editor's note: The SWA are pro-active at promoting warship modelling across the UK and are to be commended for what they do for the hobby as a whole. As an association, they are a national body and membership also means that discounts can be obtained from a number of well known suppliers)



The CNA A A seed a realize

The SWA Membership Secretary is Mr. Hilary Breeze, 38 Birch Crescent, Holtwood, Aylesford, Kent, ME20 7QE. Tel: 01622 710528, email: hbreeze@ecgroup.co.uk. Information supplied by Adrian Clutterbuck

Thank you

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FROM THE MODELS (6 INCHES)

BoatsNext issue

The Model Boats 2014 Winter Special Edition issue is on sale on the 7th November 2014



John Parker's new 1:12 scale US Coast Guard Picket Boat Feature Plan.

BORRUM

Borkum featured in Richard Simpson's Steam treatise.

This issue will include a number of major articles including a Feature Plan presentation from John Parker for his US Coast Guard Picket Boat; Glynn Guest shows how using simple mathematics can make it much easier to design practical working scratch built models and Richard Simpson in a Master Class makes the subject of 'steam' very simple. Also to be included will be: Dave Milbourn with a superb article on radio control and Dave Wooley makes airbrushing easy.



Little or large, simple mathematics make for practical model boating building.

See more about what's in *Model Boats* magazine month-to-month in forthcoming issues and see some of the articles you may have missed from past issues and subscription offers on our website: **www.modelboats.co.uk**

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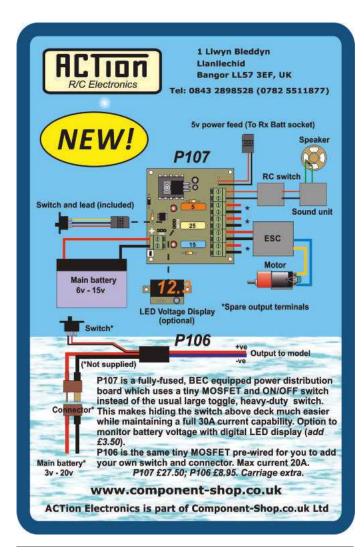
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Botnia Marin Targa 37 Part Three

Ron Rees completes the FAB-U-LOUS model of this boat as used by the Metropolitan Police on the River Thames



ABOVE: Ron Rees aboard Patrick Colquhoun II during the summer of 2013.

Photo 45. The diving platform is plywood, slotted for the locating pins, and then laminated with styrene.

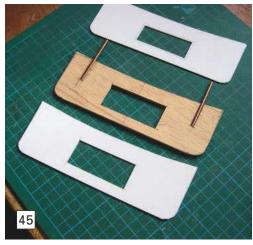
Photo 46. The diving platform mounted on the transom.

t the end of Part Two in the October 2014 issue of Model Boats, we had the hull, superstructure and lighting all made, so we are now continuing to final completion.

Diving platform

This could be made earlier or whenever you have an ideal moment, as it is just a piece of plywood, slotted to take two retaining rods, **Photo 45** and laminated with thin styrene. There is an opening to be filled by a teak slatted hatch, **Photo 46** and the





Deck fittings and other bits and pieces

The winch was made from scratch using assorted washers, a redundant servo gear, styrene and thin brass rod. All the handrails, ladders, pulpit rails, equipment frames and so on were made from brass rod and thin tube, laid out on a piece of 0.5 inch scrap plywood with holes drilled in it after marking the various spaces and sizes. They were soft soldered with a fine blow torch and/or 18 watt soldering iron. I ensured as far as possible that a short spigot was allowed for on all metal wire fittings which would then fit into holes drilled for them. They were all glued in place from the inside with a drop of medium superglue after painting. On this last point, wooden cocktail sticks are cheap, disposable and as good a way as any of applying very small amounts of superglue.

There is real teak used on the cabin sides between the windows, under the seats, the door frames and indeed wherever wood is used. Teak can be hard to find and that used here came from an old garden seat, but sealing it can be a problem. When it is new, it has a reddish brown colour with a dark flame pattern and other similar woods might in practical terms do equally well and be easier to use. Three coats of thinned cellulose dope were what was applied to finish the teak pieces before attachment, since a coat of polyurethane varnish will eventually flake off because of the residual natural oils within the wood itself. Danish Oil is okay to get a decent finish if you have some, but conventional teak oil soaks in and will disappear in a year or so and then the wood will gradually go grey

The main handrail uprights are all soldered to short strips of brass, 6×0.5 mm, and then glued into the existing holes in the top of the coaming.

www.modelboats.co.uk Model Boats November 2014





These are then topped off with teak strip which was cleaned with white spirit and epoxied to the brass strip pieces, the final finishing coming later.

The dashboard is a piece of balsawood skinned with teak and white styrene where needed. Dials are 'jewellery jump rings' which are used to join chain together and are available in Hobby World (a large retail park type of hobby store) in packs of 100 or so.

The steering wheel is a five spoke heavily dished wheel, about the size of a 5p piece. The one you see here, was made by annealing 1.5mm brass tubing, then winding it around a suitably sized small nut socket. Five holes were drilled through the tube with an 0.5mm drill then the hub (a piece of tube) and all the rest of it was jigged for soldering using 0.5mm brass rod as the spokes. After soldering, the spoke ends were filed off and it was all sprayed chrome with the rim painted brown to represent teak. **Photo 47** is a close-up of the dashboard and steering wheel.

Just outside the back sliding cabin door is a tall Samson post, with cleats top and bottom. This is from styrene tube with a 3mm bolt shank glued inside at the base. Under the floor there is a corresponding nut and this fitting also locks-down the cabin assembly. On the plan are indicated two L-shaped lugs which locate the front of the cabin under the forward deck section, thus ensuring the whole thing cannot fall off during high speed turns.

There are eight tiny 'Safety Harness Connection Points' around the boat at chest level. Three are along each cabin side and one each side on the first vertical of the front section. These are each made from a 2mm square of styrene with a folded-over piece of 0.5mm brass rod glued in and then drilled into the cabin's styrene sides, with a drop of superglue to secure.

Painting

Much of the painting was done as the model progressed, but for the key colours, conventional over the counter car touch-up aerosol cans were used. Ian Folkson also produced all the specific Day-Glo artwork and lettering after I took the photos of the full-size Targa to him and the scaled-down sizes for the model. These were all colour printed on peel-off self-adhesive vinyl and transformed the model in minutes, **Photo 48.** Notably, the real Targa is actually 'wrapped' in this way. Readers may not realise, but many lorries, for example those of Eddie Stobart, are not painted but 'wrapped' in huge bespoke sheets of colour trim and much the same



applies to suitably embellished police cars.

However, before proceeding further with the fendering and the final detail bits and pieces, it was off to the lake for some sea trials.

On the water - take one!

The model was first tested on the water in the summer of 2013 before 100% of the detail had been included and most noticeably the rubber fenders had not yet been fitted, **Photo 49.** It floated exactly on the right waterline without any changes or ballasting required and when the throttle was partly opened, it moved along at a very realistic pace. A few turns around the pond showed that it was an extremely stable design with no nasty tendencies. It was exciting to operate and turned on a sixpence and would certainly make a good scale steering model.

A rapid stop would allow some water to come over the rear platform as on the real boat and a little spray fell on the stern decking in places, but nothing to worry about. Opening to full throttle, it lifted nicely and held an attitude that was exactly the same as the full-size version. Turns were crisp and there was never a moment when it felt that

Photo 47. The steering wheel is fabricated from brass. The control dial rims are jewellery linking rings, obtained from Hobby Craft.

Photo 48. The self-adhesive decals transform the model.

Photo 49. Not quite finally complete, but looking good on the water in mid-2013!



Photo 50. No obvious vices at speed and no 'digging-in' during tight turns.

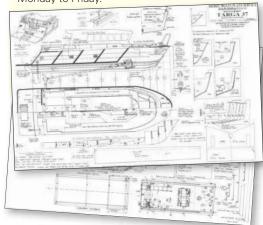
Photo 51. Here you can see the rubber fendering that goes over the word POLICE.

Photo 52. On the stand and in its final configuration.



Plan for Botnia Marine Targa 37

The two sheet full size plan **No. MM 2093** is available from MyHobbyStore Ltd and is priced at £12.50 + p/p as of October 2014. MyHobbyStore plans may be purchased online at www.myhobbystore.co.uk or please call: 0844 848 8822, 1000hrs to 1600hrs, Monday to Friday.



the model was unwieldy or couldn't handle what was happening. This first outing was proof that the design was successful and bore out its nickname of '4 x 4 of the Seas'!

After a battery change from the 7.4 LiPo to 11.1v it went like a rocket, Photo 50, but still showed no nasty vices until the steering servo packed up. After my fellow model boaters had carefully nudged the model back to the bank for me, a few minutes unscrewing the rear servo hatch showed that the servo in its sealed compartment was now under water, as mentioned much earlier in this narrative. So though it was a successful outing for this first test at Fishers Green Sailing Club, where we have a Model Boating Section, there were still some improvements that were needed. After a new servo was coated in epoxy resin (Paul Freshney's idea as mentioned earlier), plus other remedial tasks, the following Sunday saw the model with a few more bits and pieces added being put through its paces again. No problems now with water getting in and it had a non-stop 20 minute run before coming back safely to the pondside. The motor, which had been driving a two bladed Graupner 35x propeller was not even slightly warm. A quick check with an inline volt and amp meter showed the 7.4v LiPo battery down to 6.9v and a current test showed the system using two amps without load and four amps under load when in the water. So, another battery was fitted and out went Targa again!

Back to the workshop

Targa has rubber fendering all round the hull at deck edge level, around the rear diving platform and it continues on the hull at chine strake level. There are more rubber fender pieces on the hull sides angled forwards at 60 degrees, **Photo 51.** These fenders were added after the word 'POLICE' was applied to the hull sides and after the initial sea trials. A very helpful supplier of 6mm half round neoprene rubber for these fenders was discovered via lan Folkson (supplier details at the end), and a useful word of warning follows now.

The hull had been sprayed with the Car Plan brand of acrylic gloss colours which are great, but when gluing on the fenders the best glue is Bostik Clear Impact Adhesive, but this has to be very accurately applied to the neoprene strip as it will also melt this type of spray paint back to the primer, so be careful. Having thought about it in hindsight, a spray application of a clear gloss finish over the



lettering and the painted hull before fitting the rubber pieces, would protect the dark blue finish somewhat, but care will still be needed.

And finally?

Photo 52 is of the completed model in its final guise on the stand and **Photo 53** is of its interior. Obviously the battery can be changed as required, but a LiPo pack can be 50% of the weight of an equivalent NiMH battery, so for these types of model they are really the best option.

Finally, **Photo 54** is of Targa on the water in late-2013, now 100% complete.

Conclusion

I must admit that I am very pleased with the way the model looks and performs, and quite chuffed that this first attempt at designing and making a model from scratch has worked out so well. It really did look just like the real one when on the water and after a few staged runs towards and across the camera, some shots were compared to photos from Wessex Marine, who were sent copies of both and they couldn't tell the difference! The carved foam and nylon stocking covered hull is just so light, but very strong, and that allows a lot of detail to be added. This model is one of those that like lifeboats, should be clean and shiny and in fact the real police boat fulfills some of the traditional lifeboat roles.

Yes, definitely my kind of model!

Happy boating from Ron Rees

Photo 53. The final interior layout. The panelling on the walkways is all stick-on self-adhesive film.

Photo 54. Final configuration in late-2013. Targa is at slow speed in this picture.

Suppliers and useful contacts

Silicone rubber and casting resins: **Sylmasta**,

website: www.sylmasta.com, tel: 01444 831459

Blue Styrofoam board and clear casting resins and dyes:

Technology Supplies, website: www.technologysupplies.co.uk, tel: 0845 5670000

Heat proof silicone and white metal: **Hobbies UK**,

website: www.hobby.uk.com tel: 02087 614244

Plasticard sheet, profiles and glue: **SHG Models**,

website: www.shgmodels.com, tel: 01785 840308

LED's, resistors. Batteries:

Component Shop

website: www.component-shop.co.uk, tel: 08432 898528

Neoprene fenders, tube, edging: **Seal Plus Direct**,

website: www.sealsplusdirect.co.uk, tel: 0845 226 3345

Boat parts & bespoke printing: lan's Boats,

website: iansboats@virginmedia.com, tel: 02082 526702

For fittings, stickers, photos of police boat, please contact **Ron Rees**, email: rontheatricalprops@ntlworld.com.



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ABOVE: Paul Blyth's superb model of the USS Columbus.

elcome once again to our regular sortie into the world of fighting ships and this month we are looking at an award winning 1:96 scale model of USS Columbus, a first generation US Navy guided missile cruiser, plus we start work on a Deans Marine HMS Skirmisher kit.

USS Columbus

In July 2014 MB, I mentioned this model built by Paul Blyth to 1:96 scale, within the report on the Ellesmere Port Spring Model Boat Show. Now, the completed model can be seen on the water and we can reveal his unique method for maintaining its stability given its high-sided superstructure and

top-weight, but first a bit of background information about this warship.

Together with USS Albany and USS Chicago, USS Columbus was one of a class of American warship designated Guided Missile Cruisers (CG). These were not of new construction, but conversions of existing hulls. USS Albany CG10 was originally part of the Oregon City class whilst USS Chicago CG11 and USS Columbus CG12 were units of the Baltimore class. USS Columbus was laid down at Bethlehem Steel Shipyard on the 28th June 1943 and entered service on the 8th June 1945. With the end of WW2, many of the lessons were still being digested with regard to improving the effectiveness of air defence and anti-submarine warfare, whilst at



the same time the era of the big gun was coming to an end.

This was recognised with the conversion of six Cleveland class light cruisers between 1956 and 1960, one of which USS Little Rock CLG4 (Cruiser Light Guided 4!) has been preserved in Buffalo and Erie County Naval & Military Park Naval Park Cove, Buffalo, New York. Unlike USS Columbus, these ships retained their two triple 6 inch gun turrets forward whist having their new missile armament fitted aft. It was the view of the Department of Defence (Navv) at that time of the USS Columbus conversion that the gun was now superfluous, but within a short time this was reversed and two 5 inch single dual purpose guns were then retrofitted. amidships.

The conversions included the controversial reshaping of the superstructure and USS Columbus was not alone. This included a twin MACK arrangement (combined funnel and mast) and a prominent high bridge, all necessary to see over the huge SPG49 missile control radar. Plans were considered for further conversions which would have seen the installation of the Regulus 2, an early surface to surface cruise missile, plus perhaps Polaris, but these were abandoned. USS Albany and USS Chicago underwent extensive modernisation in the mid-1970's, but USS Columbus was finally decommissioned in 1975, Photo 1.

The model

3

Paul Blyth has spent three years scratch building his model and the hull is plank-on-frame to drawings supplied by Floating Dry Dock from the USA. Most of the superstructure is made from sheet styrene card, whilst the MACK's are resin cast from moulds made by Paul, as were likewise nearly all of the fittings including the fire control radars and other detail parts. These are all from masters created by Paul and are quite complex and can be seen in Photos 2 and 3.

Photo 4. Port side of the huge bridge superstructure unit with a Tartar missile launcher on 01 deck beneath the bridge itself.

Photo 5. A Tartar missile launcher and two SPG51 tracking and illuminating radar units and note the fine handrails, each individually made.

Photo 6. The after MACK with the 5 inch/38 calibre unshielded guns at its base. The bulky ASROC launcher is a deck lower and forward of this MACK.

Paul's efforts speak for themselves,

He has incorporated a huge amount of top quality fine detail into all parts of the model, particularly the superstructure, **Photo 4**, and remember this is all to 1:96 scale! **Photo 5** is of the secondary close range Tartar missile launcher system and its SPG51 guidance radar.

Each MACK is cast in resin in two parts to reduce weight. At the foot of the aft MACK, on either side mounted on extended platforms are the two 5 inch/38 calibre unshielded guns. Mounted forward of these is the ASROC launcher, once again created as a master and cast in resin by Paul, **Photo 6**. Fitted to the top of the aft MACK is the SPS43A long range air search radar, fabricated and soldered in sections, no easy task for any modeller, but Paul's efforts speak for themselves, **Photo 7**. The replenishment at sea apparatus, **Photo 8**, reveals a fitting requiring much dexterity to scratch build at 1:96 scale and also made from scratch are the ship's boats. **Photo 9**.

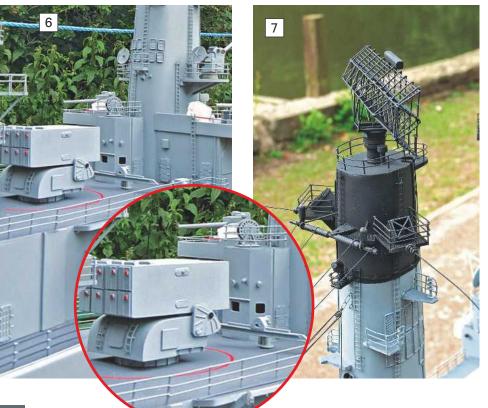
The aft set of SPG49 Talos guidance radar, with the SPW2 radar below, can be seen in this picture, **Photo 10.** In its day, the latter was a beam projector radar which operated in conjunction with

the larger SPG49. The SPW2 radar would, through a computer, control the flight of the missile and to arm a nuclear device installed on the missile, or switch it from beam riding to active homing. In the post-WW2 years, missile tracking radars were generally large, as this model shows and they relied on beam riding to guide the missile to target. This was something also seen on the RN County class destroyers with their Sea Slug missile systems. Paul has also made the Talos twin arm launcher missiles with resin casting techniques, **Photo 11**.

Perhaps at odds with modern thinking, but in the 1960's when the modernised USS Columbus entered service, aviation support was limited to a flight deck aft with no hangar. The helicopter in wide use was the Sikorsky SH 34 Seahorse, **Photo 12**, better known in the UK armed forces as the Wessex which was made under licence by Westland and operated by the Royal Navy (as well as the RAF and Army) from the 1960's to the 1980's, including during the Falklands campaign of 1982. In this last picture, just note the intricate detail on the flight deck and the fineness of the deck edge crash barrier netting, and all to 1:96 scale!







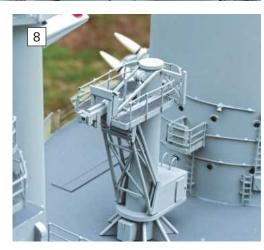


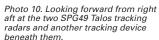
Photo 7. The SPS43A air search radar is fabricated and soldered using fine brass wire.

Photo 8. The complex replenishment at sea hoist. It is on the centreline of the ship and can work either to Port or Starboard.





Photo 9. Some of the ship's boats and their cradles.



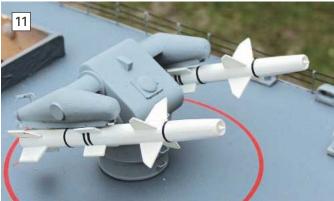






Photo 13. To improve stability, the model is fitted with a drop keel and this is an interior view of its hull mountings.

Photo 14. The depth of the additional weighted keel can be adjusted.

Photo 15. USS Columbus has four shafts and propellers.

