

20% Off!



Exclusive Reader Discount
on JSC's 1:400 *HMS Hood* kit

August 2022
Vol.72 No.861

model **Boats**

www.modelboats.co.uk

RESTORING A CLASSIC

Getting a stylish old motor
cruiser back on the water



**Come on, baby,
light my fire!**

The Fenland Lighter
conversation starter



WORKING THE HOOD

Plastic magic & a review of
the latest card kit from JSC



**PLUS Your brilliant
builds showcased!**

TAKING THE PLUNGE

Tackling the tricky art of submarine modelling





Precision Nozzle

Superglue Kit

Three grades of Sylmasta Superglue for fast, precision bonds

Thin - for bonding fine gaps and hairline cracks

Medium - for general purpose bonding

Thick - for gap-filling and vertical bonding

Plus 4x Superfine Application Nozzles

For an instant bond, use Activator

Superglue Kit - £21.22

Superglue Kit - £25.98
+ Activator 50ml

Casting Kit

Everything you need to make highly detailed reusable moulds to produce professional quality resin casts

Casting Kit - £42.30

400g Casting Resin and 450g Moulding Rubber

Casting Kit XL - £62.75

2kg Casting Resin and 1kg Moulding Rubber

Double the materials for only £20.45 more

Both Kits include Release Agent, Mixing Cups, Pipettes, Stirrers, Gloves and easy-to-follow instructions



CASTING ALLOY SALE

We have melted the price of our remaining stock of Casting Alloys.

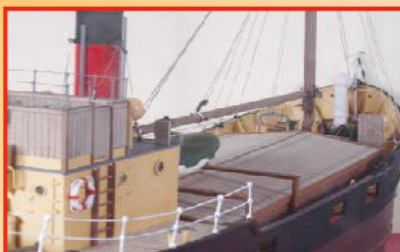
Up to 50 percent off Pewter 92, the White Metal Range and more - whilst stocks last.



Order today at SylCreate.com or over the phone on +44(0)1444 831459

www.mobilemarinemodels.com

Just a few products from our Vast Range.....



Tugging Ahead..... with

MOBILE MARINE MODELS

Model Tugology..... the driving force



The Boat Shed, Highcliffe Park, Ingham Cliff, Lincoln LN1 2YQ tel: 01522 730731 / 689209

Phone - Visit our Website

Full Colour Catalogue £6

Factory Visitors Welcome



DEANS MARINE

CONQUEST DROVE, FARCET,
PETERBOROUGH, PE7 3DH

01733 244166

www.deansmarine.co.uk

2022 colour catalogues
Deans Marine £6.75
Raboesch £4.00
RB Fittings £2.00
Deluxe adhesives £3.50
Albion alloys £1.50
£4.00 postage each
Or all 5 for £13.50 incl p&p u k

**Visit the NEW OUTLET CENTRE and
SHOWROOM or our ONLINE SHOP FOR
KITS & ACCESSORIES**

**The only model boat shop, showroom,
and a test pond.**

LATEST RELEASE



45ft Admirals barge 1/15 scale 901m x 220mm



New release S.S. FALCON 1/96 L.720mm X B. 120mm

A selection of ACCESSORIES see our website for details



OUTLET CENTRE NOW OPEN Mon—Sat 10am—4pm



BRASS PROPELLORS



EDITORIAL

Editor: Lindsey Amrani

Designer: Richard Dyer

Illustrator: Grahame Chambers

Retouching Manager: Brian Vickers

Ad Production: Nik Harber

Publisher: Steve O'Hara

By post: Model Boats, Mortons Media Group, Media Centre, Morton Way, Horncastle, Lincs LN9 6JR
Tel: 01507 529529 Fax: 01507 371066
Email: editor@modelboats.co.uk

CUSTOMER SERVICES

General Queries & Back Issues
01507 529529 – Monday-Friday: 8.30am-5pm
Answerphone 24hr
help@classicmagazines.co.uk
www.classicmagazines.co.uk

Archive enquiries: Jane Skayman
01507 529423 jskayman@mortons.co.uk

ADVERTISING

Advertising Sales Executive: Angela Price
aprice@mortons.co.uk Tel: 01507 529411

By post: Model Boats Advertising,
Mortons Media Group, Media Centre, Morton Way,
Horncastle, Lincs LN9 6JR

PUBLISHING

Sales and Distribution Manager: Carl Smith

Marketing Manager: Charlotte Park

Commercial Director: Nigel Hole

Publishing Director: Dan Savage

Published by: Mortons Media Group Ltd,
Media Centre, Morton Way, Horncastle,
Lincs LN9 6JR

SUBSCRIPTIONS

Tel: 01507 529529 – Mon-Fri: 8.30am-5pm
Enquiries: subscriptions@mortons.co.uk

PRINT AND DISTRIBUTIONS

Printed by: William Gibbons & Son, Wolverhampton
Distribution by: Markeforce (UK) Ltd, 3rd Floor,
161 Marsh Wall, London, E14 9AP 0203 787 9001

© Mortons Media Group 2022
All rights reserved ISSN 0140-2910

The Publisher's written consent must be obtained before any part of this publication may be reproduced in any form whatsoever, including photocopies, and information retrieval systems. All reasonable care is taken in the preparation of the magazine contents, but the publishers cannot be held legally responsible for errors in the contents of this magazine or for any loss however arising from such errors, including loss resulting from negligence of our staff. Reliance placed upon the contents of this magazine is at reader's own risk.

Model Boats, ISSN 0140 - 2910, is published monthly by Mortons Media Group, Media Centre, Morton Way, Horncastle, Lincs LN9 6JR UK. The US annual subscription price is \$9USD. Airfreight and mailing in the USA by agent named WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Brooklyn, NY 11256. US Postmaster: Send address changes to Model Boats, WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Subscription records are maintained at DSB.net Ltd, 3 Queensbridge, The Lakes, Northampton, NN4 5DT. Air Business Ltd is acting as our mailing agent.



contents

10 Compass 360

Latest hobby & industry news,
PLUS how to CLAIM YOUR 20% OFF
JSC's new 1:400 scale HMS Hood
card kit



12 HMS Hood kit review

Richard Dyer assesses JSC's
newly updated cardboard kit
for this iconic British battleship



16 Dawn Mist

A classic 1940s' motor cruiser
beautifully rebuilt by Phil Button



24 Taking the plunge

Glynn Guest explains why
and how he first dived into the tricky
art of submarine modelling



30 Fenland Lighter conversation starter

Attention seeker John Milesom
reveals the lengths he's gone to in his
latest attempt to strike it lucky!



36 Make savings with a SUBSCRIPTION!

Details of how to get your
favourite magazine for less



38 Back to the Hood

Doug Neilson reminds us that home is where the heart is in this plastic magic tale of a childhood dream fulfilled

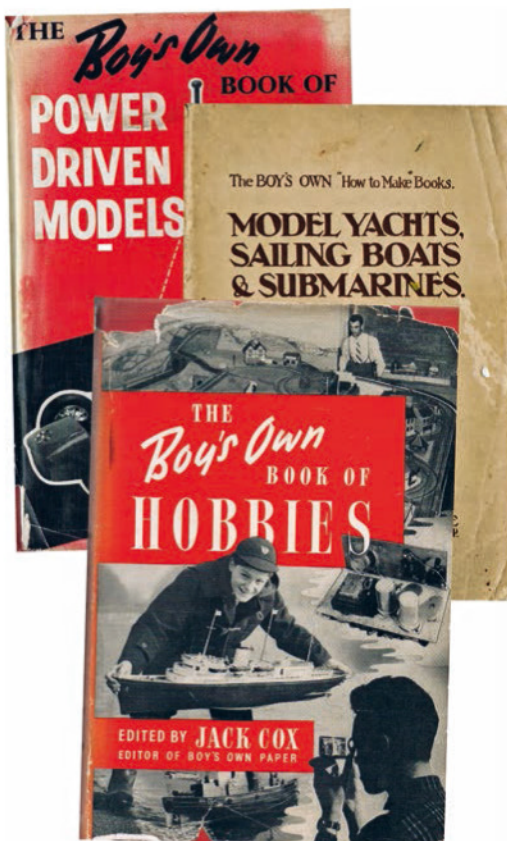


44 Empress of Canada – Part 3

Roy Cheers embarks on the penultimate leg of this modelling voyage

48 Flotsam & Jetsam: Two old favourites

John Parker turns back the pages of time



52 Memory Lane: The 5-Challenge Challenger

Dave Wiggins reflects back on the 1975 'sport' radio from Pro-Line Electronics



56 Boiler Room

Richard Simpson continues to document his latest project, designed to test out some very innovative new equipment



62 Your Models

A bumper selection of brilliant builds showcased

70 Your Letters

Appeals launched and views aired

74 Next month...

We reveal just three of the reasons you won't want to miss the September issue of Model Boats!

I've never made any secret of the fact that one of my favourite sections of the magazine to work on is Your Models, so I'm really delighted that more and more of you are getting into the "All hands on deck" spirit and sharing the stories behind, and photographs of, your brilliant builds. While I am in awe of the skills clearly accumulated by so many of you over decades of hands-on experience, it's been especially lovely to see that some of the fantastic models showcased this month are the work of those who've only recently taken up the hobby and who've been inspired to put their own take on plans and project ideas featured in Model Boats. So, whether you're a seasoned master craftsman or a complete novice, please keep your letters/emails coming because they really are the very heart of what the magazine is all about!

On the subject of community, as Covid restrictions now seem to be easing up, we'd really like to be able to include advance notification of as many hobby-related shows, open days, exhibitions, etc, as possible. Please, therefore, consider this a shout out/reminder to any of you organising events to get all the details to us in good time (bearing in mind that while we can post details online at short notice, a monthly magazine does have lead times).

Also, some of you may be pleased to learn that from the September issue, we plan to reintroduce the temporarily suspended, due to the pandemic, Marketplace section of the mag, in which private 'For Sale' and 'Wanted' ads can be placed (see our Compass 360 news pages for further details).

For now, though, there should be plenty to keep you entertained in the pages ahead.

Enjoy your read!

Lindsey

FAIREY HUNTSMAN



23" £85.50 47" £189.60



WIDE SELECTION OF FITTINGS



FAIREY HUNTRESS 34" £164.99



FAIREY SWORDSMAN 25" £112.50



PILOT BOAT 34" £124.50 NOW IN STOCK

Bring your plans to life with our
Plan Tracing, CNC & Laser cutting service

SLEC Ltd—Units 8-10 Norwich Road Industrial Estate, Watton Norfolk IP25 6DR

Tel: +44 (0)1953 885279 Email : sales@slecuk.com www.slecuk.com

DAVE METCALF BOAT MODELS

Manufacturers of scale model boat kits

'LIVERPOOL' Class 35ft 6ins. Twin Screw Motor Lifeboat

Model Scale = 1" to 1ft. (1:12)

Length O.A. = 38" (990mm)

Beam = 11.1/2" (290mm)

This kit is an exact scale model of a twin screw LIVERPOOL class lifeboat of the 1940's to 1960's. Developed from the original yard drawings, this kit is extremely highly prefabricated, using only the best quality materials. Making for a model that can be built using just hand tools and finished to museum quality by the average modeler.

This comprehensive kit contains the following parts:

5 Detailed white GRP mouldings for Hull, Bow & Stern Turtle-backs, Deckhouse & detailed Deckhouse interior bulkhead/floor.

2 Sheets of 'non-burn' laser-etched/cut plywood for main planked decks & all other planked bulkheads etc.

10 accurately cut CNC sheets of Birch ply and HIP's for all other parts.

Over 470 superbly cast white metal fittings, all made from our brass masters.

Pair prop shaft & props, dowel & strip woods, chain & fittings for handrails
brass rod, wire, tube, rigging cords etc.

A very comprehensively illustrated step-by-step instruction manual
with many construction illustrations. 3 Large sheets of scale
GA drawings all are number "keyed" to parts list.

Optional photo DVD of high-definition pictures of model during construction
and finished model. This museum standard model is suitable for either static
or R/C use, on the water performance is realistic.

e-mail, phone or SAE for information pack.

UK. P & P £10.00. Highlands, Islands and overseas on request.

Collections can be made by prior appointment.

1 Wentworth Cottages, Haultwick, Dane End,
Nr. Ware, Herts. SG11 1JG

Tel: 01920 438373

davemetcalfboatmodels@btinternet.com

£540.00
+ P & P



Also available RNLB Ann Letitia Russell Lifeboat @ £495.00. Moonbeam yacht @ £340.00

Gran Canaria celebrates its second International Deep-Sea Fishing Open this August



From 25 to 27 August 2022, Gran Canaria will host the International Deep-Sea Fishing Open for the second year running, organized by the Pasito Blanco Yacht Club. With 40 boats competing including local crews and international fishers, the competitive offshore fishing will showcase the magnificent nautical conditions of the island. The Blue Marlin will be the most sought after with a reward of 400 points. White Marlins will be worth 50 points and those who capture non-red tunas over 50kg will also be rewarded a point per extra kilogram. True to tradition, participants can use any kind of bait and pieces will be caught, marked and released.

The waters of Gran Canaria hide a completely uneven terrain making the destination a paradise for deep-sea fishing and its geographical location, subtropical climate and ocean currents result in an abundant marine life. These natural conditions allow for large and strong fish of both a sedentary species, but many migratory fish. Meaning the possibilities that Gran Canaria offers for sport fishing are immense. Registration is now open. Enter on www.pasitoblanco.com. The Pasito Blanco Yacht Club is a member of the Gran Canaria Blue brand.



www.pasitoblanco.com • www.grancanariablue.com/en



SECURE ONLINE ORDERING

www.sarikhobbies.com

PLANS / MOULDINGS / WOODPACKS / TOOLS / ACCESSORIES / DVDs / BOOKS

The World's biggest selection of Radio Controlled Aircraft, Boat & Model Engineering plans & parts



Be the first to hear about our special offers
Sign up to our newsletter or follow us on Facebook



Model Aircraft & Boat books and DVDs also available!



Many RC & Static Kits now available

sarik hobbies

The store for the model builder

FREE UK DELIVERY
on orders over £150

FREE EU* DELIVERY
on orders over £250

MODEL BOAT BUILDER
Find us on Facebook

INCLUDES PLAN & FG OR ABS HULL
(THEY ARE ALSO AVAILABLE INDIVIDUALLY)

PLAN & HULL SETS

Baikal SETMM1331 £39.50
Bluebird Of Chelsea SETBM1449 £47.50
Brave Borderer FG SETMM609 £81.00
Breeze (Pilot Cutter) FG DASET006 £138.50
Burutu & Bajima Tug SETMM1339 £49.50
Celia May Steam Launch SETMM1429 £46.00
Cormorant V112 SETV112 £39.50
Egret Tug SETMM1417 £57.50
Forceful Tug SETMM1292&3 £49.00
Galway Hooker FG SETSH2022B £134.00
Grand Banks Schooner SETMM962 £99.00
Guardsman ABS SETMM1330 £37.00
Harbour Defence Motor Launch SETMM1356 £48.00
HMS Embling SETMM2055 £65.00
Ibex (Brixham Trawler) FG DASET004 £132.50
Katie (Gaff Rig Pilot Cutter) DASET001 £112.00
Keenoma Tug SETMM1322 £47.00
Lady Ma FG DASET002 £65.00
Liverpool Lifeboat SETMM1448 £106.00
Manx Nobby DASET005 £142.50
Marguerite FG DASET008 £129.50
Moorcock 1:24 FG SETSH2023B £160.00
Paddle Tug Lulonga SETMM1465 £55.00
Pilot 40 SETMM1444 £51.00
Pilot Cutter 'Hilda 2' FG DASET003 £148.00
Revive Static Sail SETMM1275 £104.00
Shirley Ann SETMM1422 £46.50
Smit Nederland Tug SETMM1409 £39.50
St Cervia Thames Tug SETMM567 £99.00
St Louis Belle Paddle Ship SETMM826 £89.50
Submersible Submarine SETBM1426 £32.00
Thames River Tug Plaudit SETMM1453 £56.50
Topsail Schooner SETMM909 £93.00
Tyne Lifeboat SETMM1390 £51.00
Victoria Steam Launch SETMM1368 £39.50

INCLUDES PLAN & WOOD PACKS WHERE AVAILABLE
(THEY ARE ALSO AVAILABLE INDIVIDUALLY)

SHORT KITS

BREEZE
BRISTOL CHANNEL PILOT CUTTER
By David Alderton. Breeze is a nippy performance under sail.
Plan DAP006 £15.50
Hull DAH006 £131.50
Plan & Hull Set DASET006 £138.50

Barb's Boat SET3550 £89.00
Chouquette SET2560 £92.00
Etoile Jet Bike! SET2324 £85.00
Fairey Huntress 23 SETMB2131 £64.00
Higgins Helicat Torpedo Boat SETMM2056 £78.00
HMS Crane SET3524 £40.00
HMS Embling SETMM2055 £65.00
HMS Temerity SETMM2094 £75.00
Mariner US 80' Tow Boat SET3532 £71.00
Meteor SET2407 £41.00
Nimbus Mk3 SET3133 £51.50
Pilot Boat SET3062 £68.00
Riva Aquarama 1:12 SET2552/LG £54.50
Riva Aquarama 1:24 SET2552/SM £30.00
SG&K 22" Gentlemen's Runabout SET3509 £65.00
SS Noggund Steamship SETMM2057 £43.00
Star Baby SET3295 £78.00
Strathclyde 70 Wee Nip SET2966 £64.00
SV Sunbeam Solar Ferry SETMB2141 £69.00
Thames Lighter SET3552 £38.50
UTE Workboat SETMM2079UTE £59.00
Thames Barge Veronica SET3584 £99.00
Tid Tug (T.I.D. Class Tug) SET2447 £99.00
USS Bodega Bay SETMAGM2010 £125.00
Vosper MTB SETMM2062 £74.00
Vosper MTB379 SET3505 £92.00
Wild Duck SETMM2127 £89.00

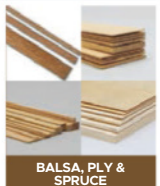


1000s OF MODEL PLAN DESIGNS

EXTENSIVE RANGE
of model boat plans to keep any builder busy

Scale Boats & Ships
Sailing Boats & Yachts
Easy to Build Boats
Engineering
Competition Boats
Hovercrafts

Hydroplanes
Straight Runners
Submarines
Unconventional
X-List Plans



BALSA, PLY & SPRUCE



THAMES BARGE VERONICA

Iconic sailing boat that plied its trade in & around the River Thames & Medway.

Plan MAR3584 £41.00
Building Veronica DVD DV3513 £7.50
Laser Cut Wood Pack WP3584 £52.00
Short Kit (Set) SET3584 £99.00



SG&K 22' GENTLEMEN'S RUNABOUT

Attractive runabout designed for river use hence the flat bottom to reduce wake

Plan MAR3509 £19.00
Laser Cut Wood Pack WP3509 £48.00
Short Kit SET3509 £65.00



WHITE METAL FITTINGS

Bollards, anchors, wheels, ladders, portholes & more

MODELMAKING TOOLS, ACCESSORIES & SUPPLIES

Screwdrivers, hand files, sanding blocks, tools & clamps, epoxy, aerosols & more



info@sarikhobbies.com

01684 311682



*Free EU delivery excludes: Croatia, Cyprus, Denmark, Estonia, Finland, Greece, Latvia, Lithuania & Malta

All prices exclude P&P/S&H. Prices are subject to change. Please check current pricing on website or by phone. E&OE.

www.sarikhobbies.com

sarik hobbies

Units 8 - 12, Willow End Park, Blackmore Park Road, Welland, Malvern. WR13 6NN. UK

HI-ENERGY**NEW RANGE!****LIPO BATTERIES:**

7.4v 650mah - £7.49
 7.4v 850mah - £7.49
 7.4v 1300mah - £8.49
 7.4v 1800mah - £13.49
 7.4v 3200mah - £18.99
 11.1v 1300mah - £13.49
 11.1v 1800mah - £16.99
 11.1v 2200mah - £14.49
 11.1v 2800mah - £23.49

**HOWES MODELS****01865 848000**

Unit 16B Cherwell Business Centre
 (Part of Station Field Industrial Estate)
 Rowles Way, Kidlington, OX5 1JD
www.howesmodels.co.uk
 Fast mail order - Overseas postage at cost

MICROZONE SUPER SPECIAL OFFER!

6 CHANNEL RADIO
 RADIO INCLUDES RECEIVER
 RRP £59.99
OUR PRICE £39.99!



Additional Receivers Available!

8 CHANNEL RADIO
 WITH LCD SCREEN.
 RADIO INCLUDES RECEIVER
OUR PRICE £59.99!

**LARGE RANGE OFF HIGH QUALITY****7.2 VOLT BATTERY PACKS**

2000MAH - £9.99
 2600MAH - £11.99
 3000MAH - £13.50
 3300MAH - £13.99
 3800MAH - £19.99
 4000MAH - £22.99
 5000MAH - £26.99

Lead Acid Batteries

6 VOLT 1.0 AMP - £4.99
 6 VOLT 1.3 AMP - £4.99
 6 VOLT 3.4 AMP - £6.50
 6 VOLT 4.5 AMP - £5.50
 6 VOLT 7 AMP - £8.99
 6 VOLT 12 AMP - £11.99
 12 VOLT 2.3 AMP - £8.99
 12 VOLT 3.4 AMP - £12.99
 12 VOLT 4.5 AMP - £9.99
 12 VOLT 7 AMP - £11.50
 6V JELLY CHARGER - £9.99
 12V JELLY CHARGER - £9.99
 6 - 12V JELLY CHARGER - £11.99

**NEW 2 CHANNEL RADIO!**

ABSIMA 2 Channel 2.4GHz Combo
 Transmitter & Receiver!
 Adjustable Travel Volume
 On Rudder Servo
OUR PRICE ONLY
£39.99!



Additional Receivers £14.00!

NEW! Kingmax Sail**Winch Servo's**

Dimensions 40x19x38mm

1.5 Turn Standard Size Servo Speed:
 0.9/360 Torque: 6.1kg - **Only £9.99**
 2.0 Turn Standard Size Servo Speed:
 0.9/360 Torque: 6.1kg - **Only £9.99**
 4.0 Turn Standard Size Servo Speed:
 0.9/360 Torque: 6.1kg - **Only £9.99**
 4.0 Turn Standard Size Metal Gears
 Speed: 0.9/360 Torque: 12kg - **Only £14.99**
 6.0 Turn Standard Size Servo Speed:
 0.9/360 Torque: 6.1kg - **Only £9.99**
 6.0 Turn Standard Size Metal Gears
 Speed: 0.9/360 Torque: 12kg - **Only £14.99**

**Standard Size****KING MAX**
KINGMAX HOBBY CO. LTD.**Billing Boats****FINALLY BACK IN STOCK!**

The very popular Billing Boats wooden boat
 kits are now back in stock!

Large range to choose from at great price!
 PLEASE CHECK OUR WEBSITE FOR RANGE
 OR CALL US ON 01865 848000 FOR MORE
 INFORMATION

PRICES FROM £22.99!**Futaba**

FUTABA T6L
 2.4GHz 6 CHANNEL
 RADIO INCLUDES
 R3106GF RECEIVER
OUR PRICE
£75.99!

Radio Link T8FB

8 Channel 2.4GHz
 Replacing the popular
 T4EU transmitter and
 receiver set at a great price

Only £54.99

Additional RX £13.99

**POWERPAL PEAK PLUS**

Easy to Use Li-PO Charger
 1/3/5A Li-PO & NiMH
 Just Plug in & Charge!
 No Setting Up Required

Our Price Only £24.99!**FUSION NX86 FAST CHARGER**

4-8 Cells Ni-CD/Ni-MH, Variable charge rate, 0.5
 -5amps. Mains operated, Peak detection.

**FOR ONLY £26.99!**

**SUPER STRENGTH METAL
 GEARED WATERPROOF SERVOS!**
 INCLUDE FITTINGS & METAL ARM!

15KG - £9.99
 20KG - £13.99
 25KG - £14.99
 30KG - £17.99
 35KG - £24.99
 60KG - £29.99

**Waterproof****Marine Speed Controllers****NEW RANGE WITH LOW PRICES!**

10A 4.8-12v ONLY £25.99
 15A 6-12 V ONLY £25.99
 15A PLUG N PLAY 6-12v - £25.99
 15A 12-24 V ONLY £31.99
 20A PLUG N PLAY 6-12v - £29.99
 25A 6-12 V ONLY £34.99
 25A PLUG N PLAY -12v - £34.99
 40A 6-12 V ONLY £44.99
 J PERKINS 50AH ESC - £35.99
 FUSION AQUAPOWER
 280A Only £34.99

**BRUSHLESS SPEED CONTROLS**

MTRONIKS G2 HYDRA 15A BRUSHLESS
 RRP £49.99 - NOW £36.99
 MTRONIKS G2 HYDRA 30A BRUSHLESS
 RRP £59.99 - NOW £43.99
 MTRONIKS G2 HYDRA 50A BRUSHLESS
 RRP £84.99 - NOW £62.50
 MTRONIKS MICRO SWITCHER - £19.99

**NEW 3 CHANNEL RADIO
IDEAL FOR MODEL BOATS**

2.4GHz with digital trims. Proportional
 channels, 2 on the sticks and 1 dial.

Additional receivers
 Only £14.99!



**Our Price
 Only**
£34.99

SD4 Pro Mains Charger NEW IN!**Low Cost UK Mains Multi Charger**

Max Charge Output: 4A
 Li-PO 2-4S 7.4v - 14.8v
 NiCd/NiMH Cells - 4-8s
 NiMH Voltage: 4.8v-9.6v

**Superb Charger
 For Only £25.99!**

**SUPER SERVO SPECIAL!**

**METAL GEARED
 15KG HI-TORQUE SERVO**
 Standard Size
 Fits All Brands

**ONLY £9.99!
 OR 2 FOR £14.00!**

**Li-Po Batteries
at Great Prices**

7.4v 1000mah - £11.60
 7.4v 1300mah - £12.99
 7.4v 1600mah - £14.50
 7.4v 2200mah - £14.99
 7.4v 3900mah - £29.99
 11.1v 1000mah - £15.50
 11.1v 1300mah - £16.99
 11.1v 1600mah - £19.99
 11.1v 2200mah - £17.50
 11.1v 3900mah - £42.99
 11.1v 5000mah - £48.99

SERVO

POWER 3KG STANDARD - £4.99
 OR SPECIAL OFFER 2 for £8.00!
 AAS-700STD WATERPROOF STD - £7.99
 NEW! FUTABA S300 DIGITAL - £11.99
 RADIANT 3.5KG BB WATER RES - £8.99
 FUTABA 3010 6.5 TORQUE - £24.99
 FUT 3014 WATERPROOF - £24.99
 HITEC 325 BALLRACE - £19.99
 POWER HD 9g Micro £3.50
 OR 4 For £13.50
 HOWES MIDI MG Servo £6.50
 MICRO METAL GEARED £4.99
 MINI SERVO ONLY £4.00 (4 for £15.00)
 HIGH POWERED BALLRACE £7.99
 RADIANT WATERPROOF Servo £8.99

**SAIL ARM, WINCH &
SPECIALIST SERVOS**

HITEC 785 HB SAIL WINCH
 WITH FULL ROTATION DRUM
 OUR SPECIAL PRICE £33.99
 HITEC 765BB SAIL ARM
 WITH 12 CM LONG ARM
 OUR SPECIAL PRICE £33.99
 FUTABA HIGH VOLTAGE DIGITAL
 S-BUS SERVO S400 - £25.50
 HITEC HS 805BB SAIL ARM HUGE
 WITH 20KG TRQ £35.99



**NEW LOW
PRICES!**



DRAGON FLIGHT 95 V2

Length 950mm Height 1470mm
Perfect model for enthusiasts to easily
and affordably get into the hobby!
Available Ready to Run with 2.4GHz
radio or ARTR (no radio)
ARTR RRP £379.99

Our Price £339.99

RTR RRP £429.99

Our Price £384.99



JOYSWAY DRAGON FORCE THE NEW VERSION 7!

Length 650mm Height 1338mm
The very popular DF65 yacht now updated
to the V7!
Available Ready to Run with
2.4GHz radio or ARTR (no radio)
ARTR RRP £234.99

Our Price £209.99

RTR RRP £284.99

Our Price £249.99

PRO BOAT - AEROTROOPER 25" BRUSHLESS AIRBOAT!

Includes TX, RX and all
electronical parts.
Just add Li-PO's
Length - 63CM!



HUGE MODEL FOR ONLY £269.99!

NEW DEALS ADDED DAILY ON WEBSITE!

01865 848000 WWW.HOWESMODELS.CO.UK

PLEASE NOTE: PRICES IN OUR ADVERT ARE LIABLE TO CHANGE WITHOUT NOTICE

50A SPEED CONTROLLER



STILL THE MOST RELIABLE
ESC ON THE MARKET!

7.2 VOLT - 12 VOLT

50A FORWARD - 20A REVERSE

RRP £37.99

OUR PRICE £35.99

MTRONIKS Hydra 15A, 30A, 50A Brushless Motor and Speed Controller Combo

Auto set up - Forwards and reverse - 6.0 to 12.0V Operation

Motor Specification

KV (rpm/v) - 1100 - Power - 120W

Diameter: 28mm - Length: 38mm

Hydra 15A Combo - Only £50.99

Hydra 30A Combo - Only £59.99

Ideal Replacement for 380 - 400 Motors

Hydra 50A Combo - Only £109.99



MTRONIKS TIO LI-PO SAFE ESCS

For use in RC boats that allows for the use of Lipo battery packs
as well as the usual NICAD / NiMH / Lead Acid batteries

15A - RRP £39.99 OUR PRICE £29.99

30A - RRP £52.99 OUR PRICE £39.99

50A - RRP £68.99 OUR PRICE £51.99

SUPER SERVO SPECIAL!

HOWES STANDARD SERVO

4KG TORQUE - INCLUDES FITTINGS

SIZE - 40.3 X 19.8 X 38.6MM

ONLY £4.99 EACH!

OR 2 FOR

£8.00!



Receiver & Transmitter Batteries

4.8 VOLT PACKS

1300MAH FLAT OR SQUARE - £6.99

2400MAH FLAT OR SQUARE £8.99

6 VOLT PACKS

1300MAH FLAT OR TRI - £8.99

1600MAH FLAT OR TRI AE CELLS - £10.50

2400MAH FLAT OR TRI - £11.75

9.6 VOLT TRANSMITTER PACKS

1300 MAH FLAT - £15.00

1300 MAH SQUARE - £15.00

2400MAH FLAT £19.99

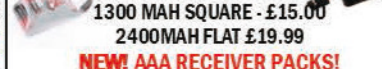
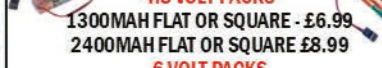
NEW! AAA RECEIVER PACKS!

4.8V 800MAH FLAT OR SQUARE - £11.99

4.8V 1000MAH FLAT OR SQUARE - £12.99

6V 800MAH FLAT OR TRIANGLE - £13.99

6V 1000MAH FLAT OR TRIANGLE - £14.99



VOLANTEX HURRICANE!

1M RTR YACHT

INCLUDES HANDSET / RECEIVER

HULL LENGTH 1 METER

HEIGHT - 213CM

IDEAL FOR BEGINNERS

RRP £194.99

OUR PRICE

ONLY £174.99!



WANTED

WE BUY SECOND HAND
RADIO CONTROL
MODELS

FROM SMALL ITEMS TO
COMPLETE
COLLECTIONS

CAN BE COLLECTED

PLEASE CALL US
ON 01865 848000
AND ASK FOR NICK

VECTOR SR65 SPEED BOAT

READY TO RACE!

LENGTH: 65CM!

TOP SPEED

30KPH!

Includes Battery

And Charger!

OUR PRICE

ONLY £94.99!



Electric Motors

385 5-POLE £2.99 each

400 3-POLE £6.99

540 3-POLE £3.99

545 5-POLE £3.99

683 5-POLE £4.00

MFA RE 140 (3-6v) £2.75

MFA RE 170 (1.5-3v) £3.75

MFA RE 360 (6-15v) £4.99

MFA 380 (3-7.2v) £5.75

MFA 385 (4.5-15v) £5.75

MFA RE 540 (4.5-15v) 3 POLE £7.50

MFA TORPEDO 800 £24.99

MFA TORPEDO 850 £24.99



FTX VORTEX SPEED BOAT

SELF RIGHTING SPEED BOAT! READY TO
RUN FROM THE BOX AND YOU CAN RACE
MORE THAN ONE TOGETHER! CAPABLE
OF SPEEDS OF 30KM/H!

44CM LENGTH

ONLY £49.99 EACH!



PROPS, SHAFTS ETC

LARGE RANGE OF THE
FOLLOWING

BRASS PROPS M4 2/3 BLADE
M4 NYLON PROPS 2/3 BLADE
STAINLESS STEEL SHAFTS M4
BRASS RUDDERS 6 SIZES IN STOCK
NEW LOWER PRICES!



Extension Leads

All For Futaba/Hitec

SERVO LEAD 200mm £1.00

EXTN LEAD 270mm £0.60 each

EXTN LEAD 500mm £0.80 each

EXTN LEAD 1000mm £1.00 each

Y LEAD £1.75 each

BEC RED BOTH ENDS £0.90

SWITCH HARNESS £3.99

Aeronaut MÖWE 2

Fishing Trawler Kit from Aeronaut

Length 549mm - Width 168mm

Kit Only £59.99

Starter bundle including KIT, 2.4GHz
Radio, battery & charger, ESC + more

only £149.99!



Compass 360

Our hobby-related news round-up

If you have a news story for these pages, please contact the Editor, Lindsey Amrani, via e-mail at editor@modelboats.co.uk

NEW KIT FROM VANGUARD MODELS

Saucy Jack: The Barking well smack



A 1:64 scale kit for the well smack Saucy Jack (1836) has just been added to Vanguard Models' catalogue.

For those of you unfamiliar with the term well smack, this was a type of fishing boat, in use from the 1800s right through to the 1950s, that incorporated a

large internal tank of seawater designed to keep a catch fresh for many days while out at sea. The Saucy Jack (a typical example of her kind) was built at Gravesend in 1836, and this 60ft in overall length vessel put in many years of service before finally being the last well

smack to leave Barking in 1880. The building and usage of well smacks elsewhere, however, continued and indeed some could still regularly be seen working out of the Faroe Islands throughout the 1950s.

Vanguard Models' new kit builds into a model measuring 426mm in overall length, 88mm in overall width and 360mm in overall height. Supplied with a full-colour instruction manual and 12 plan sheets (which include all mast and rigging drawings) the kit includes:

- * Laser cut and engraved parts in MDF and pear wood

- * A laser etched and cut maple deck with treenail detail

- * 1 sheet of photo etched brass

- * High resolution 3D-printed parts

- * A pre-made hull for a 14ft

(to scale) crew cutter boat and two wooden barrels

- * A double planked hull, in limewood for first planking and pear wood for second

- * Walnut dowel for the mast, gaff, and boom

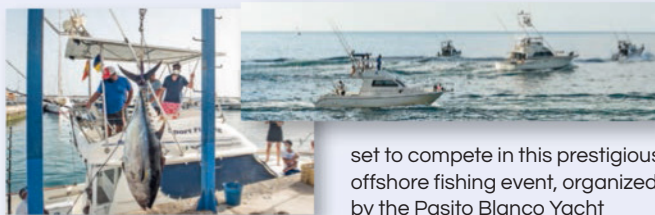
- * Multiple sizes of both black and natural rigging thread along with all necessary blocks and deadeyes

- * A free sail set model – although the model can be rigged with or without sails, the choice is yours

The kit itself is priced at £150.70, plus shipping, and can be ordered directly via the Vanguard Models website at www.vanguardmodels.co.uk but for those wanting to go the extra mile, crew figures, a Premium (upgraded) sail set and extra crates for the deck are available to purchase separately. ●

GRAN CANARIA International Deep-Sea Fishing Open

If you're thinking of booking a last minute holiday, then you may want to consider Gran Canaria, as from August 25-27, 2022, the island will be hosting the International Deep-Sea Fishing Open for the second year running. Some 40 boats are



set to compete in this prestigious offshore fishing event, organized by the Pasito Blanco Yacht

Club, so lots for model boat enthusiasts to take in and be inspired by while at the same time soaking up some rays and enjoying all the rest of the R&R this popular destination has to offer. For further details, see the ad on page 7.

BUYING & SELLING The return of Marketplace

Former fans of the popular 'Marketplace' section of the magazine, featuring small private 'For Sale' and 'Wanted' ads, will no doubt be pleased to learn of its imminent return. As regular readers will be aware, in 2020, with the onset

of the COVID-19 pandemic and resulting lockdowns and travel restrictions, we decided to temporarily suspend the service, as the vast majority of items were, because of their size and/or fragile nature, being offered on a 'buyer collects' basis.

From the September 2022 issue, however, you will, once again, be able to submit listings for inclusion by completing a form that you will find in the magazine each month and also, once the rebuild of our website on its new Morton's platform is complete (work on this is currently in progress), at www.modelboats.co.uk.

