Admiral's Barge

A 50 year old model is refurbished for more decades of service

The World's Best-Seller!

July 2016
Vol.66 No.788

model Boats

GET ON BOARD www.modelboats.co.uk

66 Years of Publication

PLASTIC MAGIC

REVELL QM2

Converted to radio control

mytimemedia MODELLING GROUP
07
£4.90

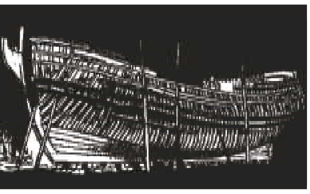
Nesejenta

New 1:33 Scale Plan Feature for this Gill Netter

Electrotor and the Foam Wraith

Two early post war electric motors of an entirely novel design

The Model Dockyard



PO BOX 104
Redruth
TR15 9BJ
Mail order Only.
Phone line open Mon-Fri 9am- 1pm

Tel UK: 01209 861733
Tel Int: +44 1209 861733
www.model-dockyard.com

U.K Delivery

Kits and Boat Hulls Add £9.00
Timber orders Add £10.00
Other Order value up to £50 Add £5.00
Other Order value Over £50 Add £9.00
Over £190 Free Delivery
Free delivery does not apply to shipments weighing over 2 kilos, being sent to the Channel Islands or Northern Ireland, Scottish Islands, Scillies, or IOM. Delivery here will be charged at cost.

Orders are sent by 1st class post or UPS carrier. Large parcel deliveries to Scottish Highland and Islands, the Isle of Man, Isles of Scilly and Northern Ireland will be shipped by 3 day UPS carrier . Deliveries to Channel Islands will be shipped by Euro 48 service

We ship Worldwide too

All prices correct at time of going to press but we reserve the right to supply at the prices ruling at the time of order despatch. E&OE

Amati Kits

Dutch Royal Yacht in Bottle 1:300 95mm	£44.95
Egyptian Ship Sahure Dynasty 350mm	£74.95
Greek Bireme 480 BC 560mm	£74.95
Venetian cargo ship, 1750 450mm	£119.95
Santa Maria 1409 540mm	£120.95
Pinta 1409 450mm 1:65 scale	£89.95
Nina 370mm 1:65 scale	£89.95
Mayflower 1620 1:60 scale 650mm	£164.95
Chinese Junk Scale 1:100 400mm	£84.95
Xebec.1753 720mm 1:60scale	£149.95
H.M.A.V Bounty 1:60 scale 750mm	£222.95
Robert E Lee Paddle Steamer 1:150 600mm	£244.95
New Bedford Whaleboat 1860 1:16 scale 550mm	£117.95
Bluenose. Fishing Schooner 1:100 scale 540mm	£87.95
Titanic. White Star Liner 1912. 1:250 1070mm	£378.95
Endeavour J Class. Wooden Hull 1:80 480mm	£79.95
Rainbow J Class. Wooden Hull 1:80 510mm	£79.95
Rainbow J Class 1:80 480mm Preformed Hull	£76.95
Enterprise J Class 480mm 1:80	£75.95
Endeavour J Class 1:35 scale 1130mm	£258.95

Victory Models Kits

Lady Nelson Cutter. 1:64 scale 530mm	£115.95
Granado. Bomb Ketch 1756 1:64 scale 800mm	£249.95
Fly. Swan Class Sloop. 1776 1:64 800mm	£282.95
Vanguard. 74 gun 3rd rate 1782 1:72 1171mm	£677.95
Pegasus Swan class sloop 1:64 800mm	£338.95
Mercury: 20 gun Brig 1820. 1:64 860mm	£351.95
Revenge 1577 1:64 scale 885mm	£361.95

Caldercraft Display Kits

Diana 38 Gun Heavy Frigate 1:64 1180mm	£468.54
Cruiser.1797. 18 Gun Brig 1:67 scale 850mm	£205.28
Snake 1797 18 Gun Sloop 1:67 scale 910mm	£205.28
Mary Rose. Tudor warship 735mm 1:80 scale	£258.83
Brig Supply 1759. Yard transport 1:64 675mm	£145.04
Agamemnon 1781. 64 gun ship 1:64 1300mm	£655.96
Endeavour. Bark 1768. 1:64 scale 725mm	£243.63
Bounty. 1789. 1:64 scale 660mm	£200.79
Sherbourne. 8 Gun Cutter 1763. 1:64 500mm	£74.92
Mars: Captured Dutch 18 gun brig 1:64 790mm	£200.79
Jalouse Captured French brig 1794 1:64 815mm	£223.13
Yacht Chatham 1741 1:64 scale 530mm	£89.25
Mortar Vessel Convulsion. 1:64 scale 530mm	£95.93
Schooner Ballahoo. 1804 1:64 scale 520mm	£62.48
Victory 1781. Nelson's flagship 1:72 1385mm	£740.78
Granado. Bomb Ketch 1756 1:64 scale 785mm	£218.64
Brig Badger 1778 1:64 scale 600mm	£175.64
Schooner Pickle 1778 1:64 scale 565mm	£129.39