On the water

USS Columbus has a relatively narrow beam to length ratio, and combined with a high-sided superstructure is (in model form) perhaps prone to stability issues. To solve this practical problem, Paul applied some lateral thinking by using a drop keel which can be adjusted to the prevailing conditions, the beauty of it all being that it can be easily removed in its entirety for static display purposes, thus maintaining the scale appearance of the hull. Photo 13 is of the hull interior where you can see the two vertical brass tubes with the rods supporting the weight protruding upwards. Adjustment is manual, by adjusting the clamps at the top of the rods, and **Photo 14 i**s an external view, with the weight fully lowered. The only external permanent thing about it all are the two tube outlets on the centreline of the keel, and most of us don't usually use a mirror to look underneath models, or do we?

motors. Paul's USS Columbus is no ordinary model

The model is fitted with four 45mm four-blade brass propellers, **Photo 15,** and a 6v 10Ah sealed

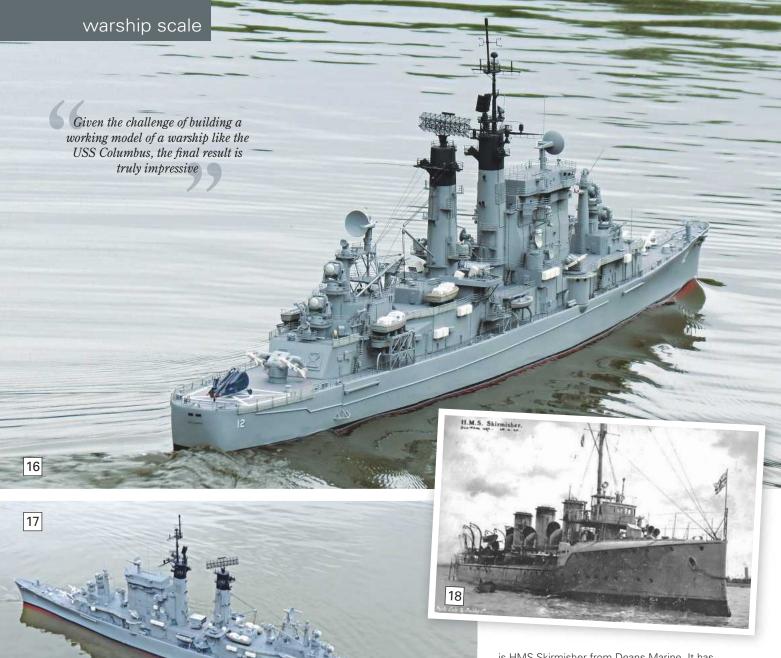
lead acid battery provides the power for their

Photo 11. The after Talos launcher (1:96 scale) with its missiles.

Photo 12. There was a flight deck, but







Photos 16 and 17. USS Columbus underway with no stability problems because of the hidden keel weight.

Photo 18. The Scout cruiser HMS Skirmisher, annotated 'Broken up 10.6.20'.

and has required a slightly different approach to achieve the excellent final result that he has, both off and on the water, **Photos 16 and 17.**

Conclusion

Given the challenge of building a working model of a warship like the USS Columbus, the final result is truly impressive and the model is outstanding, both in static quality terms and with its on the water performance. A tremendous 'tour de force' in model making by Paul Blyth.

HMS Skirmisher - Part One

With HMS Daring completed and in its new home, attention shifted to the next project. After some thought and discussion with Paul Freshney, it was thought appropriate that a build project which reflected the theme of warships of World War One would be appropriate. One such model that is attractive and readily available in kit form,

is HMS Skirmisher from Deans Marine. It has been part of their range for many years, but has been undergoing an upgrade embracing new developments to improve not just its quality, but also the appearance. It is hoped that we can bring to this mini-series not only the recommended method of construction, but some appropriate modifications that will help in both construction and appearance.

HMS Skirmisher was termed a Scout Cruiser as in the decades preceding WW1, the definitions of a cruiser were much more varied than later in the 21st century and amongst them was this type of vessel. The term was slightly misleading as their purpose was to operate with the fleet, but also have the speed to work with destroyers, so in effect these 2900 ton ships were large fleet destroyers. HMS Skirmisher and HMS Sentinel were built at Vickers of Barrow in Furness with HMS Skirmisher being launched on 7th February 1905, completing in July of the same year.

There were six classes of Scouts: Sentinel, Forward, Pathfinder, Adventure, Boadicea and Active, each having features that made them different in appearance from the others. As an example, the Sentinel class of which HMS Skirmisher was one, were fitted with a rounded forecastle. Although capable of 25 knots, HMS Skirmisher was under-gunned, being initially fitted with ten 12pdr quick firing guns, eight 3pdr and two

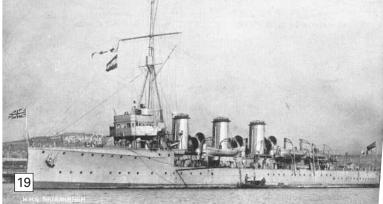


Photo 19. HMS Skirmisher, port side, in grey and with a single forward mast.

driving two propshafts.

Photo 20. An impressive picture of HMS Sentinel at speed, a sister ship to HMS Skirmisher.

18 inch torpedo tubes in a hull 360ft long by 40ft

beam. She was rearmed in 1911 and 1912 with nine

4 inch guns as her main armament. HMS Skirmisher

The kit box depicts HMS Skirmisher as having the

black hull and buff funnel colour scheme with a fore

single foremast as in Photo 18 and the very slightly

any stage I see a suitable alternative then I'll explain

the reasons for adopting the change. The kit comes

complete, but without motors, batteries and r/c gear

and can be built using all the parts and fittings in the

using optional Deans Marine upgrade packs, or your

box, but there is scope for enhancing it, either by

Who can fail to be inspired by Photo 20 of

her sister ship HMS Sentinel cutting through the

water at speed, but unlike more modern warships,

between, but I did come across Photo 21, which

shows the mid-section of a warship very similar to

HMS Skirmisher, but I cannot confirm it actually is

onboard pictures of HMS Skirmisher are few and far

reduced funnel height depicted in Photo 19. Like

all kits there is a set of instructions, however if at

and main mast. As an alternative, and to maintain

continuity with the pictures published here, the

model will be painted in a grey livery and with a

had triple expansion engines developing 17000shp

Photo 21. What a smashing picture! Full of detail, including the rating working on the side. This may or may not be HMS Skirmisher, but it is useful nonetheless.



of the trays, to ensure none are missing. Mistakes and misunderstandings often occur because people don't read the instructions, **Photo 22** being of what's in the box.

It's now nearly 30 years since

It's now nearly 30 years since HMS Skirmisher was introduced into the Deans Marine range and it is in the process of undergoing an upgrade, some of which are 'add-on' additional cost items. For example, the ship's boats are supplied as vac-formings,

which is not unusual in kits, but there is also a full set of resin moulded alternatives, as in **Photo 23**. The detail of this is excellent, but it would push-up the kit price if all of such examples were included in the basic kit. A further example are the individual photo etched stanchions, **Photo 24**, rather than the pre-spaced lengths normally supplied. Installing individual stanchions will be time consuming, but they do usually look so much better on a model and 'proper' wood decking is also available.

On the subject of stanchions there are also individual three ball cast brass types, which are cast and have fine round vertical sections, but are more expensive. Anyway, this model is being built as a working model and as such there will be some compromises and the aim is to construct something that is pleasing to display and can provide hours of enjoyment on the water, so let's see what can be done!



Photo 22. What's in the box! Deans Marine 1:96 scale HMS Skirmisher has undergone a number of upgrades since being first produced nearly 30 years' ago.

Photo 23. Resin moulded ship boats are now available for HMS Skirmisher.

Photo 24. Also available to upgrade the kit are wood decks and individual photo-etched stanchions.





The kit

our featured vessel.

own materials

This comes with the hull carefully packed within a box and all the material for the decks, superstructure, masts and deck support beams securely packed on the top of an inner box which also provides support for the three trays of fittings. Their contents are all numbered for ease of identification, coinciding with a checking and parts list. It really is advisable to reference the parts with this list before you remove the clear film covering

Where to start?

As the instructions clearly state, the first task is to make a boat stand! This may be obvious, but a good, well-fitting and secure stand, will enable the model builder to work comfortably (and safely) on







Photo 25. Modelling clav is an ideal material for accurately creating a reverse profile to mark the shapes fro a secure supporting model stand.

Photo 26. Using the modelling clay (or plasticine) to mark the profile of the stand.

Photo 27. Adding felt to the hull/stand edges protects the surface of the hull and also helps stop it sliding around.

the model.

If you are using a pre-formed hull and don't have its body plan profile, then the shape of the hull can be formed by using a strip of modellers clay (or even plasticine) laid over the hull gently following the contours where it is to sit on the stand. By gently removing the clay, you have the shape, and it's as simple as that to reproduce an almost perfect reverse curve of the hull's bottom, Photo 25.

Transfer this shape to a sheet of timber and mark the wood with a pencil, Photo 26. For cutting, a band saw is as good as anything for accurately sawing the shape. The same process was repeated for the other end of the hull stand supports. The two hull supports were then fixed to two lengths of timber to space them correctly and all sanded ready for staining or painting, whichever you prefer. Once dry, strips of self-adhesive green felt were laid over the exposed stand/hull edges, ensuring a really good fit and protection for the hull's exterior surface, Photo 27.

Next month we will be installing the running gear, motors, speed controllers and rudder servo, whilst ensuring easy access for the batteries and maintenance, such as their charging.

Answer to the October 2014 **Mystery Picture**



was wounded at the point of victory and died aboard the Flagship HMS Foudroyant and he was subsequently buried in Malta. So the picture was of HMS Abercrombie, a big gun monitor named after that General.

The heyday of the big gun monitor was during WW1, but in fact HM Ships Roberts and Abercrombie where built during WW2 for Royal Navy service. The latter was launched from Vickers Armstrong on the Tyne on the 31st March 1942, entering service in May 1943. She was similar to her predecessors, having a displacement of 7850 tons in a hull 373ft long and a beam of 89.75ft and was fitted with two 15 inch plus eight 4 inch guns, sixteen 2pdr and sixteen 20mm.

A monitor provided gunfire support, particular during amphibious operations. She had huge anti-torpedo bulges that also served to enable the ship to have a relatively small draft as well as stability as a gun platform, and was powered by turbines developing 4800shp driving two propshafts, giving a top speed of only 12 knots. HMS Abercrombie provided fire support for various actions in the Mediterranean during 1943, in the process being damaged twice by mines. Completing repairs, HMS Abercrombie was directed to the Pacific to join the British Pacific Fleet in preparation for Operation Downfall, the invasion of Japan and Operation Olympic which was the invasion of the island of Kyushu. However, following the dropping of the atomic bombs, the war with Japan came to an end before HMS Abercrombie arrived in Japanese waters. On returning to the UK, the need for the big gun monitor was no more and although being reduced to an accommodation ship, the final end came in December 1954 with her scrapping.

This month's Mystery Picture, Photo 28

The clue is: The Pearl Harbour Strike Force found a carrier.

References and acknowledgements

USS Columbus ref: US Cruisers - An Illustrated Design History by Norman Friedman, pages 394 to 400.

Conway's All the World's Fighting Ships, 1947 to 1995, pages 577 to 578.

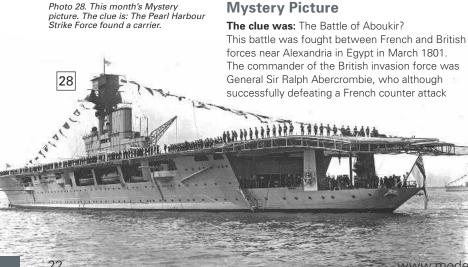
Naval Radar by Norman Friedman, USS Columbus, pages 165, 178, 179 & 182.

Ships and Aircraft of the US Fleets by Norman Polmar, pages 130 to 131

HMS Skirmisher ref: Conway's All the World's Fighting Ships, page 85.

Warships of World War 1 by H M Le Fleming, page

My thanks to Paul Blyth and the Potteries MBC for their help with preparing the pictures of USS Columbus.



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ABOVE: The happy group on Sunday

ust inside the boundary wall in the northeast of Bushy Park, Middlesex, there used to be a large WW2 American facility called Camp Griffiss, and it was from here that General Eisenhower and his staff planned the D-Day landings 70 years ago with the exact spot being marked by a memorial. So, it was fitting that an event on the pond in this park should be arranged to commemorate the anniversary, and that was what happened in early-June, 2014.

Bushy Park

On Sunday mornings, a group of us regularly gather to play with our boats on the boating pond, lying as it does a few hundred metres from what was Camp Griffiss, and what better way to do this than by building and operating landing craft, as this fits

BELOW: It was not all just warships on the day! John Nixon's US Coast Guard icebreaker Polar Star had its first on the water voyage on this day. Note the horrible weed that appeared for the 1st June, but had largely disappeared by the following Sunday.



nicely within our hobby. The idea was explored on the Model Boats Website Forum and arrangements duly made. Dates of the 1st and/or 8th June were set, these being the nearest Sundays to the 6th June, but also allowing for a bad weather postponement if needs be.

1st June

We are not a club as such and are simply a gathering of like-minded model boaters and usually there are about eight of us, but on this day we had 15 like-minded souls and well over 30 craft, including a dozen or so landing craft. A very good turnout for our pond, and the low fenced grassy knoll, where the boats are usually displayed, was guite full. Unfortunately, the sunny weather proceeding this first Sunday in June had bought on a sudden growth of weed and the going on the water was difficult! It didn't look too bad on the surface, but it seemed to be all over the pond and scuppered any attempts at formation sailing, and despite gathering all the landing craft behind my big LCT, we didn't even manage 20 metres in any sort of order! Sadly, this also scuppered the other events planned to enliven the day.

As the focus was on the D-Day landings most of the models displayed were of the WW2 era and there were quite a number of excellent examples of model making on display. True to life, many of the landing craft had been mostly knocked up out of 4mm ply (in my case in particular!) for the event, but one or two had gone a bit further than others and there were plenty of tanks, soldiers and so on to add interest to them all.

Worthy of mention must be Trevor Holloway,

event report



BELOW: Peter Ward's LCM with Ashley Needham's HMS Nelson behind it and the Sunderland non-flying boat at the back.



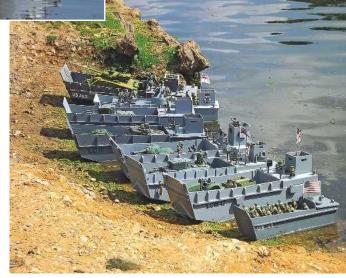


BELOW: Trevor Holloway's two metre

ABOVE: Ashley Needham's 'flack lander'.

BELOW: The landing beach.





who has been building boats on and off for a number of years. He pulled out all the stops and constructed a monster 200cm long corvette especially for the day. He has not before attempted a model this size or even used plank-on-frame as a construction technique, but it is a very worthy effort. Unfortunately, despite having been started in late-2013, the amount of work required on a model of this size is of an order not seen on smaller models and it remains 'work-in-progress' as of now, but is a truly a super model in the making. The amount of work required can only be appreciated when you are close to it, as is the huge amount of ballast required! By contrast, my 170cm long LCT was a straightforward build relatively speaking and of virtually a nil-draft design, so negating the ballast issue.

I think on the day we managed to tick all the boxes having a battleship, Ray Gale's 1.5m HMS Belfast cruiser, corvettes, several torpedo boats, an HDML and even a Sunderland flying boat, to guard the landings! Enemy craft were represented by an S-boat and an LFM landing barge while a line of pill boxes defended the bench side of the grassy knoll!



Our second go on the 8th was a scaled-down affair with just the normal crew, but mercifully the weed had all gone so we were able to do a bit more.

Not a large event as events go, but I think we did ourselves proud over the two Sundays considering the small regular gathering and certainly the memory of D-Day, now 70 years ago, was commemorated in style and at a most fitting place.

Ashley Needham (temporary Admiral!)



ABOVE: Ashley Needham's Sunderland non-flying boat!



ABOVE: Really super weathering on lain Darby's S-boat.





ABOVE: lain Darby's Flower class corvette.



ABOVE: Ray Gale's dazzle painted HDML - now that's . different!

LEFT: A US LCVP on its



LEFT: The Liverpool main waterfront was a stunning backdrop for the Mersey River Festival.

RIGHT: The model boat exhibition at the Liner Terminal was a great success and a big draw for the general public.





Mersey River Festival 2014

Dave Wooley reports from Liverpool

BELOW AND BOTTOM: This scratch built fully functioning model of the sand dredger Centaur has been built by Dave Pemberton of the OWLS MBC.



he Mersey River festival is an annual event, held in mid-June, blending a festival atmosphere with a host of maritime activities in and around the Liverpool waterfront over three days. These activities for 2014 included full-size power boat racing, yacht and raft racing, traditional seamanship routines performed by Sea Cadet units plus a spectacular air show. The Type 45 destroyer HMS Dauntless was open to the public and a Royal Marine Band were on hand and playing over the weekend.

Models

This exhibition was hosted by the Liverpool MBC, ably supported by local clubs including those from Southport, Wirral and the Omskirk & West Lancashire MBC (OWLS). Their location within the Liner Terminal area was great for displaying models as there was plenty of space, excellent natural light, a superb café and a grandstand view of the ships including the Trinity House Vessel Galatea.

There was a really good and varied selection of

models, one example being the fully functional 1:48 scale bucket sand dredger Centaur, built by Dave Pemberton of the OWLS MBC, and constructed as when operated by the Mersey Docks and Harbour Board. Centaur was built in 1901 on the River Clyde by Fleming and Ferguson, being scrapped at Liverpool in 1958.

Apart from the recognizable lines of the Isle of Man (IOM) steamers, the River Mersey had in the past played host to the North Wales steamers St. Tudno, St. Seiriol and St. Trillo. It was a surprise to see a super model of the St. Tudno, this being built by the well-known local model maker Harry Wright, also known for his superb large scale IOM steamers.

Sadly with the passing of Harry, the model was for many years neglected until Dave Morris of the Wirral MBC took the opportunity to restore the model to its original working condition. The result is a piece of local modelling history for all to see and enjoy. Dave worked overtime during the festival coping with the endless stream of visitors and their questions about the model and its history.





ABOVE: A scratch built working model of the Mersey Docks and Harbour Board salvage vessel Salvor, on the OWLS MBC stand.



LEFT: A regular visitor to the River Mersev is the UK Boarder Force cutter Viailant.

RIGHT: Representing the Tall Ships Youth Trust was the Stavros S Niarchos, built in 2000.





ABOVE: The illuminated Trinity House Vessel Galatea.

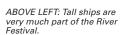
RIGHT AND INSET: Brian Hughes with the superb model of the 1930's yacht Nahlin that Edward VIII and the Romanian royal family used, and is now owned by the entrepreneur and inventor Sir James Dyson!

Another unusual model was that of a Clyde built yacht associated in the 1930's with royalty, these being Edward VIII and later King Carol II of Romania. After the deposing of King Carol II, the vessel became a floating restaurant on the River Danube, but was eventually acquired by a yacht broker and it is now in the ownership of Sir James Dyson, suitably restored. The model was displayed by Brian Hughes on the OWLS stand.

Also featured were a number of John Glossop warship models supplied to the exhibition by the Royal Navy, their centrepiece being a model of the Type 42 destroyer HMS Liverpool.









The festival attracted sail training ships such as the Stavros S Niarchos, Pelican, Spirit of Fairbridge and others, as well as in the Canning Half-Tide Dock was the UK Boarder Force cutter Vigilant. This is a particularly smart looking vessel and one that would make an equally good looking model, but the centre of attraction at the Liner Terminal were definitely THV Galatea and HMS Dauntless. There were also numerous on the water displays, but for me the most impressive was 'fly-boarding', which is the art of 'flying' on jets of water!



The real thing?

The model exhibition, because of its location, attracts a lot of interest from the general public, which is a good thing. This whole event is aimed at the general public, so exposure of our hobby by these participating clubs can only do us some good and remember, the whole event is free, so you can't do much better than that! Please check the press for the 2015 dates. •

RIGHT: The model of the St. Tudno rekindled memories of a bygone age for local residents Joan and Mal Lloyd from when it sailed between Liverpool and Llandudno in the 1950's.







LEFT: The model boat organising team of the



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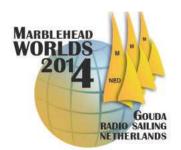
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RIGHT: Peter Stollery (39) and Brad Gibson (42) needed all their skill to get out of this 'B' heat.





2014 Marblehead World Championship



Roger Stollery reports

his event, sponsored by Magic Marine, was hosted by the R & ZV club in Reeuwijk, Gouda, Holland, also the venue for the Dutch National Championships for the last few years and well known to several British sailors. Everyone enjoyed the event, despite the wet conditions in the middle of the week. The Dutch were very hospitable and sailors were made very welcome by this full-size sailing club, which is very well appointed and had excellent facilities for the 69 competitors, their partners and spectators.

Racing was organised from a raised square control area at the end of a long jetty, part of which also acted as the launching area. Informal racing started on the Sunday and was as much practice for the umpires and race officers, as it was for the competitors.