Please note, that while listings posted solely on the website will remain free of charge, a small

fee of £15 plus VAT, to cover admin costs, will be required should you wish your ad to be published in the magazine itself.

Alternatively, a larger, 1/8th page, classified ad (with a less restricted word count and, if so desired, the space to accommodate a photograph) can be placed for just £35, plus VAT. Please contact Angela Price (email aprice@mortons.co.uk) who will be able to assist, advise and handle your booking. ●

**CLAIM YOUR
20% OFF!**
JSC's new
HMS Hood kit



Thanks to the generosity of the kind folks at JSC, this month we're offer able to offer you a hot deal on the newly updated kit for HMS Hood (which you can read all about in our review on pages 12-15)! Simply by quoting the exclusive to Model

Boats magazine discount code of **MBHOOD20** 20% you'll be able to claim a whopping 20% off this already very reasonably priced new 1:400 scale card kit when placing your order via the company's website at www.jsc.pl ●

WHAT'S NEW?

Precision Plastic Glue

Further to our beginner's guide to glues published in last month's issue, worth bringing to your attention is a recently launched new product from Deluxe Materials: Precision Plastic Glue.

This plastic cement has 10-second bonding delay, thereby

allowing easy spreading and the adjustment of any styrene plastic kit parts that are particularly fiddly to accurately position. The easy to hold bottle clear plastic bottle permits glue level visibility and features an integrated (but detachable for safety) needle for pinpoint controlled application. There is no danger of the needle getting clogged either, as the glue itself



has been chemically engineered so as not to thicken. Plus, it's non-toxic, non-flammable and odour free (so can be used indoors, even

within confined spaces).

Sold in 25g bottles, Precision Plastic Glue (AD 92) is now available from all good model shops and is distributed in the UK by Ripmax Ltd (visit <http://www.ripmax.com/> and in the USA by Horizon Hobby (visit www.horizonhobby.com). ●

OUT AND ABOUT

Hit us with your forthcoming events!

After nearly two years of having to adapt to the changing landscape brought about by the COVID-19 pandemic, finally the majority of restrictions have been lifted and we are starting to be able to enjoy the return of public gatherings.

In view of all this, we are, going forward, hoping to expand our coverage of shows, club open days, etc, beyond the odd news story by including a regular monthly events listing/diary. So, if you're organising an event of any kind, please get in touch (email editor@modelboats.co.uk)

so that we can share details (including the date/s, opening times, venue address and admission price/s) with the entire model boating community, both in the magazine and online. In the case of the former, however, please be aware that due to publication lead times we will need notification at least four weeks ahead of the event in question.



A good time was had by all at the Model Boat Mayhem Weekend, held in conjunction with the Wicksteed Model Boat Club, at Wicksteed Park, Kettering, over the weekend of May 28-29. We all need more of this, so please send us details of any future events you're involved in organising so they can be flagged up in the pages of Model Boats magazine!



Meridian Exhibitions Ltd has asked us to point out that, despite rumours circulating online, the Midlands

Images courtesy of John Mileson.



Model Engineering Exhibition has not been cancelled but will indeed be going ahead as scheduled, from Thursday, October 16-Sunday, October 16 at the Warwickshire Event Centre.

To guarantee entry to the 2022 show, tickets should be purchased in advance via the company's website (www.meridienneexhibitions.com).



co.uk), as while it is hoped it will be possible to sell tickets on the day, this will very much depend on any changes to the current Covid-19 restrictions. ●

Hands-on hobby-related product assessments

Considering shelling out for a new kit? On these pages, fellow modellers lift the lid on you what you'll get for your money.

Those in the industry that supports the hobby wishing to send in review samples for inclusion should contact the editor via email at editor@modelboats.co.uk or post samples, together with all supporting information, to **Models Boats, Mortons Media Group, Media Centre, Morton Way, Horncastle, Lincs LN9 6JR.**

**EXCLUSIVE
READER OFFER
CLAIM YOUR
20% OFF!
SEE PAGE 11 FOR
DISCOUNT CODE**

The new 1:400 scale model of HMS Hood from JSC. This example was built by Bartek Czolczynski and took him over 100 hours to complete. Note the use of laser cut card railings which are available as specific to Hood aftermarket sets (DA 15 & DA 16) - i.e., sold separately from the kit. Image courtesy of JSC.



Printed kit preview: HMS Hood

Richard Dyer assesses JSC's back by popular demand but now updated and improved 1:400 scale card kit for this iconic battlecruiser

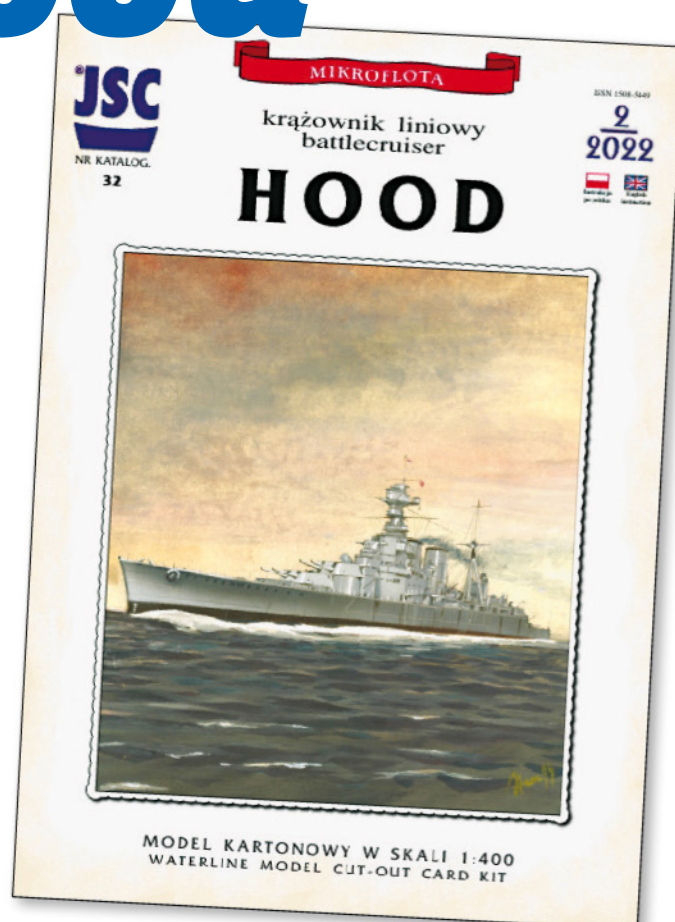
Following closely in the wake of JSC's recent model of *HMS Starling* (ref. 419), previewed in our June issue, is its latest offering, the British warship *HMS Hood*. While JSC has previously published a kit of *HMS Hood* (the last iteration being dated 2006, I believe), since its retirement from the catalogue customers old and new have been requesting a reprint. It should be noted, however, that this new kit of *Hood* is exactly that, a new kit! JSC hasn't simply reprinted its original design but has taken the opportunity to make some changes and improvements to the drafting of the model, while also bringing it up to its current high standards of production, as we shall see...

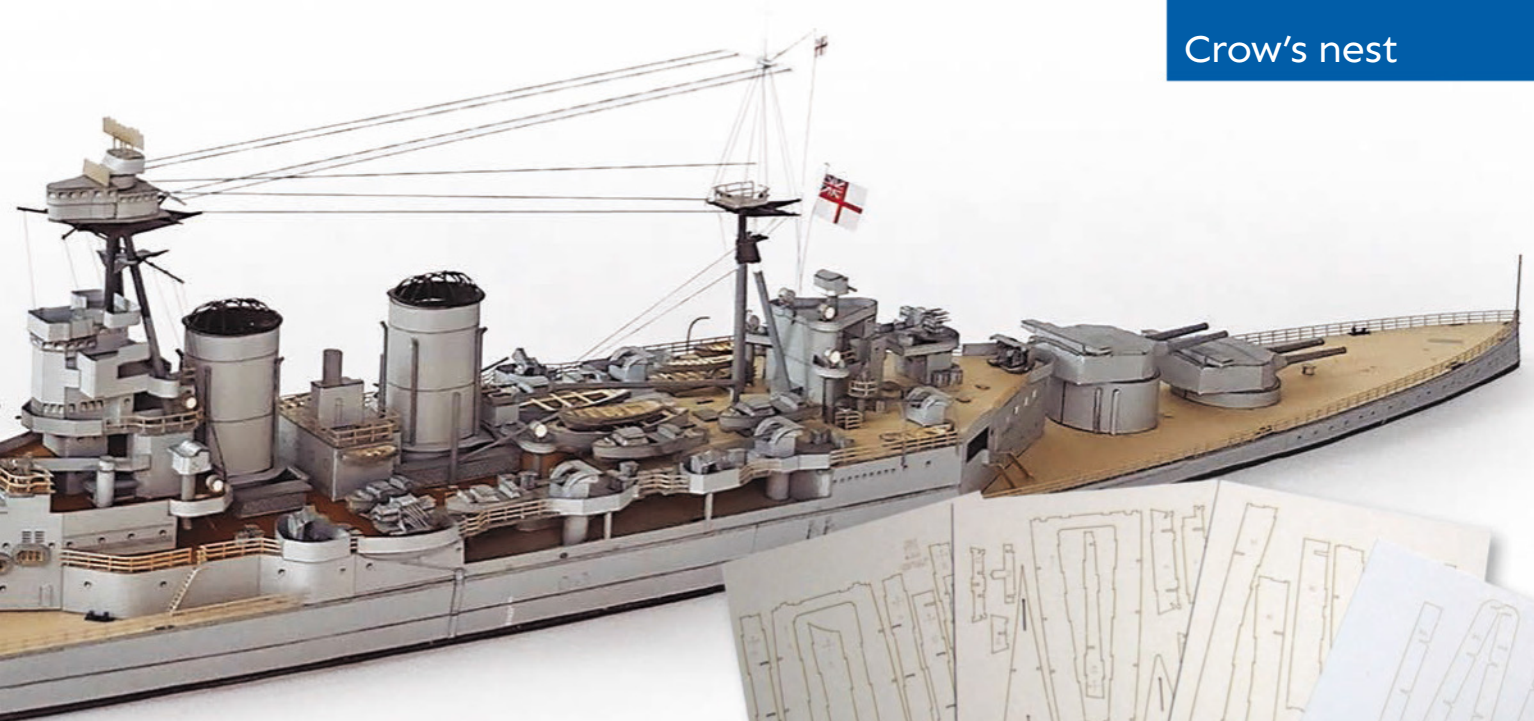
This new version (ref. 32), drafted in 1:400 scale, builds a

splendid waterline model. The kit is published in an A4 booklet format, with the card and paper components printed in colour. The text, provided in both Polish and English, starts with a potted history of *HMS Hood*. I am not going to waste any space in this preview by repeating the history of *Hood*; suffice to say that she was famously sunk by German battleship *Bismarck* during the Battle of the Denmark Strait in 1941. At the time both ships were the largest in, and the pride of, their respective navies. Thus, the naval action of May 24, 1941, was a true 'Clash of the Titans'! Accompanying the short history in JSC's booklet is table of technical data for *Hood* as she was in 1941, and the kit represents her as she served at that time.

Steady as she goes

The build instructions start with a paragraph entitled 'Auxiliary materials and tools' which offers advice on the basic tools needed to build the model, and then discusses the various symbols printed on or nearby components of the kit and what they mean. Then it's on to the assembly instructions, which guide the modeller through a

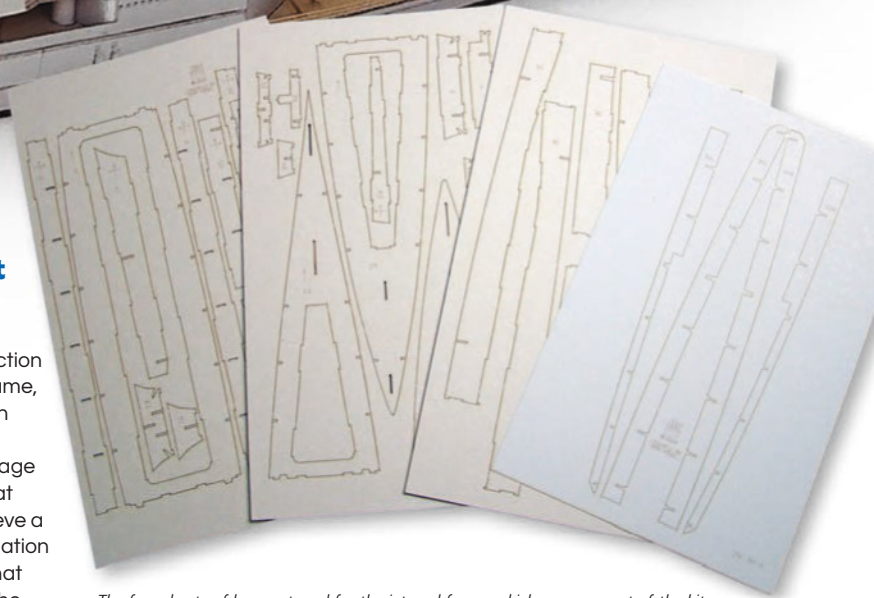




logical sequence of construction. The written build instructions are further enhanced by the inclusion of clear CAD drawings of various subassemblies, line art side and plan elevations for part location, and photographs of a completed kit. In my opinion, the combination of diagrams and photos really helps clarify what goes where and how things need to be constructed. I believe that this approach is going to become JSC's standard format to illustrate its models' instructions going forward, something I'm sure will be much appreciated by novice and veteran card modellers alike. The instructions of this kit even include a QR code, which when scanned links to a YouTube video showing how best to attach the supports located under the foremast starfish platform. For those who don't have the ability to scan QR codes JSC also print the URL to the relevant video, which I also quote here (https://www.youtube.com/watch?v=I30Cbpy_w4U).

New inside and out

The first stages of building a card model of this type are concerned with the construction of an internal skeleton, or frame, which in turn will be clad with the colour printed hull sides and deck. This is a critical stage of the build and anything that assists the modeller to achieve a straight and accurate foundation is most welcome. I believe that JSC has made changes to the design of the internal framework in this new rendition of Hood. In the past, rectangles of reinforced card were used to provide an internal support structure, which required very accurate cutting by the modeller and the extra lamination of parts to achieve the necessary thickness of card. JSC now provides four sheets of thicker card stock, which are laser cut, as part of the kit. The use of thicker card negates the need for any extra lamination and, being laser cut, obviously means that this redesigned internal frame will fit together



The four sheets of laser cut card for the internal frame, which come as part of the kit.

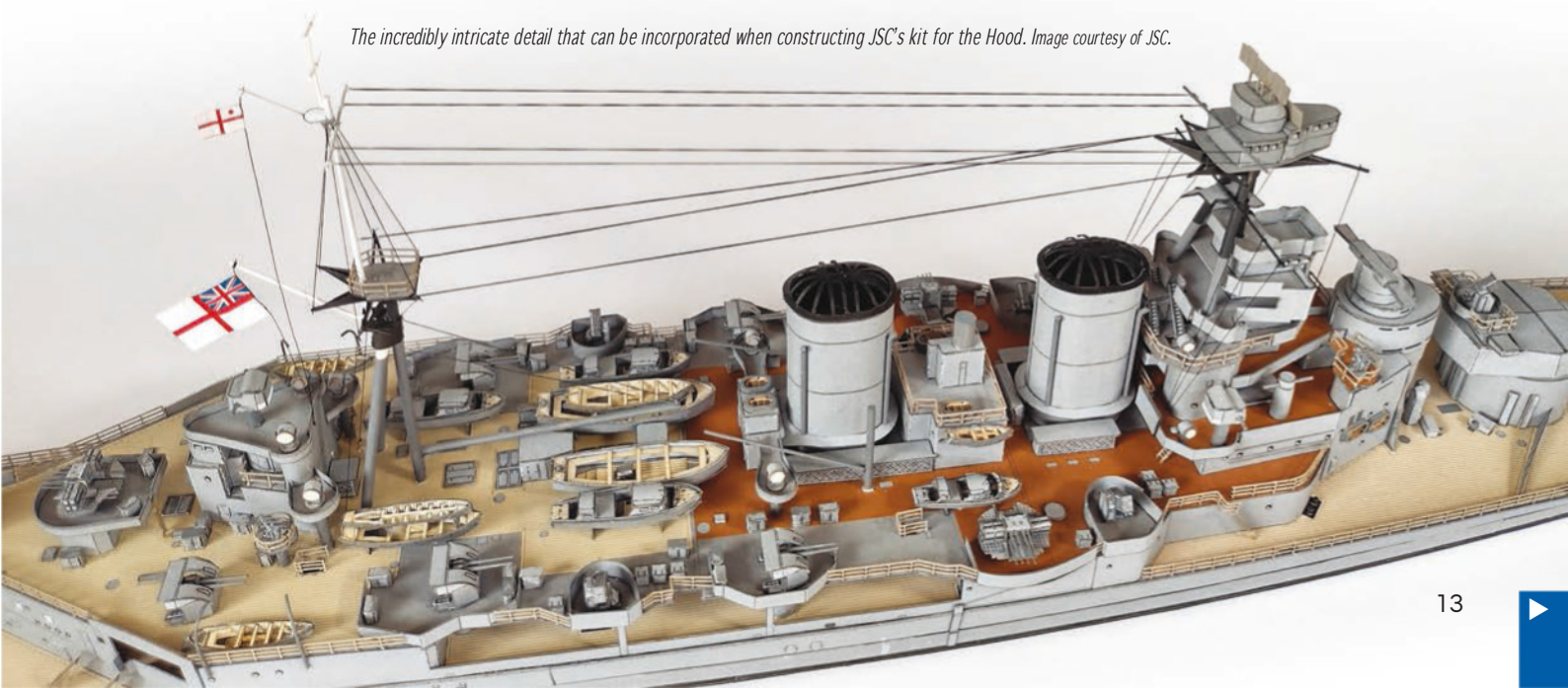
very accurately. The laser cut sheets are found in cellophane bag tacked to the inside back cover of the kit.

The colour registration and line work of the coloured card components is sharp and precise. If you look closely, you'll see that where vertical structures are to attach to the deck the colour used on the horizontal surface extends slightly underneath, thereby helping to hide any minor misalignment of parts. I also like the way that while most of the

small details, such as bollards, hatch covers and other fittings, are already represented as part of the printed artwork, JSC also provides the option to cut out and add extras of these to be glued directly on top of the flat printed components, thus giving more of a 3D effect. In short, you get to choose, depending on your own ability and personal preference, how far you want to go in adding further detail.

The pages of the kit are all double printed, something which is now becoming the

The incredibly intricate detail that can be incorporated when constructing JSC's kit for the Hood. Image courtesy of JSC.



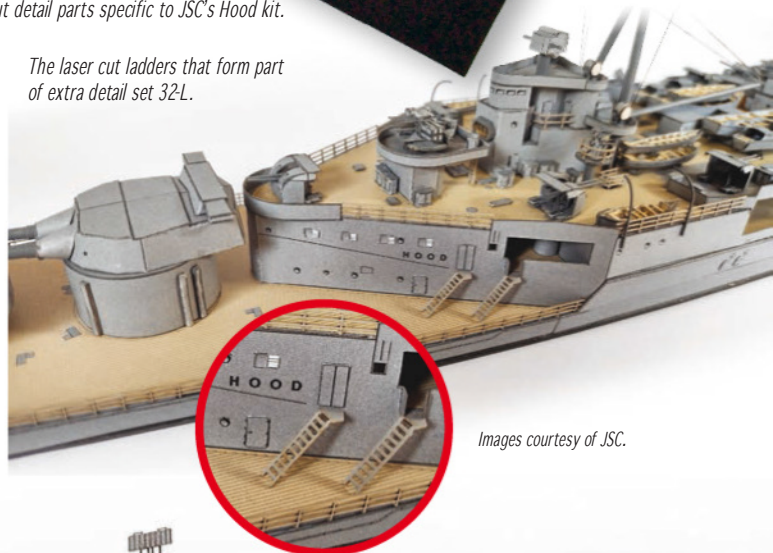


ABOVE: For those wishing to go the extra mile: the set of extra laser cut detail parts specific to JSC's Hood kit.

standard for card models and certainly a feature of the more recent examples from JSC. The double-sided printing doesn't just offer the ability to provide some colour where it may be visible underneath, or inside, components, but also the opportunity to repeat the part number directly under the component in places where it won't be seen once attached to the model. This is a great idea, and very handy for those who cut components away from the main sheet only to forget where the part came from and what the part number; ask me how I know! The gun barrels for the main armament are printed (double sided) on paper, with solid black for the inside and the appropriate shade of grey for the outer surface. Rolling gun barrels in paper is not that easy and there's

always the worry of making a mistake, so I am pleased to see that JSC provide two extras to practice with, or to replace one that doesn't quite make the grade. Indeed, it has to be said that where space permits JSC does to try to offer spare components. These are marked as such and separated off from other components, being surrounded by dotted lines. Obviously, there are some components that can be better fabricated with fine wire, brass or styrene rod, such as gun barrels for secondary and AA armament, masts, and davits. There is a 1:1 scale template provided for these items. JSC also recommends two sets of 1:400 laser cut railings suitable for this kit. These are set DA 15, 154cm, 2-bars, grey, priced at €4.15, and set DA 16, 154cm, 3-bars, grey priced at €5.24.

The laser cut ladders that form part of extra detail set 32L.



Images courtesy of JSC.

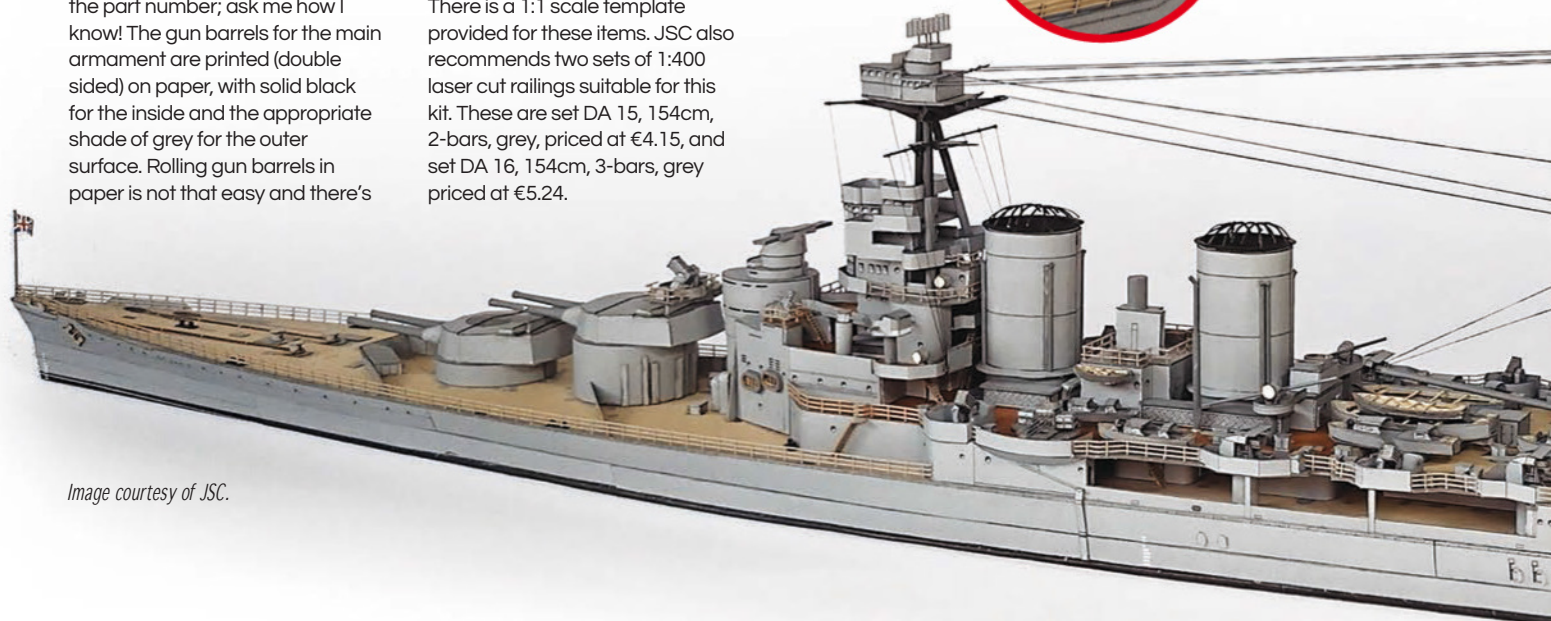


Image courtesy of JSC.



Image courtesy of JSC.

Going that extra (nautical) mile

In addition to already providing the laser cut card internal formers as part of its *Hood* kit, JSC also offers modellers the opportunity to further enhance this model with a set of bespoke laser cut parts, which can be purchased separately. The *Hood* detail set contains four sheets of card laser cut components in various thicknesses of card and a sheet of generic multilingual instructions.

The smallest sheet of card features bollard tops, anchor, and, most importantly, the cage detail atop the ship's funnels, all of which are logically replicated in thin black card. Next in size is

a sheet of grey coloured card including small details such as ladders, anchors, baseplates for the pompoms; most welcome is the fine replacement detail for the AA range finders, which in a 1:400 scale card model really is best replicated by laser cutting. I did find the part numbers (which are also laser cut) on the grey card particularly hard to see/read, so perhaps there may be need for a parts map drawing to accompany some of these smaller laser cut sheets in future. Next up in size, and the thickest of the four sheets, is a sheet of white card which contains replacements for vent detail, and life rafts, or, as I call them, 'dinghy doughnuts'. The final sheet is also white in colour and supplies alternative frame, deck, keel, and cradle parts for the various types of ship's boat, as well as duckboard detail to be added to the 'dinghy doughnuts' from the previous sheet. This sheet also contains scale accurate searchlight lenses in two sizes. I really like the inclusion of the latter and imagine that, with a thin coat of silver paint and given a pin wash of a diluted dark grey, these could be made to look quite realistic. Obviously,

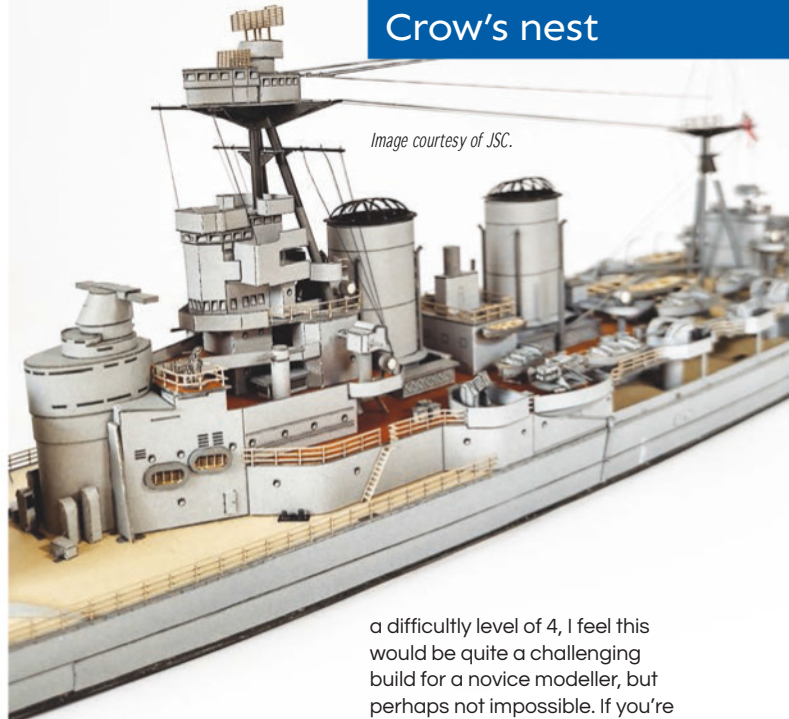


Image courtesy of JSC.

parts from the two white sheets will need to be painted to colour match components from the printed kit, though I always think that the scorching caused by the laser cutting process works well as a colour for the duckboards inside the dinghies. The laser cut detail set for *Hood* (ref. 32-L) costs €8.73 and can be purchased as a separate item from the JSC website (www.jsc.pl).

Parting shot(s)

Given the time and patience a kit like this deserves, and even without the addition of extra laser cut detail or railing sets, JSC's latest rendition of *HMS Hood* will surely build into fine model of the original ship, and at a cost of €19.51 represents excellent value for money. At

a difficulty level of 4, I feel this would be quite a challenging build for a novice modeller, but perhaps not impossible. If you're a more seasoned card modeller, then I am sure you'll love building this kit. The finished model measures 655mm (25.8in) long, so despite being 1:400 scale is still a good size when complete and testimony to just how large the real ship was. Go on, why not make this model of *Hood* the pride of your fleet!

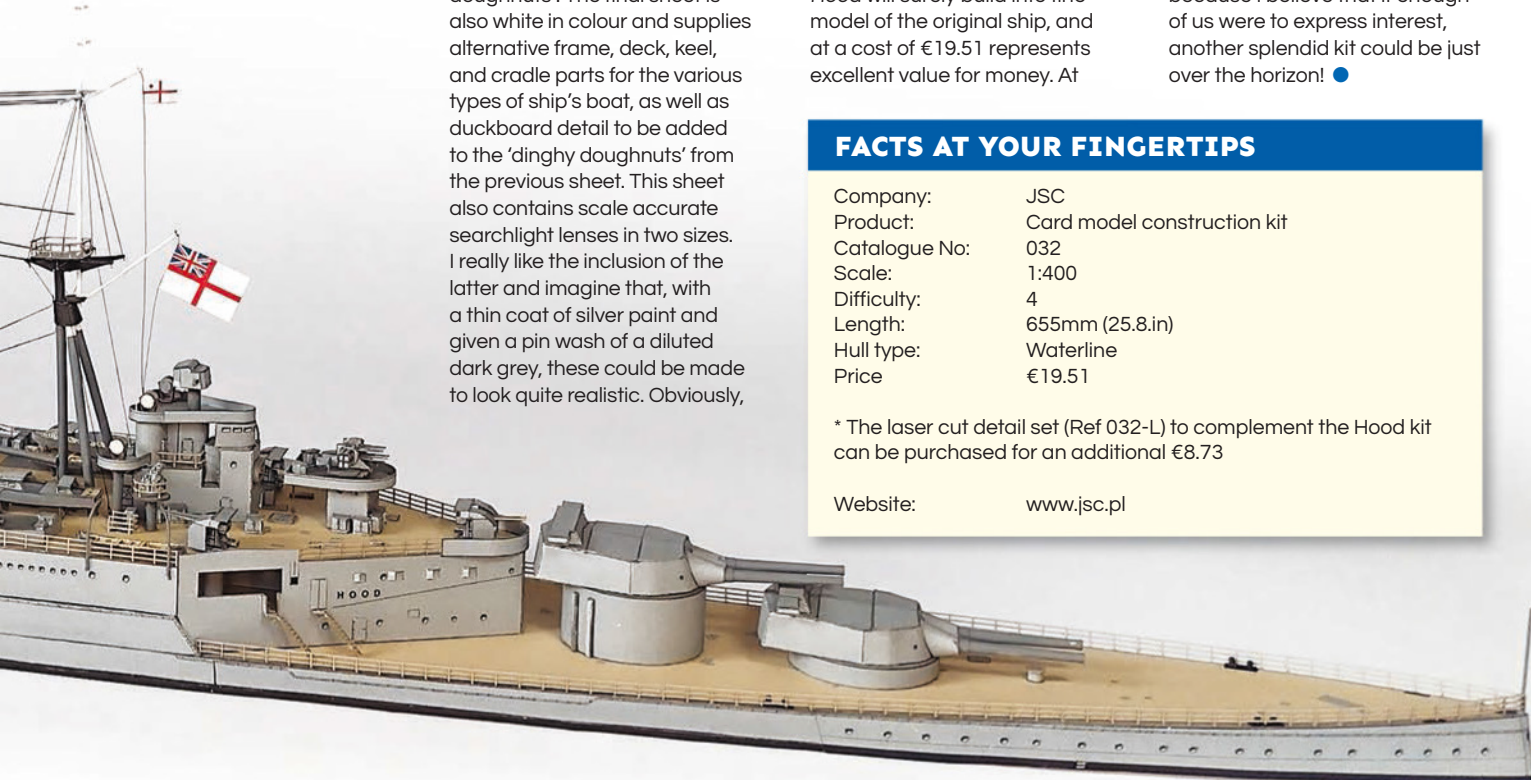
Before finishing up, I feel I must make one last observation... I notice that currently JSC has a 1:400 scale model of *Tirpitz* in its inventory, but not one of *Bismarck*. A 1:400 card model of *Bismarck* would make a great companion piece for this new *Hood* kit. So, my question is this: how many of you reading this would like to see JSC publish an all-new model of *Bismarck*? I ask because I believe that if enough of us were to express interest, another splendid kit could be just over the horizon! ●

FACTS AT YOUR FINGERTIPS

Company:	JSC
Product:	Card model construction kit
Catalogue No:	032
Scale:	1:400
Difficulty:	4
Length:	655mm (25.8in)
Hull type:	Waterline
Price	€19.51

* The laser cut detail set (Ref 032-L) to complement the *Hood* kit can be purchased for an additional €8.73

Website: www.jsc.pl





A classic motor cruiser rebuilt by Phil Button...

Many moons ago, my son-in-law, Lyndon, bought a model motor cruiser from one of my neighbours. The boat was 60 inches (1530mm) long, with a beam of 16.5 inches (420mm) and was fitted with an unknown make of two-stroke petrol engine. Her name was Dawn Mist and the heading picture in this feature illustrates the original nameplate from her transom. According to the neighbour, she'd been built in the 1940s and, he believed, originally had a steam plant. That's all he could tell us though, so if anyone out there in Model Boats' land can provide some further information about her history, we'd love to hear from you.

The model 'as bought'

Photo 1 shows Dawn Mist more or less as bought (apologies for the poor picture quality but digital cameras have improved a great deal in the 20 years or so since that shot was taken).

The hull was well built, using plywood formers and keel with thin ply skinning, although it felt rather flimsy owing to large unsupported areas of the skin. The two-stroke engine, however, was a different matter. Whatever we did, it refused to run reliably. The final straw came when Lyndon had to take a header into the local river to retrieve the model after the engine had stopped. Up to his neck in cold water, the pager in his pocket (these were the days before mobile phones) drowned and wrecked, there was no longer any doubt about it – that engine had to go!

New power plant

I found a new McCulloch 21cc two-stroke trimmer for not too much money in the garden centre and stripped off all the unnecessary



"If anyone out there in Model Boats' land can provide some further information about her history, we'd love to hear from you"



bits to give me a fan-cooled engine suitable for mounting in the boat. After modifying the engine output shaft to take the centrifugal clutch from the original engine, it was installed in the hull by bolting it to a bulkhead, using rubber tubing as a crude form of anti-vibration mountings. The engine silencer outlet was connected by a length of copper tubing into the original engine exhaust outlet that went through the side of the hull. **Photo 2** shows the engine installed in the boat – the copper

tubing at the bottom right of the picture is the extended fuel tank filler pipe.

The original handmade brass four-bladed propeller was retained initially, but tests on the water were disappointing as the engine 'bogged down' and could not deliver enough power at the propeller. As an interim 'modification' (at the lakeside) I removed two opposing propeller blades and we tried again.

With this rather drastic modification, she fairly flew across the water and planed with only

3



about a third of the hull in the water. **Photo 3** shows her at around half throttle – she's difficult to photograph close up at full speed!

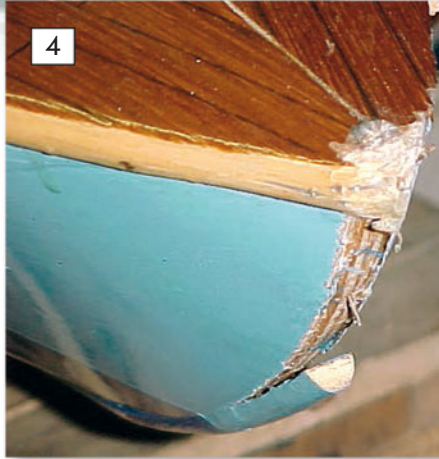
Then, disaster!

Then came disaster! We were using a 27MHz two-channel radio installation and a radio glitch (or some sort of interference) caused us to completely lose control of the boat, and at full throttle she drove straight into the concrete wall at the side of the lake in Eaton Park, Norwich. The engine was jolted off its mountings and continued to run at full throttle (but no longer driving the propeller) until it could be shut down, and a lovely brass searchlight from the top of the cabin disappeared forever into the lake. The hull was split at the bow, but otherwise the damage seemed remarkably light for such a violent collision – it later turned out to be much worse!

After the damaged model had languished for three years or so in Lyndon's garage, gathering dust, I was tasked with the following jobs (he had decided, what with work and a young family, he would never find the time for these himself):

- * Repairing the damage to the hull.
- * Replacing the two-stroke petrol engine with electric power to obtain a similar performance (even more necessary now as many boating lakes do not allow internal combustion engines).
- * Fitting a modern 2.4GHz radio system (which, hopefully, would be less susceptible to interference).
- * Repainting the model (since she was becoming rather scruffy).