Caldercraft R/C Kits

Joffre. Tyne River Steam Tug.775mm 1:48	£276.68
Imara. Twin Screw Berthing Tug 1105mm 1:32	£508.67
Milford star. East Coast trawler 1:48 933mm	£254.34
North Light. Steam Clyde Puffer 660mm 1:32	£276.68
Motor Fifie. 1:40 scale 600mm	£129.39
SS Talacre. Steam Coaster 1:48 863mm	£276.68
Sir Kay Round Table Minesweeper 933mm 1:48	£325.74

Deans Marine Kits

LCM 1653 1:24 scale 710mm	£239.74
25ft Motor Boat 1:12 scale 690mm	£194.74
Compass Rose. Corvette1:96 673mm	£181.95
H.M.S. Solebay.Destroyer 1945 1210mm	£315.73
MGB77. 71.6ft BPB 1:24 920mm	£249.74
73ft Vosper Type 1 1:24 scale 965mm	£269.46
Bronnington. minesweeper 1:100 465mm	£105.51
MTB 488. B.P.C. 71.6 MTB 1:24 920mm	£280.32
Steam Yacht Medea 1904. 1:48 870mm	£176.14
Tradition. Seine net trawler 870mm 1:24	£371.75
H.M.S. Cossack Destroyer 1938 1200mm	£290.13
63ft Motor Anti-Sub Boat No33 1:24 812mm	£213.16
Response. Steam Picket Boat 1:36 460mm	£91.66
Royal Marine. Minesweeper 1:100 619mm	£112.25

Hull and Plan Sets

Shirley Ann Inshore Trawler 1:16 scale 685mm	£49.45
Grand Banks Schooner 1193mm	£87.50
Victoria Steam Launch 1:12 scale 762mm	£40.45
Pilot 40 . Pilot boat 698mm	£50.45
Bluebird Of Chelsea . 1:24 scale 654mm	£46.95
Forceful Paddle Tug . 1:48 1003mm	£51.49
Guardsman Customs launch 1:32 scale 571mm	£37.45
Burutu & Bajima Tug 1:50scale 768mm	£47.45
Tyne Life Boat 1:19 scale 740mm	£46.49
Smit Nederland Hull 558mm	£42.45
St Louis Belle Mississippi Steamer 838mm	£72.45
Liverpool Lifeboat l 905mm 1:12 scale	£91.50
RMAS Moorhen Hull 1:43 scale 740mm	£51.45
Cervia, Thames Tug 1:48 scale 711mm	£71.50
Brave Borderer 1:32 scale 914mm	£86.50

Plan & Material Packs

Vosper MTB Hull Pack 670mm	£52.49
Higgins Hellcat CNC Pack 610mm	£57.49
HMS Temerity CNC Pack 890mm	£54.95

Plastic Kits

Trumpeter HMS Nelson 1:200 scale	£206.95
Trumpeter HMS Rodney 1:200 scale	£206.95
Trumpeter USS Iowa 1:200 scale 1352mm	£251.95
Merit USS Hornet 1:200 scale	£238.48
Tamiya IJN Yamato 1:350 717mm	£270.95
Trumpeter USS Missouri 1:200 scale 1352mm	£249.16
Trumpeter Bismarck 1941 1:200 scale 1265mm	£224.99
Trumpeter USS Arizona BB-39 1941 1:200	£160.16
Lindberg PT 109 MTB 1:32 scale 749mm	£149.95
Heller HMS Victory 1:100 scale	£149.95
Heller Le Soleil Royal 1:100 scale	£149.95
Lindberg Sea Witch. Clipper 1:96 scale 838mm	£149.95
Revell Flower Class Corvette 1:72 850mm	£107.10
Italeri Schnellboot S-100 1:35	£161.95
Iltaleri MTB77 1:35 scale 632mm	£89.95
Italeri PT109 Torpedo Boat 1:35 scale	£89.95
MTB Vosper St.Nazaire Raid MTB 74	£89.95
Trumpeter HMS Repulse 1941 1:350	£87.21
Trumpeter HMS Hood (1941) 1:350	£80.09
Trumpeter Prinz Eugen 1945 1:350	£64.96
Trumpeter HMS Belfast 1942 563mm 1:350	£62.29
Trumpeter Graf Spee. 1:350 531mm	£47.16
Trumpeter Admiral Hipper 1941 1:350	£62.26
Tamiya Bismarck 1:350 717mm	£61.99
Revell Type VIIC U-Boat 1:72	£59.99