Championship racing

Monday

After a slow start, racing gathered pace so that then at least 20 heats were sailed every day, giving competitors at least four races. The wind was NW light and fluky, particularly at the windward mark where it blew over the trees and houses. The four leading boats on the first day; Brad Gibson, Graham Bantock, Joop de Jong and Ante Kovacevic, set the pattern that was to run throughout the whole event.

BELOW: Jean-Pierre Geiser's OCTAVE, one of several non-production own designs.



Tuesday

This featured continuous rain and wind in a similar direction, but did not deter either competitors or officials who pushed the racing on to achieve 25 heats and at least five races per competitor. The standard of racing was high and the keenness at the starting line led to several general recalls.

Wednesday

It was wet again(!), but there was more wind from the NW, so the Marblehead boats made a great spectacle, flying downwind in B or C rigs. Races 9 to 14 were won by either Brad Gibson or Graham Bantock, who won four. Ante Kovacevic took three third places and Peter Stollery took a second and a third.

Thursday

It was all change again with hot and sunny weather, but a light wind that was gradually shifting from NW to WSW. There was very little wind and some delays when the wind died to almost nothing. In Race 16, Brad Gibson and Peter Stollery were unlucky at the gate as they were in the leading group, but had to give water to the two leading inside boats. However this allowed water for all the following boats and they ended up at the back of the A heat and were demoted into B. This race was won by Yannick Rossignol sailing a TRAMONTANE design. Brad got out of the B fleet and went on to win Races 17 and 18.

Friday

The final day did not start well as there was no wind and fog, but this gave the opportunity to take lots of good photographs of the various national teams and interview the leading competitors!

Racing did get started at 12 o'clock in a light westerly breeze and Race 19 was won by Remi Bres sailing an old MARGO 2 design and the final race was won by another French skipper, Marc Pomarede, sailing his TRAMONTANE design with Brad in second and third places in those races. As a result, Brad's consistency throughout the event allowed him to retain his World Champion title by a big margin with his GRUNGE design.

Event organisation

Harry Drenth managed the heats and scores from his computer in the control tower with information on screens in the clubhouse, boathouse and the



LEFT: Peter Stollery (middle) collecting his 5th position prize.



RIGHT: Brad Gibson - World Champion once again!

control tower. This was in lieu of the normal ticket board and generally worked well. The buddied observer/umpiring was generally better than the previous world championship, but there were still some issues to be addressed. Apart from not being able to see all of the course easily, there were often problems with the course itself, with the starboard end bias of the start lines and the bias and distance between the marks at the gate not achieving the benefits normally expected by competitors. However, all of the race committee and organisers worked hard and were thanked for their efforts at the prize giving.

The GBR team enjoyed themselves both on the water and in the social gatherings in Gouda itself, which is a beautiful town with some lovely buildings. The success of Brad Gibson retaining his World Champion title and being hard pressed by Graham Bantock with Peter Stollery and Darin Ballington also in the top 10, was the icing on the cake. The standard of all the boats and sailing was very high and many of the GBR team found themselves in a lower heat than they expected.

The boats

Their were many more own-design and built boats, that matched the performance of 'production' yachts. Whilst most boats were made of carbon fibre there was one beautiful Italian boat planked in timber. All were narrow with draughts just over 600mm, but not many to the maximum 700mm.

As a designer, this event was very interesting because of the great range of unique hull designs taking part, far outnumbering previous occasions and showing great enthusiasm for the class.

In addition there were some older hull designs upgraded with new foils and rigs. Darin Ballington's ROK was a good example, where this 15 year-old hull design has been modified by a longer fin and lighter bulb set further aft to keep the bow up. By careful tuning of his conventional rig he was able to compete with swing rigs, which are now used almost universally for the A rig. The CRAZY TUBE design is also 15 years old and has recently had the same treatment with a David Creed fin and bulb and a reduction in displacement, now getting close to that of a one metre yacht, but with 3.3 kg of ballast at the end of a deep fin. Swing rigs are used on every suit and the recent development of offset pivot swing rigs for the lower suits for stronger winds has been particularly successful at the British Nationals as well as at Gouda.

Useful websites

Marblehead Yachts UK: www.marbleheadsailing.wordpress.com.

Marblehead World Championships: www.rmworlds2014.com

Results (top ten only)

1st:	Brad Gibson	GBR
2nd:	Graham Bantock	GBR
3rd:	Ante Kovacevis	CRO
4th:	Joop de Jonge	NED
5th:	Peter Stollery	GBR
6th:	Laurent Gerbeaud	FRA
7th:	Yannick Rossigno	FRA
8th:	Darin Ballington	GBR
9th:	Loic Botherol	FRA
10th:	Gilles di Crescenzo	FRA



ABOVE: The typical deck plan of a modern Marblehead is that it is very narrow, parallel-sided and with a chine in the topsides.



ABOVE: Darin Ballington was a happy eighth with an older, but upgraded, ROK design.

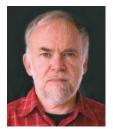
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Flotsam ZJetsam



John Parker delves into the archives

20: F. J. Camm and Practical Mechanics

workaholic, Frederick J. Camm was found ill at his desk by the cleaner in February 1959 and died at home on the 18th at the age of 63. His eldest brother Sydney had found fame in the aviation industry as the designer of the Hawker Hurricane, but Frederick's fame came from the editorship of numerous magazines with the 'Practical' prefix as well as the writing or editing of some 120 books on technical subjects, mostly for the publisher George Newnes Ltd. Opinionated and

liable to give offence at times, it seems

he was nevertheless approachable and popular and it was with affection that his magazines came to be known as 'Camm's Comics'. The best known of these, and the one of most interest to model makers, was Practical Mechanics.

Practical Mechanics

This appeared monthly and the first issue was for October 1933. In the midst of the Great Depression there wasn't much money around, but there was a great talent and desire for making and repairing things. Practical Mechanics tapped into this, providing plans and instructions for making all manner of household items as well as more ambitious projects like aircraft and cars - not just model aircraft and cars! In 1935 the magazine carried the first English instructions for

building Henri Mignet's Flying Flea personal aircraft, and when that fell from favour (fell from the sky in fact, when it encountered an obscure aerodynamic condition!) he replaced it with do-it-yourself plans for building the Luton Minor aircraft in 1938.

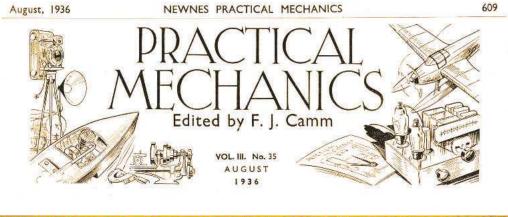
If you couldn't afford to buy a car, you could build your own three-wheeled one for £20 in 1936, or a year later, a four-wheeler for £25. The magazine's August 1935 masthead gives some idea of the incredible range of subjects covered, starting with 'Television Made Easy' - yes, you made your own! Over the years, designs were published for clocks, telescopes, cameras, projectors, a Geiger counter, radios, musical instruments, a caravan, a submarine telephone, a spot welder, an Orrery and so on. My spell checker did not even know what an Orrery is, but it is a mechanical device for demonstrating the motion of heavenly bodies.

Of course, Camm's job was that of editor, and most of the articles were by other contributors, but it was necessary for him to keep up-to-date with technical developments across the board, assess the practicality of projects and answer technical queries. The breadth of his ability is shown by the many other titles for which he was editor, namely Practical Wireless, Practical Motorist and Practical Television are notable examples, along with the Hobbies periodicals and annuals. He claimed to write an average of 20000 words every week.

As was common in those less litigious times, Practical Mechanics projects would commonly involve the use of strong chemicals, unguarded tools, lethal voltages or precarious practices that

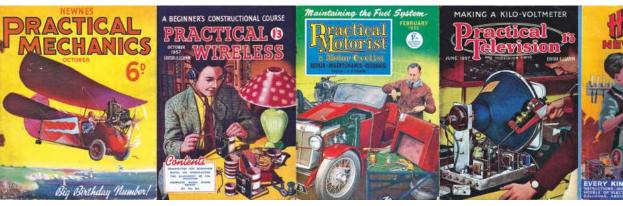


ABOVE: Frederick J. Camm.



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RIGHT: Masthead from the August 1936 Practical Mechanics.





ABOVE: Some of the titles that Frederick Camm edited.

would cause a current day Occupational Health and Safety Consultant to suffer instant heart failure, but fortunately his followers generally survived and came back for more. In amongst the

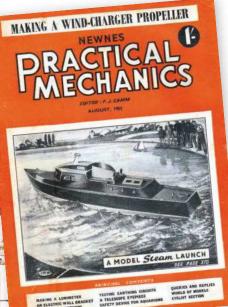
full-size projects came a steady stream of modelling projects. Some bordered on the fretwork/ craft project side of things, but others were genuine engineering miniatures of aircraft, ships, engines or vehicles. Camm himself was an accomplished model engineer, able to machine castings to build model locomotives and internal combustion engines. At an early age he had founded in 1911 the Windsor Model Aeroplane Club, together with his brother Sydney, and reported on model aircraft developments as model editor for Flight magazine.

could be safely assumed, so steam plants were popular subjects in Practical Mechanics, sometimes with a turbine engine, along with paddle steamers, launches and other nautical subjects to put their power to use. One 1935 design for a steam launch,

the Streamlinia, was put into production by Bassett-Lowke and became quite well known. To illustrate the typical style of model boat projects presented in Practical Mechanics, I have included an extract from the article 'A Model Steam Launch' that appeared in the August 1952 issue. This actually made it onto the front cover, still in black and white at this time after the difficulties of the war years. Metal



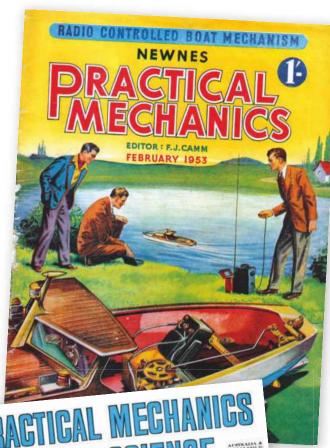
www.modelboats.co.uk



ABOVE: Cover of the August 1952

The ability of a reader to silver solder a boiler could be safely assumed, so steam plants were popular subjects in Practical Mechanics

LEFT: Constructing the steam launch Vanesa.





ABOVE: Radio controlled models series, August 1955.

LEFT: Radio controlled boat

mechanism, February 1953.

freelance rather than scale, to be powered by a two-cylinder home built model steam plant. In this era, building the boat model was often not the end in itself, but a means to harness a home-built engine or demonstrate a home-built radio control apparatus. In 1940 Camm was

editor for the book Model Boat Building, largely a compilation of material that had previously appeared in Practical Mechanics and other Newnes publications. The preface includes an offer to advise on any model boat topic not covered in the book, a service that Camm provided for most of the works that

SIMPLE BRAKE TESTING carried his name. Being well versed in electronic developments, he was in an ideal position to report on, and encourage, the application of radio control to models and his introductory book on the subject, Radio Controlled Models, appeared in 1958.

Throughout the 1950's, Practical Mechanics carried articles and series on radio control topics using the cumbersome valve equipment of the time, but transistors were on the horizon and the February 1960 issue showed how to build a transistor model control receiver.

Practical Mechanics began its life with a 262 x 215mm cover carrying full-colour commissioned art work, but was reduced to a single-colour cover with black-and-white photograph after 1940 due to wartime restrictions. It did not return to a full-colour cover, again with commissioned artwork relating to that month's content, until the October 1952 issue. The covers reverted to two-colour once again in 1959, signalling the start of the magazine's decline following the death of its founder and perhaps a rise in living standards which made it possible for people to buy, rather than rely on having to make, their own hobby equipment or household items.

Closure

By 1963, the magazine had become Practical Mechanics and Science, still published by George Newnes, but had shrunk to 230 x 155mm and was printed on poor quality newsprint. Line work was clear, but photographs lacked contrast and there was a definite hint that some of the material was old or recycled. For example, reading the article in the February 1963 issue on building a scale model of the Thornycroft coastal motor boat, the author refers to damage suffered by his prototype model during a May 1941 bombing raid that caused part of the ceiling to collapse upon it! For readers, the end came suddenly and without prior announcement, just short of the magazine's thirtieth birthday. Four stark lines on the bottom of the sixteenth page of the August 1963 issue announced that it would be the last, and ended with the valedictory: 'Though Practical Mechanics and Science is ceasing to exist, we know that practical mechanics will always be found at their home work benches'!

It is not often now that you come across one of the 352 issues of Practical Mechanics that were published, but to do so provides a reminder of the manual skills we seem to have largely lost over the years and of how one remarkable man, not so very long ago, was able to keep abreast of all of them.

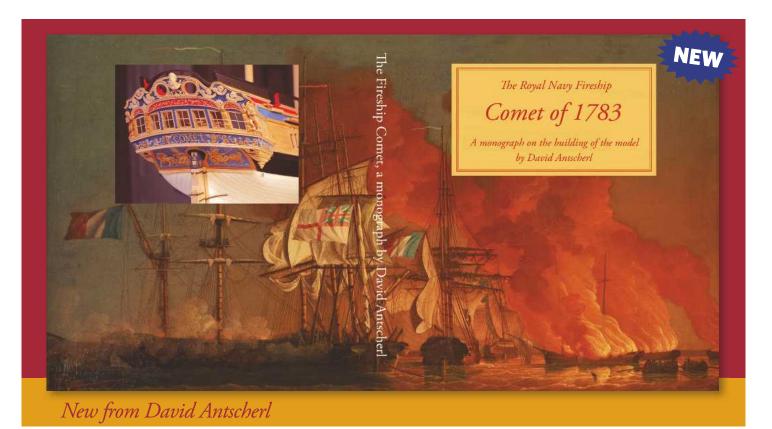
ABOVE: Coastal Motor Boat

February 1963

FEB 1963

SCALE MODEL

COASTAL MOTOR



This book describes a late 18th century fireship built by a private yard for the Royal Navy. Although built for the express purpose of setting on fire, *Comet* was lavishly decorated in high Georgian

style. She was also one of the first naval ships to be fully armed with carronades.

David's new book describes *Comet's* brief history, then details her construction as a fireship as it varied from standard sixth rates of the period. Readers will find this a useful adjunct to the author's popular series *The Fully Framed Model, The HMN Swan Class Sloops of 1767-1780.*

FEATURES

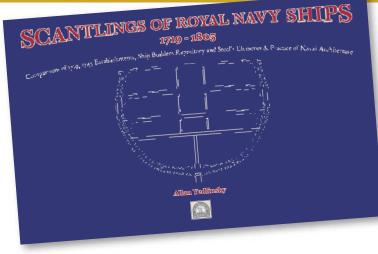
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ABOVE: The Balne Moor MBC stand, winner of the Best Stand in the Show and as usual, well stocked with a wide and impressive variety of tugs!

RIGHT: Jenny Edwards, restored by Elizabeth Jones and winner of the rigged and sail section of the competition



ABOVE: Little Shuva built by Darran Newman attracted a lot of attention on the Goole MBC stand. The full sized vessel plies its trade in Goole Docks and as its name implies, shoving things around!



CADMA Northern Model Boat Show - 2014

Gareth Jones reports



Association (CADMA) held their annual show in the sports hall of the Doncaster Deaf Trust early in June. This is the second year this venue has been used and it seems to be proving popular as there were more clubs and traders in attendance than in 2013. To increase the space inside the hall, the Bring & Buy stall was moved to a marquee outside and there were a number of peripheral traders with external stands as well. There were 17 club or group stands and 17 traders, including a wide cross section of kit and component suppliers, providing pretty well anything you could want to

ABOVE: A view of the hall from the balcony - clubs in the middle and traders on the outside walls.

build a model boat. The venue is easy to find, being adjacent to Doncaster Racecourse, has ample free parking space and a good restaurant serving hot meals, drinks and snacks.

The models and traders

The standard of models on display was once again very high and the competitions were judged by Tom Gorman and Peter Riches. The Best Boat in the Show award was won by Bob Hodgson's model of the local vessel Humber Guardian. However a disappointing aspect of this year's competition was that despite supplying a number of trophies, there were no entrants in the Junior classes. Maybe this is a sign that model boating is increasingly being perceived as an old man's hobby?

Traders? Well there were the usual ones, some



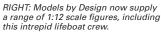
ABOVE: A fine cockpit on this speedboat model named Inspiration, built by Colin McCaig and on the Rawdon MBC stand.

show report

RIGHT: An unusual subject on the Surface Warships Association stand was HMS P28, a P class patrol boat from 1916, built by Tom Butler.



BELOW: The powerplant in Bryan Smith's model of Lady Celia, on the





BELOW: Alan Horne is well known for his beautifully engineered J Class yacht hulls, but he also makes finely moulded powerboat hulls such as



with new items for sale and of course you do have the opportunity to actually see and feel what you are buying, which is no bad thing.

Conclusion

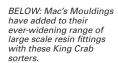
At the end of the show, Bryan Smith announced that he was retiring from the task of organising the event and next year the show would be under new management. No doubt he will be keeping an eye on the organisation, but it will be an opportunity for a new team to build on what has become a successful and popular event in Yorkshire and easily reachable from the North East and Central England.

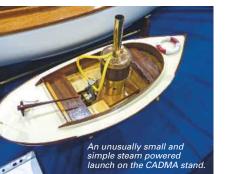
BELOW: Bob Allison's Vietnam War era river patrol boat on the York MBC stand. Those of you who are into landing craft will recognise that it is based on what was a WW2 LCM 3





LEFT: Hull Castaways had this set of models to illustrate how a small model hull can take shape.





BELOW: A nicely detailed model of an RNLI RIB on the Redcar MBC stand.





ABOVE: The completed Swift PCF boat based on the Amazing Hull, on the water at Fishers Green SC.

Most teachers in Design and Technology Departments would jump at the chance to have a model boat club after school once a week f you look at the pictures, you will see an array of some of the models I have been 'messing about with' over the last few of years. Whilst they represent various types of craft, they all have one major thing in common and that is that the are all of the hard chine type. This, from experience, has resulted in models that which may appear to be totally different, can handle all kinds of water conditions, are very stable and are all capable of considerable speed (if you wish it!) and are generally really good fun to operate.

I don't know what started off the train of thought leading to this article, but I think it was when I was engrossed in bemoaning the fate of model boating and the vagaries of the 'young generation' and their apparent disinterest in anything constructive and a couple of jovial members of the Luton & District MBC and myself expounded on possible ways of righting these wrongs in the Victorian splendour of a show at Alexandra Palace. In the chaos of the North Circular Road on my way home, I reasoned that most of us old and slightly wrinkled boat modellers had started the hobby later in life, when we had some money to spare, a bit more time and a wife who was glad to see the back of us so she could get her hands on the TV control for a change!

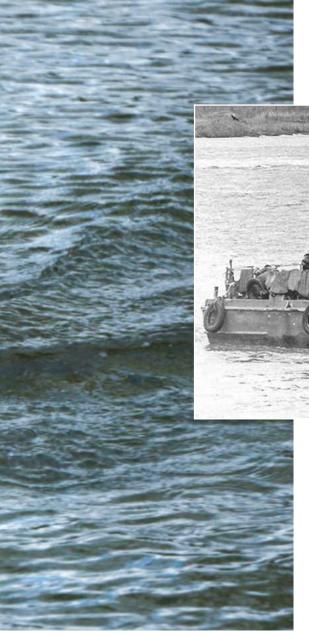
There are young and enthusiastic boat modellers out there, but are often in a family of keen model boaters' in a home where the spare bedroom is

furnished like the Swan Hunter Shipyard. Having spent most of my adult life teaching young people how to design and make things, using tools and solving problems, I know that there is a need in most of them to explore how things work. Model clubs in schools have always been enthusiastically attended, whether they be for round-the-pole electric aircraft, rockets, free-flight aircraft, indoor foam r/c model aeroplanes and even small electric powered model boats made from recycled materials. Despite all of this, it seems that only a small number then continue with such a hobby.