4



5



The rebuild

The first step in any rebuild is to closely inspect the model, disassembling where necessary to find out exactly what needs to be done. The split at the bow was easy to repair by cutting away the splintered bits of wood, grafting in new bits and sanding to shape (see **Photos 4, 5 & 6**).

Following removal of the engine, the model was taken to the boating lake for a flotation test to find out if the coming together with concrete had done any further damage (she is rather big for the 'domestic test tank'!). This test showed that there were a number of leaks where the bottom sheets of the hull should have been joined to the keel – obviously, hitting concrete at speed is a bad move!

After stripping the old paint inside the hull from the areas alongside the keel and bulkheads and thoroughly degreasing, a number of hardwood strip doublers were glued in place to reinforce the damaged joints and the whole of the inside of the hull

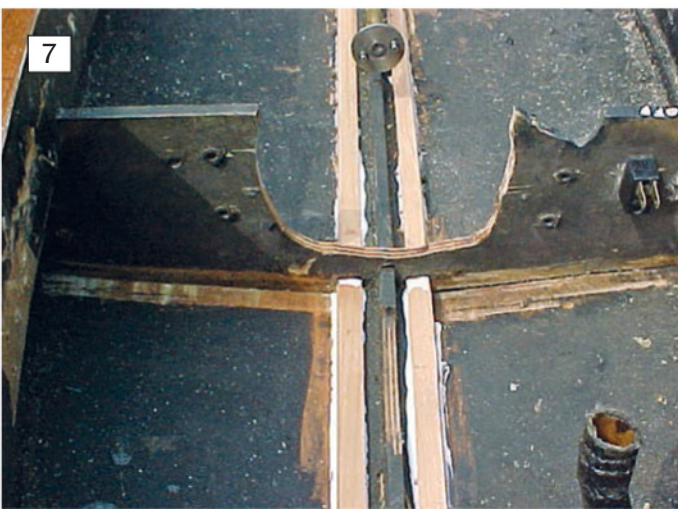
6



given a coat of polyester resin to waterproof the wood, seal any gaps and add strength.

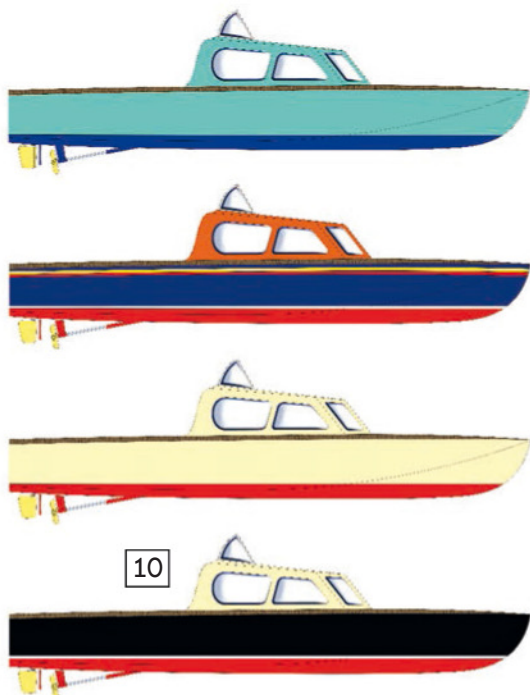
Photos 7 and 8 show the bracing at the forward end of the hull, before and after adding the resin.

7



8





“Remember, a coat of paint will highlight any problem areas, not hide them!”

Towards the stern a low frame was installed to strengthen an area of ply skinning that seemed flimsier than the rest (see **Photo 9**). The car body filler astern of the new frame is there to brace and support the bolts that hold the propeller shaft outrigger P-frame in place – originally, these were just bolted through the 1.5mm ply skin!

Repainting

Before getting on with the electric motor installation, I decided to repaint the model – but what colour(s) should she be? After much work with my PC drawing package and much to-ing and fro-ing by e-mail, a colour scheme was agreed with Lyndon. **Photo 10** shows a selection of potential colour schemes and **Photo 11** is the colour scheme as finally chosen.



To start with, the cabin was removed and put on one side for attention later, the whole model was turned upside down, the varnished rubbing strip masked off and the hull sanded down to provide a good ‘key’ for the new paint. After painting the whole hull in grey primer, this coat of paint was also rubbed down using 240 grit wet and dry paper (used wet) to show up any areas that needed filling. Once the filler had set, the hull was given a second coat of primer and again rubbed down for the final coats of paint – **Photo 12** shows her in the primer finish. Remember, a coat of paint will highlight any problem areas, not hide them!

I generally brush paint my models as I don’t seem to get on very well with any form of spraying (and the cost is less!). You need to use a good brush (and keep it cleaned as recommended by the paint manufacturer) then apply a number of thin coats, rather than

one thick one. The thin coats will not usually cover the primer in one go, but you get there eventually and avoid what I have heard called ‘a marathon job’ – that is, a dose of the runs! I have found that Rustins’ Small Job paint in 250cc tins is good for a model of this size, as it comes in a good range of colours, is quick drying and the brushes can be cleaned in water. The light blue colour chosen was ‘Delphinium’ and the dark colour ‘Oxford Blue’.

The first application of colour was a band of yellow paint below the rubbing strip. When this was dry, a strip of Tamiya 6mm masking tape was stuck on to mask off for the yellow stripe and coat of the light blue was then painted over the masking tape around the top of the hull sides. The whole bottom of the hull and the cabin were also painted in the light blue. **Photo 13** shows the masking for the yellow stripe and the light blue paint completed on part of the hull, while **Photo 14**



is of the painted cabin (note the masking tape covering the windows)

With the light blue paint completely dry, the waterline and the light blue stripe were masked off and the sides of the hull and the transom painted dark blue to complete the hull painting – **Photo 15** is after one coat of paint and shows how the paint coverage is not too good to begin with.

When the paint was completely dry, all masking was carefully removed. Needless to say, with my luck, some of the masking tape pulled off small areas of the painted lines and these had to be carefully re-masked and touched in using a small brush. A 6mm white stripe was added around the model at the waterline using self-adhesive trim tape from a car spares shop before finishing off the paint job with two coats of clear yacht varnish to improve the 'shine' and toughen up the finish. The whole hull was flatted with fine wet and dry paper after the first coat of varnish was dry, taking care not to cut right through both it and the underlying paint! **Photo 16** shows the finished result (still upside down).

On turning the model right side up, the entire deck area was cleaned, sanded smooth and given two coats of yacht varnish,



“With an outrunner, the casing revolves around the windings, rather like the rotary engines used on aircraft in World War 1”

rubbing down with wet and dry paper between each coat. The entire cabin was also given two coats of yacht varnish and refitted with its windscreen before adding it to the hull following removal of all masking tape. The original plywood nameplates were fixed to each side of the bow and the transom using silicone mastic. **Photo 17** shows the refurbished Dawn Mist in all her glory on her homemade boat stand.

Electrical installation

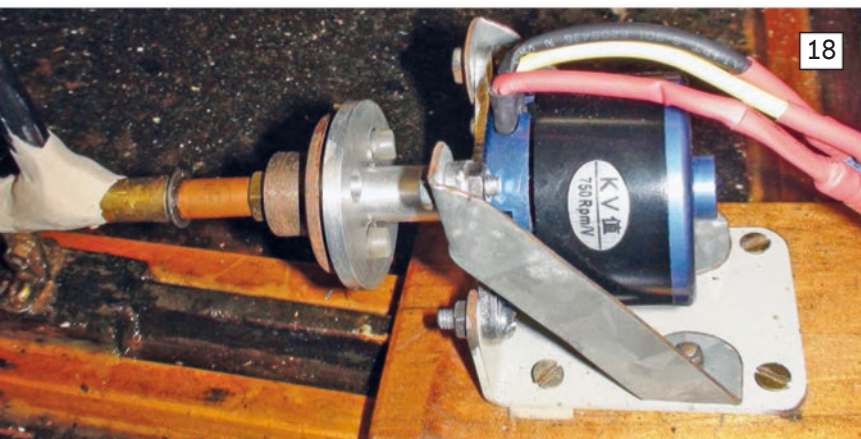
As stated earlier, the model had originally been fitted with a 21cc two-stroke petrol engine and this was to be replaced by an electric motor to provide a similar performance. According to the manufacturer, the two-stroke engine gave a maximum output of 500 watts at 8000 rpm, and this had worked well with the 'modified' propeller.

The initial plan was to use a brushless electric motor to directly replace the engine,

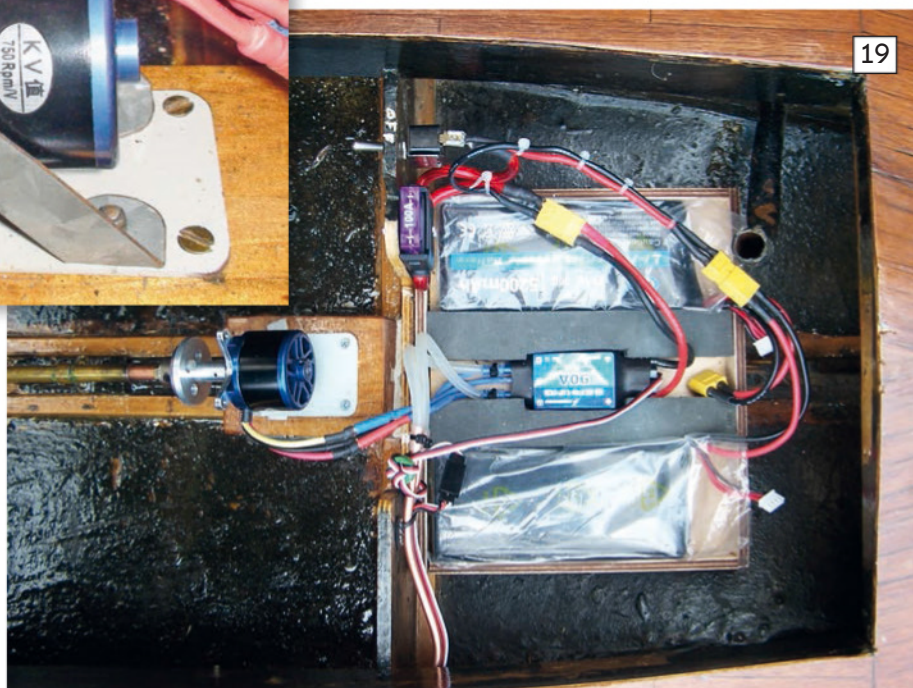
i.e., 500 watts at 8000 rpm. Using a 3S (11.1 volt) LiPo battery would mean the selection of an electric motor of around 720kv (720 rpm/volt, giving 7992 rpm at the motor shaft). With a motor rating of around 500 watts, the current draw from the battery would be 45 amps, so I needed to source a motor rated for a minimum of 45 amps with a kv of 720. Just to be on the safe side (with power in hand), I selected a 90-amp Hobbywing 'Seaking' water-cooled marine electronic speed controller.

After much hunting around on the internet, the motor finally chosen was a Chinese N4240B air-cooled outrunner, rated 650 watts (maximum 50 amps) with a kv of 750, giving 8325 rpm at the motor shaft on 11.1 volts. With an outrunner, the casing revolves around the windings, rather like the rotary engines used on aircraft in World War I).

A steel mounting bracket was made up from scrap to carry the motor on its aluminium support 'spider' and screwed to a new motor



18



19



20



21

mounting block fixed to the hull (see **Photo 18**). The steel bracing from the upper arms of the spider was added after tests in order to reduce vibration (and noise). A simple pin type coupling was used between the motor and the propeller shaft, also seen in **Photo 18**.

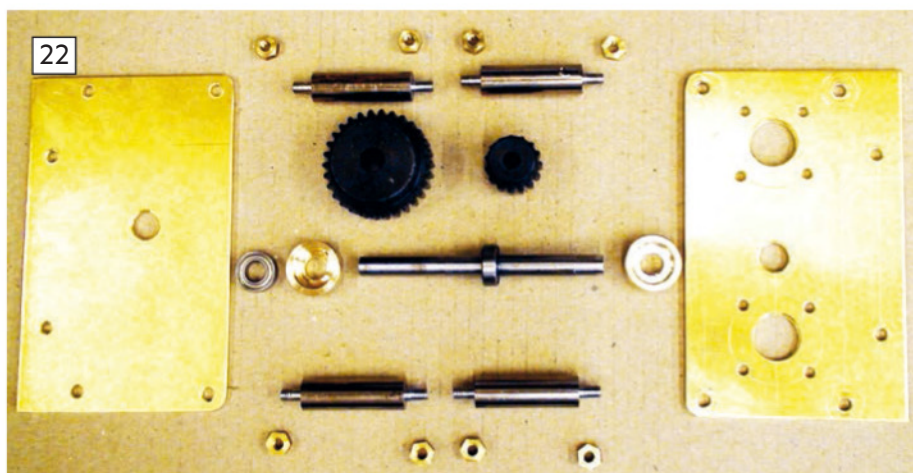
The twin 11.1-volt batteries (only one is used at a time) were installed in a basic plywood tray on the bottom of the hull, together with the electronic speed controller. **Photo 19** shows the complete installation, together with the line fuse and on/off switch. Incidentally, the on/off switch previously did duty as the ignition switch for the petrol engine.

With the addition of a Spektrum DSM2 compatible Orange 2.4GHz receiver in place of the original 27MHz receiver, the first electrical installation was complete.

Maiden voyage

Initial trials on the boating lake at Sheringham in Norfolk were rather a disappointment. The boat initially set off at a cracking pace, but the battery 'died' very quickly (you could actually hear the motor slow down!) and the performance became somewhat pedestrian after that.

Additionally, Lyndon had never much liked the look of the 70mm diameter 'modified' propeller (see **Photo 20**) and asked me if I could find



22

"I've made that mistake before and ended up with stripped gears and a bent shaft!"

something better looking. As it happened, I had been given a 3-inch (75mm) diameter three-bladed propeller (see **Photo 21**) and this could be made to fit the propeller shaft. However, calculations for this propeller indicated that it would have to run at around half the speed of the previous two-bladed owing to its greater diameter and pitch.

Mechanical changes

To drive the propeller at half motor speed would need a gearbox of some sort, with a reduction ratio of around 2:1. I sourced some heavy duty (for a model) steel gears from China (of course!) and set about designing a gearbox to carry them and the drive motor, while tying the motor spindle to the propeller

shaft so that they cannot move apart. I've made that mistake before and ended up with stripped gears and a bent shaft! Having made a draft design on my PC, I found a set of nylon gears which would provide a reduction ratio of 3:1 and so, just in case the 2:1 ratio didn't work, I modified the gearbox drawings so that it could use either set of gears (not both at once of course).

The gearbox was built up from 2mm brass sheet, with brass angle mounting feet and steel spacers. The motor mounting side plate was drilled to carry the brushless motor and the motor pinion was fitted to the motor output shaft using a filed flat on the shaft to locate the pinion grub screw. The driven shaft was turned from steel rod, runs in a pair of miniature ball bearing races and carries the original motor half-coupling. Both the driven gearwheel and the half-coupling are locked to flats on the driven shaft using grub screws. **Photo 22** shows of most of the parts (minus the mounting feet) for the gearbox at its

23

original design of 2:1 ratio prior to assembly, while **Photo 23** shows the motor and gearbox assembly installed in the boat and coupled to the propeller shaft, actually using the 3:1 gear ratio set up.

On the bench (where the hull can act as a sounding box), this installation made quite a lot of noise, especially at full throttle. It reminded me of how a guy I'd met at a Scottish pump manufacturer some years ago had described one of their fire pumps as 'a real screamer!' Hopefully, some of this noise will be damped out (sorry about the pun) when on the water, but I suspect that Dawn Mist will sound as if she is turbine powered when out on the lake.



24



Further modifications

Now for more cosmetic changes... The boat as originally built had a completely open cockpit (with the bottom of the hull as its floor) and a padded seat base at each side, which was supported off the hull bottom by foam blocks. Each side of the original cockpit had a padded seat back that butted against the seat bases. Both the seat backs and seat bases were to be retained but the foam blocks were discarded.

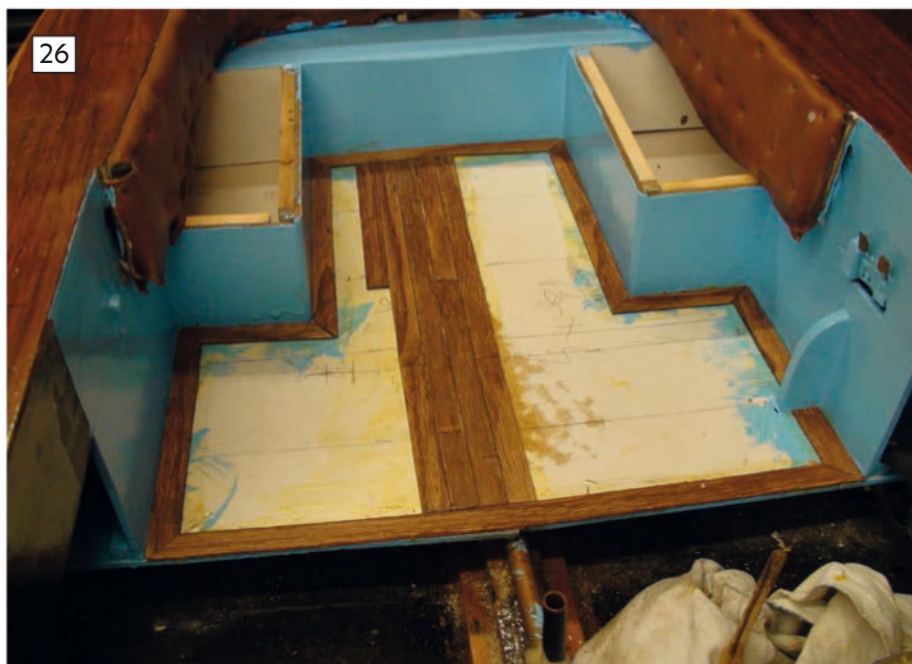
A template for the new cockpit floor was cut from card and tried in place – it's much easier (and cheaper!) to alter card than the final material, especially as card is so readily available from cereal packets. However, the floor would need to be cut in half as the hardboard which was going to be used was too big to fit through the deck opening in one piece and doesn't bend enough. Since the aft wall of the cabin came very low down in the hull (and the cabin is removable as a unit), the new floor ends just aft of the cabin.

The card outline was transferred to the hardboard sheet and the floor piece cut out and then cut down the centre for fitting. After adding spacer blocks at the keel (the keel being lower than the sides of the floor), the floor pieces were varnished to waterproof them and glued in position in the hull. **Photo 24** shows the port side waiting for the glue to dry.

Some simple boxes to support the original seat bases were made up from the same hardboard material, varnished for waterproofing and glued in place on the cockpit floor. These boxes also help to hide unwanted openings between the cockpit and other areas of the model. **Photo 25** shows the boxes before they were painted being held in place by lead blocks while the glue dried. As a further improvement, the gaps between the front of the seat boxes and the back of the cabin were filled in with more hardboard before the seat boxes and infill pieces were painted in the same light blue colour as the cabin and varnished.

25





“To represent the caulking between planks, each wood strip was rubbed along its edges with a soft pencil prior to being glued to the deck base using impact adhesive”

I had intended to plank the open areas of the cockpit floor but the only material that I had in stock was 7mm x 1mm lime wood strip, which was much too narrow for such a large model. After a good hunt around the workshop, I unearthed a piece of 1.3mm thick oak sheeting left over from some long-forgotten project and this was cut into 12mm wide planks using the band saw.

After sanding the new planks, they were ready to be fitted. To represent the caulking between planks, each wood strip was rubbed along its edges with a soft pencil prior to being glued to the deck base using impact adhesive. I use Alpha 'Thixofix' contact adhesive for planking as it allows a little time to move parts into place before it 'grabs'. The planking sequence was to fit the edge trim planks first and then infill the remaining area, starting from either side of the centre line and working outwards. **Photo 26** shows the planking part way through the process. Note that the cockpit floor has been marked across in pencil to show the plank joint positions.

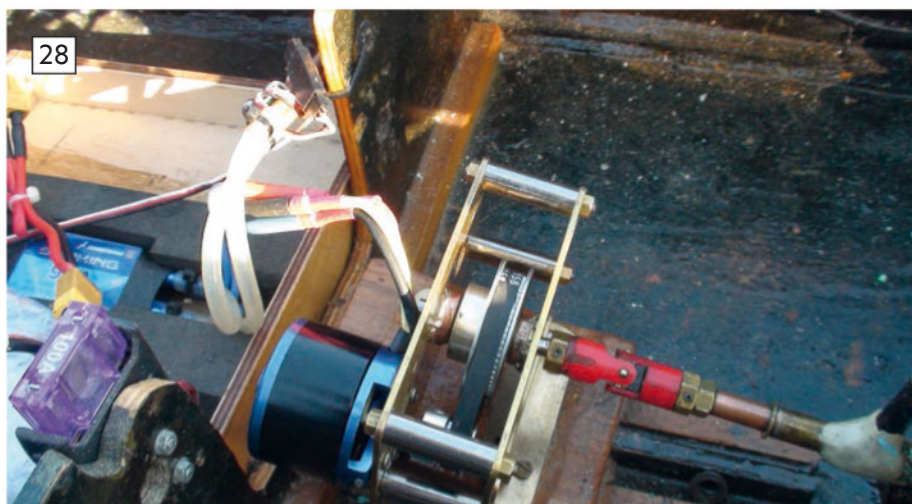
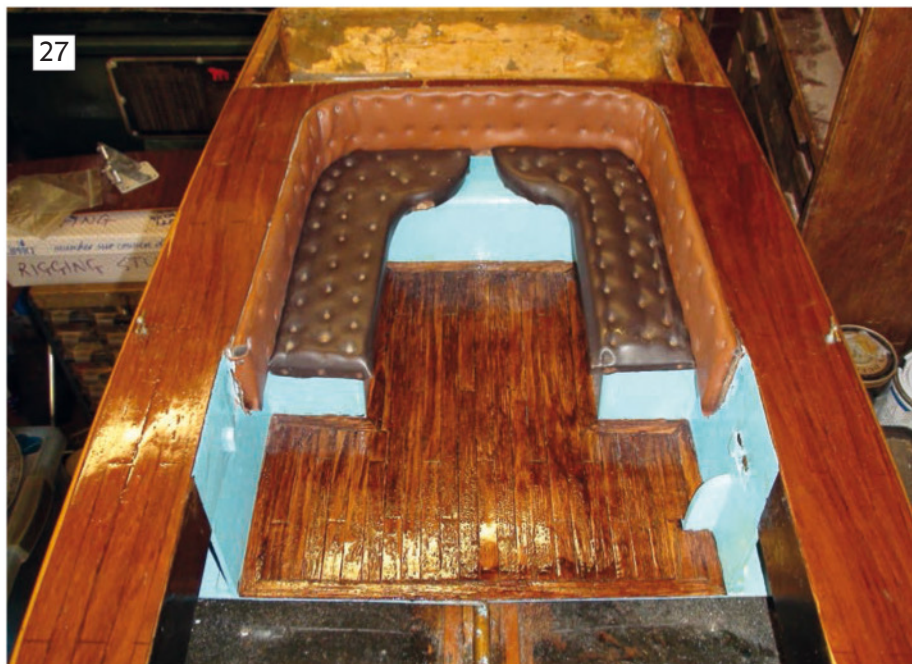
With the seat bases refitted on top of their supporting boxes, the freshly painted and varnished cockpit came out as **Photo 27**. The open compartment seen in this picture between the cockpit and the transom houses the radio receiver and rudder servo and has its own hatch cover which is held in place by four screws.

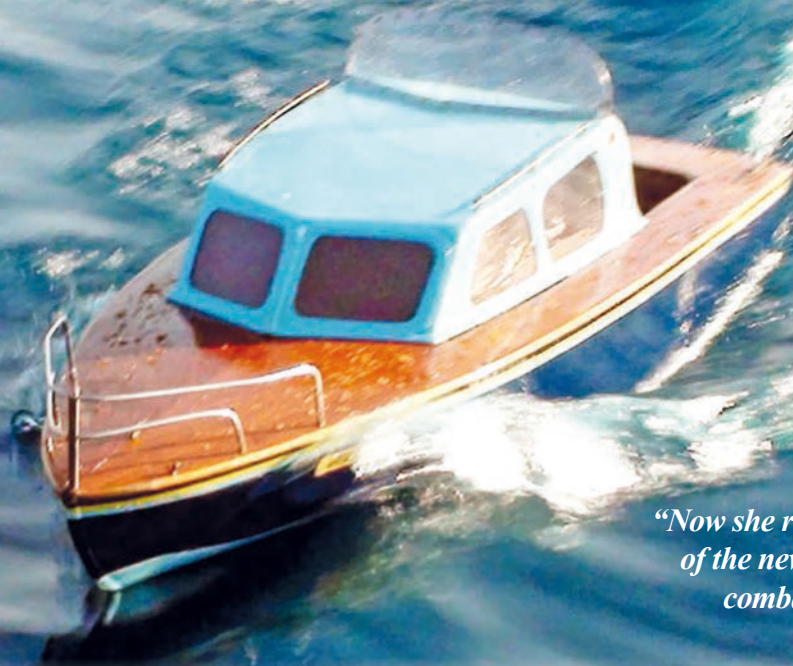
On the water (again)

To all intents and purposes, the model was now finished (apart from any minor details that Lyndon might require) and so the boat and transmitter batteries were charged up and a visit was made to the lake at Sheringham for further trials.

The day was bright and sunny, with a stiff breeze – good for sailing – but I thought that shouldn't bother such a large model as Dawn Mist. After checks of the radio gear, she was placed in the water and motored gently away from the lake side to ensure the steering was still behaving as anticipated. With any 'new' model it's always a good idea to drive slowly until you've got the hang of the steering, as this can avoid any surprises when the speed is increased. Did I say that the wind should not be a problem? WRONG!! Dawn Mist wandered about all over the lake, controlled mostly by the wind and not by me – in particular, she would not turn across the wind in the width of the lake, even at full throttle.

On increasing the speed to full throttle, the performance came very close to that when on the old petrol engine, but only for a few seconds before the power dropped to around half throttle and the throttle channel on the transmitter became a simple on/off switch! Why? Well, the current drawn by the





“Now she really flies and the additional weight of the new, and larger, batteries helps with combating the effects of the wind!”

motor caused the battery voltage to drop to within the range where the electronic speed controller reduced the power output to protect the battery. As for the noise from the gearbox, it wasn't quietened at all by being on the water and certainly attracted attention!

The 'problem' with power reduction was overcome by connecting the two battery packs in parallel, which spread the current draw over two batteries and so reduced the voltage drop. The batteries used were labelled as rated for 20C (i.e., capable of sustaining 20 times the rated capacity of 5000mAh, or around 100A) and should have easily coped with the maximum motor current of 50A – obviously the batteries were not 'as advertised' since I have also had the same problem with these same packs in another boat!

I have since bought a pair of 8000mAh 40C rated batteries and this has removed the power reduction problem. Also, to further improve the performance towards that obtained with the trimmer engine, I have modified a two cell

4000mAh LiPo battery to make a single 3.7V 8000mAh battery and connected it in series with the new 11.1V pack to obtain 14.8V – now she really flies and the additional weight of the new, and larger, batteries helps with combating the effects of the wind! The duration on the 14.8V battery pack is around 35-45 minutes (depending on how heavy the hand is on the throttle), which compares favourably with many other 'fast electric' boats.

However, at full throttle there was a knocking noise from the model that I initially thought might be coming from a failing bronze bush in the propeller shaft. Investigation on the bench, however, showed that at full power the thrust from the propeller moved the P-frame forwards a small amount by flexing the sheeting of the after hull and this resulted in the tips of the propeller just touching the bottom of the keel (evidenced by missing paint!). The addition of a thicker thrust washer astern of the P-frame has now eliminated that problem!

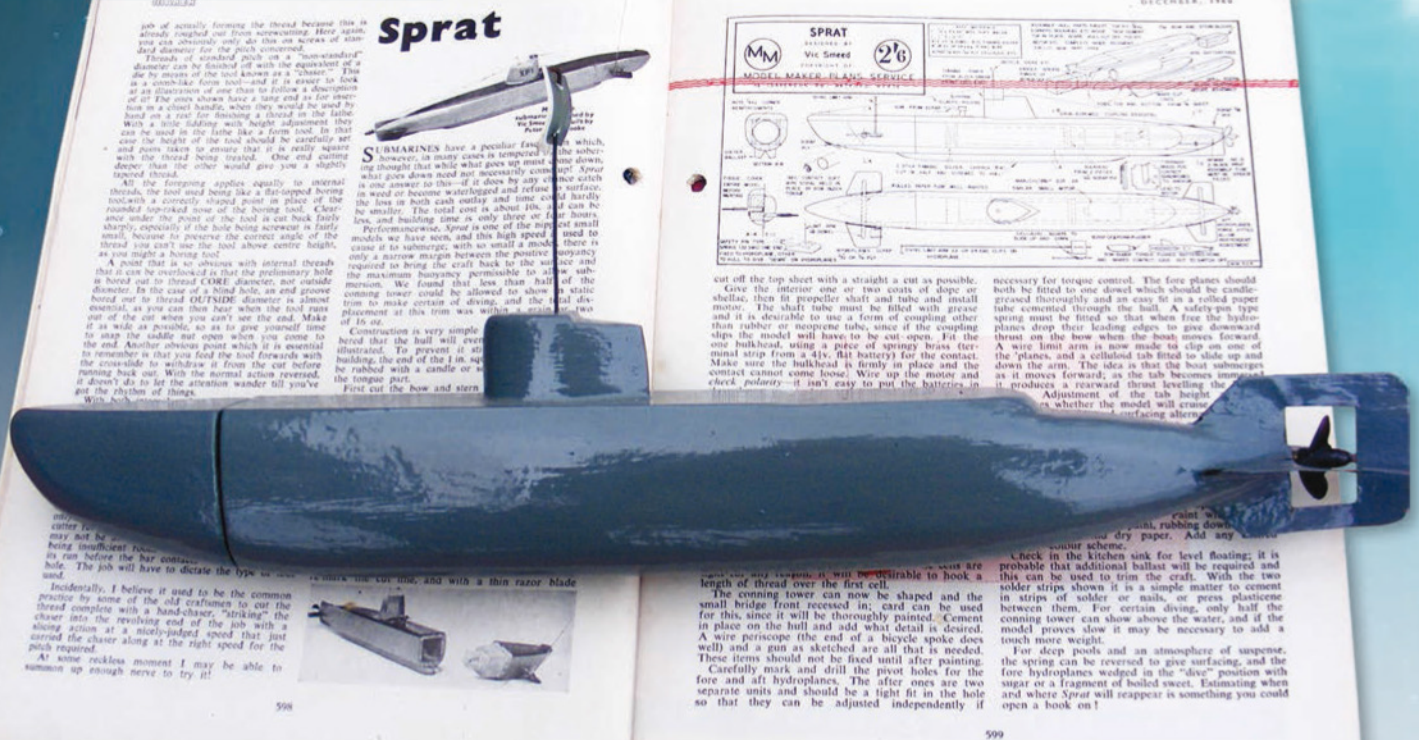
Additional improvements

Since the gearbox emitted such a terrible scream, it was modified to use a pair of pulleys and a small-toothed belt drive, still using a 3:1 reduction ratio. The original gearbox motor plate was drilled to reposition the drive motor at the correct centre distance for the belt drive and the motor refitted. The result – much quieter and looking as in **Photo 28**. The original pin type coupling has also been replaced with a more conventional universal joint. The pulleys and toothed belt came from China and are normally used in 3D printers.

Dawn of a new era

This conversion proves that it is possible to take a big old boat and get it going as well on electric power as with its original petrol engine, thereby making it useful on many more boating lakes where internal combustion engines are not allowed. ●



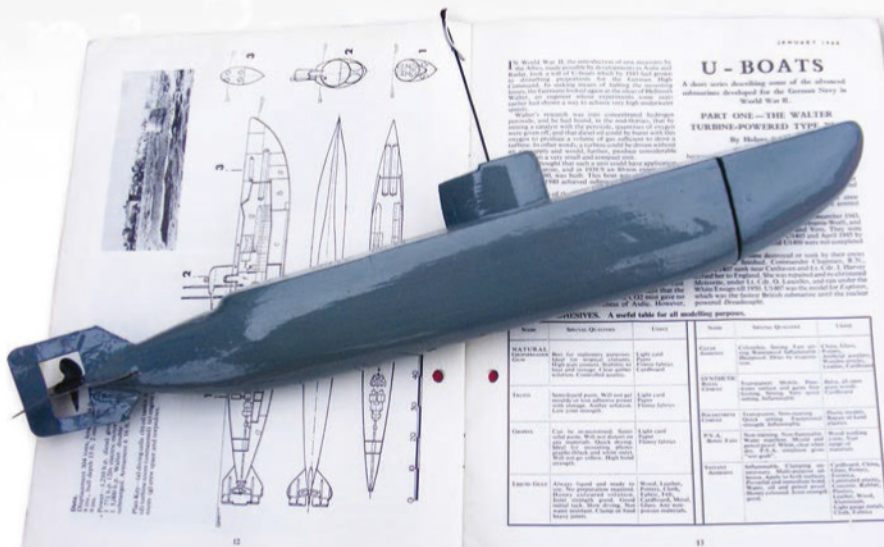


The original Vic Smeed article from 1960 and the first model it inspired Glynn to design.

Taking the Plunge

Glynn Guest explains why and how he first dived into the tricky art of R/C submarine modelling

"It looked simple enough to build and the total cost, if I remember correctly, was 10 shillings (50p!)"



The magazine article in the January 1968 issue that first suggested the Type XVII as a subject.

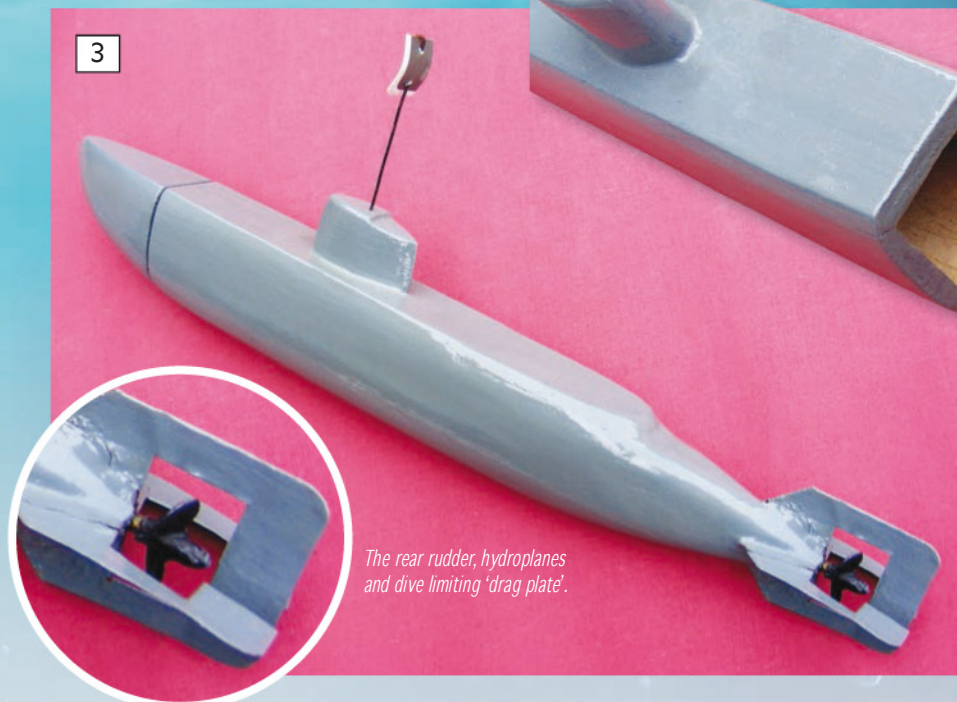
I doubt many modellers would suggest tackling a submarine an ideal first project for a newcomer to the hobby, but, actually, that was how I got involved in the world of model boats. As a schoolboy, I was an enthusiastic but not always successful builder of model aircraft. I then discovered a near

neighbour, a little older than me, was also into constructing working models but mainly of the boating kind. This looked to be more promising. It would certainly avoid my regular tree climbing recovery sessions or, worse still, returning home with my latest creation reduced down to a bag of bits!

This was in the early 1960s and my newfound friend soon introduced me to the magazine *Model Maker*. One of the issues in his magazine collection, the December 1960 edition, included Vic Smeed's plans for a simple free running submarine model, the *Sprat* (Plan MM624). It was basically a hollow balsa box containing a motor and the two dry cells that powered it. It looked simple enough to build and the total cost, if I remember correctly, was 10 shillings (50p!). An added incentive was that my friend claimed to have already successfully built this model. Construction, therefore, started promptly and, under his guidance, the model was quickly built.