Most teachers in Design and Technology Departments would jump at the chance to have a model boat club after school once a week, and when you couple that to having a model boating lake not too far away to test and run models, it is a reasonable assumption that if not now, then one day in the future one of the students will come back to the hobby when there is not so much going on in their lives. To this end I mentally explored what you would need to make a club like this succeed and my thoughts revolved around:

A local secondary school who were interested in having a club and allowing it to take place in their workshops.

A technology teacher in that school who is prepared to stay behind to support and supply the necessary qualified, safety and police clearances



easily using templates and that didn't need specialist modelling tools and equipment.

Two or more model boat club members who were prepared to get the thing going, this perhaps being the most important.

ABOVE: A US Swift PCF boat. Note the state of it and the lifejackets etc. hung on its railings.

So what now?

This article is not just aimed at people who would like to get a school or junior club model boating section going, but is for anyone who would like to have a go at building an incredibly simple, fast and cheap fun model, and perhaps something that their grandchildren could have a go at. The main thing in its favour is the design, as we know from experience that this shape is stable, strong and simple to build, yet fast, indeed very fast, which of course is paramount when you design a model for younger people. The overall shape can be easily modified to cover most of the full-size profiles that interest people, particularly youngsters, which is part of its appeal.

One key thing that we do not want, is to expect youngsters to stay enthusiastic when faced with month's of work! It seems to be true nowadays that they want quick results, but when I think back,

FROM LEFT BELOW: Conventionally built wooden American style leisure boat; Torpedo boat built from a Glynn Guest plan; Traditionally built wooden hulled Norfolk Broad's style of leisure craft; The first foam hulled model, a Fairey Huntress; Targa, the foam hulled police launch (MB September to November 2014); RAF ST207 (MB July 2014).

and who can lock-up afterwards.

A nearby club pond where youngsters could meet the adult club members and run their models and bear in mind that some schools have their own swimming pool, which could be utilised.

A simple and easy to build cheap and reliable design of model boat that gave scope to be built in many different guises.

A model where the parts could be batch-produced



special feature

RIGHT: All the template parts for the model. One of the plan copies has been cut up and the pieces of paper stuck onto the card, with the exception of the side and bottom skins.



ABOVE: This photo shows the decking piece being drawn so that you have a one piece deck. Check that the complete piece will clear the edge of the sheet of Depron when flipped over, then draw a centre line.

Whatever we build must be achievable and even if the build quality and paint finish is a total mess



so did I when I was their age. Whatever we build must be achievable and even if the build quality and paint finish is a total mess, it should still work well. Because of this we can't expect youngsters to doggedly wade through a full set of complicated formers, longitudinal strips, strip planking (or double diagonal!) and all the rubbing down, lining and glassfibre over the insides and/or the outside, etc. etc. We could always go for a vac-formed or GRP hull, but these aren't cheap and defeat the whole object.

Designing the basic hull

As regular readers of this magazine know, I enjoy 'messing around' with new materials and ideas.



Most of my recent models have been based on a carved solid (or laminated) block of blue (builder's) polystyrene foam. This system works really well, but then I know that careful shaping, checking and re-checking what you have carved, is the only way to ensure a true, accurate and scale hull. Unfortunately you can't guarantee that beginners or school students will do this and if you want to guarantee success, you end up doing it for them, which is not the idea. So what was needed, was an almost foolproof method that was quick and easy where a few minor mistakes were not the end of the world

My first model boat was a Keil Kraft EeZeBilt Triton cabin cruiser. Triton was one of a set of seven

LEFT: The adhesive used was Deluxe Materials R/C Modellers Glue for most of the building. This adhesive can be used on one side only and has to be pinned and left for an hour, after which it dries clear. It is very strong on foam, fills gaps and can be used on clear acetate windscreens with confidence as it doesn't fog the plastic.

UHU POR is a very good alternative for joining the bulk of the foam work. It should be spread thinly on both mating surfaces, left for 5 to 10 minutes then brought together, which is a faster method but more fiddly. ZAP Foam Safe CA is very expensive for the quantity you get and must be used with its own Foam Safe 'Kicker' otherwise it can remain wet for ages on foam. I thought it was pricey, being nearly £13 for both and a tiny 20 gram (0.7 ounce) bottle of glue at that! Despite this it is very useful on high stressed areas or where you don't have enough hands, clamps or pins to hold two difficult 'springy' parts together. Two part epoxy? I used Z-Poxy five minute, but only for the motor, propeller and rudder mountings. It is great on foam and other materials like wood or metal to foam, but relatively speaking it is heavy. We do understand its gap filling properties and in small quantities it has its place in a lightweight model.



RIGHT: Glue one plywood side support to the keel, weight down flat and leave to dry. When set, trim away propshaft slot before adding second plywood side.

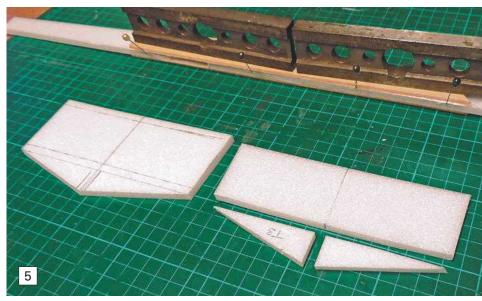
beginner's models, aimed specifically at the young newcomer to model boating and Ernie Webster, Eddie Keils' young designer, came up with a simple slot together hard chine hull design in die-cut balsawood. Other talented model designers took the hard chine hull design and applied it in various ways to create foolproof kits. Les Rowell, another model boat designer, took 'Egg Box' construction as it was called and applied it to his boat kit designs, just like Ernie Webster. The late Vic Smeed, another prolific and talented designer, modified and improved many designs to keep in line with the fast growing technology of that period. Today, Glynn Guest regularly applies the lessons learned from these pioneers and often uses similar methods in his Free Plan models.

The fact is that this slot-together concept allows us to build a simple yet strong hull that almost self-aligns as it goes together. The only fiddly bits being sanding the open structure at right angles once dry and pinning down the outer skins at the bow. Compared to the plank-on-frame method, this is a massive and practical step forward.

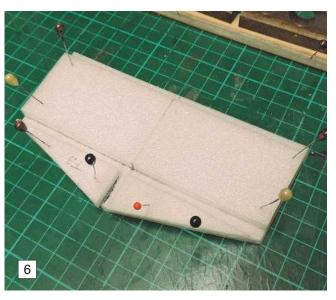
In reality we don't need all the framework to make a basic hull shape - just take a look at a welded aluminium dinghy of today or a vac-formed moulding, as we only need to make joints where the skins meet. The 1960's Mirror Dinghy used a 'stitch and glue method' and the internal supports were only there to support the seats, deck, the mast step and rowlocks, keeping the hull shape intact.

In the plan design shown here, the framework enables the self-alignment of the constituent parts to ensure accuracy without complicated jigs, giving a firm base for the motor, propshaft and rudder assemblies and supporting the transom and deck. So, in the interests of simplicity, the whole model relies on a straight centre line.

As a result, I started with a simple keel that was strengthened each side by adding 3mm Lite Ply doublers and this is the only part that really needs to be 100% straight. This 'Motor Stick' principle, as we used to call it when building free flight rubber aeroplanes, is a rigid base on which to fix all the propulsive hardware and the other frames. It ensures that the motor, coupling and propshaft align



ABOVE: While the keel is drying, prepare the parts for the transom. Use an offcut of 6mm to make sure the gaps are nice and snug.

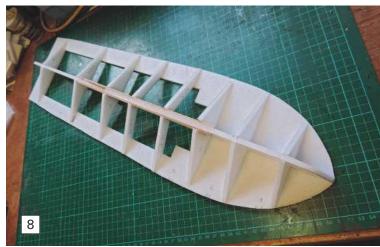


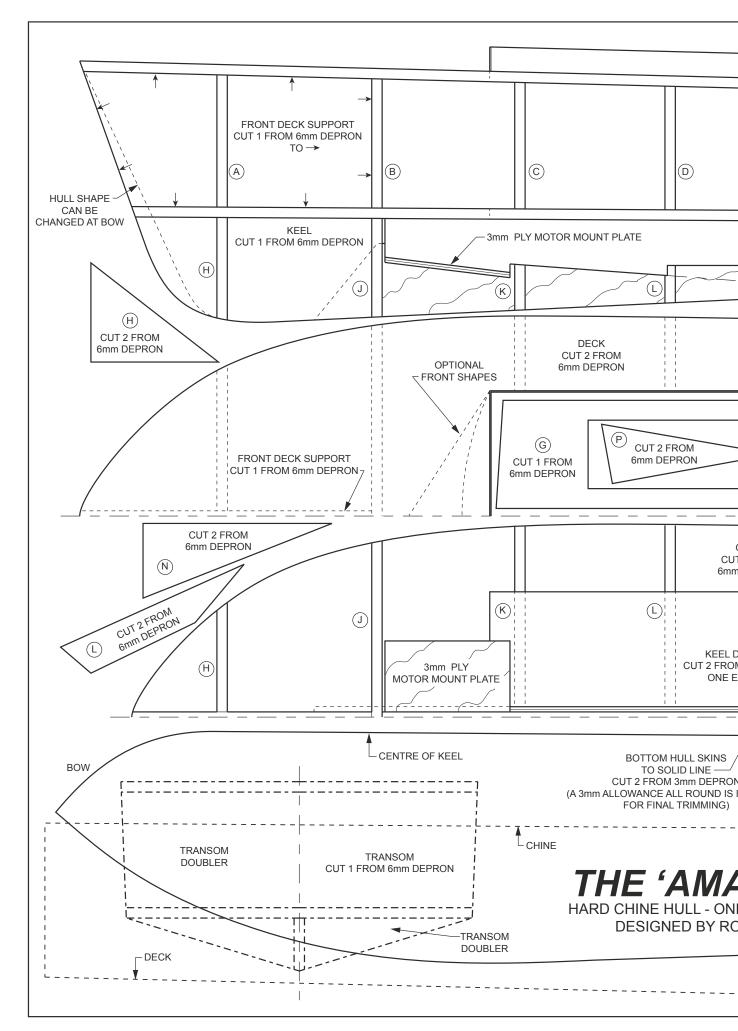
LEFT: Transom parts glued and pinned together and in the background the keel parts are weighted down on a flat surface to dry properly. This is quite important as everything is built on the keel.

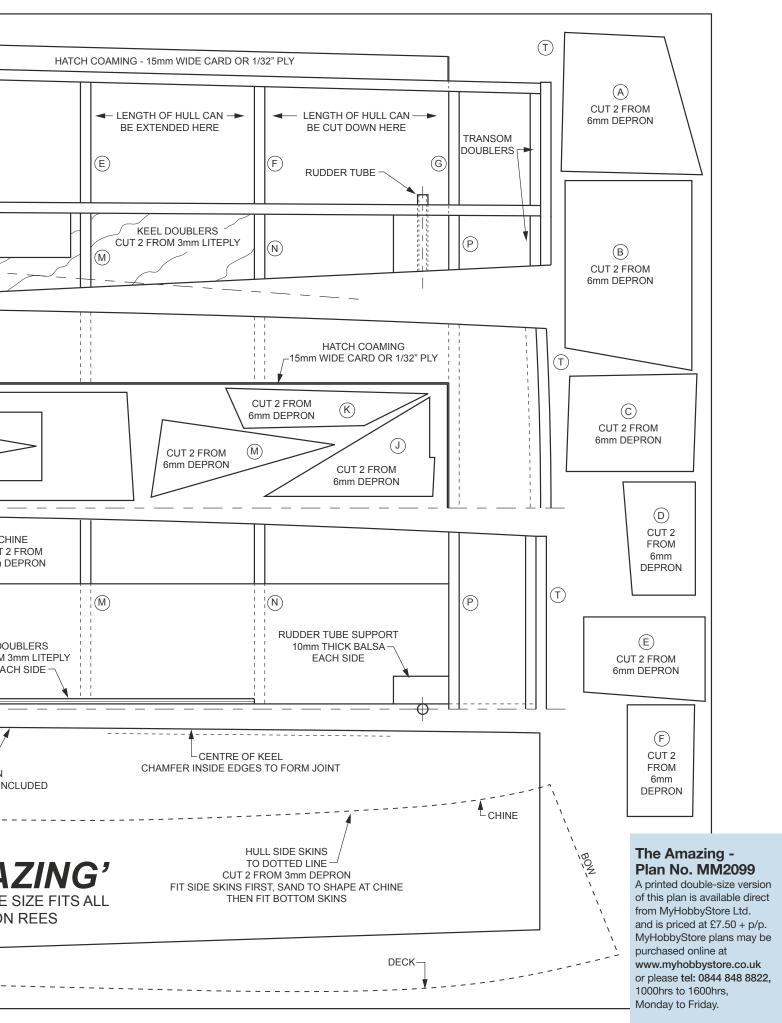
BELOW: Using pins and some 90 degree weights, glue the assembled keel on the centre line of the chine deck and leave to dry.

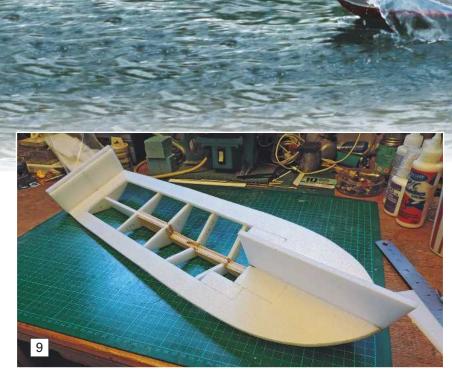


BELOW: Glue the triangular formers, in pairs as shown on the plan, into position between the keel and the edge of the chine to create the bottom of the hull.









special feature

ABOVE: Glue the transom assembly and the front deck support on the centre line. Ensure they are at 90 degrees, although the side formers, if they are cut accurately, will ensure the correct angles.

properly and if carefully built and weighted down flat when drying, forms the centre line piece of a model, which is so critical to its accuracy.

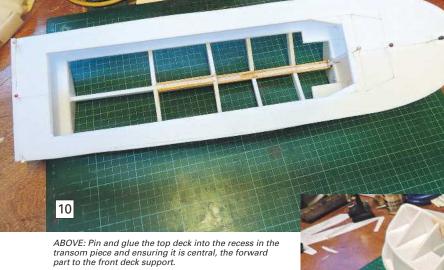
It was decided to dispense with cutting the slots and tabs so beloved by the early designers. the model builder now relying on a set square or similar to ensure 90 degree joints. This makes cutting out the parts so much quicker and if a part doesn't exactly line up, it will be sanded flat anyway and covered by the main hull skins, as remember that this truly is a quick build and/or beginner's model.

Consequently, a set of plans were drawn AFTER making a prototype hull. If it didn't look right I changed it, but doing it this way I knew for certain that the drawings worked.

The drawings supplied here can be enlarged to A2 on the photocopier (x 2) to give a finished basic hull 20 inches long by 6.5 inches beam and a depth at the bow of 4.25 inches (510 x 170 x 105mm). Two copies should be made so one of them can be cut up to make the templates. A standard 400 brushed motor would be adequate for sport use, but a 2820 size 1000kv brushless motor was eventually fitted which makes for a very spritely fun model! You can of course enlarge, or even reduce the size, as you think best.

Getting started

After cutting out a set of paper patterns, stick these on to card, or if you are planning to supply a model club of any sort, thin aluminium or good quality birch plywood would last much longer. There is also the option of cutting several kits at once using a hot wire cutter and this method benefits from an aluminium pattern for the larger quantities. Gather together the basic tools needed to build one of these Depron boats, namely:



RIGHT: Add the deck and side supports between the deck sheet and the chine sheet in pairs. Try to line them up with each other to maintain equal stresses, and if you opted to extend the hull's length, add more of these as needed. Ensure the edges protrude just a little over the edge so they can be sanded to give the exact angle of the side skins. The sanding block you make must easily span the distance and only light forwards and backwards action is needed. The foam can be damaged if you slip off the frames and dig the corner in, so take it slowly as Depron sands much more easily than wood and it only takes a short while. Just make sure the formers follow

the angle and the edges of those preceding are feathered nicely.

special feature

LEFT: I had envisaged building a freelance torpedo boat and that is why I increased the length of the hull. However, I came across this Revell 1:48 scale US Navy PCF (Patrol Craft Fast) plastic kit on eBay and once assembled it fitted the bill exactly, so from now on all the future building work had this type of craft in mind. That is the beauty of this type of hull which can be easily altered to suit the craft of your choice.



- A good quality model knife with a sharp blade.
- A steel ruler and fine marker.
- A supply of model pins, cutting mat and a sanding block.

I am a believer in keeping models as light as possible and strong, as you can always add weight, but it is nearly impossible to remove it if a model does not perform very well. There is also the need to make a beginner's or fun model like this as simple and cheap as possible, so the materials need to be easy to cut and shape. There is also the fact that there is virtually no dust when rubbing-down and this is a big plus when building models in a domestic environment.

Having designed some indoor flyers for kids at one of my school clubs, I am well versed in the use of Depron. This white polystyrene sheet is incredibly light and much stronger than people think. It is very easy to cut with just a sharp modelling knife and sands easily, plus it has no grain direction so can be cut in any way from the sheet to get the best out of the raw material. The 2 and 3mm thick sheets will bend quite easily, so are ideal for one piece hull skins while the 6mm thick sheet makes for a very rigid structure. (Recently that there was a lovely little Depron Fairey Swordsman kit available on eBay. The performance photos looked great and our hull should do the same)

Costs are a consideration. A one square metre sheet of 6mm Depron cost £5, and a similar size sheet of 3mm thick was £3, both together nearly enough for five models, which equates to less than one sixth of the cost of balsawood! Suppliers? Colin Bliss Models at Maldon and Active Scale Models of Hockley in Essex both stock sheet Depron and a quick search online will find other stockists around the UK.



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PVA adhesives will not dry if sandwiched between two pieces of foam although it can be used painted on outside surfaces as an exterior finish for strengthening. Most solvent based adhesives will melt the foam, so five minute epoxy, Deluxe Materials R/C Modellers glue, UHU POR and possibly Foam Safe Zap and Activator are really the only adhesives that should be used.

For those that cannot tear themselves away from wood for everything, all the 6mm (1/4 inch) parts on the plan can be made using soft and light balsawood and I would use either medium 1/8 or 3/32 inch for the skins, but applied with the grain vertical, cut into small sections. The assembly sequence is exactly the same no matter what material you use.

In the early days of EeZeBilt kits, the build sequence was illustrated using a step by step set ABOVE: After rubbing the sides level and in line with the shape made by the slope from deck to chine using the sanding block, the first side skin was stuck in place. R/C Modeller's glue to fully dry overnight, the other side skin piece was also then trimmed and sanded to shape.

gives plenty of time to position and pin the 3mm thick sheet to the frames. Once dry, its ends were first trimmed with a sharp knife and then sanded to shape. The other side was then added in the same way. Leaving the hull now

BELOW: Once happy with the side skins trimmed and sanded to size, coat the relevant edges with glue, position and pin on the first bottom skin, and allow to dry.





ABOVE: Trim and sand back the first bottom skin then pin and glue on the second one. This picture shows the style of sanding block used for all the major smoothing work. Here it is creating a nice bevel on the edge of the first bottom piece. You can, with the R/C Modellers Glue and a finger, make a fillet of glue along any seams that are suspect.



ABOVE: Here is the basic Depron hull. I like to use a leg from a pair of tights to skin over the hull as the foam, once treated with a coat of resin, whether epoxy or acrylic, does need the added strength that the nylon gives it. Do not be tempted to use polyester or fiberglass resin as this melts these plastics! Lightweight tissue, glass cloth, brown paper and aircraft nylon have all been tried in the past, but the problem of joins and overlaps always makes the edges fiddly and awkward to get a good totally uniform smooth finish.