Two problems were then encountered. The first was that the only suitable stretch of water was a small nearby dam, with limited access around the edges, which meant that the model could only be sailed safely when tethered by a piece of string. The second was that Vic's design submerged by having movable bow hydroplanes that were spring loaded to a negative angle, thus forcing the model to submerge as it moved forwards. Its dive was limited by a vertical wire attached to the hydroplanes. A 'drag plate' fitted on this wire would, when entering the water, push the wire backwards and so rotate the hydroplanes to a positive angle. This would

3



The rear rudder, hydroplanes and dive limiting 'drag plate'.

cause the model to rise to the surface. As soon as the drag plate emerged from the water the hydroplanes would spring back to a negative angle, thus the model should proceed in an oscillating but submerged fashion. Well, that was the idea but, due to my limited experience and skills, I could never get it to work.

The other copies of my friend's magazines gave me the encouragement to start building different kinds of model boats. I figured that since starting with a submarine model, other types ought to be easy. The intervening decades, however, have proven this notion not always to be true!

Almost submerging next...

A few years on and I had acquired a single channel radio control outfit. This was promptly fitted into and test out on various model aircraft, which may have minimised having to climb trees but only because my models seem to prefer to dive into the ground! Not surprisingly then, the radio gear was soon being used in model boats instead. Then came the idea to try another submarine model.

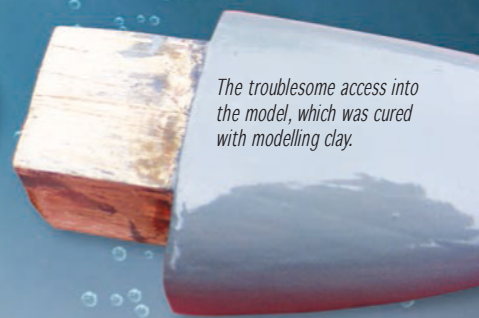
No photographs remain of this model, but it was loosely based on the streamlined nuclear submarines that the world's navies had started building. Like the *Sprat* model, it was to be a dynamic diving type, using its forward motion to drive it underwater. Balsa wood was the main construction material, with a plywood hatch firmly held on the hull with two big bolts. This sub actually managed to look quite sinister as it slunk around the lake

but, with the limited battery power available from the dry cells I had to use, it could never submerge. As a project, though, it did teach me an important lesson: these dynamic divers needed only minimum buoyancy and enough speed to submerge.

Type XVII U Boat saves the day

The idea of the simple *Sprat* model suddenly returned when I saw an article in the January 1968 issue of *Model Boats*. During World War II, the German Navy experimented with hydrogen peroxide-fuelled turbines in an attempt to give submarines greatly increased underwater speed, albeit at the expense of very high fuel consumption. The Type XVII was part of this program, and, to my innocent eyes, she looked like she could serve as the basis for a *Sprat* type of model (see **Photo 1**).

2



The troublesome access into the model, which was cured with modelling clay.

A similar balsa hull construction was used, but with a couple of changes; the most obvious one being that the Type XVII used stern-mounted rudder and hydroplanes. The other modification was to deepen the hull so that lead ballast could be installed internally rather than as strips of lead fixed to the bottom of the *Sprat's* hull. The same detachable bow plug method, to install and remove the two dry cells, was to be employed (see **Photo 2**). On my model, this feature always had an irritating slow leak, but I eventually discovered that modelling clay was the answer. By rolling the clay into 'string', about 1/8-inch (3 mm) in diameter, it could form a gasket between the bow plug and the hull; pressing them firmly together made a pleasingly watertight seal that never failed me.

I avoided the *Sprat's* method of depth control, which I could never get to work properly. Instead, a length of wire was stuck vertically into the conning tower, with a small plastic square fitted to the top to act as a drag plate. My reasoning was that I could use the rear-mounted hydroplanes to lift the stern as the model moved forwards. This would push the model under the water. As soon as drag strip entered the water, the rearwards force on it would rotate the model into a bow's upward angle and cause it to rise (see **Photo 3**). Immediately the drag plate came out of water, this bow up force would be lost, and the hydroplanes would again push the model down. My vision was that the model would scurry along, never totally resurfacing, with only the top of the wire repeatedly appearing and disappearing. Much to my delight (and to be totally honest – amazement) this was just what it did. This model was small enough to be published as a full-size plan within the pages of the July 1985 issue of *Model Boats*.



"Sailing trials were protracted, as getting the right combination of ballasting, speed and hydroplane angle wasn't easy"



Spooky success

Sometime later – actually, quite a while later – I felt the need to try another R/C submarine model, but this time with full control of the motor, rudder and hydroplanes. I had read about much cleverer people who could duplicate the real things with ballast tanks to allow static diving. A dynamic diving type was much nearer my skill level and, with positive buoyancy at all times, felt much more comfortable.

Basing my design on the modern non-nuclear submarines gave me a workable outline for this model (see **Photo 4**). The hull was to be of the solid type with a compartment for the R/C

gear, as opposed the 'free flooding' types where the hull is a hollow shell around a watertight container for the R/C gear. The solid hull suited my experience and tools but had the drawback of needing, for a similar model size, more ballast. As a result, the 20-inch (50 cm) model would finally tip the scales at a hefty 4.5 pounds (2 kg).

Balsa formed the bulk of the model's structure, but I included a detachable plywood access cover. This was held down by two bolts onto a ring made from rubber tubing and glued around the edge of the R/C compartment (see **Photo 5**); an extra precaution – and maybe unnecessary one, but it never hurts to be safe rather than sorry – was to apply a bead of grease to the top of rubber tubing before fixing the cover down.

To ensure the receiver could pick up a strong signal, the end of the flexible aerial wire was replaced with a plastic-coated vertical

steel wire embedded in the conning tower. I hoped this would also give me some idea of where the model might be once submerged. In addition, the aerial would, with the addition of a drag-plate, act as a diving depth limiter.

Sailing trials were protracted, as getting the right combination of ballasting, speed and hydroplane angle wasn't easy. The best static trim was with the deck almost awash; it looked worrying at first, but the model always resurfaced promptly if the motor was stopped. It soon became obvious that the model was sensitive to changes in speed. This led me to controlling the motor from a lever on the transmitter. Once you had the right speed to make the model submerge, it could be left alone.

The rudder was operated via the normal spring centred right-handed transmitter stick. This put the hydroplanes on the left-handed stick, which was also spring centred. Any attempt to control the model's diving by moving the transmitter stick would inevitably lead to gross over-controlling. While the model repeatedly rearing out of the water then diving back under again might have looked amusing to any spectators, it was wearing on my nerves and patience. The solution was to set the hydroplanes at the correct angle to get the model to dive using



The Spook's hatch seal made from rubber tubing.





ABOVE: Comparison of the free running and R/C models based on the Type XVII.

LEFT: All you can see when the model is correctly trimmed for submerged cruising.



Tight but functional internal installation of the R/C gear and the hatch hold-down bolts.

the stick trim, and possibly adjusting the linkage. Thus, the hydroplane stick could be left alone, and should the model start to rise or descend when sailing submerged only the gentlest of 'taps' on the stick would be needed to correct this.

One surprising discovery was that the drag plate on the aerial wire wasn't needed. Once the model was properly trimmed, the rearwards force created by the water flowing around the aerial wire was enough to keep the model cruising at a steady depth (see **Photo 6**). If the model sank too low, more force on the aerial acted to lift the bow. If the model started to rise, then the reduced force on the aerial allowed the hydroplanes to push the bow down. This resulted in a stable situation, and it was possible

to sail the model around effortlessly, at least once I got used to seeing just the moving aerial and not a model boat!

The plans and construction article for this Spook model were published in the October 1998 issue of *Model Boats*. The lessons learnt have since been successfully incorporated in a few other models.

Type XVII revisited

Several years later, while sorting through my models, the free-running Type XVII model was uncovered. Having had a return to R/C aircraft, more successfully this time with electric power, I knew how much smaller, cheaper, but still effective had things become,

so the idea of squeezing R/C gear into a similar small size submarine model was hardly surprising.

While the side profile of this model was based on the Type XVII submarines, it had to have a more bulbous hull form (see **Photo 7**); this was to accommodate the small servos, receiver, ESC and battery pack (five rechargeable AA-size cells), which occupied more volume than the motor, and two dry cells in the free running version.

Like the Spook model, a vertical aerial wire was used to control the submerged running depth. One difference was that the access hatch was simply held firmly against the hull with no sealing gasket (see **Photo 8**). I reasoned that if the hatch/hull



Type XVII model on the April 2006 issue in which it was published.

joint was close fitting then a bead of grease applied before securing the hatch ought to prove sufficiently watertight. A typical engineer's 'back of an envelope' calculation, based on grease viscosity and the likely gap between hatch and hull, suggested that it would have no problem resisting the modest pressures it would encounter – which thankfully proved to be the case.

This was followed by the now usual trials to ensure I'd achieved the correct buoyancy, speed and had got the hydroplane angle just right. Happily, this model also proved to be capable of effortlessly submerged

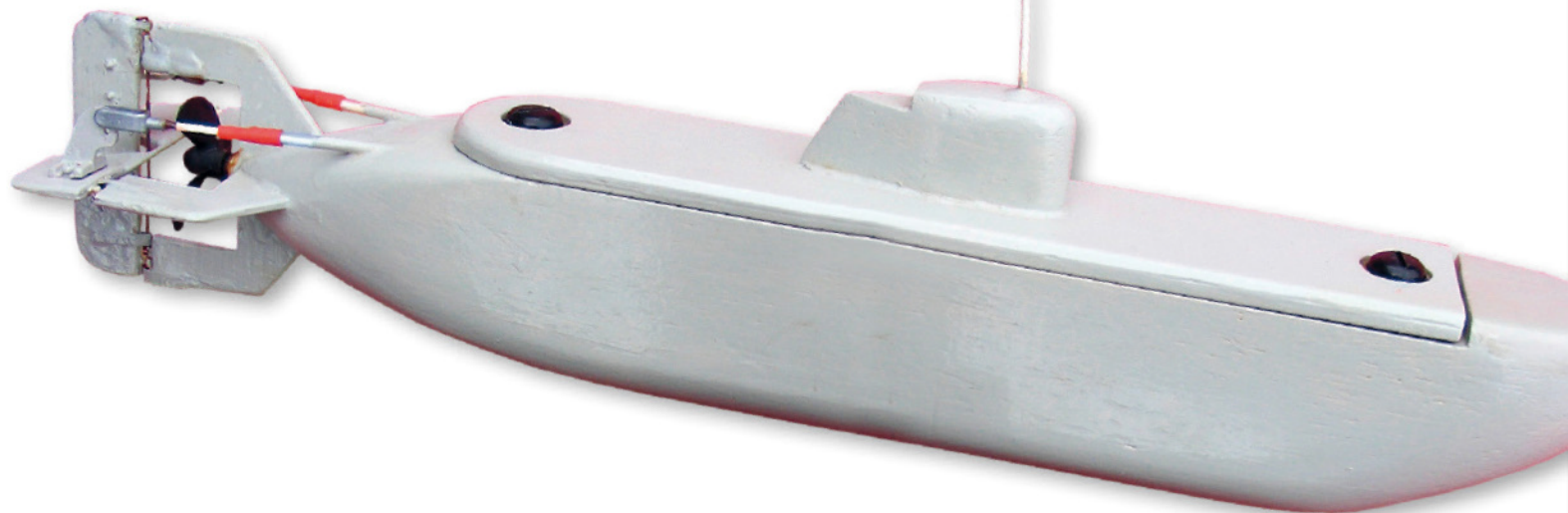
cruising around the lake. The only problem encountered was other modellers failing to appreciate where the model was, but who could truly blame them as only the aerial was visible. Again, this model also featured in Model Boats, in the April 2006 issue to be precise (see **Photo 9**).

Transparent hatch for comfort

A decade on and the itch to build another submarine model developed. This would be a little different, in that I wanted to seal the R/C compartment with a clear plastic hatch (see

Photo 10). One minor niggle with the solid hatches was that when fitted to the model I wouldn't be able to do a quick visual check to see if everything was working OK inside. It's my nature to keep looking for problems rather than adopting the foolish, and occasionally disastrous, habit of assuming nothing could go wrong.

Another difference was that I planned to have free flooding spaces ahead and behind





10

Glynn's Nixie model with the clear plastic hatch firmly screwed down and free-flooding spaces either end.

the R/C compartment. This would avoid the extra ballast that the previous solid hull models had required. To keep it a simple building project, most of the construction materials would be ply and strip wood. This inevitably led to a rather flat sided and boxy looking model; not the ideal shape to resist pressure you might think, but as I didn't intend to plumb the depths I was confident plywood would be more than adequate. Some streamlining was achieved with the use

of balsa block laminated from scrap pieces of sheet at the bow and stern. This gave my model the look of a small modern type of submarine, although with a more angular shape. It would, however, be underwater and out of sight, so no problem!

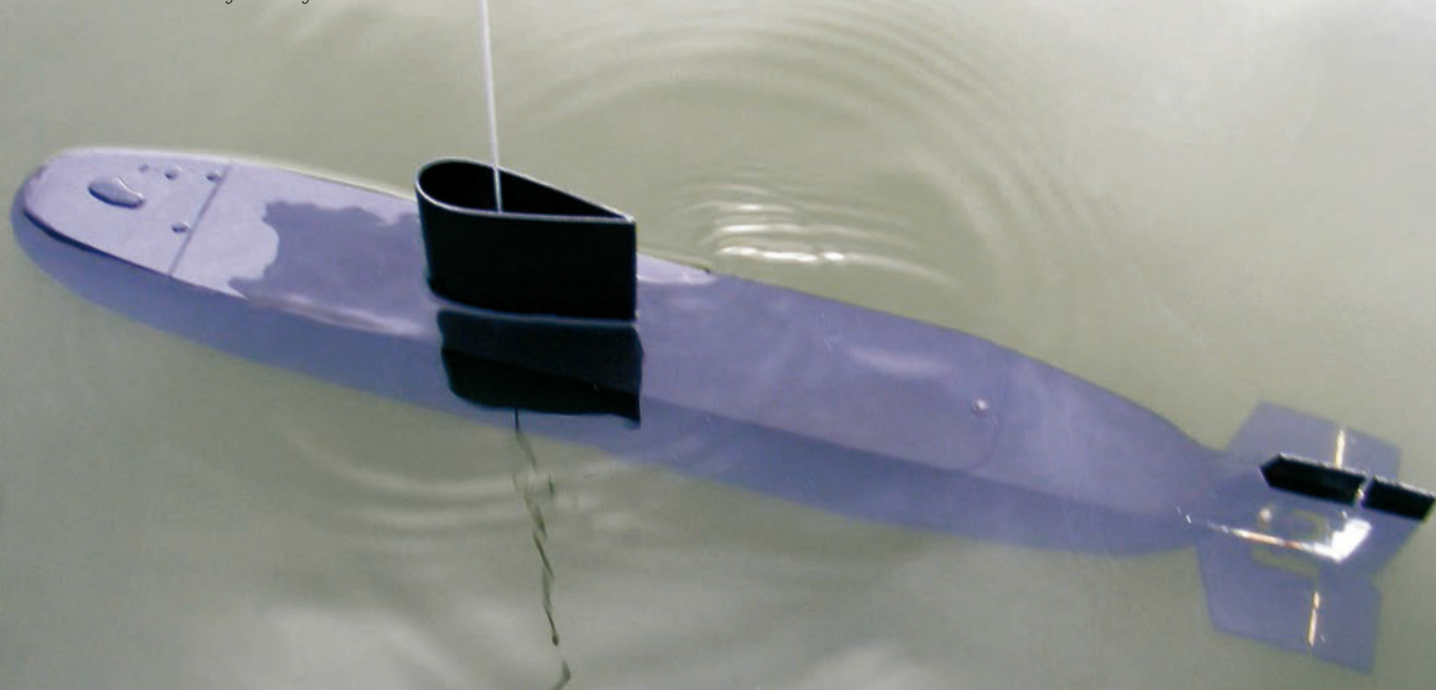
After a bead of grease had been run along the edging strip around the R/C compartment, the plastic hatch could be secured with several screws. It was surprisingly reassuring to watch the grease being squeezed into a watertight

seal between the strip and hatch. Getting the right sailing trim took a little more time, as air pockets could be trapped under the removable deck section (see **Photo 11**). Once this was sorted, though, the model performed reliably and ended up as the Nixie plan featured in the October 2017 issue of Model Boats.

Blame Das Boot

Watching the excellent film *Das Boot* inspired me to build yet another submarine model. This time, rather than something based on modern submarine designs, a wartime U-Boat shape appealed; a little different in some respects, but with many years of, admittedly intermittent, model submarine building, no serious problems were expected. Perhaps this was not the wisest way to approach a new project, but you'll be able to judge for yourself as a plan for the resulting model, along with a build guide, will feature in next month's issue! ●

11 *A Nixie showing correct static trim to achieve reliable submerged cruising*





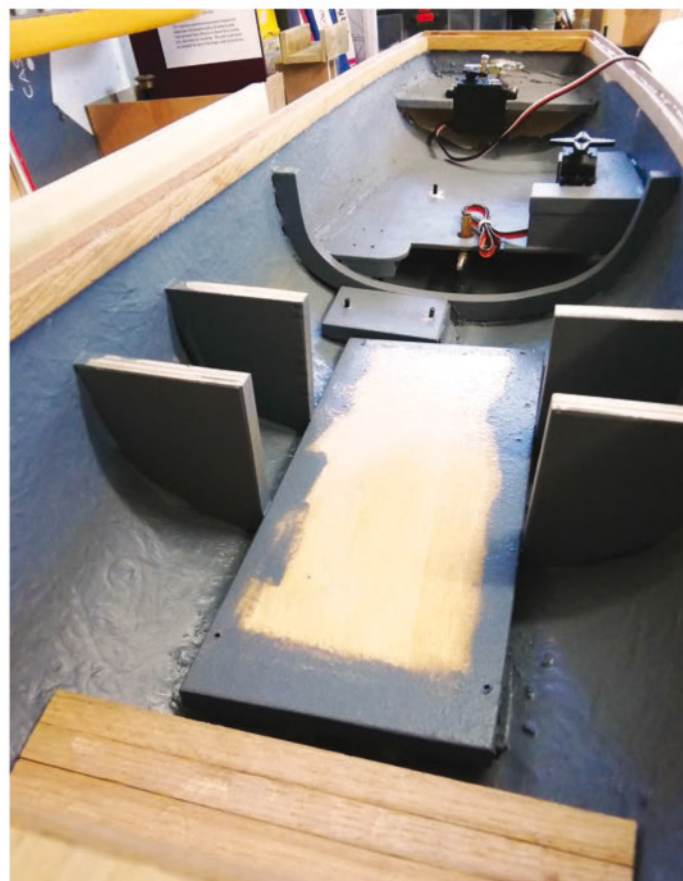
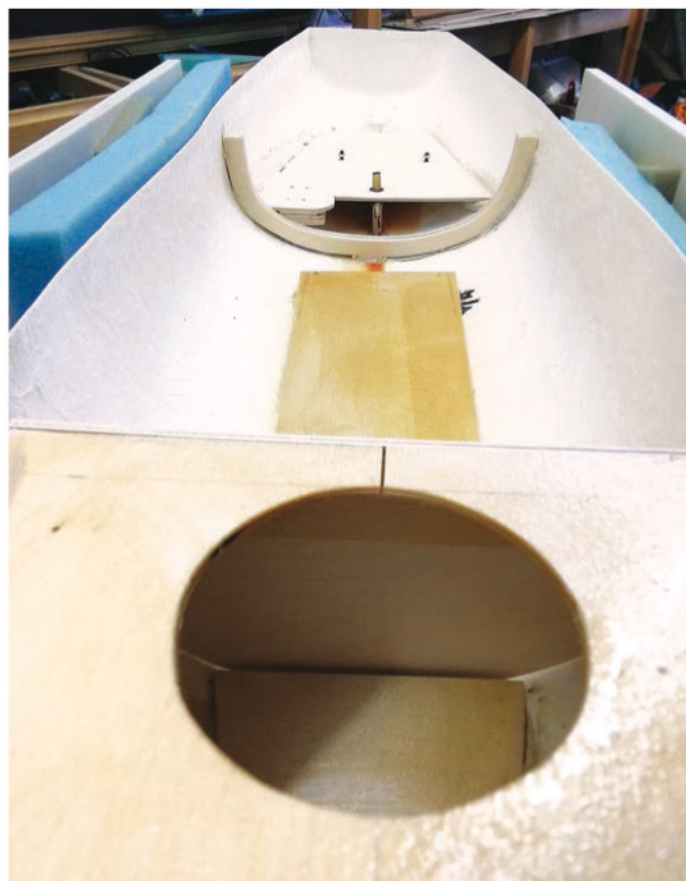
Fenland Lighter

May we have your attention, please... **John Mileson** is about to explain why he took a rather different approach to this particular project...

Apparently, I'm very boring. I know this because my wife has told me so! And while I'd like to think her casual, throw-away, remark was made purely in jest, on careful reflection, I rather suspect there may be more than a grain of truth in it.

I recently joined the Wicksteed Park Model Boat Club and to date members have been most welcoming. Perhaps, though, when the veneer wears off and they realise just how boring I am, they will start to ignore me.

Such a scenario would, believe it or not, be nothing new to me. For example, some years ago, my business partner Marion and I used to attend 'business club' meetings. The idea was to 'network' with fellow members, exchange business cards and promote our



ABOVE LEFT: The Deans Marine fibreglass hull has had the following fitted: propellor shaft, fore deck, a strengthening rib, plywood pads for the steam plant (centre) plus those for the water tank and servos in the stern. ABOVE RIGHT: In addition to further strengthening ribs (two each side), and the pad for the condenser tank, rubbing strakes have been added.

“The vessel this model is on based is little more than a glorified canal barge – the overall design, however, is quite different”

business. Typically, Marion and I would enter the meeting room and more often than not be confronted with 40 or more members all busily engaged in schmoozing.

Now, Marion was a very attractive lady and would very quickly have a group form around her. On the other hand, being of somewhat diminutive stature, with thinning hair (oh alright, bald!) and on the wrong side of 60, I was abandoned to stand in the middle of the room representing a spare part! Occasionally I would endeavour to muscle my way into one of the cliques. There would then be the briefest of pauses while the group collectively registered their surprise at my audacity before they'd hastily pick back up from the point at which they'd been so rudely interrupted. Sometimes one of the group would exchange a few words with me. The buzz of conversation would stop, and I'd be asked, in a very condescending manner, while my name badge was clearly being scrutinised, “And what do you do, Trevor – sorry, John?” “Oh, Marion and I own a yacht charter company. We have a fleet of large sea-going yachts”, I'd enthusiastically reply. The response was usually something along the lines of “Jolly good!”, and then that was that. Their original discussion would resume, and ‘Billy No-Mates’ would be left behind in its wake. Can I really be that boring?

You may recall from an earlier article I made reference to a fellow club member: Bill, a.k.a. the ‘Submarine Man’. You may also remember that at each meet one of his model submarines would either disintegrate on contact with the water or disappear completely. Well, the week before last Bill turned up with a submarine mounted on what looks like a modified zimmer frame. On this occasion the propellor fell off in the middle of the lake. Unperturbed, on went the waders and he was still wandering about up to his waist in water searching for his lost asset when we all left a couple of hours later. Last week he was already sporting his waders, obviously in anticipation of a further spectacle. Never one to disappoint, his submarine went AWOL. A search and rescue mission was once again performed in front of an awestruck audience, although on this occasion there was a considerable amount of friendly ‘heckling’ from the shore. Having located the lost craft and taken a bow to his adoring followers he returned to shore for his ritual tea and doughnuts. No one could ever accuse him of being boring; this man has style!

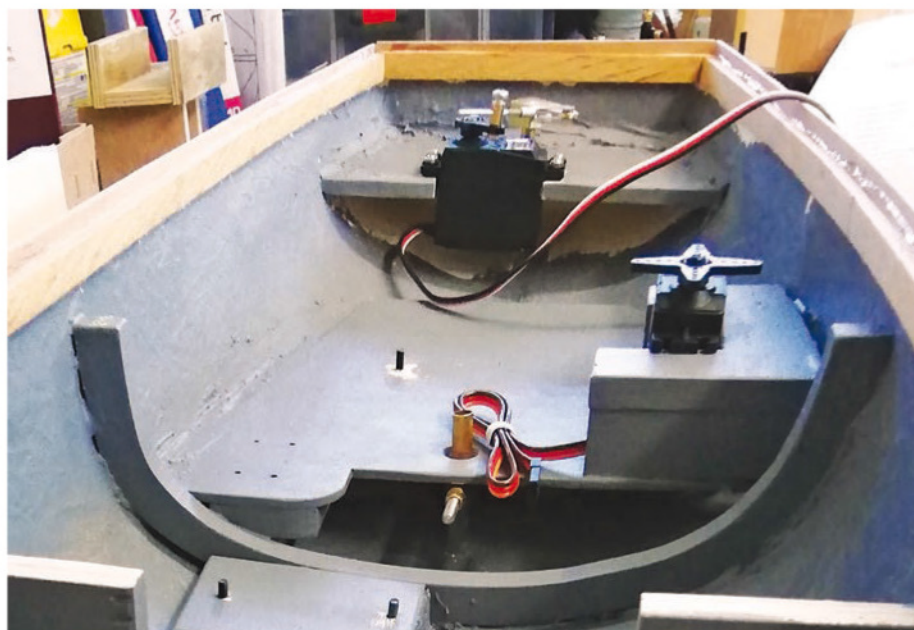
In view of all this, I began to contemplate what I could do make myself, the boats I build and the articles I write about them a bit less humdrum. I am, therefore, hoping my Fenland Lighter model will spark a little more interest and enthusiasm! Truth be told, the vessel this model is on based is little more than a glorified canal barge – the overall design and approach I've taken, however, is quite different.



ABOVE: A card template was made to ensure the correct location of the apertures in the rear deck; these are for the water tank filler, the steering servo, cockpit, and a slot for the manual water pump handle. The tank on the left is the condenser tank.



ABOVE: The gas tank is located in the bow /foredeck. John's concern was that, as a permanent location, the gap between the tank and the foredeck needed to be well sealed with silicone sealer to prevent gas, when filling the tank, from seeping into the cavity under the deck.
BELOW: Servos for the steering and steam regulator in place. The inner hull has been brush painted using Halford's grey primer.





ABOVE: Planking has been added to the foredeck and coal bunker area. At this stage, the locations for the boiler, etc, were checked. BELOW: The inside of the hull. The white pad in the centre is thin insulation material. Not necessary, John points out, but he had some kicking around so thought he would use it.



ABOVE: The fibreglass outer hull in its original pristine condition required 'spoiling', and John felt he was just the man for that job! Patches of self-adhesive Formica surface edging were added to create the impression of repairs.

Fenland waterways workhorse

My pre-build research turned up very little useful information in terms of the project itself, so I instead had to rely on some rather grainy old photographs. For those of you unfamiliar with the history of the Fenland lighter, though what I can tell you is that measuring approximately 42ft long, with a beam of 10ft, they were 'general carriers' of their day, operating from around 1700 to 1850. Plying their trade on the two main Fenland rivers, the Ouse and the Nene (Nen), these flat-bottomed craft carried inbound goods from the Wash ports. Coal, salt, hardware, and wine, plus timber from the Baltic, were delivered to the inland wharfs at Wisbech, Bedford, Northampton, and Cambridge.

On the outward journey local produce was carried to the many minor wharfs along the aforementioned rivers, while produce bound for export was carried to the Wash ports. Each lighter could carry 20-25 tons of cargo.

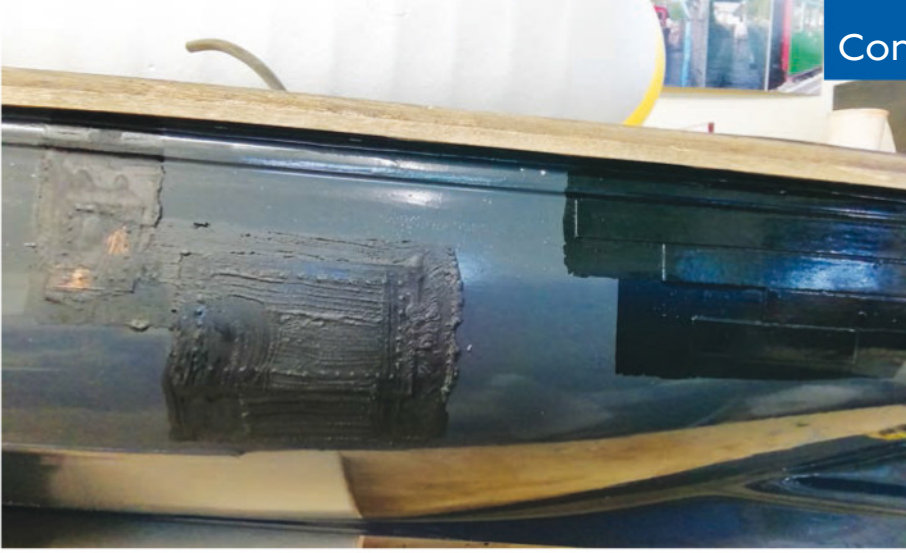
A 'gang' of several lighters would be drawn by horses along the riverside towpaths. Towards the end of the era some were drawn by steam-powered lighters acting as tugs. I decided to base my model, therefore, on one of the steam-powered versions.

She may not be amused but, hopefully, you will...

As it happened, I'd originally intended to build the steam-powered launch the Victoria and Albert from one of the Deans Marine kits. So, having this, and a Clevedon Steam boiler and engine, 'in stock', I decided to rob the kit of its fibreglass hull and utilise the steam power plant for this project.

I was determined to make this boat different from the other models I'd built; less boring! To achieve this, I proposed to make it a 'scruffy' looking craft. After all, maintenance on the originals must have been limited. It's relatively easy to build a pristine model but, as I found out, less so a more convincing working boat. The challenge was going to be making it look a bit bashed about and generally unloved.

I made a start. It was all very well having the engine, plant and hull, but I was concerned the former might not fit into the latter. I was particularly apprehensive since I'd asked Gerry at Clevedon Steam to supply me with a larger gas tank, condenser tank, a water top-up tank and hand pump, as the hope was these larger capacity items would give me increased sailing time. Thankfully, I managed



ABOVE: Sufficiently horrible! Thin copper patches were glued onto the hull and then daubed with paint, spoiling what was a nicely painted hull.

RIGHT: The ingredients John used for making a mess of the hull were talcum powder, enamel paint and white spirit.

BELOW: The upside-down hull showing the effect of scrubbing the talcum into the enamel paint, aided by plenty of white spirit. Below the water line, the green 'mess' was treated in the same way. The idea was to represent the tarred/pitched hulls of the original lighters.



ABOVE: The stern after 'treatment'. John decided this looked quite disgusting, but then decided "Never mind, too late now!"



The finished hull.
If you close your eyes,
it looks quite effective,
John suggests!





ABOVE: The coal bunker at the bow of the lighter.
RIGHT: The Clevedon Steam boiler and engine fitted. This still looks rather new, as here John, points out, his courage failed!



to fit everything in, and the hull floated reasonably well in a 'bath test'.

Next came the fitting out of the hold area of the hull. Pieces of plywood were bonded to the inside of the hull to enable the boiler and engine to be bolted down. These also strengthened the fibreglass hull and provided pads onto which to locate the two servo units. Inner and outer surfaces of the hull were then painted with grey primer. I know it is becoming a bit tedious and boring but stick with me as the next stages get a bit more interesting. At least, I think so!

Getting down to the nitty-gritty

I was about to step outside my comfort zone. The idea was to give the existing very smooth fibreglass outer hull a rougher, more bashed about, feel. I'm sure that boats of this type would have sustained some hull damage of the years, which would probably have been crudely repaired by the lighter crew.



ABOVE: The fenders were made from pre-dyed mutton cloth, simply rolled up and tied off at each end. For dye, John used diluted wood stain.

LEFT: All the controls etc, are, located on the rear deck. The large brass handle is for the water top up hand pump. The small-bore brass tube feeds oil down to the propeller shaft, the electric connector is for battery charging and the large bore black pipe is for topping up the water reservoir. The power on/off switch is also shown.



ABOVE: To add some interest to the lighter, John decided to fit a name board on either side of the aft deck. These needed to look 'worri' to remain in keeping with the rest of the 'decor'. The top board in the photo shows the one already hacked about, while the lower one is shown as was, prior to that operation. RIGHT: The boards in place.





ABOVE LEFT: The rear deck, with various pieces of cargo covering the controls. The bricks were handmade from DAS modelling clay, then air dried and stuck around a cardboard box, which covers the oil feed water top and charging point. ABOVE RIGHT: The bow of the lighter. The two boxes cover the top of the gas tank and gas control valve.

To start the process, I stuck onto the hull strips of Formica edging. These were to represent small sections of repaired planking. Other patches were made from very thin copper sheet, embossed round the edges with indents to represent screw heads.

Whereas my hull was painted in an overall dark grey, I decided, in my wisdom, to paint the patches black. The overall effect was horrible! Making the boat scruffy was turning out to be more difficult than anticipated. So, leaving the outer hull to dry off, I turned to the hold/boiler room area. The whole lot, including the already grey painted area was given a wash of diluted black enamel paint. While still wet, black paint was brushed around the edges and corners to effect dark highlights. These highlights were bled into the wash, giving a very pleasing, even if I say so myself, effect, particularly on the

oak planking. To the bilge area, a mix of buff, brown and cream paint was applied to the still wet black wash and the overall sludge effect proved satisfyingly realistic. To be honest, I found the most difficult part was knowing when to stop 'weathering'.

On the other hand, the outer hull was a right old mess. The only consolation was the anything I did now could only improve it! The effect needed to represent an ill-maintained vessel, where the hull was probably coated in some form of pitch. To achieve this, dark grey enamel paint was mixed with a drop of white spirit and a generous helping of talcum powder. This created a paint of a similar consistency to thick cream. The mixture was then spread onto the hull with a brush, which was regularly dipped into the talcum powder to create a dappled finish – a bit like stucco. Once dry, which took

only a matter of minutes, the underside from the waterline down was coated in a sludgy green mix, again using talcum powder. Even if I say so myself, the overall effect looks very credible; you will have to trust me on this, as my photos don't fully capture the rough texture of the surface very well.

Loads of additional interest

While most of the cargo hold is taken up with the steam plant, space was available on the fore and aft decks for a variety of cargo. To illustrate the types of cargo carried, I made some wooden boxes, bundles of Norfolk reed (used for thatching) made from dried grass, baulks of timber and some bricks. The bricks are made from DAS modelling clay. As the model is scaled to approximately 7/8-inch to the foot, this additional detailing wasn't too fiddly and so was both easy, and ultimately very rewarding, to craft.

Am I boring you?

Well, that's the project virtually finished. Just the final sea trials to carry out.

I've been telling my wife all about these lighters, thinking she may be interested. However, after about five minutes I've noticed her eyes start to glaze over and, so far, her only comment has been "Not only are you boring but tedious, too". Well, that's a bit of a bonus – at least no-one can accuse me of doing things by halves!

Seriously, though, surely such an interesting model is not that boring? Come on, chaps... back me up here! ●



LEFT: The patching on the hull.

RIGHT: The very rough finish of the hull.

BELOW: An overall view of the John's Fenland lighter.



DIRECT DEBIT SUBSCRIPTIONS (UK ONLY)

Yes, I would like to subscribe to **Model Boats**

☐ Print + Digital: £14.75 quarterly

☐ Print Subscription: £12.50 quarterly

YOUR DETAILS MUST BE COMPLETED

Mr/Mrs/Miss/Ms.....Initial.....Surname.....

Address.....

Postcode.....Country.....

Tel.....Mobile.....

Email.....D.O.B.....

I WOULD LIKE TO SEND A GIFT TO:

Mr/Mrs/Miss/Ms.....Initial.....Surname.....

Address.....

Postcode.....Country.....

INSTRUCTIONS TO YOUR BANK/BUILDING SOCIETY

Originator's reference 830390



Name of bank.....

Address of bank.....

.....Postcode.....

Account holder.....

Signature.....Date.....

Sort code.....Account number.....

Instructions to your bank or building society: Please pay Mortons Media Group Ltd. Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Mortons Media Group Ltd and if so, details will be passed electronically to my bank/building society.

Reference Number (official use only).....

Please note that banks and building societies may not accept Direct Debit instructions from some types of account.

CARD PAYMENTS & OVERSEAS

Yes, I would like to subscribe to **Model Boats**, for 1 year with a one-off payment

UK ONLY:

☐ Print + Digital: £60.99 ☐ Print: £51.99

EUROPE & ROW:

☐ EU Print + Digital: £77.99 ☐ EU Print: £68.99

☐ ROW Print + Digital: £84.99 ☐ ROW Print: £75.99

PAYMENT DETAILS

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro

Cheques payable to Mortons Media Group Ltd and write code MBO2022 on the back.

Cardholder's name.....

Card no:.....(Maestro)

Valid from.....Expiry date.....Maestro issue no.....

Signature.....Date.....

TERMS & CONDITIONS: Offer ends December 31 2022. Subscriptions will start with the next available issue. Direct Debit payments will continue every 3 months unless you tell us otherwise. To view the privacy policy for MMG Ltd (publisher of Model Boats), please visit www.mortons.co.uk/privacy. Please visit www.classicmagazines.co.uk/terms for full terms and conditions.

POST THIS FORM TO:

MODEL BOATS SUBSCRIPTIONS, MORTONS MEDIA GROUP LTD,
MORTON WAY, HORNCastle, LINCOLNSHIRE, LN9 6JR

**HURRY
OFFER
ENDS
SOON**



PRINT + DIGITAL SUBSCRIPTION

- 1 year's worth of issues **delivered to your door**
- Great savings **on the shop price**
- **Download** each new issue to your device
- A **discount** on your digital subscription
- Access your subscription on **multiple devices**



PRINT SUBSCRIPTION

- 1 year's worth of issues **delivered to your door**
- Great savings **on the shop price**
- Never miss an issue

SUBSCRIBE TODAY

DIGITAL
SUBSCRIPTIONS
AVAILABLE ONLINE!

Hurry! Subscribe now and make huge savings!

- Model Boats is the world's best-selling monthly consumer magazine of its kind.
- Packed with content that encompasses all aspects of the hobby, whether your passion lies in it static models, radio controlled scale, fast electric or internal combustion engine models, steam driven craft or model yachts, we guarantee that amongst all the news, reviews and fascinating full length features you'll find something that floats your boat!
- Reader input is actively encouraged. The letters pages are dedicated to views aired and information shared, while the readers' models section serves as a launch party for all those wishing to showcase their latest successfully completed projects.
- What's more, every other issue includes a free model plan, supported by an illustrated feature on the vessel that inspired it and how to achieve the best results from your build.

So, subscribe today and broaden your horizons!



TERMS & CONDITIONS: Offer ends 31st December 2022. Please visit the URL below for all rates. Please see www.classicmagazines.co.uk/terms for full terms and conditions.

SUBSCRIBE SECURELY ONLINE

 www.classicmagazines.co.uk/mbodps

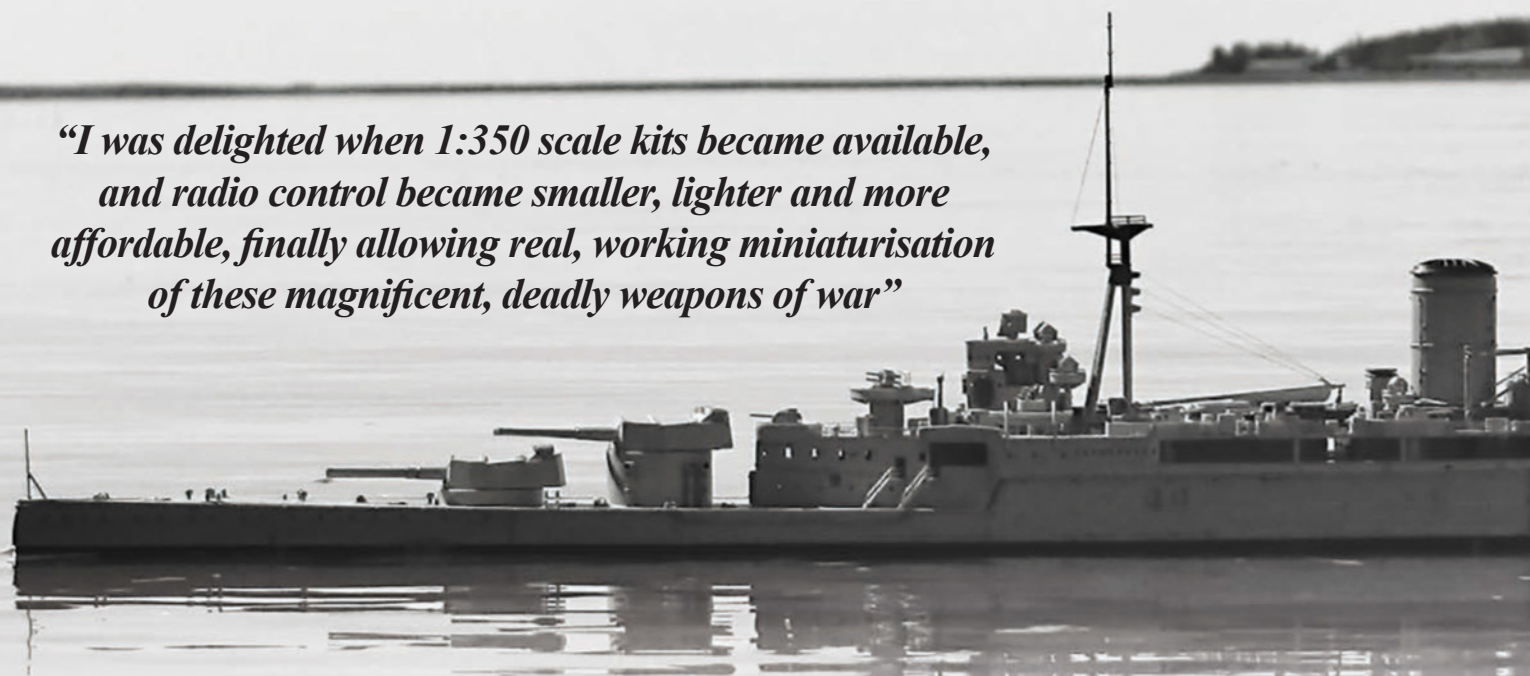
CALL OUR ORDER LINE

 01507 529529

Call 01507 529529, lines open Mon – Fri 8.30am – 5.00pm

Quote ref: MBODPS

"I was delighted when 1:350 scale kits became available, and radio control became smaller, lighter and more affordable, finally allowing real, working miniaturisation of these magnificent, deadly weapons of war"



Back to the Hood!

Doug Neilson reminds us that home is where the heart is, in this plastic magic tale



'Sisters': The Tamiya PoW and the Trumpeter Hood.



I've been fascinated by the story and the tragedy of the whole 'Bismarck episode' since about the age of four, dating back to sneaking downstairs one night with my younger brother to stare in rapture at the 1:1200 scale Eaglewall model of the *Prince of Wales* my father had been making that evening. The agony of the four-year-old mind as it realised that this beautiful creation was too small and delicate to play with and would not float in the bath (at least the right way up), has lived with me for many years since, still motivating me now in my retirement.

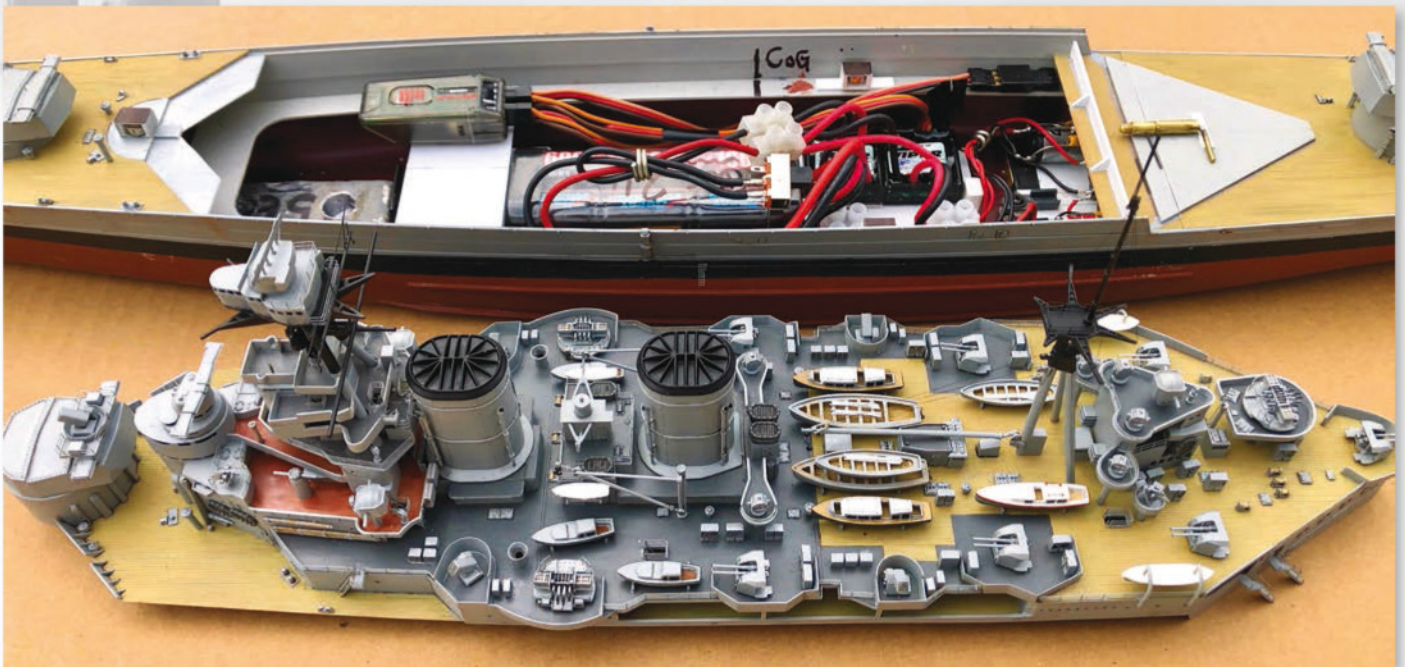
Many Airfix models of the *Bismarck* and *Hood* later, I was delighted when 1:350

scale kits became available, and radio control became smaller, lighter and more affordable, finally allowing real, working miniaturisation of these magnificent, deadly weapons of war.

Several years ago, I finished the Tamiya 1:350 *Prince of Wales*, with three-channel control to rudder and separately controllable port and starboard props and found this was a delight to sail on any weed-free pond or big enough muddy puddle I could find (deeper than about 1½ inches, of course), creating a very scale-looking wake and proving a lot of fun to manoeuvre into dock (on windless

days). I was then fortunate enough to have been given the Trumpeter 1:350 *Hood* kit for Christmas not long after its release (by my now wife, for obvious reason!), and have recently finished this, too, with three-channel radio control.

The *Prince of Wales* was initially completed a few years ago and has been a useful test bed for the commissioning of the *Hood*. Although both are almost identical in build and 'engineering', there were a few kinks still to work out before the *Hood* finally passed her acceptance trials recently, the building of which I'll discuss in a bit more detail here.



Good access to the batteries and switch, with three small magnet pairs giving a good, tight fit and grip.

The kit

Although not perfect, the 1:350 scale Trumpeter model is, in my opinion, much the best plastic model of the Hood available (with the possible exception of the 1:200 version). The plastic moulding is lighter than the Tamiya PoW castings, but equally suitable for making a working model, nevertheless. The mould quality is crisp, with a good fit of most parts, and conversion to full R/C control is pretty straightforward, once a couple of small problems have been ironed out.

The kit comes as a waterline hull, with the below water hull moulded separately. As for the PoW, the deck is in three sections, with the foredeck component extending back to the second breakwater at the B turret barrette. The main/shelter deck centre section is from there to the step down to the quarterdeck just forward of X turret, and a third piece for

“Although not perfect, the 1:350 Trumpeter model is, in my opinion, much the best plastic model of the Hood available (with the possible exception of the 1:200 version)”

the low quarterdeck aft, all together providing opportunity for easy internal access with minimal modification.

The above and below water hull parts were glued together and sealed well with thick liquid cement on the inside, with the forwards cross-member removed to allow good access to the ‘machinery spaces’.

Four holes for the shafting were drilled and filed out of the hull, with the A frames also drilled and filed out slowly to eventually

accommodate the 1/16-inch brass rod shafts in the concentric 3/32-inch OD brass tubing that acts as the shaft bearing and guide. This outer tubing extends from the propeller through the A frame all the way back to well inside the hull. This allows a long and fully watertight shaft, when both lubricated and sealed with a good, thick, viscous grease (no stuffing box needed). Thick, viscous grease seems to prevent any shaft binding rather better than the Vaseline I initially used in the PoW (leaving one prop shaft tube fractured by the shaft as it transiently bound in the tubing a few years ago). This thick grease will obviously take more power to turn, but with the 4:1 gearbox on the motors I used, torque is not an issue, even at low rpm.

The props I initially used were the plastic scale ones from the kit. These were surprisingly effective and more than adequate. I have,



ABOVE: The firmly attachable quarterdeck. This won't wash off. BELOW: The four motors are glued to a small plate that can be easily removed if necessary.



ABOVE: The four bronze Prop Shop ½-inch Standard Scale props, turning 'outwards', of course.

“As a measure of the accuracy of Trumpeter’s hull moulding, the model floats at mid boot topping level at light load, settling to just under the uppermost margin of the boot topping at war load”

however, been a huge fan of the Prop Shop/ Protean Design props (prop-shop.co.uk) for several years now, so was delighted to discover that the firm’s ‘Standard Scale’ ½-inch diameter three-blade prop is almost an exact scale replica of the 15ft diameter props of the real thing, scaling up to within six inches of the true scale size. Ordered with a simple 1/16-inch hole for the prop shafts, these are simply glued on with a medium superglue. These are true little gems; beautifully engineered, they function perfectly and are exceptionally good value at £7.19 each.

The hull initially seemed of large capacity, but with the foredeck piece cemented in waterproof place, and the rather low quarterdeck aft, space rapidly became somewhat restricted. At 1:350 scale, each gram is about 43 tons, with the ‘light displacement’ of around 43,000 tons, therefore being 1,000g model weight. Full war load is about 1,100g (around 47,000 tons). The model’s buoyancy is thus not a limiting problem, with about 400g of lead pushed into corners and stuck with double sided tape under the decking. As a measure of the accuracy of Trumpeter’s hull moulding, the model floats at mid boot topping level at light load, settling to just under the uppermost margin of the boot topping at war load.

As the photos show, the removable quarterdeck is held down by a combination of things. There is a small plastic lip that slips under the last inch or so of the quarterdeck



aff that has been cut off and cemented in place at the stern. A brass bolt is placed through some brass L-section frames, affixed with some styrene strip under the flanged and removable Y turret, into a nut which is glued (epoxy) to the hull midline between the inboard shafts. A further small sliding bolt forwards to the forward-most portion of the quarterdeck piece, cut off and cemented in place across under the step down from the aft end of the shelter deck. With the freeboard here forwards on the quarterdeck being only around 1cm, this will be the place that any water will enter, but the fit is good, and with some added plasticard there have been no leaks as yet.

The central main/shelter deck portion is stiffened by a plastrut I-beam forward underneath between the bridge and B turret barrette, and held in place by a small, rare earth magnet under the removable B turret onto a magnet on a plasticard spacer/mount immediately below, with two more similar magnets under the deck edges further aft.

The giblets

The motors themselves are four great little units from MFA/Como in England. These are the 990D series with the planetary, metal, 4:1 gearbox. They are only 12mm in diameter, weigh 26 grams, rated for 3-volts, and run very quietly.

I had first used these motors in the PoW, with only two installed initially (inboard engines, to maximise prop wash over the

*ABOVE: At full displacement, there's just over 1cm freeboard at the forward quarterdeck.
BELOW: Geese - more dangerous than the Bismarck?*



rudder for slow speed handling) but found that this arrangement required almost the full 6- volts available from the four alkaline AA cell batteries I was using to achieve a scale-looking full speed. Encouragingly, though, even with prolonged runs at full throttle, any heating was mild, with the motors/gearboxes coping well with the significant over-voltage, presumably due to the rather low loading

required to push a kilogram of plastic (and lead) through the water.

For the Hood, however, I chose to power all four props in the hope that I might be able to run the motors at a lower voltage and therefore lessen further any fire risk (remembering what happened to the prototype, of course). To my delight, on the initial sea trials I found that with the four





INSET: Photoetch railings, and some mild pin wash and dry brushed weathering.



of them powering the model there's rpm aplenty at between 4 and 5 volts, and that even at 6-volts any heating remains mild, with the Hood's crew keen to try some water-skiing. While I imagine a weed-induced prolonged stall at 6-volts might eventually not be a happy experience, the two Mtronics microVIPER speed controllers have built-in stall protection, and the short segments of silicon fuel tubing used as shaft linkages are cut to a length that slips or twists off should the prop stop but motor not. (Encouraged by the Hood, the PoW now has all four props powered as well, with identical results.)

Any motor-shaft misalignment is minimised to reduce any flexing forces on the shafting, but I use a short segment of 1/16-inch brass shaft between the motor and the prop shaft itself to compensate for any imperfections in this.

The two motors on each side are wired in parallel to each port/starboard ESC output. I did try wiring them in series on each side so the 7.2-volts of the NiMH battery pack (as used in the Hood) could only put 3.6-volts across each motor at full throttle, but this didn't work at all well, with subsequent failure-induced research confirming this was indeed a bad idea.

Power

My original intention was to power the Hood with four alkaline AA batteries, as this has worked well on the PoW model for the last several years. This gave reasonable run time, and the batteries were easily changed at the ocean side (or (1½-inch deep) puddle side), with no worries about having things charged up when the weather surprises with sunshine on a windless day. To my great disappointment however (having fitted out the interior to accommodate such a power source), whenever the rudder microservo was used, the motors on one side or other would cut out, only to restart when the servo fell quiet again. Much experimentation and fiddling later (including soldering in 12 capacitors anywhere they might fit for RF interference suppression), I can only assume that the amount of current the four motors take from the 6-volt alkaline AA battery source sees the added rudder servo then demand more than the batteries can deliver, sufficiently lowering the deliverable voltage to the ESC (or receiver) and resulting in control loss. The PoW ticks along with no problems and is still four alkaline AA battery powered, with not a missed beat, but the Hood now has 7.2-volts from a NiMH 1600mAh pack.

As I mentioned earlier, the MFA motors are rated for 3- volts, but with the Spectrum R/C

transmitter I use the servo and throttle ranges are programmable, with full stick deflection power thus limited to what has experimentally proven sufficient for a scale speed/wake, plus a bit of safety margin to escape any irritable waterfowl HMS Hood might encounter when at sea! At such emergency rpm, I've measured about a 1.2- amp draw on the battery, at about 5-volts to the engines.

And control...

I have spent a lot of time over the years browsing for an R/C transmitter with two ratchet-able throttle sticks for fully separate port/starboard engine control to allow all the fun and challenge of manoeuvring these ships at low speeds in harbour (being pretty much the point of small model ships at this scale, for me at least).

Programmable servo mixing doesn't appeal (although it's probably preferable for faster boats where slightly asymmetrical power could be rather more embarrassing) and I was intrigued to find that the Spectrum transmitters (my DX6e, at least) have a 'Mode' switch on the back, that allows either left or right stick to act as a throttle on a ratchet forwards/backwards. In a fit of quarantine induced recklessness, I was delighted to discover that on removing the back of the transmitter,



"I found a link on the excellent HMS Hood Association website's 'Performance and Seakeeping' page to some Ship Handling notes published by the Admiralty in the late 1930s"

the 'mode' switch was connected to a large horizontal bar spanning between the two stick gimbals. This articulates with a small bar at each end, which when pulled inwards towards the centre of the transmitter pushes a ratchet down onto the stick base (while lifting the ratchet off the outwards moving other end on the other control stick). By removing this large bar and pulling the two ratchet bars together towards the middle with a couple of small zip ties, suddenly there it was: the Holy Grail of two fully independent throttles on ratchets! Quite straightforward; the only real "uh oh" moment I had due to a fine and short wire to the aerial pulling off the board as the back was removed. This was on a small but easily reconnected gold connector plug however, and with care would probably not need to be unplugged to get the mode selection rod out.

The ship herself was finished with some photoetch railing and ladders (leaving off the main deck edge rails that would almost certainly not survive even the first pondside trip). She was then finally trimmed out to an even keel afloat to her waterline in the plexiglass upturned lid of a previously broken display case I had made. Being transparent, this allowed accurate ballasting without having to lean into a bath full of water (and all that implies for the hairdo!).

To sea

I found a link on the excellent HMS Hood Association website's *Performance and Seakeeping* page to some 'Ship Handling' notes published by the Admiralty in the late 1930s.

The geared engines and separate throttles on the Mitronics controllers provide faultless low rpm control, and now, with the perfect little ½-inch bronze props, it's really quite surprising how closely the model seems to behave as described for the prototype. When handling at slow speed using the engines, the ship proves a lot of fun (if maybe not very thrilling for the uninitiated observer). These 'Handling Notes' are, however, also very well worth reading, even by those with no interest in conning a large warship (or small model thereof) to the South Mole in Gibraltar, with the last 'summary' paragraph providing a deep insight into how our times and society really have rather improved in the 90-odd years since they were published!

These 1:350 scale models (I have the Minicraft 1:350 *Titanic*, too, also motorised, but awaiting re-fitting) are very much for days on the mill pond, with any wind scaling up to the full-sized equivalent as the square root of the scale (just under 19) apparently. Thus a 2-knot wind affects the

model in the same way a 38-knot, Force 8, gale would have the original, making handling 'challenging'. This, combined with the freeboard of about 1cm at the forward quarterdeck, makes good sailing days outdoors something of a rarity, at least around here. Possibly the ideal environment for them would be indoors, on a pond made from a rim of 2-in x 1-in planks, some large plastic sheets and some duct tape, sat on the flat floor of a large garage or warehouse somewhere.

Steering/docking competitions with these ships would be a lot of fun. The lack of much rudder authority at low speeds, as with the full-sized ship, especially going astern, requires a lot of practice in order to successfully manoeuvre them on their props instead, pretty much as described in the handling notes.

All in all, I think this model has finally satisfied the wee boy kneeling on the piano stool, gazing up at the 1:1200 *Prince of Wales* – and the 58-year wait has simply made it all the more satisfying. Now all that is needed is a second Spectrum transmitter I can 'modify', and the *Prince of Wales* and the *Hood* can once again put to sea – 81 years after their last sortie together – even if it is only on a small muddy puddle somewhere just down the road. ●

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal,
providing you various content:
brand new books, trending movies,
fresh magazines, hot games,
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



AVXLIVE .ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>



Empress of Canada

Part 3

Roy Cheers continues the story of an ambitious project to recreate this elegant transatlantic liner in 1:160 scale

Having covered the completion of most of the exterior hull details last month, let's now move on to fitting the deck details...

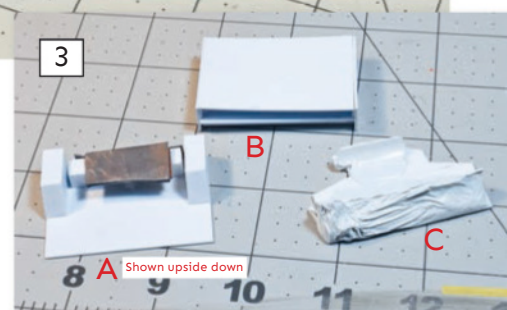
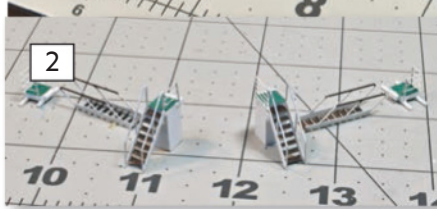
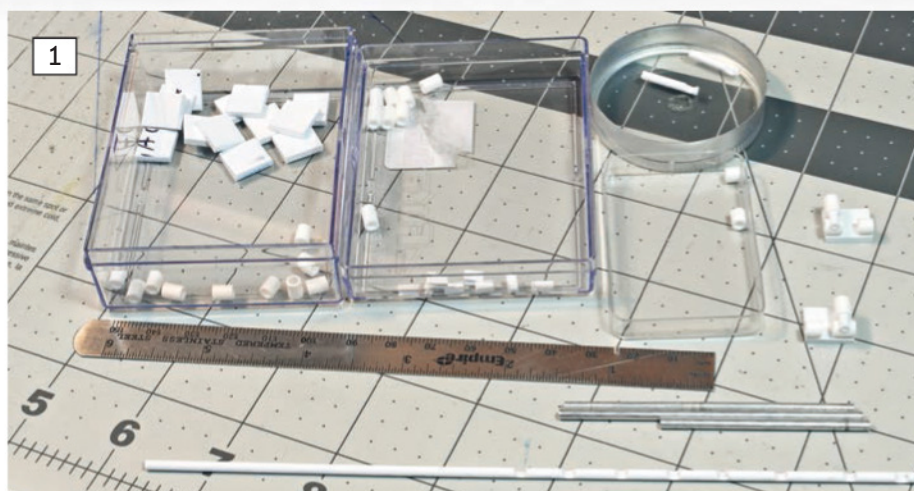
The groups of roller fairleads, arranged on platforms around the edge of the foc'sle, came courtesy of a bollard pack from RB Models. These have diameter of 1.5mm (a scale 9") and a mounting stub of 1mm diameter. I found the easiest way to hold these small fiddly pieces for painting was in some 1.2mm diameter holes in a piece of scrap styrene. A small blob of tacky glue was enough to secure the stubs firmly on the underside, while allowing them to be removed again easily afterwards.

The mooring bollards and lifeboat davits I ordered from the Bluejacket Shipcrafters' range, while the mooring winches I used were warping drums from the Billing range and filled to make a domed top. The anchor windlasses I made from styrene; being of the naval type, with a vertical shaft and 'the works' below deck, these were quite simple to model. The windlass control pedestals came, once again, from RB Models.

Features on the superstructure such as wooden doors and ventilation grilles were digitally designed using Photoshop, and then printed onto vinyl.

The cargo winches were constructed from styrene sheet, channel and tube and aluminium tube. The warp ends are loco safety valve castings from the NBrass Locos range. My winch 'production line' is shown in **Photo 1**.

Amongst the etched parts are the railings which are brass 1:150 scale 5-bar railings purchased many years ago from 4D Model Shop. The stubs at the bottom end of the stanchions make them very suitable for mounting in mating holes in a deck. The Empress had low height bulwarks at most deck edges, to which the bottom horizontal rails could be glued. CA glue was used to attach the railings



and the paint was scratched off both surfaces in the glued area.

The stairs (see **Photo 2**) I purchased from Gold Medal Models, while the ladders on the derrick posts came from the Scalelink range.

A three-part installation fixture was used to hold the large lifeboats in the correct position while gluing (see **Photo 3**). Piece A fitted on the deck between the railings, deckhouse and

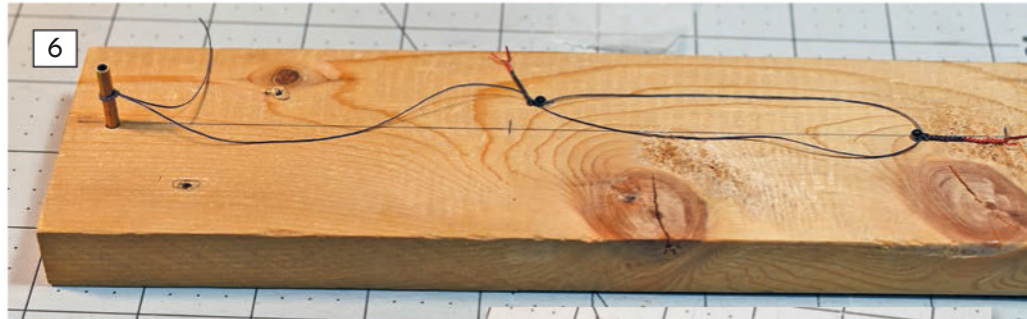
davits, Piece B on top of it, and Piece C, with the lifeboat, on top of that. Piece C had been made by wrapping a lifeboat in cling film and then pressing it into some paste-type epoxy. A simpler, single-piece gluing support was made for the two small, lighter, lifeboats (see **Photo 4**).



“This has become a common battery solution for me after disappointing experiences with preassembled packs”

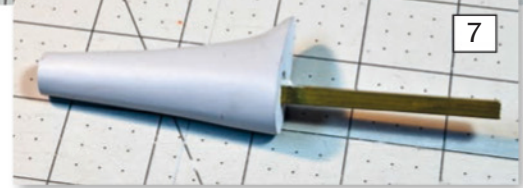
The derrick posts were either made from the wooden handles of cheap dollar store paint brushes or from styrene tubes. The rigging for lifting the cargo derricks on the real Empress used pulley blocks with three sheaves (rollers), meaning that six wires ran from the top of the derrick post to the derrick end. I settled for two wires to represent this. The pulley blocks were made from etched nickel silver and some copper wire (see **Photo 5**). For the rigging itself I used elastic thread, each individual piece having been measured and then assembled as in **Photo 6**; the loop at the left-hand end was hooked to the deck adjacent to a winch, the centre block glued into the top of the derrick post and the rightmost block into the end of the derrick.

The mainmast was built from a core of styrene tube and sheet and shaped from Milliput, with a 1/4-inch square brass tube glued in (see **Photo 7**). It was thus removable, and fitted into a piece of 5/32-inch tube in the deckhouse



what was described in that article was the addition of a top flange and a clear cover.

A top view of the lower hull internals is shown in **Photo 8**, forward half at the top. The board holding the electrics for the smoke unit is mounted vertically to the left of the unit.

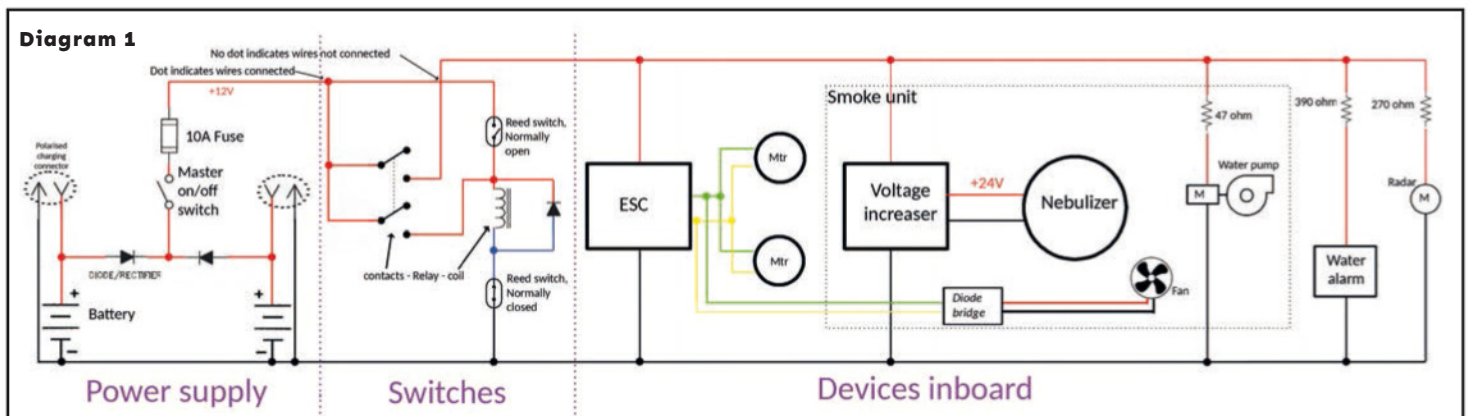
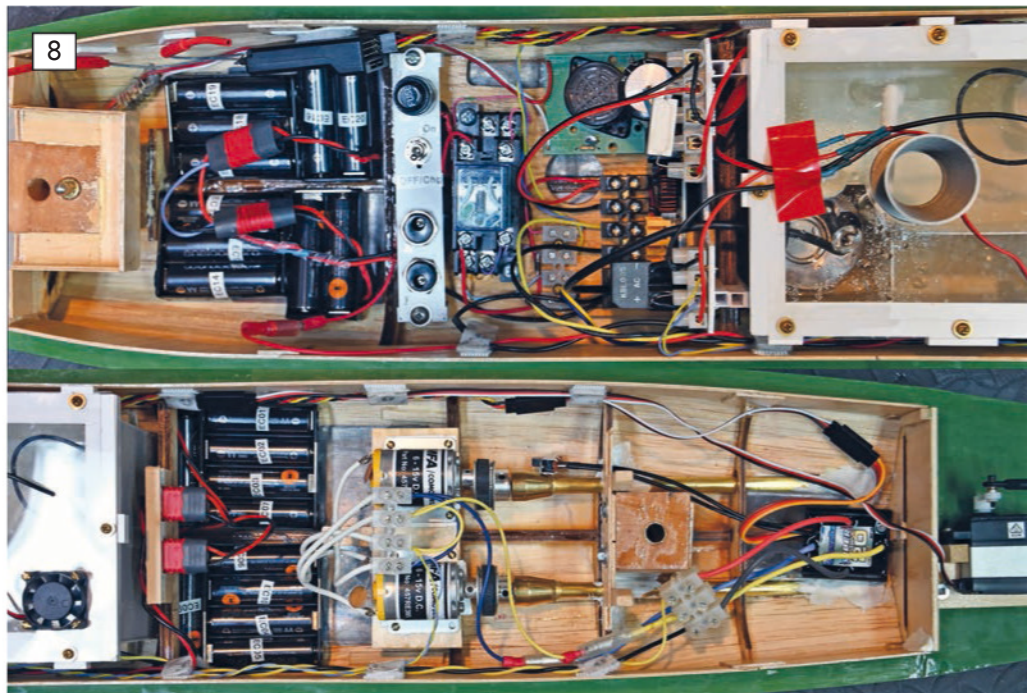


Electrical

My simple wiring circuit is shown in **Diagram 1**. 12V is supplied from packs of Eneloop Pro AA NiMH batteries for the smoke unit and the propellers. Normally, each pair of packs is charged in series through the polarised sockets. If necessary, individual packs or AA batteries can be removed for charging. This has become a common battery solution for me after disappointing experiences with preassembled packs.

For each sailing I wanted to turn on power with a master switch and bolt the hulls together at home. At the water, two reed switches are employed to turn the power on and off to onboard devices. 'Off' is on the port (red) side and 'on' on the (green) starboard. These operate a relay which controls the power to all devices.

The smoke unit was described in the August 2020 edition of MB. The only change here from



9



10



To the water

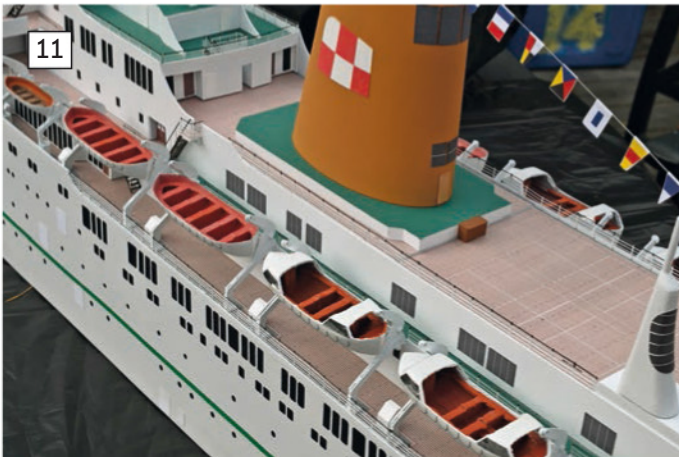
The very first on-water trial of the model occurred when the lower hull was tested for water tightness, as described earlier. The model had its first running test when the upper hull was simply a shell; first in my 'test dock' where it was ballasted down to the waterline, and then a run on a lake (see **Photo 9**).

Another test dock trial was done much later, once the model was almost complete. This immediately showed a lack of stability because

the model would not stay upright, although she wouldn't roll over (I didn't try pushing it).

The easiest solution was to lower the centre of gravity (CoG), which had to be done with changes in the lower hull, because the upper was fixed. I had originally planned to use two 6V SLA batteries, each weighing 800gms. Each one was replaced by the two packs of AA batteries. This reduced the total battery weight to 340gms. The packs were made by gluing together plastic battery holders to form

four flat packs of five cells, so low CoG. The battery holders were industrial quality, made of higher strength plastic and with stronger springs than what I call 'typical' hobby battery holders. This reduction in weight was made up by $\frac{1}{32}$ -inch-thick lead sheet laid on the hull bottom. At the same time, the wood sheets that were fitted to hold the SLA batteries were removed so the battery packs sit on the lead sheets on the hull bottom, further lowering their CoG.



“It’s easy to write an article like this and make it seem that everything went according to a ‘grand plan’. Trust me, I’m not that good! While unforeseen problems, and even mistakes, are inevitable, however, correcting them doesn’t always mean ‘scrap and start again’”

The next trial (see **Photo 10**) showed the stability to be improved enough that the model floated upright. To assess the results of these actions in the test dock, the model was pushed

over until the bottom edge of the green boot-topping was visible. I concluded then that the model was sufficiently stable. Happily, sailing on a day with some gusts of wind confirmed this.

Oops – that’s not quite correct!

Slowly, all the parts described came together (see Photos **11, 12, 13 & 14**) most rewardingly. That said, it’s easy to write an article like this and make it seem that everything went according to a ‘grand plan’. Trust me, I’m not that good! So, next month I will be addressing some of the modifications that needed to be made before completion of the build. ●



Two old favourites

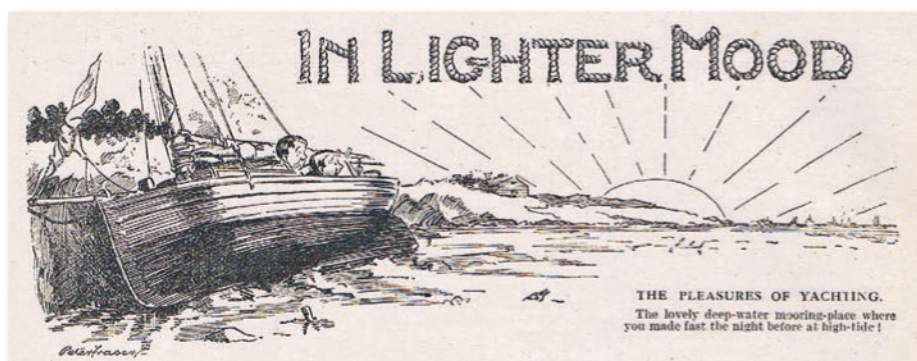
John Parker turns back the pages of time...