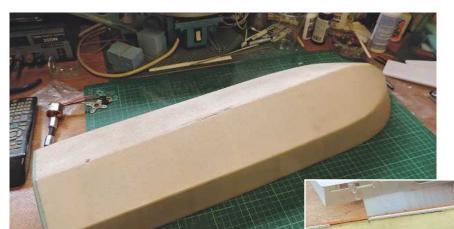
A leg of a pair of ladies tights, being a tube of nylon, will cover a hull up to 36 inches in length with no joins or overlaps and is surprisingly strong once finished. If it is easier for you, or you want more strength and knock resistance, then after the first layer of nylon and resin has had the sharpness (it dries hard, but a little rough to the touch) sanded off, a second nylon skin can be added if desired. In the picture, the toe and heel part of the tights are stretched together and tied over the gap in the deck to get rid of any wrinkles. This also creates a handle to hang it up to dry for manhandling, without touching the wet surface.

of hand drawn black and white pictures as printing technology was not as advanced as it is today. I'm glad to say that we have moved on since then and the photo sequence shows how to put the basic hull together. The prototype was built exactly as per the plan and the second hull built from it is the one used in the photo sequence, but was extended by adding 1.5 inches in front of, and the same distance behind, the wooden supported keel pieces. I also extended the top deck plan by another inch at the bow/deck level and consequently the rake of the deck support piece. This gave me a hull more suitable for torpedo boats and similar and was done to show the flexibility of the basic plan.

Conclusion

Well, that is the build of our basic 'Amazing' all-purpose Depron hull. The long one became a Swift PCF from the Vietnam War and details of the upper parts were all taken by doubling up all the measurements of the 1:48 scale Revell kit to make a handy 1:24 scale replica. The little black hull will probably become a Fairey Swordsman or a sports fishing boat in due course or just a freelance fun run model. It doesn't matter what you choose, because as long as you watch the weight of the cabin and so on, you know for a fact that it will be a good runner.

In the final analysis, the Swift PCF model has performed extremely well and even though I have



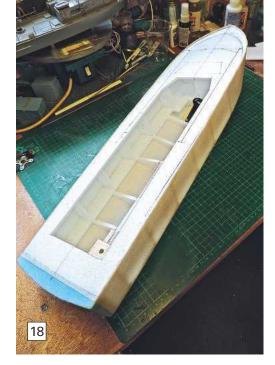
RIGHT: The 'guts' of the Depron hulled boat.

ABOVE: This is the hull after finishing with the 15 denier (thin) tights and applying one coat of SP113 Finishing Epoxy Resin, although any make of solvent free finishing resin will do. Some of the Acrylic (water based) coatings are nice and easy to use, but will take three to four coats to match the strength of one coat of epoxy resin. They are of course quick to dry between coats, 20 minutes on average, and easier to sand. I have also experimented with thinned PVA adhesive. Cascamite powdered glue and Ronseal clear acrylic gloss varnish will work equally as well as a purchased, branded, acrylic product, Note: I needed a curved transom for the Swift PCF boat, so added a piece of blue foam, glued with R/C Modellers Glue, sanding it to shape once dry before covering with nylon.

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RIGHT: The Depron Swift PCF boat - almost finished in mid-2014.



ABOVE: And here is the hull the right way up! It may be best to coat the deck separately, using the same principle, but the other way up, if you can't get the creases out of the stretched 'tights leg' when pulled over the top of the hull.

a few more bits and pieces to finish off, I am more than pleased with its performance. It took about two days to make and cover the hull, and in terms of cost, the materials for the hull including Depron, adhesive, a pair of tights (yes, I did buy new ones!) and resin came to a little over £7. Not bad for a beginners model!

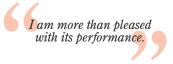
Have fun and keep on model boating, Ron Rees.



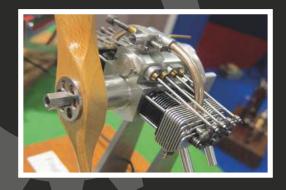


ABOVE AND LEFT: Here are the two hulls, the black 30 Denier coated original that the plans were drawn from and the slightly longer tan coloured 15 denier covered hull for the Swift PCF model. At this point they have no chine, running strips or deck edgings, but these are easy to fit. I tend to use 1.5mm and 3mm spruce stripwood or similar, glued on with medium superglue before the final coats of finishing resin are applied. Now your hull is ready for its superstructure, so start searching the world wide web for images of various boats as there are thousands of them out there.









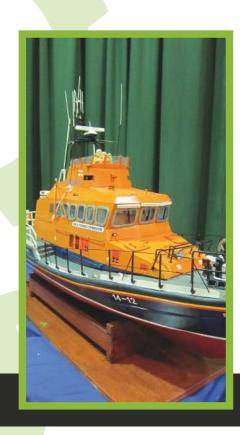
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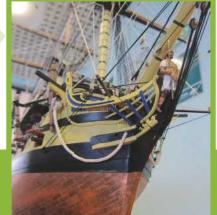
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ENTRY NO.	OFFICE USE ONLY	
	CLASS	ENTRY NO.

ENTRY FORM - COMPETITION & LOAN MODELS

PERSONAL DETAI	LS (Please print)			
Surname		Forename(s)		Age
Address				
	Post Co	de Email _		
Home Tel No		Daytime	e Tel No	
Model Club or Association				
How many years have you	been a modeller?			
MODEL DETAILS -	- PLEASE TICK BO	OX IF MODEL IS FO	R LOAN 🔲	
Entry Class (competition er	tries only)			
Model Title (to be used for	catalogue and display card	d)		
Model Description (to be us	sed for catalogue and disp	olay card)		
Model Scale	Length	Width	Height	Weight
Type of construction				
Parts not made by you and	commercial items			
Please supply a photograp	h of the finished model for	r insurance purposes.		
Are you supplying Judges	Notes? Yes 🔲 No 🔲			
Value of Model (MyTimeMe	edia Ltd will not insure the	model unless a realistic val	ue is entered) £	
I have read the rules and co	onditions of entry and con	firm the information is corre	ect to my knowledge and I a	ccept the conditions of entry.
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	actuded on or with this for	rm may appear in MyTimeM	edia Ltd publications and on	our websites.
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To help you get the best from The Model Engineer Exhibition

These notes are written purely for guidance. Full information is contained in the Competitors' Information booklet which is sent to every entrant as part of the information package. If you have an item and are unsure as to the Class into which it should be entered, leave that section blank and we will take care of it. The Judges have the right to move any competition exhibit into another class if they feel that by doing so its chances of gaining higher marks or a more appropriate award are improved.

f the item is offered as a Loan exhibit please indicate this by writing Loan on the form in the box identifying the Class. Loan models are not judged but carry all other privileges associated with competition entries.

Part built models are particularly welcome in the Loan Section; visitors like to see work in progress, and entry does not preclude the item being entered in competition when completed.

The classes listed below are those associated with mainstream model engineering.

Club exhibits

Where a club is exhibiting, each model should be entered on a separate entry form and clearly identified as a club exhibit by entering Loan/Club in the class section box. This ensures that we have a full record of all models on display during the show and facilitates matters of administration and insurance.

Additional forms

If you do not wish to deface your copy of the magazine we are happy to receive photocopies of the entry form, one for each model. We will be pleased to send out extra forms if required, so if you know of a modeller who is not a reader of one of our magazines but who you think may wish to participate, please advise them to contact our Exhibitions Office, or simply photocopy the entry form for them. The success of the show depends largely on the number of models on display. Your work could well be the stimulus which inspires someone else to start in the hobby. There can be no doubt that this event is our showcase on the world of modelling in all its aspects. Every modelling discipline needs more and more participants, and it is by displaying not only the crème-de-la-crème, but also examples of work of a more achieveable standard, that people are encouraged to join into the wonderful world of modelling, in whatever aspect. We look forward to seeing a sample of your work at the show!

Engineering Section

- Hot air engines.
- General engineering models (including stationary A2 and marine engines).
- Internal combustion engines. А3
- Mechanical propelled road vehicles A4 (including tractors).
- Δ5 Tools and workshop appliances.
- Horological, scientific and optical apparatus. A6
- A7 General engineering exhibits - not covered by the above

Railway Section

- Working steam locomotives 1" scale and over.
- R2 Working steam locomotives under 1" scale.
- Locomotives of any scale, experimental, freelance or based on any published design and not necessarily replicas of full size prototypes, intended for track duties.
- Scratchbuilt model locomotives of any scale, not covered by classes B1, B2, B3, including working models of non-steam, electrically or clockwork powered steam prototypes.
- Scratchbuilt model locomotives gauge 1 (10mm scale) and under.
- Kitbuilt model locomotives gauge 1 (10mm scale)and under.
- Scratchbuilt rolling stock, gauge 1 (10mm scale) and under.
- Kitbuilt rolling stock, gauge 1 R8 (10mm scale) and under.
- Passenger or goods rolling stock, above 1" scale.
- Passenger or goods rolling stock, under 1" scale.
- Railway buildings and lineside accessories to any B11 recognised model railway scale.
- Tramway vehicles.
- Working steam locomotives built from a kit.
- B-K2 Working locomotives other than steam powered. (Any model locomotive in class B-K1 and 2, built from a commercial kit, entered into these classes will not be judged in the medal classes but can receive commended certificates and an award from a trade supplier).

Marine Models

- Working scale models of powered vessels (from any period). Scale 1:1 to 1:48
- Working scale models of powered vessels (from any period). Scale 1:49 to 1:384
- Non-working scale models (from any period). Scale 1:1 to 1:48
- Non-working scale models (from any period). Scale 1:49 to 1:384
- C5 Sailing ships and oared vessels of any period - working.
- Sailing ships and oared vessels of any
- period nonworking.

 Non-scale powered functional models including hydroplanes.
- Miniatures. Length of hull not to exceed 15in for 1:32 scale, 12in for 1:25 scale, 10in for 1:16 scale; 9in for 1:8 scale. No limit for smaller scales.
- For any model boat built from a commercial kit. Before acceptance in this class the kit must have been readily available for at least 3 months prior to the opening date of the exhibition and at least 20 kits must have been sold either by mail order or through the retail trade.

Scale Aircraft Section

- Scale radio control flying models
- Scale flying control-line and free flight Scale non-flying models, including kit and scratch-built
- Scale flying radio controlled helicopters

Model Horse Drawn Vehicle Section

Carriages & other sprung vehicles. (Omnibuses, trade vans etc.) Wagons, carts and farm implements. Caravans.

Junior Section

- For any type of model, mechanical or engineering work, by an under 14 year old.
- For any type of model, mechanical or engineering J2 work, by an under 16 year old.
 For any type of model, mechanical or engineering
- work, by an under 18 year old.

All entries will be judged for standard of craftsmanship, regardless of the modelling discipline, i.e. a boat will not be competing against a military figure. Providing a model attains sufficient marks it will be awarded a gold, silver or bronze medal.

Model Vehicle Section

- Non-working cars, including small commercial vehicles (e.g. Ford Transit) all scales down to 1/42.
- Non-working trucks, articulated tractor and trailer units, plus other large commercial vehicles based on truck-type chassis, all scales down to 1/42.
- Non-working motor bikes, including push bikes, all scales down to 1/42.
- Non-working emergency vehicles, fire, police and ambulance, all scales down to 1/42.
- Non-working vehicles including small commercial vehicles (e.g. Ford Transit,) scale from 1/43
- Any available body shells including Concours, in any scale or material, to be judged on appearance only.
- Functional model cars/vehicles which must be able to move under their own power of any type. Can be either free-running, tethered, radio controlled or slot car, but must represent a reasonable full size replica.

DUKE OF EDINBURGH CHALLENGE TROPHY Rules and Particulars

- The Duke of Edinburgh Challenge Trophy is awarded to the winner of the Championship Award at the Model Engineer Exhibition.
- The trophy remains at all times the property of MyTimeMedia Ltd.

- The name of the winner and the date of the year in which the award is made will be engraved on the trophy, which may remain, at the discretion of MyTimeMedia Ltd., in his/her possession until required for renovation and display at the following Model Engineer Exhibition.
- Any piece of model engineering work will be eligible for this Championship Award after it has been awarded, at The Model Engineer Exhibition, a Gold or Silver medal by MyTimeMedia Ltd
- A model may be entered more than one year but if the model wins it will be permanently retired.
- Entry shall be free. Competitors must state on the entry form:
 - (a) That exhibits are their own bona-fide work.
 - (b) Any parts or kits which were purchased or were not the outcome of their own work.
 - (c) That the model has not been structurally altered since winning the qualifying award.
- MyTimeMedia Ltd. may at their sole discretion vary the conditions of entry without notice.

COMPETITION RULES

- Each entry shall be made separately on the official form and every question must be answered.
- Competition Application Forms must be received by the stated closing date. LATE ENTRIES WILL ONLY BE ACCEPTED AT THE DISCRETION OF THE ORGANISERS.
- Competitors must state on their form the following: (a) Insured value of their model.
 - (b) The exhibit is their own work and property.
 - (c) Parts or kits purchased.
 - (d) Parts not the outcome of their own work.
 - (e) The origin of the design, in the case of a model that has been made by more than one person.

NOTE: Entry in the competition can only be made by one of the parties and only their work will be eligible for judging.

- Models will be insured for the period during which they are in the custody of MyTimeMedia Ltd.
- A junior shall mean a person under 18 years of age on December 31st in the year of entry.
- Past Gold and Silver medal award winners at any of the exhibitions promoted by MyTimeMedia Ltd. of the exhibitions promoted by MyTimeMedia Ltd. are eligible to re-enter their model for the 'Duke of Edinburgh Challenge Trophy'. Past winners at any of the exhibitions promoted by MyTimeMedia Ltd. will not be eligible for re-entry into the competition unless it has been substantially altered in any way.
- MyTimeMedia Ltd reserve the right to:
 - (a) Transfer an entry to a more appropriate class.
 - (b) Describe and photograph any models entered for competition or display and to make use of any such photographs and descriptions in any way they may think fit.
 - (c) Refuse any entry or model on arrival at the exhibition and shall not be required to furnish a reason for doing so.
- Entry into the competition sections is not permitted
 - (a) Professional model makers.
 - (b) Anyone who has a financial interest in the direct supply of materials and designs to the public.

NOTE: If unsure, please contact the Competition organisers prior to the show.

- The judges' decision is final. All awards are at the discretion of the judges and no correspondence regarding the awards will be entered into.
- Exhibitors must present their model receipt for all models collected at the end of the exhibition and sign as retrieved.
- The signed release for each model must be presented to security staff when leaving the exhibition complex with display model(s) after the close of the exhibition.

IMPORTANT NOTE: PLEASE MAKE COPIES, INCLUDING PHOTOGRAPHS, OF ALL INFORMATION RELATING TO YOUR MODEL, AS MYTIMEMEDIA LTD WILL NOT ACCEPT LIABILITY FOR ANY LOSS.

Boiler Roo **Part Forty Seven: Workshop Practice - Sawing** Richard Simpson's series on model steam plants

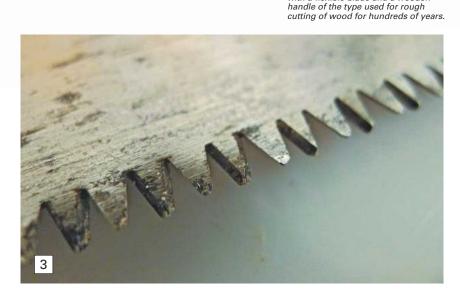
he final part of this brief look at workshop hand tools is sawing, which is something that we tend to overlook as being important, our seeming to more and more rely on various types of machine tool to do things for us. So 'sawing' is one of those traditional skills that we often tend to consider as insignificant as we can skim the cut in a lathe or milling machine, or 'dress it' with a file, as per the October 2014 'Boiler Room', to rectify a poorly executed saw cut. However, a few thoughts put into sawing techniques may well save you time and effort in the long run and prevent undercutting the marking and perhaps damaging the workpiece.

How it works

A saw is nothing more than a thin metal blade with a straight edge that has tiny teeth cut into it, Photo 1. These teeth are designed to cut when pushed forwards across the surface of the metal. Because there are many hundreds of teeth along the length of a saw blade, each one makes its own cut and removes its own small shaving of metal or wood. The teeth are designed to be offset from the blade, alternately from one side to the other, Photo 2, so the slot being cut by them as they are pushed forwards is very slightly wider than the blade itself, thereby ensuring a clearance for it. This can be very clearly seen in some cheaper disposable blades such as in some types of Junior Hacksaw blade where it is made corrugated, rather than having the teeth offset, for ease and cheapness of

BELOW: Easier to see on a large wood saw, the teeth are offset alternately from side to side to produce a cut that is slightly wider than the blade to ensure it does not bind.





manufacture. The blade material and teeth interval is determined by the material to be cut, so a softer material such as wood can have widely spaced teeth so removing larger shavings of wood and the blade does not need to be very hard, Photo 3, whereas for metal cutting, finer teeth and a much harder material is required to enable it to be cut, Photo 4. It is fairly obvious that if you use a blade designed for wood sawing to cut metal, it will very quickly become blunt, but conversely a fine toothed metal cutting blade can overheat if used on a soft material, which will tend to clog and compact in the teeth. The teeth spacing is known as the 'Teeth Per Inch' of the blade or 'TPI', not to be confused with Threads Per Inch as quoted for fastenings!



ABOVE: A close up of the wood saw teeth shows clearly the cutting face on the forward edge of the tooth.
This is exactly the same arrangement with metal cutting saws, but in a smaller size.

ABOVE: A typical traditional handsaw with a flexible blade and a wooden

LEFT: The much finer teeth of a typical metal cutting hacksaw blade. Despite being a disposable blade, it is still designed to cut on the forward stroke and the teeth are offset just like a wood cutting saw.

steam basics



ABOVE: Hacksaws have many varied types of arrangement for tensioning the blade, but they all have the same considerations. If the set-up is worn and the blade is allowed to become out of alignment, the saw should not

The saw only cuts on the

forward stroke, so gentle

pressure should be applied

when the saw is moved

forwards and the pressure

should be released when the

saw is drawn back again.

Another factor to consider in your selection of blade is whether you want a fine finishing cut or a rough removing cut. As you can see a wide range of saw blades are available and it is critical from the start to be using the correct one for the material to be cut.

The next thing to consider with a saw blade is how we are going to hold the blade in the saw handle. The blades are thin to enable a fine cut to be made, thereby minimising waste and effort, but this can then make them quite flexible. Consequently a means of tensioning them will be required. Compare, just for a moment, wood saws such as a large Cross Cut saw or Rip saw which has a more rigid, but unsupported blade for fast easy removal of large amounts of wood with little regard to the accuracy of a Tenon saw. The Tenon saw is designed for accuracy so has finer teeth, a strong firm blade and a stiff backbone to keep the blade rigid, which allows accurate neat finishing cuts to be made.

Flexible blades however such as Hacksaw blades and Junior Hacksaw blades need to be held under tension in a frame to ensure they remain in a straight line and this in itself can lead to challenges. Whatever tensioning device is used, it will have a means of holding the blade under tension and inline with the frame, **Photo 5.** Wear in the fixings can often lead to the blade coming out of alignment and saws such as this should either be repaired or scrapped. When the blade is fitted, it must be perfectly in alignment with the frame and under good tension to ensure that flexing does not occur during use. The threads of any tensioning device should be free and smooth to operate and so should be checked out of the frame occasionally to ensure this, as it could lead to preventing the tightening torque not being transmitted into the correct tensioning of the blade.

Safety

As with filing, we again tend to think of a saw as a pretty innocent tool and perhaps do not give it the respect it deserves. It is a long row of sharp teeth designed to cut dense materials so it will have very little problem removing a sizeable part of your finger or hand! One slip or a broken blade is all it takes to have a deep cut in your hand, usually with a generous portion of wood or metal filings to make

a nice mess of the wound and ensure that a nurse will have to dig it all out! The best defence against this misfortune is to ensure the job is secure in a vice; the saw is correctly tensioned; is in alignment and sharp; and you are standing square on to the job with your cutting arm in line with the job and at a comfortable height. As with filing, I would also recommend wearing a pair of goggles as sawing metal generates fine metallic particles, which can be airborne in a ventilated environment and could easily get into your eyes.

A few types of saw

As we have already discussed, we can start to categorise saws by the material for which they are designed to cut. There are a whole range of wood saws from the big rough cut types such as Cross Cut or Rip saws through to more accurate types such as the Tenon saw but then there are a whole range of more traditional types of wood saws, usually for specific purposes, often now long redundant. These can include Pad saws, Keyhole saws, Bow saws, Floorboard saws and even Jig saws.

Metal saws tend to be more inclined to be of a disposable blade variety with a tensioning arrangement and include the various designs of Hacksaws and Junior Hacksaws, **Photo 6.** The great advantage of these are the fact that you can fit a specific blade for a particular material, so you can use one saw handle for many different purposes. You might also find small rigid blades designed to be fitted into Stanley knife handles or other multi-purpose modelling tool handles, but I tend to be a bit wary of these are they are invariably not very rigid, are not supported and can tend to flex too much.

And sawing?

Although so often it is tempting to hold a piece of metal flat on a surface with one hand and try to cut the waste from the end with a saw held in the other, I cannot emphasise enough the benefits of putting the job in a vice. Even if you are not in your workshop, find some means of securing the work such as a 'G' cramp to enable you to have both hands free for the saw. You are in far better control of the saw and much more likely to end up with an accurate cut. Next, stand with your body facing the vice, your forearm that is holding the saw in line with the cut, and also at the same height as the job. You should be able to see the line to which you are going to cut, as each stroke of the saw will be guided by it. Your leading hand will provide the forward motion and guidance, and your second hand, placed on top of the saw, will provide downwards pressure, **Photo 7.** The downwards pressure should not be so excessive as to cause the blade to flex and send the cut off at an angle,

RIGHT: Junior Hacksaw blades still require tensioning, but rather than use a screwed device they rely on the flexibility of a frame which has to be manually compressed to enable the blade to be fitted. This is probably the easiest blade to fit backwards!

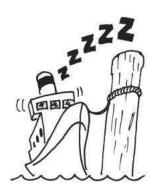


and not too light, thus causing the saw to make very shallow cuts.

As already mentioned, the saw only cuts on the forward stroke, so gentle pressure should be applied when the saw is moved forwards and the pressure should be released when the saw is drawn back again. If you do not release the pressure on the back-stroke you will soon blunt the teeth as they are dragged backwards over the surface of the cut. It is worth starting the cut with your finger to guide the blade to make the initial impression before transferring your hand to the top of the saw to apply some pressure. From then on you should be watching the progression of the cut with each stroke and ensuring that the saw is following the marked line on the job. Ensure that the saw remains square and pressure remains even otherwise you will find that the leading edge of the cut will follow the marked line, but the training edge will wander off in another direction!

If you practice these few simple points you will find your sawing is easier and significantly more accurate, and consequently require a lot less remedial work to dress-up the edge of the job.





n my smaller models, 've been using those cheap propeller, shaft and tube assemblies. With 30 and 40mm diameter three bladed plastic propellers, they are a good match for something like a 385 electric motor, but definitely not for the 380/400 motors. Assuming that I can still use a micrometer correctly. the propshaft is 1.75 mm in diameter which can make the connection with a motor shaft a shade more troublesome than the common M4/4BA propeller shafts that us modellers usually use. However, thickening the shaft up with a short length of tight fitting plastic tubing has always allowed me to make a secure motor connection with a piece of silicone tubing.

The propellers just screw on to the threaded end of the shaft and up until now have **Mooring Post**

Glynn Guest with advice and tips for modellers

A Stitch in Time!

never given me a problem. The latest model was being given its final ballasting trials when I could not resist the urge to play with the transmitter throttle stick. Full ahead produced a healthy amount of rearwards flowing water and full astern gave nothing but a loud whirring noise!

Yes, full astern had resulted in the propeller unscrewing itself from the shaft and it had fallen off.
Luckily these tests were being carried out in the bath so the propeller was not lost, but if I been using the garden pond, then the propeller would have been lost. I hate to think what is lying or possibly living at the bottom of this pond nowadays! Even worse would have been the loss of the propeller in the

middle of the much larger lake where the local club sails!

The propeller was refitted, but this time with a spot of thread-locking compound and a firm twist. So far even my most spirited operation of the transmitter controls has failed to dislodge the propeller, which pleases me no end as these assemblies are so handy to

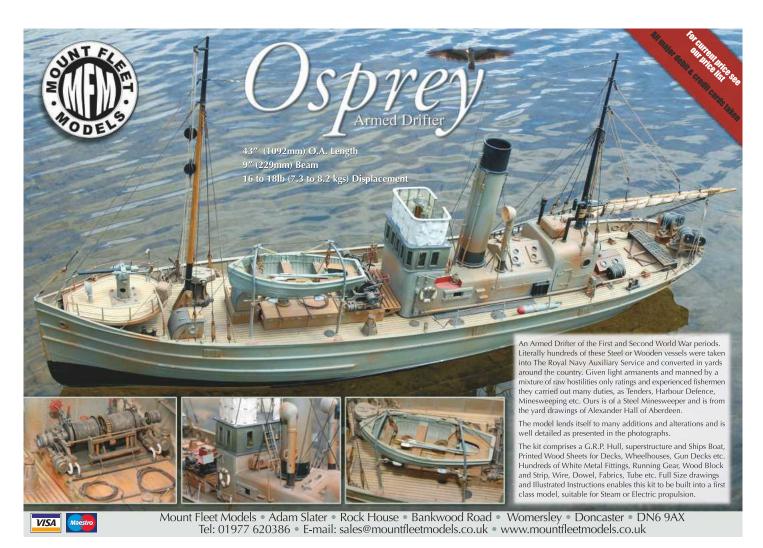
use, they being much cheaper than anything I could make and often a perfect match for small models

scale musings

The lesson has been learnt that if a locking nut is not used to secure the propeller on a propshaft, then something other than hopeful hand tightening of the propeller is needed.



propeller boss needs to be overcome.







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2014 Footy Gold Cup



Sail Footy UK

Roger Stollery reports

eld at Furzton Lake, Milton Keynes at the end of July, a great weekend's radio control Footy racing was had by 24 competitors, including five juniors, from all parts of the UK as well as Switzerland, France and Italy. This annual championship event is held in a different country every year and this year was organised by Sail Footy UK, now an affiliated MYA Class Association, and organised with the help of the Two Islands Radio Yacht Club. As well as being blessed with good weather, the wind direction on both days was very favourable, even if it was very light and variable at times, which allowed a total of 16 races to be sailed. Not only was the weather hot, but the competition from abroad was very hot too!

This was by far the most competitive of the six Gold Cups held so far and apart from a single protest hearing, the event was sailed in a most sporting spirit. This made it a friendly event with elements of fun and it was good to make some international friends and perhaps catch the bug for



a bit of travel next year. The low cost and small size of Footy yachts allows the eager participation of children and families, with young people making up more than a quarter of the entry, so the future of the Footy and radio model yacht racing as a whole looks good.

The boat designs were of great interest, with the Italian designs developed only during the last couple of years, using up to 330g ballast. This allowed them to carry large, tall and efficient conventional sail rigs; their sails were beautifully made using a light clear and/or silver/gold satellite film. The ballast is some 15% heavier than the heaviest UK designs, most of which use swing rigs. All of the French hulls were made using diagonally planked balsa, bonded with superglue and weighing only 20 grams each! The winning Phil Tyler SLIM boat had been moulded with carbon-fibre, fits into the measurement box diagonally and uses a ballast of 300gm to counteract its tall offset pivot UNA rig, again with beautifully made sails. The most extreme design, HOOLIGAN by Gary Sanderson, was longer than a foot and fitted in the measurement box both diagonally on plan and in the elevation.

Racing

Saturday

Phil Tyler sailing his SLIM design with a large rig, was able to win the first two races easily. Race 3, was won by the young Frenchman Hippolyte Bessiere sailing a PROTO, the first GBR boat

LEFT: They can look like toy boats to the uninitiated, but are in fact exciting miniature radio controlled racing yachts.



RIGHT: The Junior Hippolyte Ressiere

finishing behind all of our friends from over the water! The situation looked better for GBR in Race 4, when Rob Vice sailing his ICE, finished second behind Enrico Audizio of Italy sailing an ENGI design.

When racing restarted after lunch, Enrico could not hold back Claudio Vigada sailing an URCA, nor his dad, ex-Olympic and America's Cup sailor, Gigi Audizio in Race 6. In the final race of the day Phil Tyler won again, establishing a slim overall lead over Claudio and Enrico.

Sunday

The wind on Sunday morning was stronger and from the NW, but that too became lighter with direction variations from either the West or the East at times. Before the start of racing, Alfie Hart who had previously been filming the racing from the control area when he wasn't sailing, set a camera on a BOTTLE boat powered by a small Footy rig and with everybody's agreement filmed the first B Heat race. This went down well and didn't interfere with the racing. Phil Tyler continued his winning form by taking Races 8 and 9, with Claudio winning Race 10. Enrico won Race 11 and Jean-Francois Bessiere from France sailing his PROTO design winning Race 12, with Claudio again winning Race 13. Alfie Hart, a GBR sailor, won Race 14 with his ICE after a close battle with Rob Vice. This apparent match race at the front of the fleet continued into the final two races, both won by Rob and allowing him to claw his way into silver medal position, one point behind Phil and just one point ahead of Claudio who was just two points ahead of Enrico! So, a close result,



and that perhaps is what is nice about this type of racing without having one person 'miles' ahead of everyone else. At the prize giving, Phil Tyler thanked the whole race organising team for setting up and running the event.

Results - top 10 only

1st	Phil Tyler	Switzerlan
2nd	Rob Vice	GBR
3rd	Claudio Vigada	Italy
4th	Enrico Audizio	Italy
5th	Gigi Audizio	Italy
6th	Hippolyte Bessiere	France
7th	Alfie Hart	GBR
8th	Jean-Francois Bessiere	France
9th	Hugh McAdoo	GBR
10th	Baptiste Galaup	France

Angus Richardson Trophy for most innovative Footy - Gary Sanderson.

LEFT: Architect Jean-Francois Bessiere's balsawood PROTO - the bare hull almost weighs nothing!

A great weekend's radio control Footy racing was had by 24 competitors.

Wings and Wheels 2014

his was held at the end of June at North Weald in Essex, this being the 28th show. For what is primarily an outdoor event, the weather is critical and this year it was fine on the Sunday until late, when the rain came in buckets! There had also been light showers as the Saturday progressed, however prior to the downfall on Sunday the weather had been generally kind and allowed the model flyers to make full use of the sky.

Model boating

We are really only concerned with the marine activity within these pages and in the large dedicated marquee, many local clubs came together to make a full display of a wide variety of model boats. Leighton Buzzard MBC was the organising club (as in previous years) and they were well supported by many of the usual clubs plus newcomers Fishers Green MBC. As in previous years there was a decent-sized outdoor pool available which does help to attract visitors into the marquee to see the range of models on display.

Trade?

On the trade side, there were some 50 or more traders on the flight line supplying everything the aeromodellers could need and naturally there





Dave Brumstead reports

LEFT: The host club Leighton Buzzard MBC with Ron Wem's model of Lady Steph in the foreground.

LEFT: Lady Steph by Ron Wem, based on a photograph of the Broom 45.

event report



ABOVE: Keith Henley of the Moorhen MBC making use of the outside pool with his HMS Bulldog.

BELOW: The Brentwood MBC stand.

was a spin-off for us model boaters in that radio equipment, batteries, adhesives etc. were available. Well known battery suppliers, Component Shop, were on the flight line as were model timber suppliers The Balsa Cabin, SLEC and Howes Models who advertise in this magazine. Outside the model boat marquee, Mountfleet Models were exhibiting three of their range with flyers available



ABOVE: Southend MBC had one of the largest displays in the marquee. In the foreground are two of Ray Malone's tugs; Crowley and Ken Mackenzie.

for their other model kits and it was nice to see Mark (of Mountfleet Models) here.

Conclusion

Just up the M11 from its junction with the M25 and situated close to Harlow, this is a well supported show in terms of aeromodelling, but there is sufficient here for us model boating enthusiasts to make the trip. It is not a particularly expensive event either.





LEFT: Lee Dickinson of the Broomfield MBC operated this tug on the outside pool. His model was comprehensively equipped with all the required masthead lights working, as well as internal wheelhouse illumination.

BELOW: Fishers Green MBC was a new addition to the exhibition with a variety of models on display.

Fishers Green
Midel Boat Club



ABOVE: Fun on the pool with fast electrics and Club 500's!



ABOVE: Great Yarmouth MBC had a range of models on show, including a TID tug and a Broads Cruiser



LEFT: AMBO (Association of Model Barge Owners) were represented.





TRADE ENQUIRIES WELCOME

VERTICAL

Weight, empty: 590g (20.8oz)
Water capacity, steaming:
approx. 125ml (4.2 Fluid oz)
Start up time from cold:
3 minutes
Width, including burner &
steam valve: 115mm (4.53")
Total height:
200mm (7.87")



Miniature Steam









HORIZONTAL

Weight, empty: 680g (24oz)
Water capacity, steaming:
approx. 150ml (5 Fluid oz)
Start up time from cold:
3 minutes
Width, overall: 65mm (2.56")
Length, including burner:
155mm (6.1")
Total height: 137mm (5.39")

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Déjà vu?

Dave Wiggins and the Victoria Model Steamboat Club's 110th Anniversary Regatta



recorded model power boat club, staged a special regatta to celebrate its 110th year of model boating in Victoria Park, East London. The full range of traditional powered model types were seen and demonstrated throughout the day beginning with the oldest discipline of Straight Running, something with which Victoria MSC has had a long association.

his event in June took me back to my very

On this summer 2014 day, Britain's oldest

first few years as a young model boat builder.

The day

Beginning at 1030hrs, several different classes were run under the direction of Keith Reynolds, beginning with the Wedge class boats, before the hydroplane guys took to the water around midday. There was then a short and very pleasant lunch break during which a magnificently decorated celebration cake was cut by the Model Power Boat Association's representative Mrs. Sue Odell, accompanied by the VMSC President Mr. John Underwood, who made a short speech followed by a toast to 'the club'.

After the hydroplane pole had been removed, the straight running competition resumed with Metre, Functional, Boat and Ship classes being run before the day finished with a raffle and the presentation of prizes late afternoon. As I say, it was a full day of model boating and there were craft on the water throughout.

Straight running and tethered hydroplanes?

I think it might be sensible to offer a few words about what is involved as many readers will have never seen, let alone taken part in, a traditional straight running or tethered hydroplane regatta.

ABOVE: Memories of an especially happy day for Victoria MSC members and their families and friends.

Straight running boats

These may be powered by internal combustion, steam or electric power units (even rubber bands and clockwork motors many years ago!) and the model is released manually by its owner and then runs unguided over a course of perhaps 60 metres before being stopped and returned by the line of 'human stoppers' who stand behind a line of markers through which the model must pass. There used to be just six target markers and entrants would score five points for a 'Bull', three points for an 'Inner' and one point for an 'Outer' with a zero for a total miss. Three attempts at the course were allowed and this was monitored by a marshal who stood by the start gate. Since then the scoring has been updated, but the principle remains the same.

There was a wide and interesting variety of power plants in use, including electric motors used in many of the Wedge hulls, although vintage steam and glow motors and very large 2-stroke petrol engines that were popular in the past, were also to be seen. In the early 1960's there would have been many of the still (for then) popular British marine diesels, but I don't recall seeing even one on this day. I don't recall seeing a four stroke GANnet either, now that I come to think of it, and there were certainly plenty of those in the 1960's as well, but like the diesels I expect that they are now prized collector's items. Minor straight running variations (not run this day), are 'Nomination' where the boat owner 'nominates' the exact time that his boat will take to cover the distance and 'Circular Steering' where the line of target markers is placed across, rather than along, the line of the lake. The latter



BELOW: The Victoria Model Steamboat Club's 110th Anniversary Cake!



has the big advantage of requiring fewer (or even no) 'Stoppers' as owners mostly recover their own model boat. Another point about circular courses is that they force competitors to adjust the rudder between heats, thus ramping-up the skill level required.

Tethered hydroplanes

The racing of these is almost as old as straight running. For safety reasons, the speed of unguided models was limited to 12mph in the early days of the hobby, so power boat enthusiasts devised a way of tethering very fast, stepped hull racing boats to a strong pole set into a lake's bottom. This had (and still has) a smoothly revolving top and boats can thus run free in a circle at speeds that began at around 15 to 20mph, but have now reached the 100's (the magic 'ton'). On this day, three classes of 'Restricted' tethered hydroplane were raced under the direction of club chairman Norman Lara, these being 2.5cc airscrew, 6.5cc waterscrew and electric. The fastest time of the day was achieved by Jim Free from Blackheath with his B-1 (Sport) airscrew hull and the best 'Sport 40' waterscrew driven time was also recorded by Jim. A sign of the times was Martin Broad's brushless electric motor powered hydro' which managed 89.17mph.

As befits such an established club, there was a respectable turnout of steam propelled free running models including the one and only r/c model spotted, an open launch powered by a now vintage and quite valuable Saito four cylinder plant. Bigger, steam powered free runners included a pair of Stuart Turner 10V and Double 10 engined craft operated by Don and Dean Reynolds as well as some most interesting early steam and petrol 4-stroke engines bought along for discussion by Richard Gorbutt. I also saw an especially interesting high speed steam straight runner formerly owned by the Blackheath MPBC member Alan Rayman, the author of a well known book on the subject.

Conclusion

It wasn't just competition in Victoria Park as there was a great deal of pleasant social chattering and nattering and it was also clear that this club has been more successful than many in attracting younger members to the lake. During the day, complete strangers asked sensible questions about the hobby such as 'how are the boats made'? I can only encourage our London based readers to go along and take a look for themselves as the park



LEFT: Some of the steam hardware present, all powered by ST engines though often much modified.

BELOW: Some of the boats awaiting their turn to attempt the steering course. The large petrol powered RTTL and the two MTB. boats seen are very typical of the straight runners of the 1960's while the brightly coloured hulls are somewhat later.



Results

Wedge class Straight Running: Boat and Metre class Straight Running: Ship and Functional class Straight Running: Airscrew Hydroplanes (2.5cc): Waterscrew Hydroplane (6.5cc): Electric Hydroplane:

(Information supplied by Mrs. Sue Odell)

Delia Reynolds (Victoria) Don Reynolds (Victoria) Dean Reynolds (Victoria) Jim Free (Blackheath) - 114.17mph Jim Free (Blackheath) - 94.35mph Martin Broad - 89.19mph

itself is an interesting place as it is obvious that a great deal of money has been invested in it since I was last there in the 1960's, and there are some very interesting diversions for youngsters including an amazing skateboard arena and water play area as well as a brand new café and other attractions.

The VGSC Club Secretary is Keith Reynolds, email: keithreynoldsv71@talktalk.net, or just take a stroll into Victoria Park on any Sunday.

BELOW: Round the Pole hydroplanes!





HM Bark Endeavour

Brian Mitchell's model

n 1768, Lieutenant James Cook sailed to the South Pacific to observe the transit of the planet Venus across the face of the sun. His ship was the converted collier Endeavour, and this series of pictures show the stages of construction of Brian's 1:64 scale model of the vessel, working from plans in the Anatomy of the Ship series, 'Captain Cook's Endeavour' written by Karl Heinz Marquardt, and which is still available in the retail market.



RIGHT: Looking more like basket work, the basic hull is of two layers of veneer, the first layer laid lengthways, the second across the hull.



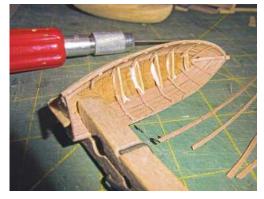
ABOVE: The veneers have been coated with brown parcel paper, deck supports fitted to make the hull rigid and the first external planks of 0.9 mm Obechi are being laid, clamped in place until the PVA glue has set.



ABOVE: The external planking is complete, stem, sternpost and keel fitted and the decks are half-complete. The decks are in two layers, the first being plywood sheet across all the deck, followed by planks to scale. Attachments for blocks are fitted at this stage.



ABOVE: One of the ship's four boats coming out of its plug. The wooden plug was first coated with cling film, then brown parcel paper, followed by the external



planks, keel etc.



RIGHT: The four ship's boats in position. The lower two are on chocks on the deck, the upper two laid over spare spars.