ABOVE: Boy's Own Paper through the years; left to right, 1889 - 1923 - 1941 - 1958 - 1963 - 1967 (the final issue).
BELOW: From the humour page, 1922.

For most of the 20th century the Boy's Own Paper and Meccano Magazine provided a welcome monthly dose of reading material for thousands of young people in the United Kingdom and throughout the countries of the Commonwealth. Both had long publication runs and both survived two world wars, though not unscathed, for paper shortages cut down their size in the 1940s and neither managed to regain their former glory. They foundered in the rapidly changing world of the 1960s and 1970s.

Boy's Own Paper

Intended to counter the rising popularity of comics and other publications considered a bad influence, the Boy's Own Paper, or BOP as it became known, opened its innings in 1879. It was published by the Religious Tract Society, initially as a weekly but later (from 1914) changing to a monthly format. Confusingly, the early weekly editions were also collated and issued as monthly compilations of four weekly issues. The emphasis was very much on fiction stories, most often tales of daring-do from the far-flung regions of the British Empire, presented as dense slabs of text relieved only by a few fine linework illustrations. Some famous writers helped gain recognition through publication of their early work in the



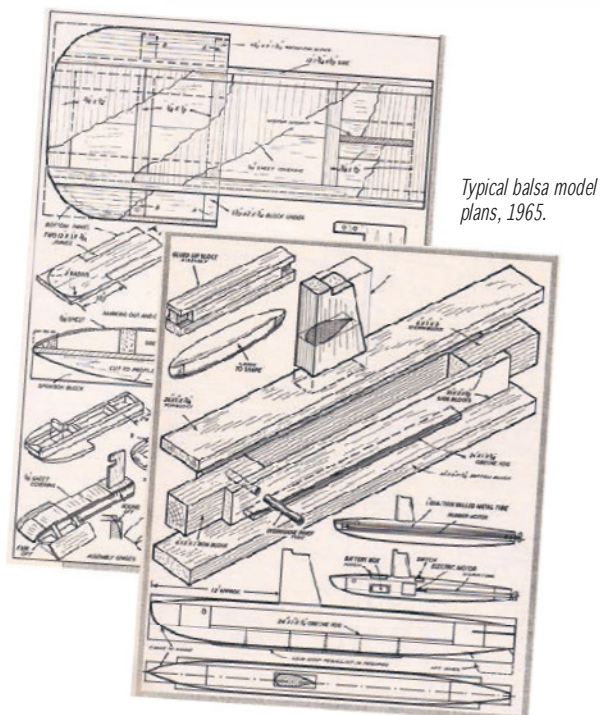
"Intended to counter the rising popularity of comics and other publications considered a bad influence, the Boy's Own Paper, or BOP as it became known, opened its innings in 1879"

magazine; these included Jules Verne, W.E. Johns, Arthur Conan-Doyle and Elleston Trevor.

As time went on the coverage widened to include hobbies, sport, humour and general interest articles. The March 16, 1889, edition, for example, contains an early report on model yachting, noting that "steady progress, more than fervid excitement, marked the year 1889 in model yachting history". Amongst

the regatta results we learn that "Forty-one yachts came to the starting line of the Mayor's Cup race at Bradford, Yorkshire, the winner being Sea Shell, at 24-inch by 7-inch, quite a pigmy by the side of most of the competitors and owing her victory to a judiciously small spread of canvas".

The magazine really hit its stride in the 1920s, with each monthly issue now containing around 70-80 pages, with another six or eight of advertising, a commissioned colour artwork for the cover and an inserted illustration that was suitable for framing. August 1923's issue includes instructions for making a model yacht but there was no full-size plan, only small rather vague sketches. If you wanted something more ambitious, you had to wait for the July 1924 issue, which told you how to build your own radio-controlled model power boat!



Typical balsa model plans, 1965.

RIGHT: Allied Boy's Own books on modelmaking and hobbies.

BELOW: Pull-out hovercraft plan, 1963.



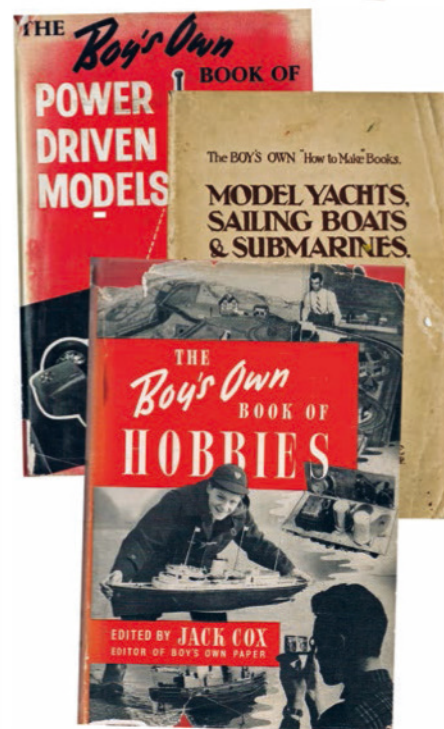
The BOP badge with its Latin motto, which translates as "That which interests boys form the contents of our book".

During World War II, the Boy's Own Paper was allowed to continue publication because it was considered good for morale, though successive paper restrictions cut down its size, page content and the number of copies that could be printed. Readers were encouraged to donate unwanted copies to reading groups or the crews of Royal Navy ships to help alleviate the situation, and it was estimated that each copy of the BOP was read by 30 or more readers until it was falling apart. This well-meaning practice died hard and was a difficult hurdle for the magazine's post-war editor, Jack Cox, to overcome when the push was on to increase sales.

The BOP continued in its small size format throughout the 1950s. As conditions eased, however, the number of pages was increased, and second-colour accents livened them up and provided a more contemporary look. Model boat coverage continued sporadically, with a few featured build articles and a Model Boats Supplement included with the May 1962 issue.



"Model boat coverage continued sporadically, with a few featured build articles and a Model Boat Supplement included with the May 1962 issue. A change of publisher in the 1960s brought a return to a larger format and the ability to include model plans at a reasonable size, most often penned by R.H. Warring, with radio and electronics features by Gilbert Davey"



A change of publisher in the 1960s brought a return to a larger format and the ability to include model plans at a reasonable size, most often penned by R.H. Warring, with radio and electronics features by Gilbert Davey.

Fiction continued to be an integral part of the mix, but the magazine was beginning to show a lack of direction. Articles on fashion and pop groups sat uneasily alongside traditional ones on stamp collecting and fishing. For anyone with a strong interest in a particular subject there was by now an explosion of speciality magazines that catered exclusively for that subject, while the popularity of short story and serialised fiction was falling in the era of television. The publishers abruptly pulled the plug on the BOP with the February 1967 issue, though the BOP Annual continued for a while. It wasn't a bad innings – 88 years.



“Originally supplied free of charge bi-monthly in 1916 as a marketing tool to promote the products of Meccano Ltd, circulation soared to 70,000 in the 1930s, showing that each 100-page issue of the larger format magazine, now costing sixpence, held much of interest even for non-Meccano enthusiasts”

Meccano Magazine

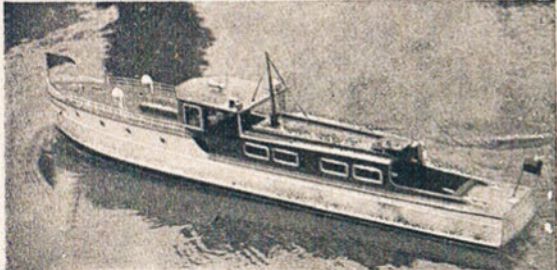
Originally supplied free of charge bi-monthly in 1916 as a marketing tool to promote the products of Meccano Limited, the Meccano Magazine soon grew into an enlarged general hobby magazine, which from 1922 appeared monthly. Alongside articles on the latest

Meccano products, such as the first Hornby trains, the magazine detailed the building of some fine Meccano models and ingenious mechanisms, kept the reader up to date with engineering developments in the real world and reported on the activities of Meccano affiliated clubs worldwide. The circulation soared to 70,000 in the 1930s, showing that each 100-page issue of the larger format magazine, now costing sixpence, held much of interest even for non-Meccano enthusiasts.

Further expansion of the Meccano empire came with the introduction of Dinky Toys in 1934 and Hornby Dublo trains in 1938. Along with the Aeroplane Constructor and Motor Car Constructor sets, Elektron electrical outfits, Kemex chemistry sets, Hornby speedboats and Dinky Builder outfits, as well as the traditional Meccano sets, they helped generate plenty of content for the magazine, but the military models and articles on the expansion of the RAF were a forewarning of

the war that was to come. When it did, there was little change at first, but in the following years paper restrictions decimated the magazine and it emerged from the war a shadow of its former self, cut down to ‘pocket size’ and with just a few pages of poor-quality newsprint so thin that it allowed the reverse page to shine through.

Rebuilding was slow, with many of the pre-war associations lost for good, but by the 1950s the magazine was starting to look respectable again, though it remained in its small 203 x 140 mm format until 1961 when it took on a larger 240 x 190 mm size under a new publisher, IPC. The change disguised the fact that Meccano had decided to divest itself of the magazine to cut costs while still retaining responsibility for the Meccano content. A further change of publisher to Thomas Skinner in 1964 brought a new look larger format with the March 1964 issue, and the tag line “The practical boy’s hobby magazine”.



Cabin Cruiser “ADVENTURE,” in action. Price £13-15-0

THE MODEL and THE MOTOR

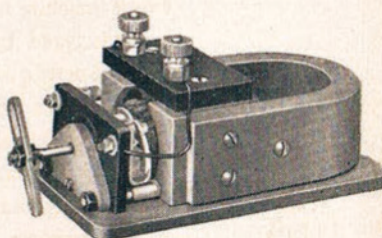
You can choose a Yacht, a Motor Boat, a Scale Model Ship, finished, or the parts for building these from the Bassett-Lowke Ship Model Catalogue. Also drawings, fittings, kits of parts for working and non-working models, ancient and modern. In fact EVERYTHING for the Model Shipbuilder.

ASK FOR S.17. Model Ship Catalogue. 6d. post free.

Other Catalogues.
GR.17. Gauge “0” Railways. 3d. TT.17. Gauge “00” Railways. 2d.
AB.17. Steam Locomotives, Stationary Engines and Everything for the Model Constructor. 8d. post free.

BASSETT-LOWKE LTD., NORTHAMPTON

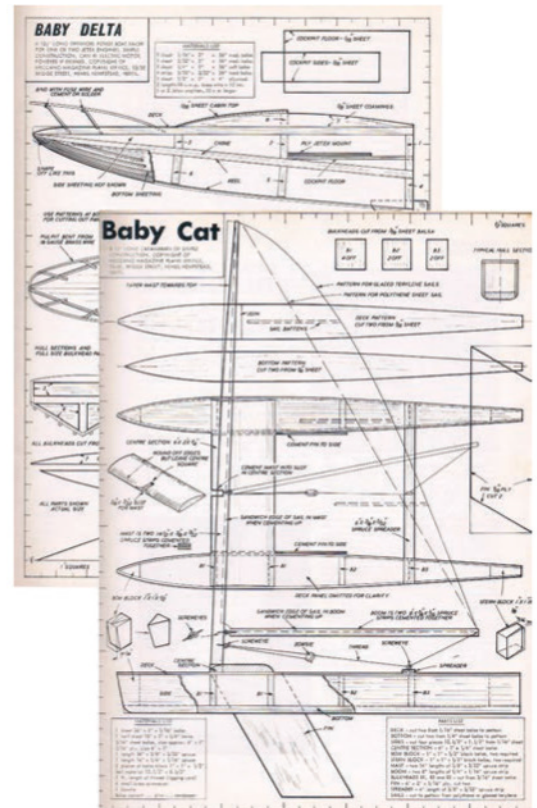
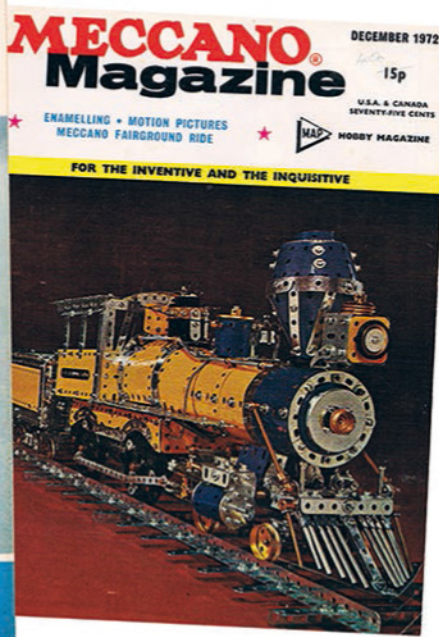
LONDON: 112, High Holborn, W.C.1 MANCHESTER: 28, Corporation St.



The Marine Motor as illustrated is now available in two sizes.
No. 1, 3½ x 2½. Weight 15 oz. 21/6.
No. 2, 4½ x 2½. Weight 2 lbs. 3 oz. 46/—

A Bassett-Lowke advertisement from 1940.

Meccano Magazine through the years; left to right, 1932 - 1937 - 1948 (2 issues) - 1961 - 1965 - 1972 (the final MAP issue).



Typical balsa model plans, 1968.



An advertisement for Hornby speedboats, 1961.

The revamped magazine may have looked modern, but it was criticised for its sparse and wasteful layout - and sacrilegious lower-case spelling of Meccano on the cover! It did bring the opportunity to give coverage to the wider modelling world, with Ray Malmstrom and R.H. Warring called upon to provide regular plans. The latter's Project 66, for example, was a popular scheme for a deep-vee hull based on the Brave Moppie off-shore powerboat, which was presented across the January-April 1966 issues. After a number of years, though, the publishers found they weren't able to make the magazine pay, and the announcement came that the July 1967 issue would be the last.

Model Aeronautical Press, later Model and Allied Publishing, then publishers of

“Project 66 was a popular scheme for a deep-vee hull based on the Brave Moppie off-shore powerboat, which was presented across the January-April 1966 issues”

Model Boats, Aeromodeller and other hobby magazines, stepped in at this point and took on the re-launching of the magazine in January 1968 in their standard format, billing it as “The new young modeller’s magazine”. It was a genuine attempt to recapture some of the magic of the old Meccano Magazine and combine this with general interest and modelling articles, but after five years it too

failed to find a sufficient readership and the final MAP issue came in December 1972. A series of specialist, subscription-only quarterly titles followed, but had died out by 1981.

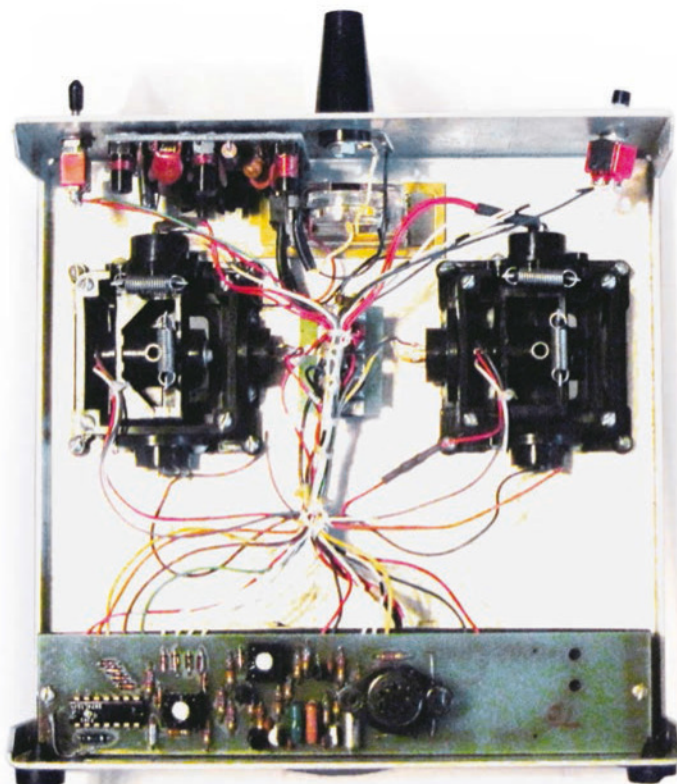
Looking back through some old Meccano Magazines, I am struck by the advertisements, which are full of manufacturers’ names and products long since forgotten or dimly remembered with fondness. They are a goldmine of information for the model historian. And here’s a surprising fact: the electric motor pictured in Bassett-Lowke’s 1940 advertisement is currently in production over 80 years later, in Melbourne, Australia, as the motive power for a range of bespoke model locomotives! ●



Brave Moppie model built from the 1966 MM plan by D. Brouet.



The 1975 Pro-Line 'Challenger' transmitter seen inside and out.



The 5-Channel Challenger

Dave Wiggins reflects back on this 1975 'Sport' radio from Pro-Line Electronics

Pro-Line Electronics of Phoenix, Arizona very much styled itself as a quality leader in the field of 'professional' R/C systems, and to an extent this was so, in that the firm's 'Competition Series' line of 6- and 7-channel radios were adopted and employed by most of the leading US aerobatic and pylon flyers of the 1970s. American R/C pilots like Jim Whitley filled the American International teams of the period, and for a few years Pro-Line Inc could rightly claim to be 'The Winner's Choice', something that every major manufacturer sought to achieve.

The initial line of Pro-Line sets was very small, including only Pro-Line's hugely expensive (\$450) 'Competition-6' (later expanded to 7) set and a very nice quality

"When radios sporting these sticks occasionally pop up for sale on the second-hand market today, you'll find, however battered they may be, they'll be quickly snapped up by enthusiasts eager to obtain the highly-prized control column"

pair of 3-channel/single stick radios aimed at top US glider pilots. A few of these pricey 3-channel radios were bought and employed by better off boaters, but as single stick units they were really unsuited to the task and most were fitted into gliders, whether for thermal or slope soaring. The 5-channel 'Challenger', however, was just as suited to marine as to aero use.

Stick notes

The initial acceptance of the Pro-Line 'Competition Series' radio line was hugely influenced by the firm's adoption of a very high quality, 'all metal', dual or triple (buyer's choice) axis control column. This hand-assembled 'stick' was of such quality and 'feel' that it was bought-in by other US companies, such as Kraft Systems, for use in their own top-flight transmitters (for example, the Kraft KP7Z). In fact, anyone out in the States building high spec/maximum reliability radios during this period inevitably used Pro-Line sticks for their best models.

Even back in the 1970s, however, these essentially handmade items were never easy to get hold of, due to Pro-Line Electronics Inc retaining first call on all production. So, when radios sporting these sticks occasionally pop up for sale on the second-hand market today, you'll find, however battered they may be, they'll be quickly snapped up by enthusiasts eager to obtain the highly-prized control column.

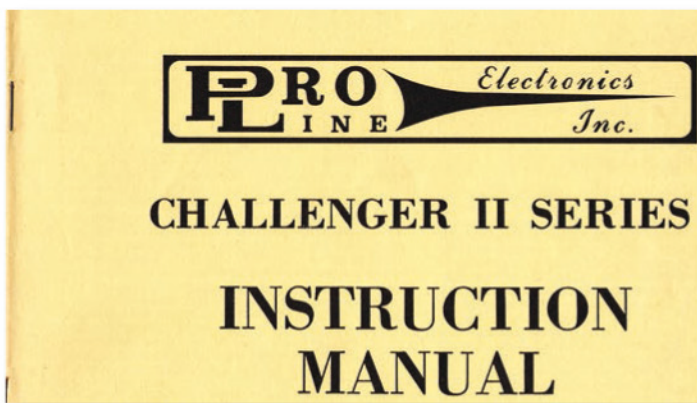
The Challenger series, and the later Cadet

By the mid-70s it had become apparent that there was a sizeable market for somewhat less expensive but still good quality and high reliability R/C units. A trail for such gear was blazed, as was so often the case back then, by Phil Kraft of Kraft Systems Inc in Vista, California with his first 'Sport Series' 5-channel radio offered at \$199 all up. This radio was a massive worldwide sales success for Kraft, and I suppose that every one of the brand's competitors must have looked at the idea of bringing to the market a less expensive set, Pro-Line being no exception.

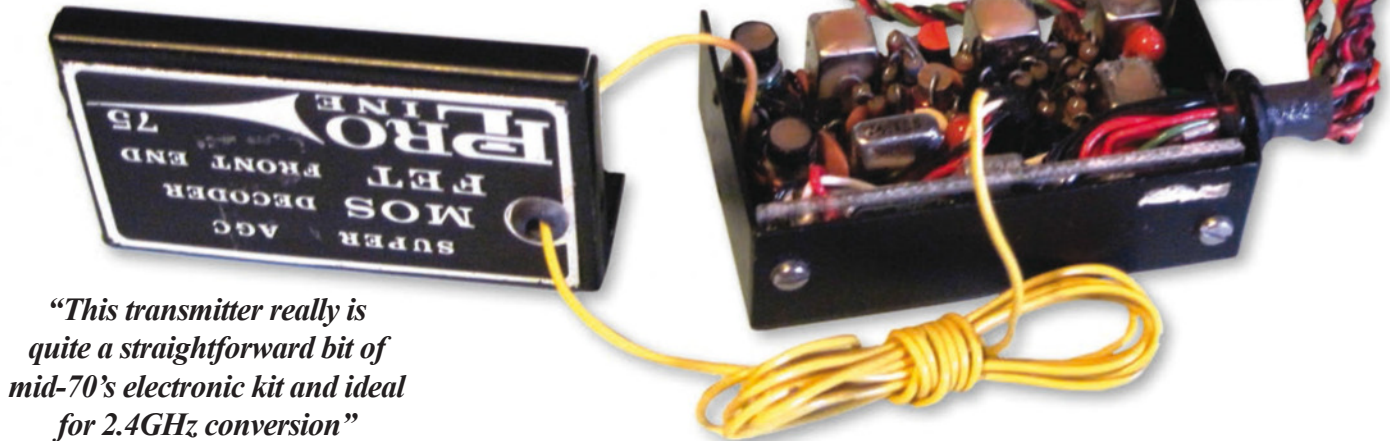
The 5-channel 'Challenger' was Pro-Line's first attempt at a sport level/mass-market radio, and this sold well enough to encourage the firm to improve it still further and to modernise the electronics in line with mid-70's advances in technology, viz-a-viz the integrated circuit or 'chip'. It's this second Challenger set that I am, therefore, showcasing here.



A Pro-Line Electronics transmitter RF deck on 27AM.



ABOVE: The Challenger's user manual. RIGHT: A standard Pro-Line receiver of the period.



"This transmitter really is quite a straightforward bit of mid-70's electronic kit and ideal for 2.4GHz conversion"

This transmitter really is quite a straightforward bit of mid-70's electronic kit and ideal for 2.4GHz conversion. The receiver, of course, if you have one, is a write-off now, as are any servos; the latter were supplied, as sets of mechanics, to Pro-Line by Kraft, but moulded in cream to match the Pro-Line livery. Pro-Line then fitted its own amplifiers, designed, like all Pro-Line electronics, by the firm's lead designer Jim Fosgate, and these (like the receiver decoder) had the inconvenient peculiarity of being negative pulse.

In past conversions I have reused the (very nice) original metal receiver casings to house a 2.4GHz receiver. Neatly done, this can look very professional. All the connectors used by Pro-Line were manufactured by Deans of the USA, but if re-equipping with 2.4 receivers one just uses modern flying lead cables made by 'JR' so that modern (positive pulse) servos and speed controllers are all then possible once the transmitter encoder pulse has been reset to a precise 1.5mS neutral.

As built, all Pro-Line transmitters featured a simple and reliable plug-in RF deck available on any (then) legal radio band, thus negating the need to return a set to the factory just for a band change. You merely ordered a new board and receiver pair matched to one another.

In the UK, only the old 27MHz combo is still legal and examples are now few and far between due to the fact such a small number were made back then (one imagines only for export). As it happens, I do own one 27AM Pro-Line RF deck and this could be used with, say, any relatively modern 4- or 5-channel/27AM receiver if one is to hand. That said, 2.4 is probably the way to go nowadays.

It is possible to find this same radio rebadged as the Pro-Line 'Cadet' – this being the very last Pro-Line radio to be built



Pro-Line's 1976 brochure.



A rare Pro-Line jacket badge.

before the company ceased trading when the Japanese began to take over the R/C market. Save for slightly different sticks, the radio shown and the Cadet are virtually identical.

Speaking of sticks (the Tx illustrated has D&R plastic mechanisms), in these less expensive radios one needs to be aware that the control potentiometers are simply 'cermet' (ceramic) servo tracks housed in the plastic control column, a bit like those manufactured for many years by E/K Logitrol. These are tiny resistors indeed, and it would be wise to remove and replace, or at least to clean and lubricate the old ones before reuse after 40+ years in storage. As one will inevitably have to replace the old batteries and some rotten power wiring anyway, it's no great extra effort to renovate the four control pots.

A rather sad ending

Demand for 'Challenger' & 'Cadet' radios (even at \$350!) exceeded the company's expectations and a rather odd (not to say very sad), series of unexpected (but maybe self-inflicted or badly planned) events bought the company down. I'm told, by tech friends Stateside, this was down to the firm simply failing to realise how popular a 'sport' P/L set would prove and consequently then being unable to meet demand. To compound things, once flight damaged outfits began to return for repairs, they just didn't have enough technical staff to deal with the

Another Winner is Born!

For That Winning Touch

• THE CHALLENGER •

FEATURING

- Five channels, with retract gear switch for fifth channel
- Trainer system compatible with Competition Six systems
- Charger built into transmitter
- Dual connector blocks used at receiver (Not compatible with Competition Six Systems)

Transmitter features:

- High precision D & R stick assemblies
- New integrated circuit encoder
- High-power output
- Training system (standard)

\$379⁹⁵

See Your Dealer

Receiver features:

- Four I.F. stages
- F.E.T. front end
- Dual A.G.C.
- Sensitivity 1.0 microvolts
- Strong aluminum case

10632 No. 21st Ave., Suite 10
Phoenix, Arizona 85029 (602) 944-4626

workload. One US friend, with huge experience in R/C service, told me that while all the firm's customers were still top-line/semi-pro model pilots (as they were at first) there was no problem at all, as these guys mostly owned multiple radios. Once less able 'hobby level' customers began to buy Pro-Line gear en masse, however, the repair burden of crash damaged equipment overwhelmed the factory's service department and its hard-earned reputation for top customer service quickly plummeted.

An ad for Pro-Line's first version of the 'Challenger'.

Reed all about it!

Next time around, I will be travelling a decade further back, to the British R/C scene of the mid to late '60s, in order to highlight one of our own country's principal manufacturers of the 'reed' era, so join me again for another trip down memory lane in the October issue! ●

IN BETWEEN ISSUES...



While awaiting your next copy of Model Boats magazine, why not visit our website at www.modelboats.co.uk or our Facebook page at www.facebook.com/modelboatsmag, where you'll find additional content, be able to interact with both the MB team and fellow enthusiasts in the model boating community and be given a sneak peek at what you can look forward to in the next edition.

Steam Drifter / 1920s Puffer

Steam Drifter

Scale 1:72
L. 380 mm



Steam Drifter a representation of the 1920s drifter which went up and down the East coast.

Kit contains:

Two piece thermo formed hull, boiler casing and ship's boat. Printed plastic parts for the deck, wheelhouse

Etched brass and metal fittings, anchor windlass, prop and shaft, motor and rubber coupling

Full size drawing & instruction book



1920s Coastal Puffer.

1920s Puffer (78ft)

Scale 1:72
Length 325mm
Beam 80mm



Kit contains:

Two piece thermo formed hull, printed plastic parts for the deck, wheelhouse

Etched brass and metal fittings, anchor windlass, prop and shaft, motor and rubber coupling

Main plan & instruction book

MOUNTFLEET MODELS



Adam Slater • Rock House • Bankwood Road • Womersley • Doncaster • DN6 9AX

www.mountfleetmodels.co.uk

Tel: 01977 620386 • E-Mail: sales@mountfleetmodels.co.uk

Buy on-line or
phone/post
your order



A softwood frame provides a good foundation for a box shaped locker and is easy to cut and correct in place. Blu Tac holds the frame while glue sets, and all the vertical and horizontal items can be checked for accuracy.



Richard Simpson continues to document his build of the *Wide-A-Wake*, a model designed to test out some very innovative new equipment...

Having got the deck and its fittings mostly in place and established the amount of remaining space, it was time to get stuck into some woodwork. The electronics all needed hiding in some lockers, so these required building into the hull between a pair of frames, while at the same time being made both accessible and removable. I also decided to prolong battery life by fitting a separate battery

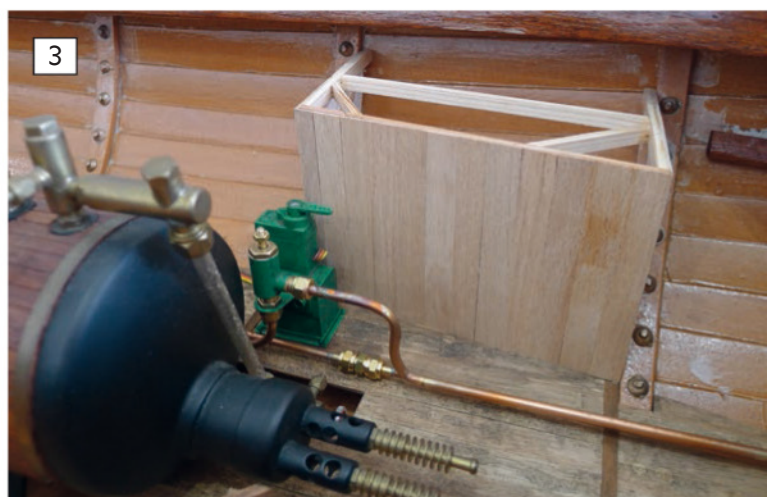
in each locker, as I knew the high torque servos were going to need a fair amount of power and I didn't want current drain from them affecting the sensitive electronics of the Automatic Boiler Control unit. So, when constructing my lockers, I'd need to allow enough space to fit a battery pack in each of them. A steering mechanism also required making, along with the final elements of deck fittings and internal detailing.

Lockers

Both lockers were made in exactly the same way – the idea being to maximise their interior space without them taking up too much room on the deck. The starting point was to build a softwood frame, with the lower edge sat on the deck and the inboard face held vertically by the framework. The frame was left a millimetre short of the distance between the hull ribs to allow for the cladding. All the parts were then temporarily held in place with Blu Tac to ensure perfect alignment while the glue set (see **Photo 1**). Once the glue for the frame had set and stiffeners had been added across the corners to brace it, the frame could then be lifted out of the hull to progress. The sides and the top were all clad with the same doll's house floor planking that had been used for the main deck, with the rear edge cut carefully to fit into the curve of the hull (see **Photo 2**). Once all the cladding was glued on (see **Photo 3**), the external surfaces were enhanced with further softwood framing to create a fairly typical locker look. To ensure a good location while maintaining easy removal, the lower edge of the inboard external frame was glued to the deck and not the locker; the locker therefore sits against this piece of frame, which matches in perfectly and hides the fact that it's not



2



3

ABOVE LEFT: Once the glue has set on the frame it's strong enough to be removed and worked on as a much more convenient separate item. Here you can see how the sides, which have been cut from a paper template taken from the hull, have been clad with more planking. ABOVE RIGHT: The inboard face has also been clad in this planking to create a very neat locker that fits the hull perfectly and looks as if it is built in.



LEFT: The outside framework is purely decorative, but the lower frame piece of the inboard face is actually glued to the deck not the locker, so it acts as a secure locating part.

actually a part of the locker. The internals of both lockers were arranged to ensure clearance by mounting a battery in the inside surface of the lid and, similarly, mounting on/off switches on the relatively hidden forward face of the locker. Cable entry points were cut into the lower edges to permit all cables to be neatly routed into the boxes while still allowing them to be removed without disturbing anything. The only connection to be broken would be the battery lead, which I connected to an extension cable to enable the locker unit to be completely removable for charging.

The top faces of the lockers were enhanced with some long white metal hinges and clasps from a doll's house supplier, held

in place by some round headed brass nails (see **Photo 4**). Both were tested for a final fit (see **Photo 5**), and the whole unit was then painted with a weathering wash and protected with a matt polyurethane varnish (see **Photo 6**).

Steering mechanism

With the arrangement in this model's cockpit area being closed in, I decided not to mount the steering servo internally but to put it in a housing on the deck. This had the advantage of easy access for the future, as well as enabling the linkages to be above the bulwarks, so hull penetrations were not going

to be required. The disadvantage would be having to make sure everything looks credible and realistic, but I figured that was a small price to pay.

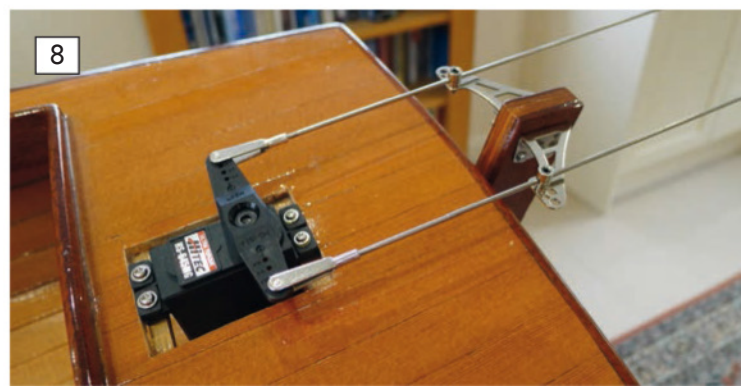
Being such a large model, with a fairly hefty rudder, I went for the same hi-torque servo that I used for the engine controls, so my first job was to mark out the linkages and, therefore, the position of the servo. A piece of paper was laid across the aft deck and used to draw on the positions of the arc of operation of the horns and the movement of the linkages (see **Photo 7**). I always think that two linkages look much more balanced than a single one, so stainless-steel horns were sourced from a model aircraft supplier, as were 2mm diameter threaded stainless steel control rods. The same swivel pins as used on the engine control servo horns were also used to connect to the steering horns, and stainless clevises were used at the steering servo horns to ensure easy adjustment and perfect alignment.

To mount the servo, after the location had been determined on the paper, a hole was cut into the sheeting of the deck. Two transverse beams were then glued to the underside of the hole to provide solid mounting points for the servo, which was screwed in place (see **Photo 8**). After proving that the linkages and horns were all set up correctly, these bits and pieces were removed again and, along with a number of deck fittings, were all set up for spray painting. A couple of coats of primer



ABOVE LEFT: Both lockers in place in the hull. These neatly sit between the frames but are easily removable, while at the same time provide a reasonable volume of interior space in which to hide the electronics. Worth noting is the water control valve on the port side, the gas regulating valve on the starboard side and the gas tank frame on the starboard side. ABOVE RIGHT: To help blend the lockers in with the internal fittings, they were given the same colour wash as was used on the main deck planks. To protect and seal them, two coats of matt polyurethane varnish was then added.

BELOW LEFT: Using a paper template makes it easy to see just where the linkages are going to end up and will give you a good idea of the limits of movement. It's a lot easier to play around at this stage than it is when cutting up bits of wood and metal. BELOW RIGHT: The Hi-Torque servo in place in the hole in the deck and all temporarily connected up with the two operating linkages. Good movement was achieved on the rudder with this set up, which is going to be needed with such a long model.





LEFT: The deck bits and pieces and the rudder linkages have all been painted with primer and then an ivory enamel to contrast with the green engineering internals and the red hull exterior.

one, which was to form the base of the hatch coaming. When it was removed, as this frame was required to fit the deck perfectly, a sheet of abrasive paper was taped down to the deck and the forward and aft transverse members were gently rubbed onto the rough surface to generate the same shape as the deck on the lower faces of these pieces (see **Photo 11**). This enabled the frame to precisely fit the camber of the deck but with a flat top (see **Photo 12**). The sides were built up from softwood strip, and included gaps for the servo rods to emerge, before being clad with a thin mahogany sheeting, which was trimmed at the base to match the curve of the cross beams and also trimmed at the servo rod gaps (see **Photo 13**).

This piece was then varnished with a gloss varnish and glued to the original frame on the deck to create the coaming. The rods were fitted and tested for clearance all around, and then the flat cover was made simply from a frame around the coaming topped with some more planking. Two coats of gloss varnish finished the part, and magnets were fitted to the inside edges of the lid and the coaming to ensure that the cover remains in place. The steering linkages were then all fitted to complete the job (see **Photo 14**).