LEFT: A small boat is being fitted out with internal planks, ribs, floor etc. Clothes pegs come in handy at this time, holding all in place whilst the glue sets.



ABOVE: The rigging to the foremast. All the blocks, deadeyes and ropes are to the correct scale sizes and colours. The rigging lines are belayed in their correct manner, but the ones used for actually sailing the model are made to run through to enable the sails to be set for each tack.

LEFT: HM Bark Endeavour afloat on the Norwich MBC pond. With the sails set properly, the model sails straight with no other form of control other than the wind direction.



RIGHT: A general view of Kindly Light which stands in Tracy's hallway.

Kindly light

Tracy Strachan describes Peter Patterson's model his is a 1:12 scale model of a Bristol Channel Pilot Cutter that was built by Peter Patterson of Northern Ireland. Peter is an ex- Merchant Navy officer and has always been close to boats, sailing and has a love of the sea, not that surprising really! He built the model following a request from myself after I saw some of the other excellent work he has produced and wanted it as a future legacy of him. Peter is 84 now and it took him two years to complete, which is amazing considering he spent three months very seriously ill in hospital, but his determination to complete the model was a major positive factor in the recovery process. Every last detail has been handcrafted and the model has

been totally scratch built, including manufacturing the ropes and rigging. It is a static model, and I am very happy with it as it is in my hallway.

A bit of history

Kindly Light was the sixth of six such boats sailing the Bristol Channel and was built for Lewis Alexander of Barry, South Wales. All the Alexander brothers were well known pilots, but in those days, the first pilot cutter to reach an incoming ship got the business, unlike today where it is all officially regulated.

She was six inches more in the beam than the other cutters, which gave her a slight sailing advantage, together with more cabin space, but it has to be said that Kindly Light was the last sailing pilot cutter to be built before steam took over. She was made to the highest specification when built in 1911 by Armour Brothers of Fleetwood to a William

HMS Invincible (1907)

Kim White's new, but in in progress, model

BELOW: This photo shows the differences between the two types of turret.

Then I finished my last model (HMS Glamorgan, MB April 2013) I took some time off building to enjoy sailing, but as you will all know, such idylls don't last and the need to build again grows ever stronger.

With the 100th anniversary of the start of World War One upon us I decided that now was the time to begin a model of a ship I have loved for many

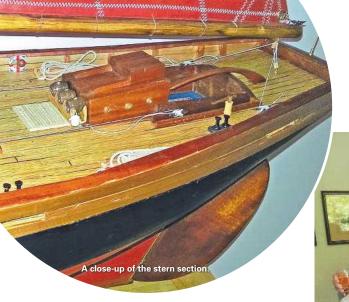


years, namely the battlecruiser HMS Invincible and it would be to the same scale as the 1:72 HMS Glamorgan.

I'm still not proficient enough to attempt a hull myself, but heard that Southern Cross Models in Australia was offering a 1:72 scale HMS Invincible hull so I ordered one. By great luck I was able to arrange for my hull to be started on the same day that the original ship was laid down, namely 2nd April.

Whilst waiting for it to be made and bearing in mind one has to travel some distance in Australia for these things, I decided to get things moving by starting on the main gun turrets and the rear superstructure and you can see the progress thus far in the accompanying photos.

HMS Invincible mounted two types of experimental electrically-powered 12 inch gun turrets, which were later converted to hydraulic power. A and Y turrets were built by Vickers, but P and Q by Armstrong's, so two different shapes to build. I have made them exactly like the originals,



Stoba design. The keel, posts, frames, stanchions and beams were of English Oak with planking of Elm and Pitched Pine and doors of best Yellow Pine. Her fastenings were of galvanised iron, with a deck of pitched Pine and Teak. Masts and spars were Silver Spruce and the sails were of the best flax in winter and cotton in summer.

She was sailed by one man and a boy and had a noted ability to safely 'heave-to' in heavy seas. This is still appreciated today in refurbished originals from that period and some new build craft. Kindly Light was a very fast boat in spite of her heavy displacement. After her service in the Bristol Channel she became the yacht Theodora until sold to the Royal Artillery Yacht Club in 1946 and converted for ocean sailing. She was then later bought and used as a training vessel which saw her cross the Atlantic, and back, in 1958.

In 1960 she was the founding vessel of the Ocean Youth Trust and continued taking boys and girls to sea until sold to the Maritime Trust in 1971. She was sold back into private ownership in 1993 on the understanding that she would be restored. Her 100th birthday was in 2011.

The Kindly Light model now resides at the home of myself and son-in-law Graeme and is hugely admired by all and is a tribute to Peter's skills.

Tracy Strachan - 2014





ABOVE: Tracy right, with mum and dad, the model's creator.

LEFT: A close-up of the bow area.

out of flat sheet, as no commercially-available turret models exist and the barrels are built-up from plastic tubing.

Astute readers will see that the rear superstructure, all that has been completed so far, is missing the ship's boats and the skid-beam boat deck. So far I've made three attempts to get that right and have scrapped each one, but at least with it not fitted you can see the details on the upper deck.

The figures in the spotting top are WW1 naval figures from the Skybirds range, circa 1920's, and are in keeping with the period of the battlecruiser. I plan to have the model finished within the next twelve months at the latest. The decks will be individually planked and operating parts will include the searchlights, navigation and bulkhead lighting, rotating turrets and smoke generators. A full-length feature article will be in this magazine, probably sometime in 2016! I hope this little taster will go to show that you can start building a model ship, even if you have no hull!

Kim White - September 2014

RIGHT: So far the basic rear superstructure and two turrets have been built.







ABOVE: A close-up of the paddle wheel drive mechanisms. The especially made rubber belts have tended to break if over-tensioned.

Wrigley 121 Stern Wheeler

Dave Pugh's model from a Model Boats Free Plan

A chance idle moment in a local model shop led to the discovery that some brass tubes are a perfect sliding fit inside each other.

BELOW: Port rear quarter view of Wrigley 121.

thought Model Boats' readers might be interested in my experience of building the Wrigley 121 Stern wheeler featured together with a Free Plan, in the October 2012 issue, courtesy of Glynn Guest. This was only my third model and the first from a plan, so I wanted something not too difficult, but also a little different, and Wrigley fitted the bill nicely. The Model Boats feature of its construction by Glynn Guest was excellent, well illustrated with plenty of photos and a materials list, plus step by step instructions. All of the these gave me the confidence to attempt and eventually complete the model.

Paddle wheels

I figured the paddle wheels would be the hardest part, so started with them. Cutting the various circular components for the paddles out of styrene (plasticard) with a compass cutter was tedious and their assembly a bit of a fiddle, but the article photos and guide were a big help. I pretty much stuck to the original recommendations, but I used brass tubes (one inside the other) for the paddle wheel shaft and its bearings. Here, a chance idle

moment in a local model shop led to the discovery that some brass tubes are a perfect sliding fit inside each other. For the outer tube saddle clamps I used plastic shelving blocks suitably bored out to accommodate the axle tube. Various ideas were considered for the electronic control of the two paddle wheel motors, but eventually I settled for two electronic speed controllers so each paddle could be controlled independently.

Hull and superstructure

Nothing really to report here as it was all straightforward and Glynn's recommended method and sequence of construction was absolutely fine.

Problems?

Once complete, painted and in use, the only problems encountered were:

1) The drive belts initially kept breaking where they had been joined, as I had to get them made to measure with welded joints. Some tension adjustment was necessary!

2) The front-end of the model needed ballast. I tried the method given in the article of putting some lead under a dummy lifeboat on the foredeck, but the C of G was too high and resulted in some scary rolling when turning. So, reluctantly I cut a hole in the deck to access the hull interior and put the lead ballast inside, siliconed in place to retain it, and then sealed the hole and put a dummy tool chest over it.

Conclusion

I am very pleased with the model as it sails extremely well, is very manoeuverable and relaxing to sail when listening to the rippling water from the paddles. It takes a little time to get the hang of steering by controlling each paddle wheel independently, but once mastered it all becomes second nature. Wrigley 121 produces a good turn of speed and is exceedingly frugal on battery consumption. The model always attracts interest and attention wherever I go, whether sailing or not. I would highly recommend this model to anyone who hasn't build from a plan before and would like to 'have a go'. Many thanks to Glynn Guest and Model Boats for the feature and plan of Wrigley 121.



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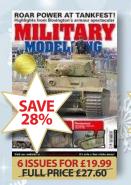
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Glynn Guest with advice and tips for modellers



Laser your way through!

cale steering events can be a great club activity where members can show off their skills whilst manoeuvring their models through obstacles. You are normally required not to touch obstacles when negotiating your way through them. One common exception is the 'Touch Buoy' where the model is expected to make contact, usually with the bows.

Now some modellers seem to have a gift for touching, if not ramming, everything on the water when they sail, but confront them with a 'Touch Buoy' on a steering course and they encounter extreme difficulty and I'll admit to finding it tricky when the buoy

cannot be approached along the line of sight.

In your mind's eye you have to keep projecting where the model is heading which does not always come naturally to some people. I did once suggest that a light stick, perhaps a strip of balsa, could be fixed to the bows of a model to act as a guide when practising steering manoeuvres, but whilst waiting at a supermarket checkout, I spotted another possible aid to sharpening one's steering skills.

This was one of those small combined light and laser pointers intended to be attached to a key ring. I remember when laser pointers first appeared and they were an expensive piece of one-upmanship, but nowadays they are common and this small item was really cheap and hence irresistible.

Quick tests were carried out by fixing it to the bows of a model with some adhesive tape. The first problem was to get the right position so the laser beam would hit the desired target. Placing it an inch or two (25 to 50 mm) above the water level and horizontal seemed to be best idea. The second problem was seeing the red spot, not an easy task in bright sunlight, so perhaps better in overcast conditions and at night time would be ideal.

Once the red spot is on the

target, it needs some skill to keep it there whilst the model advances towards it, but like riding a bicycle, with patience it becomes easier until it is something that you can do with little conscious effort. However, do be warned that solely concentrating on the red spot can be dangerous as the model might sail into problems before you realise they are happening!

This idea of just using a laser pointer as an aid seems to be reasonable, but I suspect that it would be frowned upon if used in an actual competition situation and I'm not sure that hiding the laser on a model and only switching it on when required would be welcomed either! In fact, if you were to add a real-time video link to a camera on the model whilst sailing a steering course, then that would be really unpopular!

As a final note to the Health & Safety conscious, my little laser pointer was sold with a warning to avoid direct eye exposure. Provided it is used with a modicum of care, no problems ought to arise. Lasers are commonly used in many items that can be bought without restriction; my collection includes a jigsaw with a laser cutting guide and one of those lasers used to get things straight and level, but if you really feel these items are too dangerous, then please go into a store that sells them and make a citizen arrest of all the staff. The subsequent court case ought to prove interestina!

Wash Your Hands!



y wife reaffirmed that she cares for me, when just as I was about to leave for a sailing session, she threw a small bottle at me. It contained one of those antiseptic hand gels that you can use to clean your hands before eating food, should soap and hot water not be available.

Every so often we get reminded about all the 'nasties' than can be picked up from the waters that we sail our models in.

LEFT: A typical over the counter antiseptic hand sanitizer solution. There are numerous brands available from high street outlets. This can result in clubs providing some sort of disinfectant hand washing solutions at organised events, but I wonder just how many take such precautions when we nip out for a quick sail?

I'll confess that until my wife threw the bottle at me, this was something I'd never thought about, not that I had the intention of eating anything with my hands dripping with pond water, but it is easy to see that something nasty could be inadvertently transferred to clothing and possibly ingested?

Considering that I do a lot of my test sailing on a local canal, which has plenty of visible wildlife and therefore even more things you never see, then it might also be a good idea to give my hulls a spray with some sort of disinfectant when they are removed from the water. There has to be a sensible balance to these precautions however, otherwise someone will no doubt advocate the wearing of a full bio-hazard suit when sailing our models!

So, a small bottle of antiseptic hand gel is something that I try to include in the 'extras' that are taken to ensure a good sailing session. Mind you, as I now think about it, this idea might be less to do with my wife's feelings for me and more to do with ensuring that illness never prevents me from doing all the domestic jobs I've been promising to do?

Naked Models

isplaying our models at public events is a great way to encourage interest and possibly future involvement in our hobby. Questions inevitably arise over the methods of construction and the materials used to create the models.

During the building of my latest model, I had reached the stage

where painting could begin.
Looking at the 'bare' model, all
the different materials used in its
construction could be seen. This, I
thought, would be a good way to
illustrate how we build our models
to any interested spectator who
might just be the next recruit into
the hobby?

A display consisting of





immaculate and pristine models may well appear impressive to fellow modellers, but might at the same time be intimidating to non-modellers. Nowadays it can be hard to convince ordinary people that they can create things rather than just be consumer and I once had a spectator refuse to believe that I had actually built my Type 21 frigate rather than buying it ready made from some oriental factory. I'm still not sure that opening the model up to

reveal its wooden construction actually convinced him that it was home-made! I'm going to suggest that when any clubs plan any public displays, that they include a few part built models. Some clubs will undoubtedly do this already, but many could add this feature. A good idea might be to have two similar models alongside each other, one partly built and unpainted with the other completed in all its glory?

Test Bench

Model Boats looks at new products

Attention - Manufacturers & Distributors

• These pages are open to you - your shop window to bring to the attention of our thousands of readers, new products - kits, books, videos, engines, R/C gear, motors, anything that could be of interest to model boat builders. Send your information initially to Model Boats Test Bench, PO Box 9890, Brentwood, CM14 9EF - or ring the Editor on 01277 849927 for more details. You cannot afford to miss this opportunity!

Scantlings of Royal Navy Ships 1719-1805

Comparisons of 1719, 1745 Establishments, Ship Builders Repository and Steel's Elements & Practice of Naval Architecture

Written by Allan Yedlinsky. Softback, 'Wiro' bound, 271 pages, 372 x 225mm, 10 black & white line drawings ISBN: 978-0-9837532-9-2, Published by SeaWatchBooks LLC, 19 Sea Watch Place, Florence, OR 97439, USA.

Website: www.seawatchbooks.com., e-mail: seawatchbooks@gmail.com. Tel: (541) 997 4439. This book is only available from the publisher. Price: \$45 plus \$9 Shipping & Handling USA, \$20 Canada, \$30 all other countries.

Customers can order online, worldwide.

Conducting research on ship types of the 17th and early 18th Centuries can be a long and sometimes expensive undertaking. Whether it's work on a single ship or comparative analysis of multiple ships, the underpinnings of that work are the scantlings* of different classes or rates of ships. Scantlings of Royal Navy ships are available in the 1719, 1745 and 1750 revisions of establishment figures put forth by the Navy Board.

In 1788 an anonymous person authored The Shipbuilders Repository, giving scantlings for the era, then in 1805, Steel's famous work, Element & Practice of Naval Architecture, provided

crows nest



dimensions for the beginning of the 19th Century.

In this work, Allan Yedlinsky, author and builder of the Euryalus series, has put together all these sources in an easy-to-read and use spreadsheet format. All of the scantlings from the above sources are laid out a 356 x 203 mm (14 x 8 inches) format and bound using the concealed 'Wiro' method that allows it to lay-flat so that 711mm (28 inches) of information can be viewed.

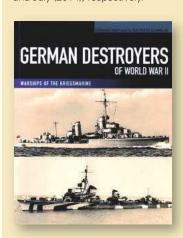
This book would prove extremely useful for ship modellers who are planning to scratch build a Royal Navy ship from this period, thus saving time and money when searching through multiple sources for information.

*Scantlings: A set of standard dimensions for parts of a structure especially in shipbuilding. (Source: Oxford English Dictionary)

Book Review by John Deamer

Warships of the Kriegsmarine: Volumes Three to Six

These are the remaining four volumes of a six volume series written by Gerhard Koop and Klaus-Peter Schmolke, published by Seaforth Publishing, an imprint of Pen & Sword Books Limited, 47 Church Street, Barnsley, South Yorkshire, S70 2AS. Tel: 01226 734222, website: www. seaforthpublishing.com. All four books are in softback, 242 x 192mm, priced at (RRP) £16.99 available direct from the publisher or through the usual retail outlets. The two previously published volumes, 'Battleships of the Bismarck Class' and 'Pocket Battleships of the Deutschland Class' were reviewed in MB, May and July (2014), respectively.



German Destroyers of World War II

ISBN: 978-1-84832-193-9, with over 200 black & white photographs, maps and plans.

All forty three (forty five were built, but two were never commissioned) German destroyers, designated with a 'Z' (for Zerstörer) prefix to their pennant number, that were built between 1934 and 1943 and saw service throughout the war are detailed in this volume. Many were lost, but at the end of hostilities those that survived were awarded to allied navies in the general distribution of German warships, where some continued in service into the 1950's and 60's before being scrapped.

With these six books in total, The Warships of the Kriegsmarine the authors, Gerhard Koop and illustrator Klaus-Peter Schmolke, depict the warships of the WWII era German Navy which is among one of the most popular subjects in naval history with almost an uncountable number of books devoted to them. Each of these volumes contain chapters that range from their design and development, armament and machinery, to appearance, camouflage schemes and modifications. They also cover their career histories and the many actions they fought. Heavily illustrated with plans, battle maps, line drawings and a substantial collection of photographs, this new six volume edition of the series, which has been out of print for ten years or more, will be welcomed by enthusiasts, collectors and ship modellers alike.



Battleships of the Scharnhorst Class

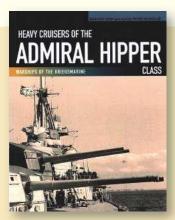
ISBN: 978-1-84832-192-2, with over 300 black & white photographs, maps and plans.

The Scharnhorst and the Gneisenau, the subject of this volume, were the product of a long, involved and politically determined design process that saw them develop from an improved pocket battleship to what many describe as a battlecruiser, although they were really fast battleships. They were the most active and successful of the Kriegsmarine's major warships, taking part in numerous operations including the infamous 'Channel Dash'.

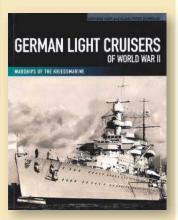
The Heavy Cruisers of the Admiral Hipper Class

ISBN: 978-1-84832-195-3, with over 400 black & white photographs, maps and plans.

This volume covers the Admiral Hipper Class which included the name ship and



Blücher, Prinz Eugen, Seydlitz and Lützow, among the largest heavy cruisers to serve in WWII. Intended to be a class of five, they enjoyed contrasting fortunes: Seydlitz and Lützow were never completed; Blücher was the first major German warship to be sunk in action; Admiral Hipper became one the most successful commerce raiders of the war; Prinz Eugen survived to be expended as target in one of the first American nuclear tests in 1946



German Light Cruisers of World War II

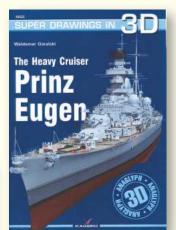
ISBN: 978-1-84832-194-6, with over 350 black & white photographs, maps and plans.

This volume is devoted to the six ships: Emden, Königsberg, Karlsruhe, Köln, Leipzig and Nürnberg that were built between the wars. They were primarily intended for commerce raiding, but the war gave them few opportunities for such employment, although they did provide useful support for key naval operations in the Baltic and the North Sea. Two, Königsberg and Karlsruhe, were lost in the 1940 Norway campaign, the remainder survived for most of the conflict.

Book Reviews by **John Deamer**

The Heavy Cruiser Prinz Eugen

Written by Waldemar Góralski. Paperback, 297 x 210 mm, 96 pages, 176 graphics, ISBN: 978 83 62878 86 4, published by Kagero and sold in the UK via Casemate UK, 10 Hythe Bridge Street, Oxford, OX1 2EW, website: www. casematepublishing.co.uk, tel: +44 (01865) 241249. The book is printed in English and superbly presented. Price £15.99 (rrp) and it may be purchased direct from Casemate UK or through the usual retail outlets.



This book is one the 'Super Drawings in 3D' series that focus on the construction of famous ships - battleships, carriers, cruisers and submarines. With ground-breaking 3D imagery, each corner, angle, and dimension of the ship is viewable. With various close-up views, and each 3D image is based on the actual technical scale drawings and photographs, this makes an exceptional reference tool. Information on the design, development and combat history of each vessel is also included, as well as numerous photographs and 1:350 scale drawings.

Prinz Eugen was a Admiral Hipper-class heavy cruiser which served with the Kriegsmarine of Germany, surviving to the end of WW2, only to sink following Operation Crossroads, a nuclear weapon test at Bikini Atoll in 1946. She was best known for her service with KM Bismarck in 1940 in action with the Royal Navy and HM Ships Prince of Wales and Hood.

This is one of the series and other recent releases include, The Japanese Heavy Cruiser Takao 1937 to 1946 and The Japanese Destroyer Kagero, both presented in the same format.

These books are fantastic reference tools for model makers and are highly recommended because of their outstanding graphical colour illustrations, the included plans and background information, which enable a top-class model to be built.

If you go to: www.shop.kagero. pl/lang/en, then you can see the full range of these books which includes US, French and British warships as well as others.

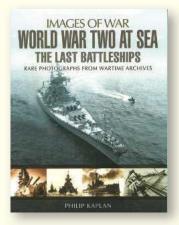
Book review by Paul Freshney

the experience of WW1 and the story of the battleship, along with a short section on the 'New Capital Ship', namely the aircraft carrier. Then we get to the heart of the book, covering some of the stories from WW2. KM Tirpitz and the Bismarck have their stories as does the Graf Spee from the early part of the war. Other covered include HMS Warspite, the huge IJN Yamato, the USN Iowa Class battleships, all of which survived that war and went on to serve in Korea, Vietnam and the Gulf War of 1991 before becoming museum ships

I found this an interesting read and very well illustrated with a good selection of archive photos of use to the model maker.

Book Review by

Robin Buckland

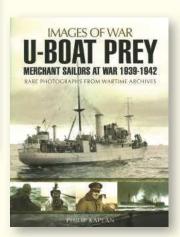


WW2 at Sea - The Last Battleships

Written by Philip Kaplan, paperback, 192 pages, 241 x 188mm, copiously illustrated, ISBN: 9781783036387, published by Pen & Sword Books Limited, 47 Church Street, Barnsley, South Yorkshire, S70 2AS, tel: 01226 734222. website: www. seaforthpublishing.com, RRP £14.99. Available direct from the publisher or through the usual retail outlets.

Compared to others in the Images of War series, there is a good deal more text in this than in some of the other titles, but it is still filled with some excellent archive photos.

The title of the book didn't entirely do justice to the topic as it actually covers the story of the battleship from post-Dreadnought onwards. The first sections of the book cover the impact that the launch of HMS Dreadnought had on battleship design going into WW1 and then to the end of that war and the scuttling of the Imperial German Fleet at Scapa Flow. Then it moves on to tackle the lessons learned from



U-Boat Prey

Written by Philip Kaplan, 128 pages, ISBN: 978-1-78-346-2940, published by Pen and Sword Books, 47 Church Street, Barnsley, South Yorkshire, S70 2AS. Tel: 01226 734222. website: www.pen-and-sword.co.uk. Price (RRP) £14.99. Available direct from the publisher or through the usual retail outlets.

The 'Images of War' series from Pen and Sword books continues to grow at a good rate and this time the focus is on the Merchant Navy and its men and the ships that fed the lifeblood of Britain during the war, and helped move troops, food, oils, equipment and all the other material essential to a nation and its army in wartime. Commonly this series features well captioned photos, with a smaller text content. While this new title has lots of excellent photos, the text content is greater than usual.

The author looks at all the aspects of the Merchant Navy in WW2, along with coverage of their hunters, the German U-Boat arm. Within what makes up a really interesting read are a whole variety of aspects of life in the Merchant Navy during WW2. A hard life, in varied conditions from the tropics to the arctic. One chapter tackles the story of tankers, and what it meant when one of these got torpedoed and of course there are the Liberty Ships, a British design that was

built in the USA using assembly line production techniques. The U-Boats were the hunters, and they are included.

This is a well balanced account, looking at the U-Boat crews alongside the Merchant Navy sailors they were hunting, so in summary a good picture of what like was like serving in convoys, relying on the escorting warships to keep them safe.

Book Review by

Robin Buckland

Plastic nuts, bolts, rivets and handwheels

cratch building a model boat is a challenge and part of this is finding detail components to bring the model alive. Many vessels are bristling with rivets, nuts and bolts and while you can buy the metal versions in plenty of sizes, the price quickly becomes prohibitive.

Cambrian Models produce a range of plastic moulded detail parts. As these are aimed at garden railway modellers, they are large enough for the sort of scales we normally build in. Rivets are 1.5mm in diameter and the nuts 1.5 and 2mm and there is also a useful pack of brake handwheels in 3 to 15mm diameters.

Prices: NA5: 180 Nut & Bolt Heads £1.80

NA6: Assorted Brake/steam Handwheels & gauges £1.80

NA7: 230 Rivet Heads (one size) £1.80

Available direct from the manufacturer or through good model railway shops.

Cambrian Models, 10 Long Road, Tydd Gote, Wisbech, PE13 5RB, website:www.cambrianmodels.co.uk.



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1:24 WILDCAT 53 Windfarm Support Vessel, featured in August 2014 MB. Includes two brushless 1400kv motors and two 40A Hawk esc's. Radio not included. £400 ono, buyer collects. Brian Roberts, tel: 01978 364058 (Wrexham).

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FLOWER CLASS CORVETTE built from Revell kit. includes r/c and rechargeable battery. Sails well. £150, Derek Wells, tel: 01772 752150 (Preston, Lancs').

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Craig Dickson reports from Stevenage

ello readers! In the October issue of Model Boats, I concluded with some information about basic boat maintenance after the end of a race. So for this issue I would like to first give some consideration as to what key aspects are needed in terms of preparing a power boat in the time leading up to an event. Attention to detail prior to a race can involve things that are very obvious but often overlooked and that can make the difference between success on the day or total frustration!

TOP: D44: Garry Dickson 's Miami in a tight turn!

FAR RIGHT: B44: The Challenger of Garry Dickson.

BELOW: Battling it out at Buoy Four, the D4 Patriot of Mike Barnes having the edge over Malcolm's Sigma.



Pre-race boat preparation

What do we need to think about? It perhaps goes without saying that the integrity of the hull following the previous race needs to be checked and any significant damage from a collision be repaired. So let's assume that the boat has no gaping holes in its sides and is good in that respect, and also let's assume that the boat had a good cleanup following the last race, otherwise perhaps now is the time to wipe away any muck and grease from its inside.



Check around the boat for the tightness of all key fastenings, including the nuts and bolts holding the key components in-situ. These include the engine and exhaust mounts and especially the fittings that take the full vibration of the engine, such as the propshaft coupling and radio control linkages etc. In respect of surface drive mono hulls commonly fitted with a plywood reinforcement panel fibreglassed into the interior of their transoms, special attention should be given to the nuts and bolts that hold the exterior hardware onto it, such as the rudder support and propshaft tube strut support. When these boats have been laid-up after often getting very wet, the plywood can shrink and the bolts going through it and their associated fittings may need tightening just a little.

Lubrication All moving parts especially metal to metal, should be checked for lubrication, but the drive and propulsion system is of key importance. The boats using solid driveshafts with a ballrace fitted at the top end of the propshaft tube require very little attention, perhaps just a bit of extra grease in the bearing housing? The commonly seen flexible shaft drives of surface drive mono hulls and catamarans will need more attention. This type of flexible shaft ideally needs to be checked after each run for excessive wear and lubricated each time whether by a marine grade grease or more oil in the oil feed tank just prior to the race. A flexi-shaft running dry of lubrication normally starts to squeal and scream just before it snaps!

Check, and charge, all the key batteries before race day, including those of the radio control system, starter motor and glow plug. There is nothing worse than discovering that you cannot race because you forgot to charge one of them.

Check and double check radio operation. This includes the failsafe system which will be tested prior to each race and if it fails to function, then you are out of the event.

Visually check all the water-cooling circuits and related connections for integrity.

Check exhaust joint connections which can include internal high temperature O-rings on some systems and external silicone tubing on others. Whilst these components should last a good length of time, heat will eventually degrade the material and it is better to replace a worn component early than find out that it fails prematurely causing the engine to stop mid-race!

Check the radio box and its lid to ensure that the key seals are in good condition for proper integrity. Water ingress into the box is a common cause of radio control issues during racing and when a boat flips over and is partially submerged, that really does test the integrity of the seals.

The engine? Check that it turns over freely with the spark plug, or glow plug in a nitro (glow) engine removed. With nitro (or glow) engines now is the time to check that the glow plug still works and actually glows when connected to the battery! There is no harm also in firing-up the engine just to make sure it starts as it should easily do, although I personally don't do this.

It is beyond the scope of this issue to cover everything, however the points mentioned are some of the key ones. Finally when happy with the boat, it is a good idea to check your lake-side tool box to ensure that all key spares are in it and not left at home on the bench!

Let's get back to the race action......

Stevenage 2014

For quite a few of our members, this venue is a long way to travel, which unfortunately does tend to limit the entry numbers. However, this 2014 event was so superbly organised and offered such great facilities that in future we will no doubt see it grow in popularity. The host club made us feel especially welcome and their facilities include a local cafeteria, a splendid lake and a private race preparation area. Combined with the rescue boat facilities, it had all the ingredients for a great day's racing, which started bright and early with the driver's meeting. Bill Warder (Stevenage MBC chairman) gave us a great welcome and reminded us all that first and foremost the day was all about enjoyment, race



action being the icing on the cake. Ian Searle our BMPRS chairman, was Officer of the Day (OOD) and charged with organising the day's race events, having managed the booking office prior to the event. Ian did a splendid job managing the day as everything went according to the time schedules.

ABOVE: AA42: The very quick Challenger of David Clay.

Highlights of the races?

On this occasion, unusually the two types of boat that featured most competitors were the smaller engined AA and A classes, but there was still plenty of other action on the day! The Results Table clearly shows the competitors, who with consistency and quick boats, tromped home to take the winning positions, but what about those who perhaps didn't



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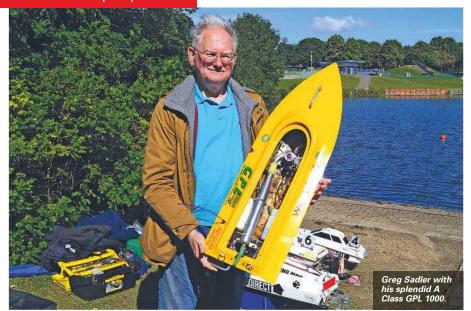
LEFT: Can you see the impending collision?



ABOVE: Junior member Luke Bramwell's A6 Sea Spirit going flat out!

LEFT: The winning Cat 2 class Mercury of Garry Dickson.

propwash





ABOVE: The somewhat overheated engine of Mike Barnes' winning D4 Patriot. Note the threads of the spark plug (top right) containing the cylinder head alloy that melted causing the plug to blow out!

BELOW: The damaged front sponson of Malcolm Pratt's Catamaran.



do so well, and why was that? I shall include some details here because I think it is just as helpful to know why a boat (or its owner) did not achieve the expected result as opposed to why the winning boat(s) did so well!

AA class

The MDS 28 powered Sea Spirit of Mike Barnes took first place with a 99 lap total, so full credit for his consistency in both heats. Bernard Holder's Crusader 1 took second place with 82 laps in total but what was it that cost him valuable laps in the first heat? It was the glow plug in his MDS 21 engine that failed in that race, the boat needing rescue, a replacement plug and re-launch. David Clay's very fast CMB 21 powered Challenger 43 delivered an outstanding performance in Heat One with 61 laps scored at the halfway point. In Heat Two however, his CMB 21 engine on its gearbox stripped bare the nylon threads of the gear wheel, leading to an early retirement, but with 79 laps in total David deservedly gained third place. Local Stevenage MBC member, Greg Sadler's Weston 28 powered GPL 1000 hull was remarkably fast, yet he only scored a total of 8 laps and why was that? Well, in the first heat he noticed that he had radio control issues affecting his rudder (steering) control and that of the mixture control servo for his engine, so he wisely decided to retire his boat for safety reasons and a proper check later. BMPRS junior member Kian Searle had a frustrating time in this class with no laps scored as his r/c system kept constantly going into failsafe mode, shutting the throttle before he even completed a lap, but he then made up for this disappointment in the A class!

A class

With six competitors in this class the first two places were very close, with David Clay's CMB 45 powered Orion taking top place, scoring 119 laps in total. Bernard Holder was close behind in second place with 112 laps. Bernard's Crusader 2 stopped after a collision with Luke Bramwell's Sea Spirit which cost him a few laps after needing a restart.

Kian Searle's ASP 46 powered Crusader 2 performed well in Heat One with his confident driving, and then in Heat Two, ran out of fuel causing him to stop early when he was well ahead, but his total lap score of 85 earned him a well deserved third place.

My Crusader 3 boat was I thought doing well until three times on the trot, it did a barrel roll at full speed going around Buoy Two. That remains a mystery for me, but I was thankful for fourth place! With only four laps total why did Greg Saddler's extremely quick Weston powered GPL 1000 boat fail to do better? This boat is fitted with twin pressurised fuel tanks and one of them moved off its mounts causing it to be punctured resulting in no pressure and thus no fuel supply, so he had to retire the boat after just four laps of the first heat.

B class

The three competitors in this race all achieved excellent consistency as you will see from their lap scores in the results table, and this led to some extremely close and exciting racing. Bernard Holder's CMB 67 powered Magnum took first place helped by his usual excellent driving, almost touching the buoys as he went tightly round them! Malcolm Pratt's extremely quick Apache scored only four laps less than Bernard for second place, although he tended to drive a wider course to avoid the risk of hitting a buoy. Garry Dickson's Webra powered Challenger achieved a good lap total but in Heat Two (when the wind had picked up leading to choppy conditions), he flipped his boat over needing rescue and a restart which cost valuable laps leaving him in third place.

C class

Despite only two entries in this class, the first heat proved to be very close with some exciting racing between Bernard Holder and Ian Searle. Ian's CMB 90 powered Makara could have been on target to win this race as his boat was running exceptionally fast. However towards the end of Heat One, his boat started making strange noises suggesting a mechanical issue. When he brought the boat in, it was full of smoke inside. The stuffing tube (the fixed tube housing the flexible driveshaft) had moved up towards the coupling causing a huge amount of friction, thus the smoke and also the glow plug had blown. At the start of Heat Two, lan's starter belt snapped, so he wisely decided to retire his boat for the confirmed second place. Thus, with 81 laps under his belt, Bernard Holder gained his second win of the day and deservedly so!





LEFT: The D44 Miami of Garry Dickson being rescued after hitting the bank in a 'safety first' crash.

BELOW: The proud Stevenage 2014

D class

The three competitors in this class each had very capable and fast boats and the Results Table shows how close the racing was! The Gizmo 28 powered Patriot of Mike Barnes won with a 120 lap total, but engine overheating issues were evident in Heat One, and near the end of Heat Two the boat stopped. Mike discovered that his engine had been literally cooked to death with molten metal visible on the threads of the spark plug that had popped right out of its housing.

The GZ 30 powered Sigma of Malcolm Pratt perhaps would have won this event if it wasn't for him flipping the boat in Heat One, so he narrowly ended up in second place with 118 laps in total. Garry Dickson's Miami 55 had two hiccups which resulted in him coming third. In Heat One he had to stop his boat as he realised that he had inadvertently forgotten to change the transmitter memory settings to the Miami as they were set for another boat! Then in Heat Two he decided to take his gloves off and drive a bit more aggressively. This ended up with the boat going into the bank with its nose stuck deep in the mud!

Cat T1 class

With only Kian Searle in this class, a minimum of one lap meant top points!

Cat T2 class

Garry Dickson drove his Mercury catamaran with caution which ensured consistent lap scores and a total of 81 laps for first place. The CMB 91 powered Aeromarine of Malcolm Pratt started off very well in the first heat, but then suffered a broken throttle linkage resulting in loss of throttle control. He put the cat' into a spin to lose speed and then drove it into the bank to stop it, causing damage to the front port sponson. Although it was patched-up for Heat Two he had lost too many laps to have a chance of being first.

Conclusion on the day's racing

This was yet another thoroughly enjoyable event with all the racers' having great fun, sharing good banter amongst the serious business of competition. Special thanks go to Bill Warder and his colleagues of the Stevenage MBC and to Madelyn Reed who did a superb job managing the lap counting.

Cheers for now - Craig.●

Stev	Stevenage Results - June 2014						
	Name	No	Hull	Engine	Heat 1	Heat 2	Total
AA c	lass						
1st	Mike Barnes	4	Sea Spirit	MDS 28	48	51	99
2nd	Bernard Holder	86	Crusader 1	MDS 21	35	47	82
3rd	David Clay	42	Challenger 43	CMB 21	61	18	79
4th	Greg Sadler	72	GPL 1000	Weston 28	8	0	8
5th	Kian Searle	128	Manta	Picco 21	0	0	0
A cla		42	Orion	CMB 45	50	69	119
1st	David Clay Bernard Holder	42 86	Crusader 2	CMB 45	50 56	56	119
2nd 3rd	Kian Searle	128	Crusader 2 Crusader 3	ASP 46	43	42	85
4th	Craig Dickson	55	Crusader 3	SC 46	43	31	74
5th	Luke Bramwell	6	Sea Spirit	SC 46	31	30	61
6th	Greg Sadler	72	GPL 1000	Weston 45		0	4
Oth	dreg Sadier	12	GI E 1000	V V C 3 (O I) + C	, -	O	7
B cla	SS						
1st	Bernard Holder	86	Magnum	CMB 67	64	62	126
2nd	Malcolm Pratt	9	Apache	CMB 67	64	58	122
3rd	Garry Dickson	44	Challenger 48	Webra 61	60	52	112
C cla		00	N 4	CN AD OO	00	10	01
1st 2nd	Bernard Holder Ian Searle	86 127	Magnum Makara	CMB 90 CMB 90	68 61	13 0	81 61
ZHU	iaii Searie	127	IVIdKala	CIVID 90	01	U	01
D cla	ss						
1st	Mike Barnes	4	Patriot	Gizmo 28	63	57	120
2nd	Malcolm Pratt	9	Sigma	GZ 30	57	61	118
3rd	Garry Dickson	44	Miami 55	MPM 31	58	51	109
	1 class	100	0 0 .	000.04	0		0
1st	Kian Searle	128	Sprint Cat	OPS 21	2	0	2
Cat T	2 class						
1st	Garry Dickson	44	Mercury	MPM 31	41	40	81
2nd	Malcolm Pratt	9	Aeromarine	CMB91	27	40	67

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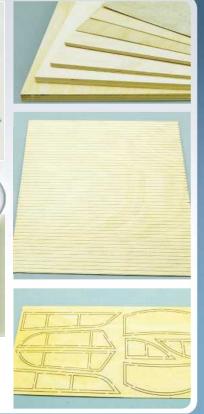




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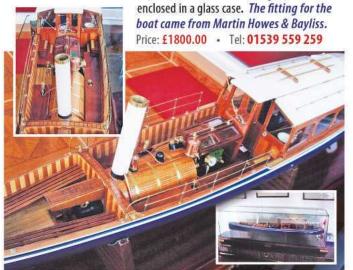


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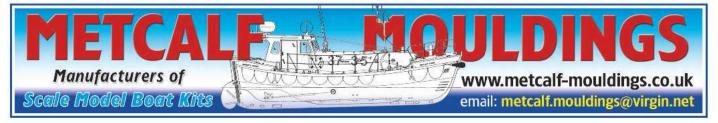
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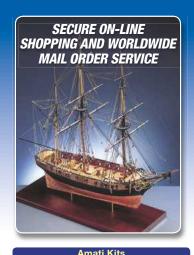
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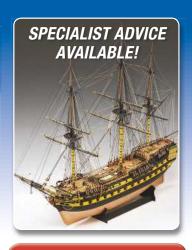
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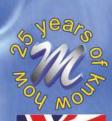
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