Final assembly

At this point I thought it was about time all the big bits were assembled in the model to see how everything looked. Once I'd put the

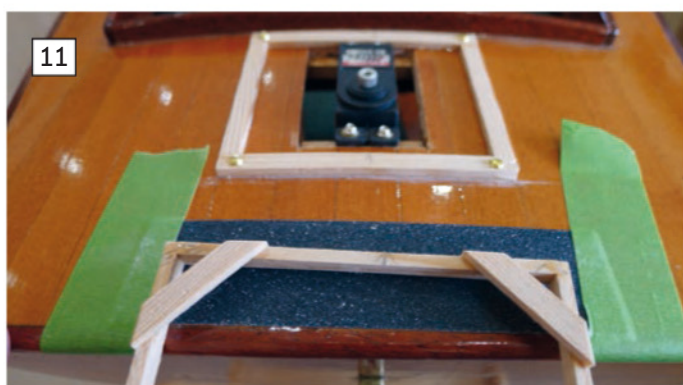
"I opted for a flat-topped hatch because, of all the deeply thought out and highly complex reasons behind this choice, the bottom line was that it would be a lot easier to make!"



The first stage of the hatch was to make a simple locating frame, screwed to the deck to force the wood to follow the camber.

and a topcoat of ivory enamel completed the items ready to fit (see **Photo 9**).

The next job was to produce a housing around the servo. This could either have been with a curved top to match the deck camber or a flat top. I opted for a flat-topped hatch because, of all the deeply thought out and highly complex reasons behind this choice, the bottom line was it would be a lot easier to make! The first job was making up a frame around the opening to use as a means of location; this was simply soft wood glued and screwed to the deck to force it to conform to the camber (see **Photo 10**). Next, another frame was made to fit snugly around the first

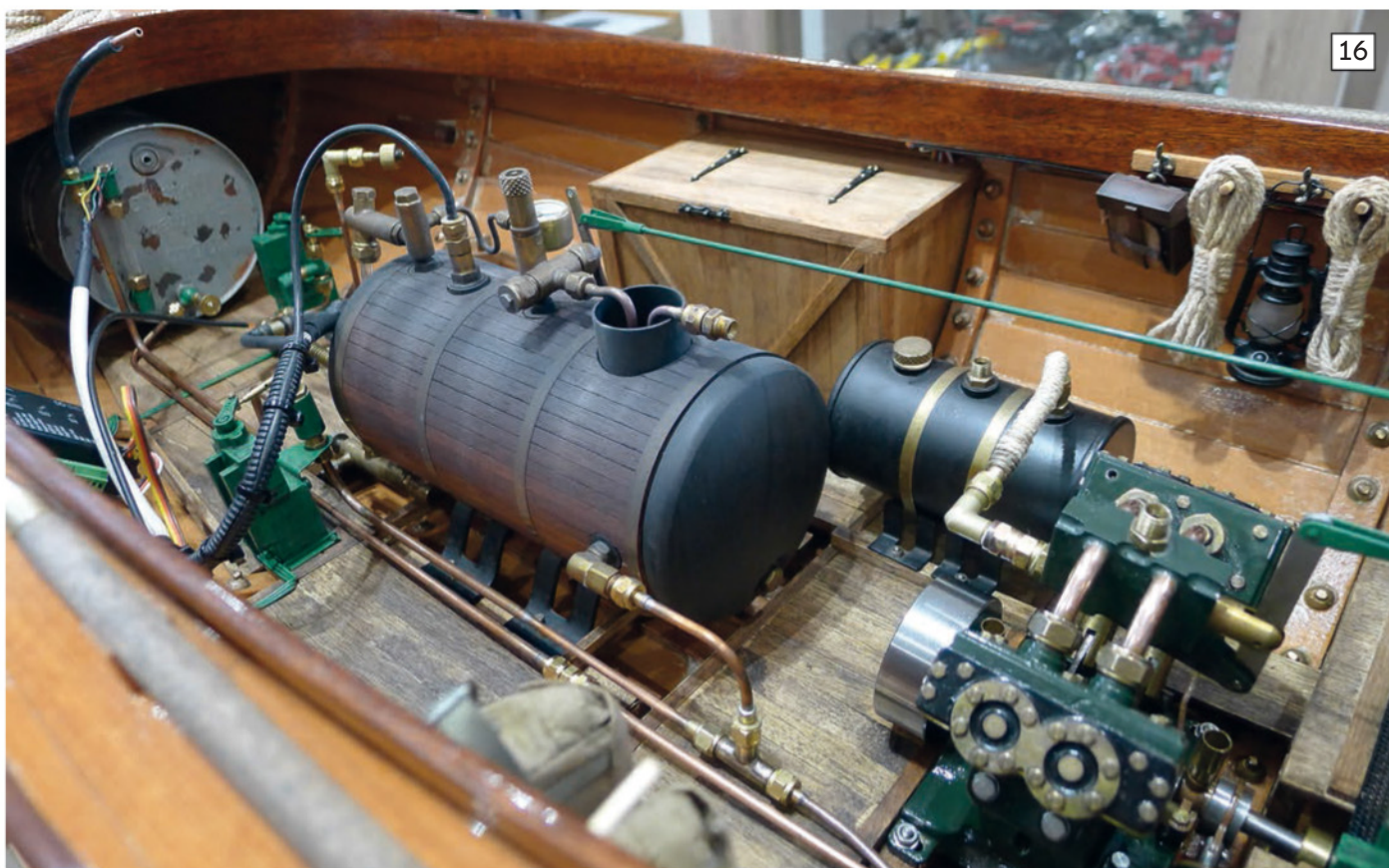


ABOVE LEFT: Around that another frame was made to perfectly fit the inner frame, which could then be removed to have the transverse edges sanded down to fit the camber. The rise of the camber was only around 15mm, which doesn't sound much but which would give a horrible gap at the base of the coaming if not addressed. ABOVE RIGHT: The effort was worth it, as the final frame fit the camber of the deck perfectly, without a gap at any point. BELOW LEFT: When the frame was then built up to full height, with cuts outs included for the servo rods and the outsides clad with mahogany veneer cut to match the shape of the base, it all came together as a nice neatly fitting structure. BELOW RIGHT: The outside frame was varnished and glued down, and a cover made by simply constructing another frame around the top edge, which was then covered with some more deck planking. Painted with a gloss varnish and with all the painted-up linkages fitted, it looks suitably realistic and neat.





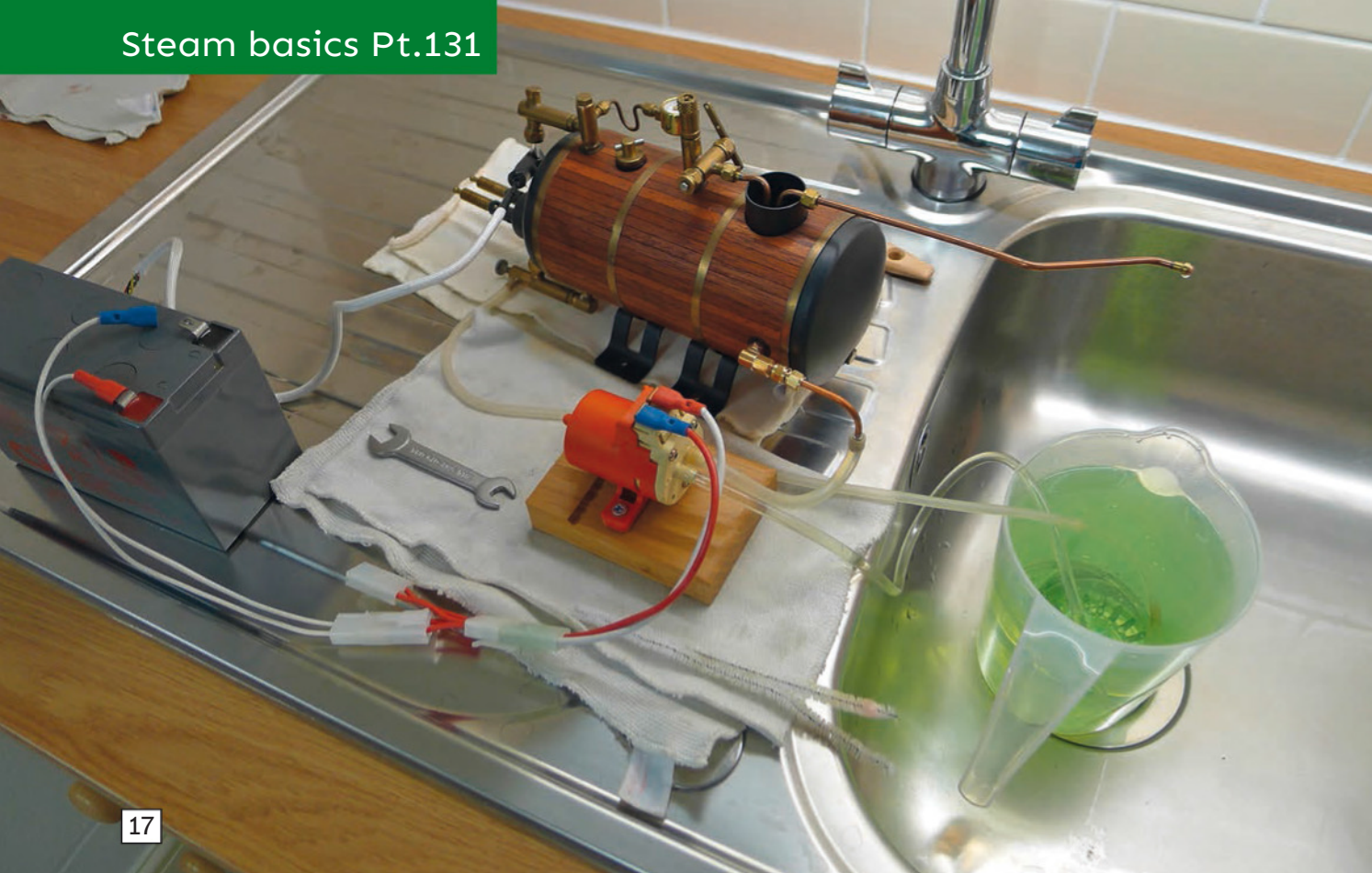
ABOVE: Although there are probably not very many rare and collectable boilers that end up going through the 'weathering' process', on this model it really adds to the realism and helps to bring together all the separate items inside the hull. BELOW: A suitably weathered boiler and other bits of machinery, along with a worn looking deck and well used woodwork, contrasts with the well looked after and maintained engine.



deck in and the electronics packages had all been attached to the hull with double sided foam tape, the cockpit was dropped in, and the front bulkhead was added. I wanted the insides of the model to look as realistic as possible, so the boiler would need to be fairly sooty, with a well-worn and paint-chipped funnel (see **Photo 15**). Washes and a few paint chips were applied over most of the

machinery, but I took into account the fact that an engine, being such a critical piece of machinery, would usually be very well looked after and maintained. Consequently, this was simply oiled up and fitted to its bearers and the shaft universal joint; it did, however, go through a light paint job first to give it a much more credible look before being placed in situ. After that, the pipework was

completed between the engine, boiler and separator, and the water pipework was connected up. The lagging on the steam pipework wasn't fitted until a couple of steamings had taken place, but the water pipes were polished, and the fittings were treated to an enamel wash to create a used but well cared for appearance (see **Photo 16**).



17

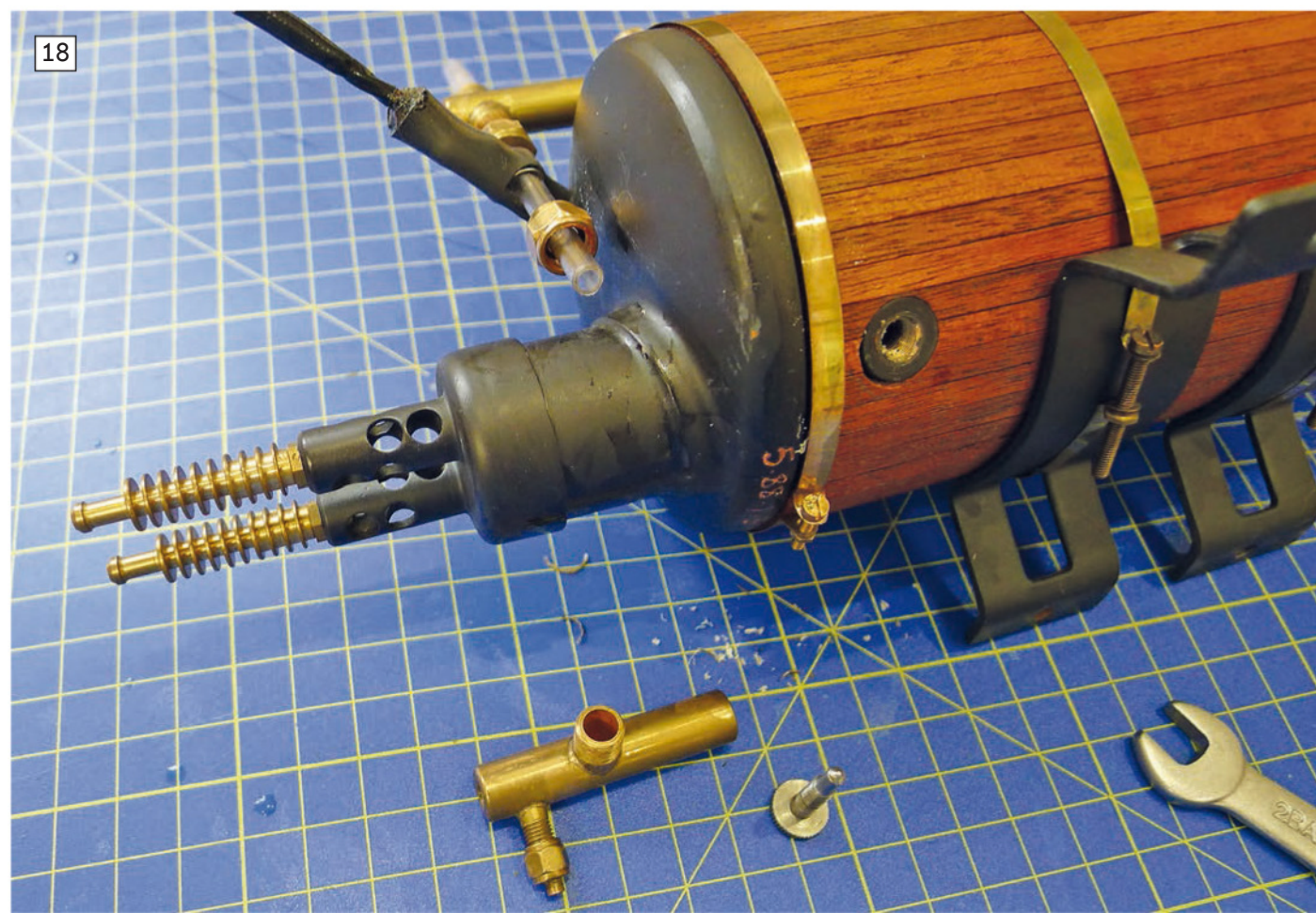
ABOVE: It's a lot easier to discover any issues while the model is still on the building stand, but it's still a bit of a challenge to have to remove the boiler numerous times. Richard points out he should have realised that the boiler needed pickling before he fitted it, but he'd mistakenly assumed it hadn't been used much.

With the main components all in place, a number of trial runs were done to see just how everything worked together. This is known as the shake down period, where problems can be identified and corrected before a

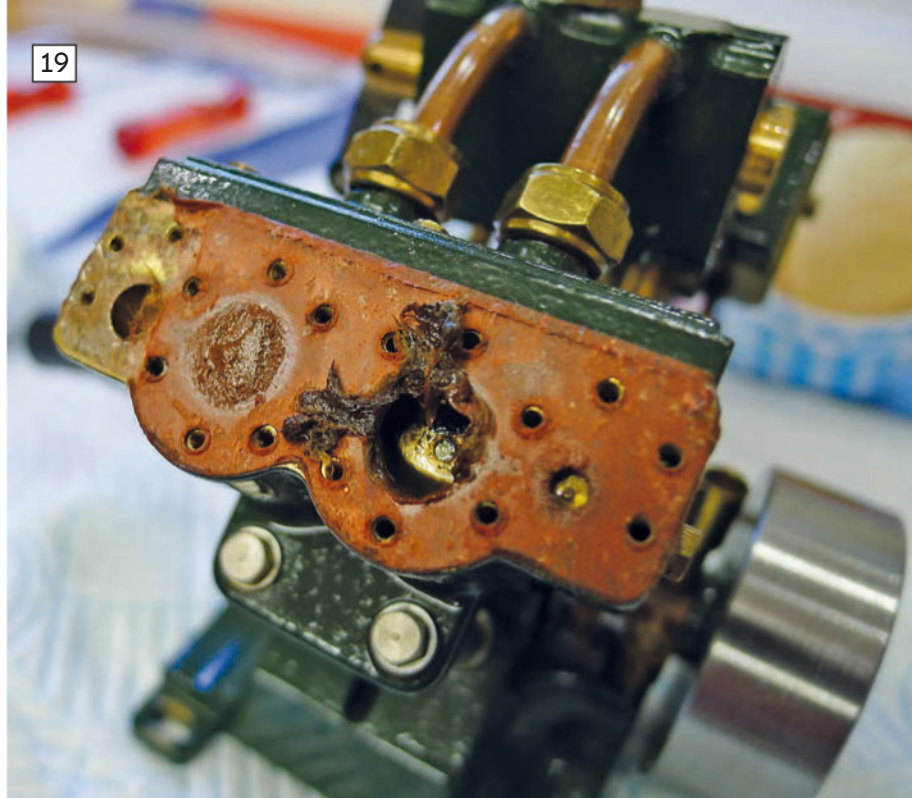
model is committed to an expanse of water. In this case, unfortunately a number of issues were identified. One was the fact that the boiler sight glass didn't appear to be working correctly, so the boiler had to be removed

again and given a thorough pickling with a descaling fluid (see **Photo 17**). The lower sight glass fitting was found to be completely blocked with calcium deposits, so that required a good cleaning out (see **Photo 18**).

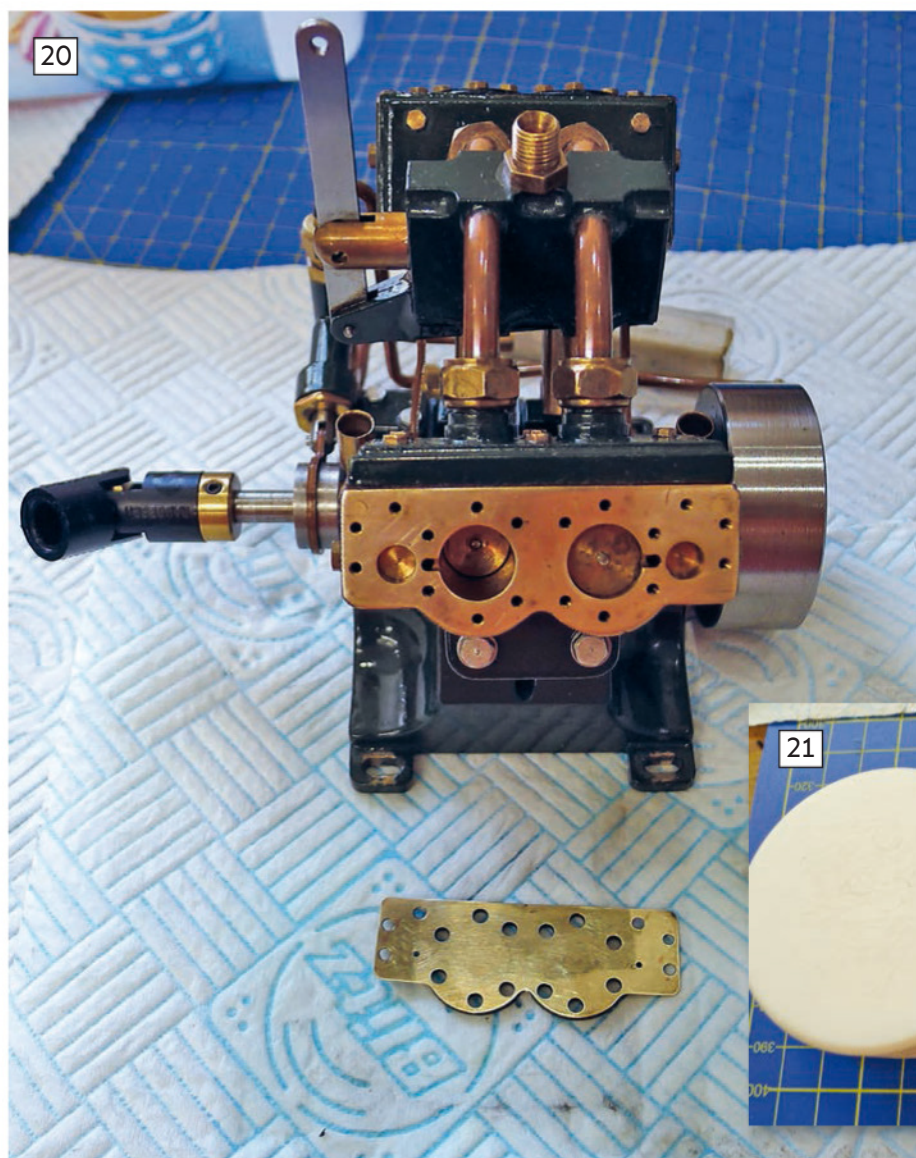
BELOW: Calcium deposits in the bottom of a boiler are a classic cause of sight glasses not working properly. This lower fitting was completely blocked, even after pickling, and had to have a drill run through it before fine brushes got it clean.



18



ABOVE: It looked like the congealed 13-year-old steam oil was the cause of the engine running very slowly, as this was the sight that Richard was greeted with when the cylinder covers were removed. It's hard to see what's rotten gasket and what's solid oil.
BELOW: A thorough clean-up and a spot of fresh oil at least removed all the old mess above the four pistons.



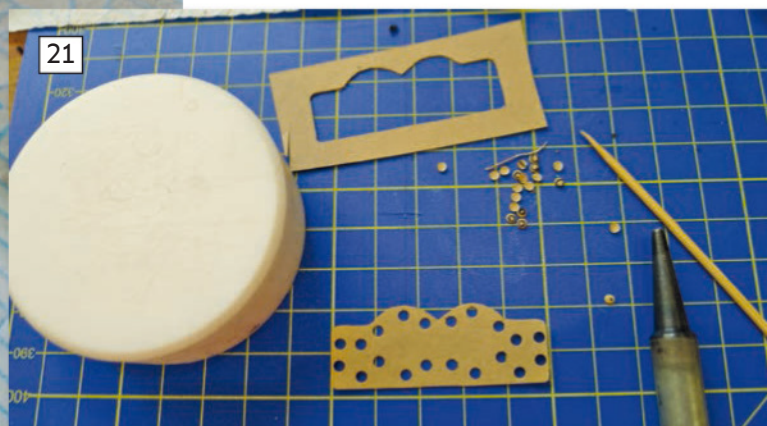
The next challenge was that the engine ran extremely slowly, despite performing well on test on the bench using compressed air. Again, this was extracted, and the top ends stripped down to remove the solidified steam oil that had accumulated (see **Photo 19**). Having painstakingly cleaned (see **Photo 20**) and rebuilt using new gaskets (see **Photo 21**), another bench test resulted in the engine running just as I'd hoped on compressed air. After refitting it back into the model, however, and again running it on steam, the engine performed very poorly. Frustrated, I then put it through a number of further tests on compressed air, only to discover that the brand-new elbow fitted to the exhaust steam line had not been drilled through; this served as a reminder I really shouldn't have needed to in future check all the basics before pulling things apart!

Following that, various battery combinations were tested to find the best one for the electronics packages, and a number of software modifications had to be made to the two electronic units before things started to look like they were working reliably. This was perfectly understandable as the two control units had previously only been tested on a work bench and it was the first time I'd seen them actually operating a model. Finally, the sight glass seemed to be getting air locked fairly frequently, so a new pipe was fitted to its blow down valve, which was then fed to a valve on the hull to enable frequently blowing down, which would keep the glass clear.

Next month...

With the majority of the main structural building now done, in the final instalment (concerning this build – not, I must hastily point out, the final instalment of my Boiler Room series) I'll be covering the all the last little bits and pieces of detailing that should really bring this model to life, and I'll be revealing how it performs. ●

BELOW: New head gaskets were also fitted, which proved to be an exercise in very careful hole punching. Luckily, Richard had a homemade punch and a neoprene anvil that did the job perfectly without damaging the thin gasket material.



Photographed on the day of they made their joint maiden voyage at Wicksteed Park, the gorgeous Victorian river launches modelled by John Mileson and Richard Page.

Your Models

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

Double the fun!

At the back end of last year, Richard Page and I built a pair of steam powered Victorian river launches. You may have seen the article in the Model Boats magazine entitled 'A tale of five boys' (January 2022 edition).

Well, it has taken almost six months, but recently we plucked up courage to take the

launches down to our local pond in Wicksteed Park for their 'maiden' voyages.

We made sure we arrived nice and early at the pond side before too many members arrived to witness potential failures of our boats. For this auspicious occasion we had each bought a pair of chest high waders in order that we may join our boats in the water. This would allow us to make any adjustments.

So, clad in these waders we set about preparing the gas fired steam engines.

Now, for some reason, I seem to attract the lunatic fringe of society, and this morning was to be no exception. Almost immediately, two old boys wandered up and stood for some time watching us. Eventually, one said "What are you doing?" To which I felt like saying, "Oh, we're just



Mike and Zoe are now working on their own version of Clive Haliwell's Nautilus junk modelling project, as included in the June 2022 issue of Model Boats.

MB inspired projects

Hello from Leeds and Rawdon Model Boat Club! Being an International One Metre R/C sailor, my family thought I may like Model Boats magazine, to which they have subscribed for me. Your March article on the paddle boat, *Tristan*, soon had me working alongside my ten-year-old granddaughter Zoe to construct *Duckling*. This was launched





getting ready for a game of table tennis", but Richard, having more patience, politely took the time to explain exactly what we were doing. After a while, having chewed over the information, the second visitor enquired "Do you wear waders all the time?". I was going to suggest we did, and in fact they were not waders but incontinence trousers. However, Richard stepped into the breach, pointing out we were about to immerse ourselves in the water to join our boats.

During this 'high minded, academic' conversation the launches had both come

up to working pressure. We checked all was well with the radio control systems for the steam regulator and steering, and then, being satisfied everything was under control, the launches were 'launched' and off they chugged across the pond.

This was what model boating was all about! Powered by Clevedon Steam plants, they performed faultlessly for about 20 minutes, after which they were brought ashore for refuelling, ready for the next cruise. The pure joy of all this, however, seemed to have by passed the two old boys, who rather than simply watching in

quiet appreciation had begun discussing haemorrhoids and constipation. It came as some relief, therefore, when they finally sauntered off. Nothing, however, could have wiped the grins off our faces when we also eventually headed back to the asylum!

**JOHN MILESON
EMAIL**

*Ha, ha, sounds like a sketch for an episode of Only Fools & Horses, John! All jokes aside, though, no wonder you were grinning. You must both be so proud of these beautifully crafted builds. **Ed***

with success on the club water at Rawdon, north-west Leeds.

Subsequently, we are construction a static model along the lines of Nautilus, as featured in the 'All Hands on Deck' pages in the June issue. Not being very nimble fingered and supporting recycling, we are finding this a useful development project.

Since the magazine entered our house Zoe has now joined RMBC and continues to enjoy model boating.

Many thanks!

**MIKE WOODCOCK
LEEDS**

*Receiving your email and photos really made my day! I was hoping someone would use Grahame's plan to build this cute little paddle boat and put own their own unique take on it, and yours is simply superb – as is what you've done with the Nautilus. I also love that your granddaughter worked on these projects with you! In fact, it's so great to see how many of you are helping make the hobby a real family affair and actively engaging and encouraging a whole new generation of model boat enthusiasts. Thank you so much for sharing these fantastic pics! **Ed***



*Mike Woodcock's granddaughter, Zoe, launches Duckling, the model she and Mike built together from the free plan for 'Tristan, the little paddle steamer', designed by our very own Grahame Chambers and featured in the March 2022 issue of Model Boats. **Ed***



ABOVE: For ease of transportation, Greg Turek decided to model his mighty 1:72 scale model of HMAS Sydney 2 as two separate halves that can be bolted together at pond side.

HMAS Sydney 2

This is my 1:72 scale R/C model of HMAS Sydney 2, a modified Leander class cruiser that was sunk off the West Australian coast by the German raider Kormoran during World War II, with the loss of all on board.

As I like to transport and sail my models as efficiently as possible, I decided to build the model in two halves that can be bolted together. With this model being almost 2.5 metres long, had I modelled her in one piece I'd have difficulty carrying her in my car. The two sections, however, are very easily transported and assembled at pond side.

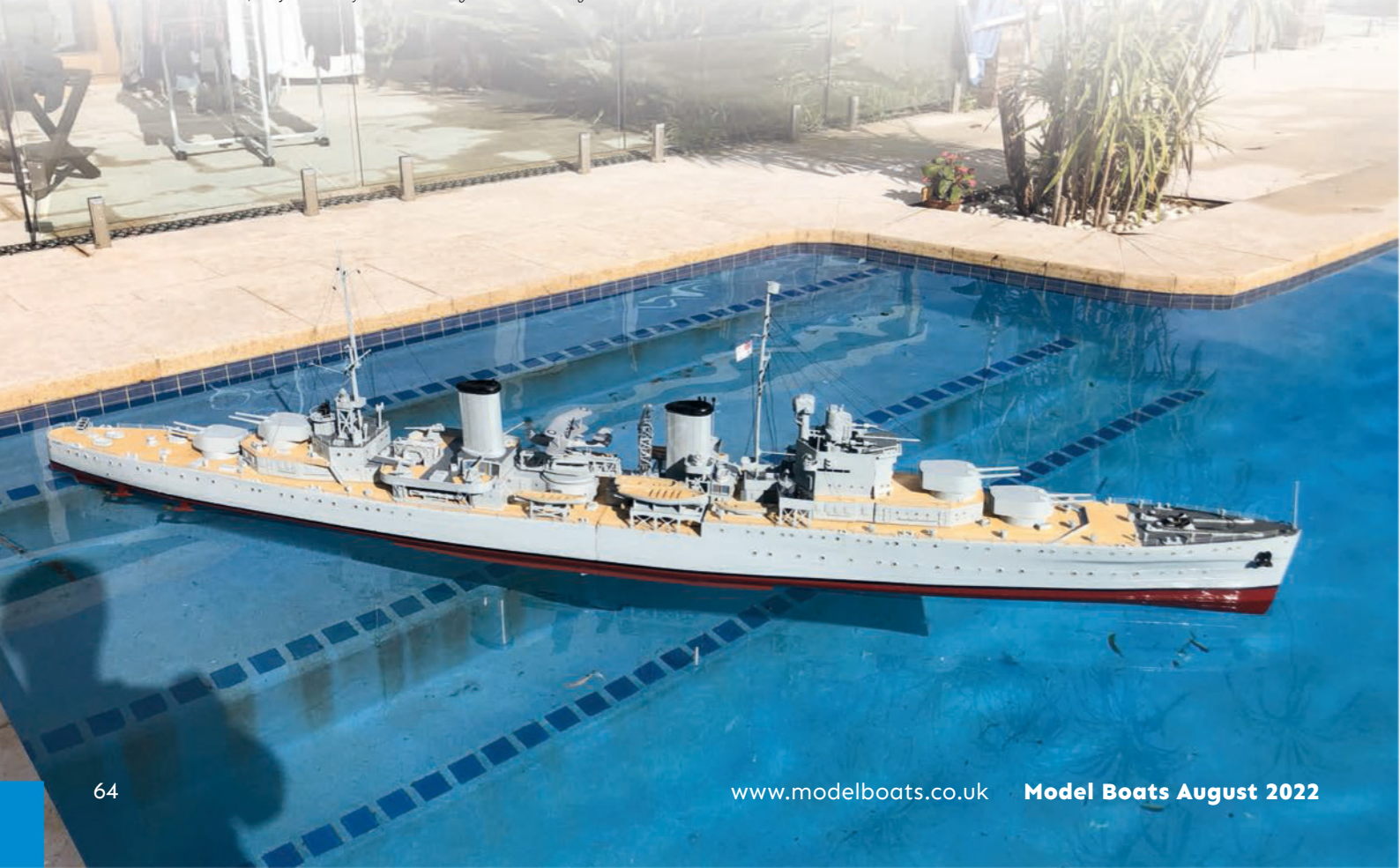
I used Profile Morski plans for her scratch built hull and superstructure, with some additional parts obtained from APS models. About 8kg of ballast is required. She's powered by four 540 brushed motors, using one 45-amp ESC for each pair. I used two 5-amp 2-cell Lipos in parallel for each ESC.

Video footage of her maiden voyage on our St George Model Boat Club pond at Scarborough Park in Monterey, a suburb of Sydney Australia, is available to view on YouTube – simply search for the Piratefleet channel.

GREG TUREK
EMAIL

*She's simply magnificent, and what a clever way of solving the transportation issues such a mighty model presents, Greg. I had to digitally enlarge the size of the image of her in your pool (very jealous!) to be able to establish where the two halves come together – especially as my eyes were kept busy by all the perfectly scale and totally convincing detail you've incorporated on deck – so out of the water who would ever guess at this ingenious method of construction? **Ed***

BELOW: Out on the water, the join is barely discernible. Greg will be elaborating on his method of construction in a future issue.





Magnificent Endeavour

It was nice to see that my models (Folkboats and Ocean Crest) generated interest from your readers and that you published the letters. I have been fortunate in the past to have a number of pieces published (even in *Yachting World* after my Transatlantic

passage on our 50-footer) and one featuring my large model of the racing J Class yacht *Endeavour* many years ago. A picture of her is attached for your interest.

Thoroughly enjoying your publications.

CHARLES CHAMBERS
EMAIL

Thanks for that kind comment, Charles. What an elegant and simply exquisite model. I can honestly say that of working on the pages in the Your Models section is always a sheer delight, because the level of talent out there never fails to amaze me. Ed



USS Sharps (AKL-10)

By rough count, I think this is scale model ship number 40. I began modelling back in 1972 and around the same time started subscribing to *Model Boats*. Since then, various free plans have inspired my builds. I did take a hiatus from model boats for about ten years and got into model railroading. Now I'm into both!

This latest model, the *USS Sharps* (AKL-10) is a sister ship to the *USS Hewell* (AKL-14), which was the 'stage' for the 1950's movie *Mister Roberts*, starring Henry Fonda, Jack Lemon, James Cagney and William Powell.



Matthew O'Neill shows off his superb 1:48 scale scratch-built model of USS Sharps (AKL-10).

I am a scratch builder and this model, as all models, is of 'bread and butter' construction (my preferred method). It's scale to 1:48. The prototype was 117ft LOA with a 33ft beam, which makes a nice model at 44 1/4-inches LOA. There's plenty of room for the wet cell battery, single 12V motor, transmission, two counter-rotating props, radio and some ballast.

I fell in love with this ship the first time I saw *Mr Roberts* sometime in the late '60s.

For years I search for plans and could find none. Even the infamous ship *Pueblo* (AKL-44) was a sister, but no plans.

Then, lo and behold, the September 2021 issue of *Models* featured, on page 40, 'The Fabulous Fir' – and there were plans! The ships were very similar. The *Fir* was built about five years before the *Sharps*. The LOA was about the same, as was the beam. Yes! I promptly had the plans enlarged to 1:48, then redrew the bow and stern sections to more closely match the photo I have of the *Sharps*.

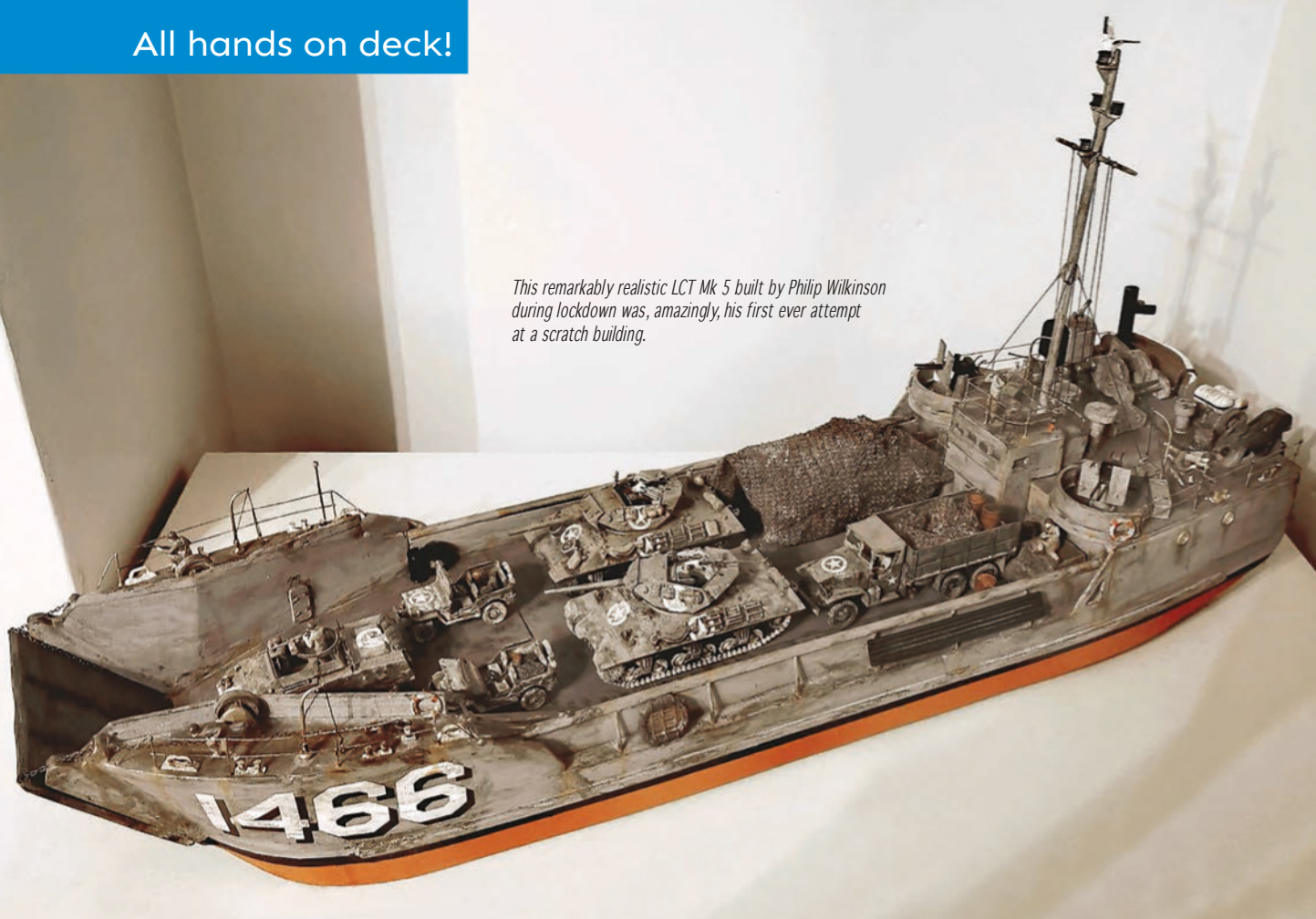
I am sending you some photos – and, yes, that's the 81-year-old me!

Thanks for a great magazine.

MATTHEW O'NEILL
VIRGINIA, USA

*I'm so glad Jim Pottinger's *Fir* plan proved helpful, Matthew. You definitely deserve a trophy for your superior achievement! Ed*





This remarkably realistic LCT Mk 5 built by Philip Wilkinson during lockdown was, amazingly, his first ever attempt at a scratch building.

Like a duck to water!

Having read with interest the recent plan articles about the D-Day landing craft, I thought I would send you a photograph of the 1:48 scale Mk 5 that I set to work on during lockdown. This was my first ever attempt at building a model from scratch (well, save for the Tamiya sourced vehicles and figures on board), so it was a case of learning as I went along, but I have to say I've thoroughly enjoyed the whole process.

I am now working on my next project, which although not yet finished is coming along nicely.

PHILIP WILKINSON
VIA MB's FACEBOOK PAGE

*What a brilliant job you've done, Phil!
The extra time and effort you've put into achieving that weather worn finish, sourcing all the correctly scaled vehicles and figures and adding all the well thought out and*

completely convincing stowage has paid off big time.

*Your steam launch looks like she's going to be a real beauty, too, and I love that you've chosen such a very different subject for your follow up project. Can't wait to see more photos of her once she's finished! **Ed***

BELOW: And Philip's next project is already shaping up to be an absolute stunner of a model!





ABOVE: Work in progress on Rex's 1:48 scale model of Ryhope, which is being constructed from a Caldercraft but modified to represent the tug in her wartime guise.



Although Rex has already added some charming detail touches to his tug, he intends to keep the build quite basic for now so that his young grandchildren can enjoy handling the model. The more fragile fittings can wait until they are a bit older.

Ryhope

I bought Caldercraft's 1:48 scale kit for the tug Ryhope to build for my son back in 1998. Unfortunately, being a complete novice, I didn't get very far and eventually ended up putting all the bits back in the box! Then, during the first Covid lockdown in 2020, I was browsing on the internet and found your Model Boats magazine. I now subscribe to a regular copy and find your articles have been very inspirational and got me started again on this tug.

Not only did I decided to modify Ryhope from commercial form into her wartime guise but, as so many of the technologies have changed in



Since originally purchasing the kit back in 1998, the R/C equipment available to modellers has improved considerably, something Rex has enjoyed embracing and incorporating into his build.

model boating since I bought the model over 20 years ago, the 27 Mhz controller has also been replaced to a 2.4Ghz set up. A Mtronics speed controller and digiSound Napier diesel sound module have been installed, too.

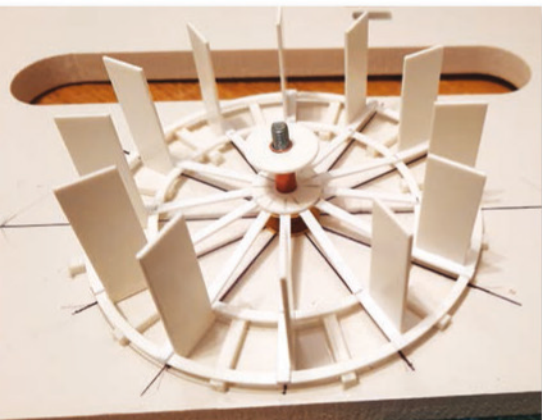
On D-Day (June 6) I sent an email to my children, now in their 30s, showing a 1950's picture of the original tug at Harrison's shipyard, Bill Quay, Newcastle, before conversion to Ryhope [this image is copyright of the Tyne & Wear Archives, but can be viewed online at www.tynetugs.co.uk/dpc741943.html]. They were interested in the tug's history and surprised by my progress.

I will initially complete her as a simple build, allowing my young grandchildren to be able to handle the tug, and then as they grow up will add masts, deck furniture, fenders, etc.

Thank you for compiling an interesting magazine so full of information for those interested in ships and model boating.

REX DOWLMAN
(FORMER MERCHANT NAVY
RADIO OFFICER)
EMAIL

Bravo, for bringing this historic tug back to life so charmingly in model form, embracing and getting to grips with the new technology now available to modellers and also for yet another great example of how the joys of the hobby can be passed on to our children and children's children – even from a very young age. Ed



Compton Castle

I am sending you some photos of my latest model, the PS Compton Castle.

Working from plans and photographs to a traditional plank on frame build, she has taken 16 months to complete.

This paddler could be seen working on the River Dart up until the early 1960s and the inspiration for the model came about due to the fact that my grandfather, William Henry Balkham, worked on her until her withdrawal from service. She was then moored in Totnes, where she became a café, and was painted in Birdseye colours for an advert. The hull can still be seen in Truro, Cornwall, and has been use by various businesses.

JAMES THOMPSON
EMAIL

*What a beautiful build and finish, James! The level of detail is simply astonishing. That's a paddle steamer to be truly proud of. **Ed***



James Thompson's delightfully detailed, traditional plank on frame build of the paddle steamer, Compton Castle.





For the record, Jim Pottinger points out, the American Scout featured in last month's Sterling Work restoration feature, along her sister ship American Shipper, also illustrated, was in fact not an ex-Liberty class ship as described but one of seven C2S-AJ5 class ships built by the North Carolina Shipbuilding Company. Jim has kindly supplied this shot of an actual ex-Liberty ship, the Vall Sun, for comparison purposes.



Your Letters

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



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

Class correction

Sorry to be nit picking but, in the interest of accuracy, I feel should point a misnomer in last month's Sterling Work restoration feature. The ships featured (i.e., the heading picture of American Shipper, and American Scout, as modelled) were not USA-built Liberty class ships but rather two of seven C2-S-AJ5 class constructed by North Carolina Shpbldg. Co. Wilmington,

Delaware: American Shipper, Yard No.232, and American Scout, Yard No. 236 – both having been built in 1945.

I am including an image of an ex-Liberty type for comparison purposes [see above], albeit with the later raised wheelhouse.

That said, Geoff has done an excellent job on the model itself.

JIM POTTINGER
EMAIL

CAN YOU HELP?

Rigging help required

I am hoping that you will be able to assist me. My husband, John, is now 92, not in the best of health, and has poor eyesight now. He has been making a model of the Mayflower for the last 3-4 years (frequently interrupted by health issues) and has reached the rigging stage, which is proving too difficult for him. Is there perhaps a model club within the Chelmsford, Essex, area (or anywhere really), who could help, or indeed anyone living within easy striking distance who may be able to assist?

It really would mean a great deal to him if the boat could finally be finished. It looks very sad without the rigging.

VALERIE CUMMINS
EMAIL

I know what a friendly and helpful community this is, so if someone reading feels they'd be able to lend John a hand here, please get in touch. Ed

Restoration S.O.S.

When I was a child my dad, Don Gordon (model engineer and model boat enthusiast), made me a little sailing boat –

a bit more than a toy but not really a proper model, and my companion on many trips to the Round Pond in London when dad was sailing one of his model boats.

I still have this little boat, which is 13-inches long, solid wooden hull, and gaff rigged. The gull, keel, rudder, mast,



Trish Preston would dearly love to get this little sailing boat, built for her while still a child by her father, repaired and restored. Can anyone reading perhaps offer some assistance here?

boom and gaff are all still okay, but sadly, through the 60-odd years of storage, the sail and rigging have pretty much rotted away.

Silly as it may seem, I would love to have her restored to her former 'glory'. Do you know of any people/clubs/organisations/companies who might be able to help (for a reasonable fee)? I don't think it would be too complicated a job but it's not something I could undertake myself. I now live in Launceston in Cornwall, and have no idea where to start looking. I appreciate this is a long shot, but there's no harm in asking!

Any advice would be greatly appreciated.

Thank you in advance

TRISH PRESTON
(NEE GORDON)
EMAIL

What an adorable little keepsake, Trish! The idea of having her restored isn't silly in the slightest; if she were mine, I'd feel exactly the same way. I am quietly confident that someone reading will be able to offer some assistance here, and I'll be thrilled for you if this proves to be the case. Over to you, chaps! Ed

Bristol Channel pilot cutter build

John Mileson takes us on a voyage back to the Age of Romance, via the rather less glamorous setting of his potting shed!

While I cannot claim to have watched all eight series and an unbelievable 91 episodes of *The Onedin Line*, this BBC television drama left an indelible mark on me. As I write this article the theme tune to the series courses through my mind; it was the *Adagio* from *Spartacus* by Khachaturian. What was it about, this fairly innocuous programme that still haunts my memory? Well, it was set in Liverpool and charted the chequered history of James Onedin, owner of the *Onedin Line*, during the period from 1860 to 1886. It starred Peter Gilmore and Anne Stallybrass as the fictional husband and wife, and, as it happened, the actors ended up getting married to each other in real life. The indisputable star of the show, however, was the schooner *Charlotte Rhodes*, which in reality was the schooner *Kathleen* and May, built in 1900.



Welcome aboard, Mr Onedin!

"The BBC television drama series conjured up all the 'romance' of the 19th century seafaring traders, and the allure of this then drew me to the Bristol Channel pilot cutters, which operated in a similar era"



To establish the outline of the inside of the fibreglass hull in order to make cardboard templates for bulkheads, a piece of card was roughly shaped to size and then card fingers were glued on. The end of each finger then determined the outline at that point.

Most of the filming took place in Bayards Cove, Dartmouth, a location I came to know very well. The series conjured up all the 'romance' of the 19th century seafaring traders, and the allure of this then drew me to the Bristol Channel pilot cutters, which operated in a similar era.

These cutters, as the name implies, worked out of a number of small ports set around the estuary of the River Severn. The Bristol Channel, noted for its tidal range of over 46 feet, strong tides, underwater obstacles and ever shifting sands, presented one of the most hazardous approaches to a major port in the UK.

Bristol at this time developed into a major international trading port, dealing with cargoes as varied as sherry to tobacco and, of course, served the reprehensible slave trade.

24

www.modelboats.co.uk Model Boats July 2022

Bristol Channel Pilot Cutter questions

Just a few lines to say how much I enjoyed reading about John Miles's build of the Bristol Channel Pilot Cutter *Katie* and to compliment him on what a lovely model he's made.

However, I feel the article would have been more interesting if there had been less focus on a long-gone TV programme and more on the reasons as to why he did certain things in the build. Queries I would have liked answers to include:

- * Why he used so many full bulkheads in a grp hull;
- * What was the timber and thickness/width he used for covering the upper parts of the bulkheads?
- * Why did he use so much teak in the build, especially in the mast and spars (I would have thought, a rather inappropriate choice)?
- * What were the large clamps used on the

bulwarks timbers; were they the ratchet or spring type?

Believe me, this is in no way a criticism of John's build, just queries which have sprung up in my mind.

I would endorse John's praise of Frank Parsons and his company, Nylet Sails, as, in the past, I have also used them and could not fault either the sails or his service.

Finally, I suspect that the features dedicated to the construction of naval vessels and cruise ships, which take up many pages of the magazine and are often over spread over several issues, are not of so much interest to the majority of your readers. While I appreciate such articles may include building tips, etc, that are transferable to other models, I don't normally read these as, although not an expert, I have been building models for longer than I care to consider and am more interested in the 'smaller' sailing and power vessels.

**DEREK BRADLEY,
NORFOLK**

Thank you so much for your email, Derek. Constructive criticism is worth its weight in gold, and I can honestly say this is by far the most useful feedback I've received since taking over as skipper. You raise some excellent points, which I feel it only right to let John address himself:

"I was very interested in Derek's comments regarding the need for more construction details in my articles.

The reality is that, being new to model boat building (some three years now), I'm still learning all the time from other reader's articles in the magazine. I'm certainly no expert in any aspect of model boat building, and, truth be told, tend to lurch from one crisis to another! As such, I don't take myself too seriously and hope this is reflected in my articles.

When starting a new project, I photograph every aspect of the build, believing that pictures give a better pictorial description than words ever can, and simply try to make my articles as informative and entertaining as I can.

I have welcomed Derek's feedback, however, and have noted his comments. As my headmaster used to write on my reports 'Miles could do better.'"

Now, I appreciate that John's very honest response may raise a few eyebrows amongst those who perhaps feel that all articles accepted for publication in this magazine should be the work of highly knowledgeable and skilled modellers, but, the way I look at it is this...While many of our contributors are indeed extremely well placed when it comes to sharing what they have learnt over decades of experience, in order to keep things inclusive and less intimidating to newcomers we also need to celebrate and champion those learning as they go, especially when they're brave enough to share not just their successes but some of their howling failures, too.

As for balance when it comes to subject matter, that's always a challenge when editing a title intended to serve a readership with such diverse interests, both thematically and when it comes to modelling preferences (e.g. static vs working builds, methodologies/materials/etc). Due to the niche nature of the title, our contributors are themselves enthusiasts rather than professional freelance journalists, and while I obviously discuss future feature ideas with those who write regularly for us, we are still reliant on articles being submitted on spec by those in the wider community. This, therefore, determines the material I have to work with, although I do try my best to achieve as much balance as I can in any given issue. **Ed**

**Price Reduced
to £2650**



After moving to Poole, Dorset, last year I have enjoyed completing my 'Lady Jane' GRP Steam Launch Kit, however developing health issues are now preventing me from launching her.

This is an opportunity to purchase a 'Lady Jane' which is in 'New' condition, ready for launching.

The Martin Baylis Marine Steam Plant and Radio Control have been tested.

My costs have been about **£4000**, Priced for a quick sale, Grab yourself a bargain, buyer collects on completion. Bank Transfer of funds.

**Please telephone me on
01202 081963 to discuss**

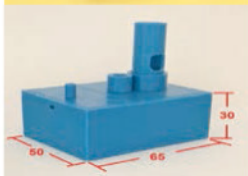
MODELBOATBITS

www.modelboatbits.com

Call now: 01597 870437 or 07921 032624

MINI MIST

steam /smoke effect unit

30mm High x 65mm Long x 50mm Wide

PLUG N PLAY Voltage 6V

Ideal for those smaller models
Just add plain water to produce
smoke/steam effect.
Adding a more realistic
effect to your model.

WATCH VIDEO ON YouTube
<https://youtu.be/DYJu569Yj1g>

MAXI MIST

steam /smoke effect unit




70mm High x 116mm Long x 66mm Wide

PLUG N PLAY Voltage 12V

This fan assisted Mister unit
Just add plain water to produce
smoke / steam effect.
Adding that more realistic
effect to your model
Variable fan speed to create
preferred output rate

WATCH VIDEO ON YouTube
<https://youtu.be/wPw1DLXmr2A>

Only available direct from the manufacturer, not from any retail outlet!

Club500 Slipway



Club500 Racing...
...continues to be ever popular at our model clubs.
See our Website or call us for details of prices, colours and accessories available.

Model Specifications:
Length: 515 mm
Beam: 180 mm
Includes motor, propshaft & Tube, Propeller, Coupling and Rudder assembly with over 200 possible colour combinations and a rainbow mix of colours.

Ordering is only via the website: www.club500slipway.com
or by telephoning: Malcolm Griffith at Club 500 Slipway, 59 Shackleton Drive, Perton, Wolverhampton WV6 7SA. * Tel/fax: 01902 746905
* Mob: 07884 071122 * email: club500@hotmail.co.uk

Pendle Steam Boilers

Makers of High Quality Affordable Steam Boilers for Marine and Stationary Enthusiasts




t: (07452) 875912 • e: sales@pendlesteamboilers.com
www.pendlesteamboilers.com

FLEETSCALE

WWW.FLEETSCALE.COM

GLASSFIBRE BOAT &
WARSHIP HULLS,
FITTINGS AND SEMI KITS
IN MOST SCALES AND ERAS

EXTENSIVE
SECURE ONLINE STORE

MILITARY & CIVILIAN RANGES

19TH, 20TH & 21ST CENTURY

IN1/24TH, 1/32ND, 1/48TH,
1/72ND, 1/96TH, 1/128TH

TEL: 01822 832120

FAX: 01822 833938

WESTWARD MOULDINGS LTD

Australia's Premier Maritime Hobby Shop

FLOAT a BOAT
Fine Models Since 1962

48c Wantirna Road, Ringwood Victoria 3134 Australia
Tel. 61 3 9879 2227
www.floataboat.com.au Mail Order

Call Angela
to advertise in

**model
Boats**

01507 529411

aprice@
mortons.co.uk

CLEVEDON STEAM

Supplier of steam engines, plants and
Cheddar Models compatible accessories

Tel: 01326 291390 • Mobile: 07818 044648

www.clevedonsteam.co.uk

Balsa Oak

SLEC

Ash Poplar

Spruce

Cherry

Obechi

Cedar

Plywood's

Pine Bass

Beech

Mahogany

Manufacturing

Buy on Line

www.slecuk.com

Laser & Router Cutting Service

Slec Ltd Tel 01 953 885279 Fax 01 953 889393

E-mail : sales@slecuk.com

Starling Models

The UK specialists
in small scale ship
kits and accessories

visit our online shop: www.starling-models.co.uk

www.maritime-models.co.uk

SECURE ON-LINE SHOPPING - MAIL ORDER ONLY

We stock a range of fittings from
Aeronaut, Caldercraft, Krick and
Robbe also tools, paints, props,
propshafts, couplings and
much more check out the
web-site for our full range.

Official stockists of BECC accessories
and kits from Caldercraft, Krick & Aerokits.

Commissions & restorations also undertaken!

**Maritime
Models**

E-mail: info@maritime-models.co.uk

Telephone: 01432 263 917 or 07786 781 421

www.mantuaamodel.co.uk
179 Dedworth Road Windsor Berks SL4 4JN
For all your modelling needs. Tel: 01753 856321

Model ship and boat specialist - Radio Control.
All types of wood - Lime - Walnut - Mahogany
Spruce - Balsa - Ply

Distributor for Mantua Model of Italy
Mantua Sergal and Panart model kits fittings and accessories fast mail order service

**ALWAYS IN
STOCK:**

Huge range of
miniature fixings,
including our socket
servo screws.

ModelFixings.co.uk

also the home of **ModelBearings.co.uk**

- Taps, Dies & Drills • Adhesives
- Engine & Miniature bearings • Circlips, etc. etc.

Tel/Fax +44 (0)115 854 8791 Email: info@modelfixings.com



Starling Models

The UK specialists in small scale ship kits and accessories

New releases!



HMS Glamorgan County Class DDG, 1982

1/700



Bangor class minesweepers
HMS Rhyl and HMCS Kelowna
1/350

Resin kits with photoetched and 3d printed parts and decals



Visit our online shop at www.starling-models.co.uk

CUSTOM 3D PRINTING

**model
Boats**

Call Angela to advertise

01507 529411 a.price@mortons.co.uk

Next month in **model Boats**

In our September 2022 issue, on sale from August 19, 2022, be sure not to miss...

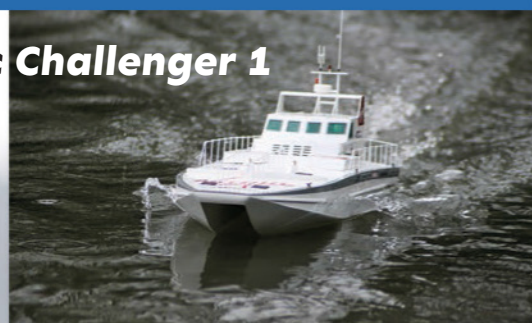


● Upscaling Aerokit's Sea Hornet

Get stuck in to a build without a brass pin in sight!

● Virgin Atlantic Challenger 1

Who dares wins: an exciting modelling adventure



● YOUR FREE PLAN for a dynamic diving submarine

A project that doesn't require deep pockets and which won't leave the first timers amongst you feeling out of your depth!

PLUS A thematically varied selection of feature-length articles, all your favourite regular pages – including Your Models, Your Letters, news, reviews – and lots more (Please note: content may be subject to change)

You will find more about the exciting content coming next, features of particular interest you may have missed in past editions and details of the very latest subscription offers on our website at www.modelboats.co.uk

You can, of course, order your copy of the September 2022 issue, which goes on sale at all good newsagents from August 19, now, but why not treat yourself to an annual subscription, as monthly copies will then be delivered directly to your door.

What's more, the unique subscriber number allocated to you will provide website access to digital copies of the current issue and to our archive of back numbers. It will also unlock subscriber exclusive bonus material not featured in the magazine.

If you can't always find a copy of this magazine, help is at hand! Complete this form and hand in at your local store, they'll arrange for a copy of each issue to be reserved for you. Some stores may even be able to arrange for it to be delivered to your home. Just ask!



Please reserve/deliver my copy of on a regular basis, starting with issue.....

Title..... First name.....

Surname.....

Address.....

.....

.....

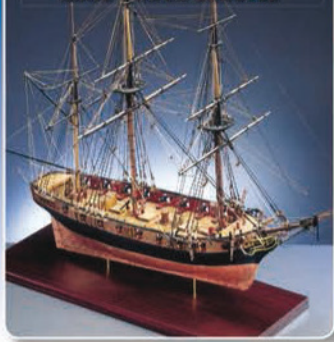
Postcode.....

Telephone number.....

If you don't want to miss an issue



**SECURE ON-LINE
SHOPPING AND WORLDWIDE
MAIL ORDER SERVICE**



**WE HAVE A LARGE RANGE
OF MOTORS, PROP SHAFTS
AND ESC'S. TO KEEP YOUR
BOAT MOVING DURING
THE SUMMER.**

CORNWALL MODEL BOATS

www.cornwallmodelboats.co.uk

Highfield Road Industrial Estate, Camelford, Cornwall PL32 9RA

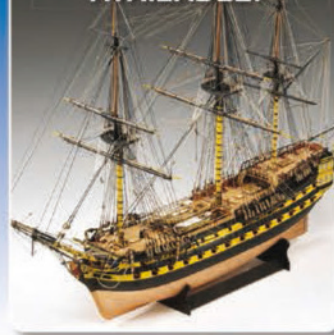
Telephone: **01840 211009**

**SECURE ONLINE SHOPPING
& MAIL ORDER SERVICE**

Free mainland UK delivery on orders over £100
(*excludes surcharge areas)

**WE STOCK A WIDE RANGE OF RADIO CONTROL AND
STATIC DISPLAY KITS, FITTINGS, TOOLS AND PLANS**

**SPECIALIST ADVICE
AVAILABLE!**



**PLASTIC STYRENE KITS
WHICH ARE THE HULL AND
DECK STRUCTURE.
PLEASE GIVE US A CALL OR
CHECK OUT OUR WEBSITE.**

Aeronaut

Mowe 2 Fishing Boat 495mm	56.95
Classic Sportsboat 540mm	67.00
Diva Cabin Cruiser 580mm	69.95
Delphin Fishing Boat 730mm	108.95
Capri Sport Boat 700mm	144.00
Marina Runabout 670mm	145.00
Ramboline: Push lighter 1188mm	176.95
Anna 3 Fishing Cutter with Fittings	237.60
Hansajolle Sailing Yacht 940mm	244.00
Nurnberg battleship with Fittings 905mm	249.95
Graf Spee Pocket Battleship with Fittings 940mm	365.95
Prinz Eugen Battleship with Fittings	419.95
Scharnhorst Battleship With Fittings 1170mm	419.95
Prinz Eugen Heavy Cruiser with Fittings	419.95
Johnny Harbour Tug 990mm	440.00
Tirpitz Battleship with Fittings 1255mm	492.95

Amati

Bragozzo Venetian Fishing Boat	71.94
Americas Cup Challenger 1:80 480mm	73.99
Rainbow J Class Yacht 480mm	73.99
Greek Bireme 480BC Length 560mm	74.95
Chinese Pirate Junk 400mm	84.00
Arrow Gunboat 470mm	94.00
Blue Nose Fishing Schooner	83.95
Coca Spanish Cargo Ship 41cm	95.95
Greek Galliot 18th Century 1:65	103.00
Mayflower English Galleon Length 650mm	159.95
Bellezza Italian Sports Boat R/C	125.00
HMS Bounty 1787 Length 720mm	218.00
Fifie Scottish Fishing Vessel R/C 700mm	220.00
Endeavour Americas Cup Challenger 1150mm	255.00
Robert E Lee Mississippi Steam Boat 1:150	243.95
Endeavour Americas Cup Challenger Built Hull	248.00
Riva Aquarama - Italian Runabout 850mm	279.00
Dorade Fastnet Yacht 1931 Length 856mm	279.95
Titanic 1912 1:250 Length 1070mm	369.99
Bismark 50 inches long	490.00

Billings

Dana Fishing Cutter B200	47.00
Torborg B910 Sailing / Paddle Boat	52.00
Rainbow Shrimp Cutter B201- Beginner boat	53.00
Waveney Class RNLI Lifeboat - Beginner boat	54.00
US Coast Guard B100	54.00
Esperance B908	60.00
Le Bayard Fishing Boat B906	58.00
La Martegaou B902 Flat bottom boat	60.00
Henriette Marie Pilot Cutter B904	63.00
Havmagen Fishing Boat B683 Static kit	82.00
Bluenose II B600 Schooner	85.00
America Racing Yacht B609	89.00
HMS Renown B604 50Ft Pinnace	91.00
Roar Ege Viking Ship B703	92.00

White Star American Motor Boat R/C B570	106.00
Kadet B566 R/C Vacuum Formed Hull - Beginners	112.00
Andrea Gail - Perfect Storm B608 Static Kit	118.00
Phantom B710 R/C Classic American Runabout	120.00
Marie Jeanne B580 Fishing Boat	130.00
St Roch B605 Static Kit	130.00
Hoga Pearl Harbor Tugboat R/C B708	155.00
Lilla Dan B578	158.00
Sir Winston Churchill Schooner B706	162.00
Dragon Yacht B582	174.00
African Queen B588 74cm	179.00
Boulogne Etaples R/C B534 Stern Trawler	181.00
Mayflower B820	181.00
HMS Bounty B492	215.00
Viking Ship Oseberg B720	233.00
Andrea Gail-Perfect Storm B726 R/C 720mm	240.00
Banckert B516 also called "Maasbank"	245.00
Nordkap Trawler B476	252.00
HMS Endeavour B514	256.00
USS Constitution US Frigate B508	281.00
Zwarte Zee Tug B592 R/C	285.00
Jylland Steam and Sail Frigate B5003	295.00
Ebjorn Ice Breaker B536	323.00
Smit Rotterdam B478	340.00
Norske Love B437 Three Masted Warship	358.00
Wasa B490 - Expert Range	358.00
Fairmount Alpine Dutch Super Tug B506	364.00
Colin Archer B728 R/C	463.00
HMS Victory B498	500.00
HMS Warrior B512	565.00
Absalon Navel Ship B500	600.00
RMS Titanic B510	1050.00

Caldercraft Static & R/C Boats / Aerokits

Fifie Amaranth Herring Drifter C7010	158.00
Milford Star Side Trawler C7019	340.00
North Light Steam Clyde Puffer C7001	375.00
Joffre Tyne Tug C7000	379.00
Alte Liebe Harbour Tug C7020	398.00
Marie Felling C7003	625.00
Imara Steam Berthing Tug	725.00
Resolve Twin Screw Navel Tug C7024	779.00

Caldercraft Nelsons Navy

Hm Schooner Ballhoo 1804 C9013	79.99
HM Cutter Sherbourne 1763 C9010	99.00
HM Yacht Chatham C9011	119.00
HM Mortar Vessel Convulsion C9012	126.00
HM Schooner Pickle 1778 C9018	174.00
HM Brig Supply 1759 C9005	189.00
HM Brig Badger C9017	224.75
HMAV Bounty C9008	256.99
HMS Snake 1797 C9002	260.00
HMS Mars 1794 C9009	264.00
HMS Cruiser 1797 C9001	269.00

HM Gun Boat William C9016	269.00
HMS Jalouse 1794 C9007	295.00
HM Bomb Vessel Granado 1756 C9015	298.00
HM Bark Endeavour 1768 C9006	315.00
The Mary Rose Tudor Warship C9004	339.00
HMS Diane 1794 C9000	599.00
HMS Agamemnon C9003	869.00
HMS Victory 1781 C9014	980.00

Corel Static Display Kits

Yacht America SM102	48.00
Flatlie Chesapeake Bay Fishing Boat 33.5cm	77.00
Dragon Yacht SM51	91.00
HMS Greyhound 510mm	155.00
Flying Fish SM19 745mm	174.00
Half Moon 17th Century Galleon 520mm	190.00
Cocca Veneta, 16th Century Merchant Vessel	191.00
Eagle American Brig 1812 1:85 Scale	193.00
Dolphyn, Dutch Privateer SM16	213.00
Yacht D'Oro 17th C Brandenburg Yacht	216.00
Amphion Swedish Yacht 785mm	225.00
Galeone Veneta 16th Century Armed Vessel	231.00
HM Endeavour Bark 1768 SM41	269.00
Corsaro II 1:24 Scale Ragatta Yacht	400.00
HMS Bellona 74 Gun Ship 770mm	418.00
Coca Veneta 16th Century Bradenburg Frigate	423.00
Wasa Swedish Frigate SM13	497.00
Wappen Von Hamburg Brandenburg Ship	869.99

Dumas Tugs & Working Boats

Noahs Ark #1264	98.00
Jolly Jay Gulf Coast Fishing Trawler #1231	178.00
River Barges #1219	178.00
George W Washburn #1260	219.95
Great Lakes Freighter #1264	221.00
City Of Baffolo Lake Steamer #1278	283.00
Winter Harbour Lobster Boat #1274	291.00
Jersey City Tug #1248	330.00
Brooklyn Tug, A classic Tugboat #1238	421.00

Dumas Coastguard Vessels & Navy

US Army Tug ST-74 1941 #1256	127.00
US Coast Guard 41' Utility Boat #1214	180.49
PT 109 US Navy Boat #1233	192.70
Pt Higgins 78' Patrol Boat #1257	208.00
SC-1 Class Sub Chaser #1259	215.00
U.S.S Crockett #1218	221.00

Dumas Paddle Steamers & Submarine

Akula Russian Attack Submarine #1246	208.00
USS Bluefish Submarine #1245	226.50
American Beauty Paddlesteamer #1215	233.59
Myrtle Corey Memphis River Tow Boat #1253	328.00
Creole Queen Mississippi Riverboat #1222	425.00

Dumas Sports & Race Boats

Short Stuff a Deep Vee #1411	46.00
Vee Bottom SK Boat #1410	47.99
Miss Circus Circus Hydroplane #1323	421.00

Krick Kits Suitable for Electric or Steam Power

Felix Hamburg Harbour Launch 634mm	108.00
Anna Open Steam launch 610mm	112.00
Lisa M Motor Yacht	124.00
Muritz 650mm Length	169.99
Nordstrand Trawling Yacht	200.00
Grimmershorn Motor Vessel	289.00
Alexandra Steam Launch 940mm	330.00
Antares sailing yacht With Rigging Set 1260mm	643.00

Krick Kits Static/ Electric or Steam Power

Alexandra Steam Launch with Fittings	330.00
Anna Open Steam Launch with Fittings	112.00
Antares With Rigging Set	643.00
Felix Hamburg Harbour Launch	108.00
Grimmershorn Motor Vessel	289.00
Lisa M Motor Yacht	124.00
Nordstrand Trawler Yacht	200.00
Sirius Shrimp Cutter	495.00
Alert US Cutter	216.00
Gulnara 1060mm Sailing/ Steamer	320.00
Karl & Marie German Freight boat	171.00

Mamoli

Alert Privateer Schooner 428mm	125.00
American Schooner 790mm	147.00
Vespucci Italian Navy Training Ship 720mm	360.00
Black Prince Privateer Schooner	96.00
Blue Shadow American Brig 695mm	143.00

Mantua & Panart R/C and Static Boats

ARM 82 Dutch Fishing Boat	91.00
Black Falcon 18th Century Brig	105.00
Mincio Freelance Mahogany Runabout	112.00
Armed Swedish Gunboat	146.95
Brittania Royal Yacht of the Prince of Wales	155.00
Bruma Open Cruiser Yacht	214.00
Astrolabe. French Sloop 1812 1:50 Scale	236.00
Venetian Passenger Motor Yacht	259.00
Gorch Fock German Sail Training Ship	322.00
Amerigo Vespucci Italian Navy Training Ship	359.00
Anteo Harbour Tug 890mm	395.00
Ajace Cargo Ship 840mm	413.95
RMS Titanic R/C 1:200	950.00

OCRE has a NEW MODEL!

Amerigo Vespucci 980mm	339.00
HMS Titanic 1:300 Scale OC14009	202.00
Ulyses Ocean Going Steam Tug 830mm	195.00
Prinz Eugen German Heavy Cruiser	400.00
Pacific 231 Locomotive	385.00

ALSO:

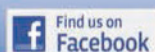
ALL THE HARDWARE, BUILDING MATERIALS AND RC EQUIPMENT REQUIRED TO COMPLETE YOUR MODEL

Visit the website for our full range of kits:

www.cornwallmodelboats.co.uk

email: sales@cornwallmodelboats.co.uk

Prices are correct at the time of printing, but are subject to change without notice



Hoga pearl
harbour tug



Mtroniks

electronics innovation

Over 30 years of
know-how

24V VIPER Marine

Brushed speed controller
Available in 15A, 25A or 40A

FROM £41.99



No Relays or moving parts!



Ultra fine control for model boats running up to 24V.
Available in different power ratings to suit all sizes of motors.
100% waterproof for trouble free modelling!
See website or contact your local dealer for more information.

VIPER Marine

Brushed speed controller
15A, 25A, 40A or 75A

FROM £33.99



Ultra fine control for model boats running up to 12V.
Available in different power ratings to suit all sizes of motors.
100% waterproof for trouble free modelling!
See website or contact your local dealer for more information.

tio Marine

Brushed speed controller
Available in 15A, 30A or 50A

FROM £39.99



Ultra fine control for model boats running up to 12V, including Lipo cells!
Available in different power ratings to suit all sizes of motors.
100% waterproof for trouble free modelling!
See website or contact your local dealer for more information.

microVIPER

Brushed speed controller

£33.99



Ultra fine control for small model boats running up to 12V with a 10A motor limit.
100% waterproof for trouble free modelling!
See website or contact your local dealer for more information.

Marine motors

Brushed motors for model RC boats

M400



£7.99

M500



£9.99

M600



£19.99

DIGISOUND

Realistic engine sound system



£69.99

Waterproof, 12V, amplified sound module for model boats that require realistic sound with engine start/stop, horn and changing running sound.
Speaker included!
See website for available sounds.

24 Month Warranty on all Mtroniks electronic products



Mtroniks marine products are available from all good model shops, we are always available for advice direct

High quality speed controls designed and manufactured since 1987 in the UK

Mtroniks
electronics innovation

41A Ilkley Road, Otley, LS21 3LP, UK
Tel: +44(0)1943 461482 Fax: +44(0)1943 468335

www.mtroniks.net
enquiries@mtroniks.net