Plastic Kit Upgrades

German AA Weapons WWII 1:350	£8.40
Naval figures 1:350 scale	£7.20
Passenger ship crew figures 1:350 scale	£8.40
Naval Crew Figures German WWII 1:350	£8.40
Etched lifebelts set 1:350 scale.	£8.40
R.N Naval figures Far East 1:350 scale	£8.40
Bismarck etched detail Tamiya Bismarck 1:350	£22.30
Tirpitz (designed to be used with Tamiya kits)	£30.60
HMS Hood detail sheet pack 1:350 scale	£30.60
Admiral Graf Spee etched sheet set 1:350 scale	£24.99
HMS Repulse etch detail sheets 1:350 scale	£19.50
Prinz Eugen etched set. 1:350 scale	£22.30
HMS Repulse railings set 1:350 scale	£19.50
Prinz Eugen etched railings set 1:350 scale	£22.30
Prince of WaleS etch sheet pack 1:350	£20.60
HMS Dreadnought 1907 Etched detail 1/350	£19.50
HMS Dreadnought 1907 Railing Set 1/350	£14.99
Wooden deck for HMS Hood 1:350 scale	£36.50
Wooden deck for Graf Spee1:350 scale	£32.30
Wooden deck for HMS Repulse 1:350 scale	£34.80
Wooden deck for Prinz Eugen 1:350 scale	£34.80
Wooden deck for Tirpitz 1:350 scale	£34.80
Wooden deck for Admiral Hipper 1:350 scale	£34.80
DX Wooden deck & Etch for Hornet 1:200	£230.70
DX Wooden deck & Railing for Bismarck 1:350	£37.99
Wooden deck for Bismarck 1:350 scale	£31.50
Wooden deck for Tirpitz 1:350 scale	£31.50
Wooden deck for KG5 1:350 scale	£33.20
Wooden deck for Price of Wales 1:350 scale	£33.20
DX Wooden deck & Railing for Warspite 1:350	£53.80
DX Wooden deck & Railing for Bismarck 1:200	£192.80
DX Wooden deck & Etch for Missouri 1:200	£215.99
DX Wooden deck & etch set for Nelson 1:200	£199.99
GLS Flower Class Deck & Fittings Set. 1:72	£99.99
GLS Flower Class Type `C' Bridge Set 1:72	£38.40
GLS Flower Class Corvette Depth Charge Set	£39.38

This is just a selection from Gold Medal, MK1 Design, Master, Great Little Ships and Eduard.

Harold Underhill Plans

Cutty Sark Clipper Ship 698mm	£29.54
Marie Sophie of Falmouth 1033mm	£44.41
Lady of Avenel. Wood. 850mm	£33.30
74-Gun Two-Decker (Circa 1813 1422mm	£77.71
Lady Daphne Thames Sailing Barge812mm	£29.54
12-Gun Brig-of-War. Lines, 1187mm	£55.51
Cunard Liner Servia, 1:192 scale 850mm	£33.30
40-Gun Frigate (Circa 1790 831mm	£66.61
Valerian. Brixham Trawler 1069mm.	£49.23
Diesel Ring Net Fishing Boat 615mm	£29.53
Three Brothers. Rye Fishing Smack. 797mm	£29.54
Muirneag. Scottish Zulu- 1612mm	£66.61
Clyde Puffer Sealight, 588mm	£19.68
Leon. Wood Brigantine 514mm	£59.07
Iron Paddle Tug 1:48 scale 863mm	£44.40

This is just a selection of the range available.

R/C Boat Plans

Will Everard Thames Barge 1:48 scale	£17.50
Brave Borderer: 36in Vosper patrol boat,	£12.50
Range Safety Launch: 43in	£17.50
Miranda Steam Launch: 42in	£12.50
Vosper MTB 1:32	£12.50
Enterprise: 1:12 Northumbrian Coble	£12.50
Tyne Lifeboat 740mm 1:19 scale	£12.50
200 Series RAF Seaplane Tender 1:12	£12.50
Liverpool Lifeboat 1:12	£12.50
St Louis Belle Mississippi stern-wheeler 33"	£12.50
Norfolk Wherry 13.75	£12.50
Inchcolm Clyde puffer 24¾in	£12.50
Celia Jane Thames Coastal Sailing Barge 1:24	£22.50
Cervia: Thames tug in 1:48 scale	£12.50
H.M.S Hood 1:192 scale	£12.50
Eileen motor fishing vessel 1:24.	£12.50
H.M.S Ark Royal :1:192 WWW Aircraft carrier	£12.50
Fairmile Type 'C' M.L.: A 1:24 scale	£12.50
S.S Channel Queen : well-deck steamer 1:46 .	£12.50
Assault and mechanised landing craft. 1:32	£17.50
Clochlight Clyde Puffer: 1:36	£37.50
Formidable: Steam drifter 1:33 scale	£17.50
Britannia 1893 . Royal racing yacht, 1:32nd	£29.50
Pibroch A 1:50th scale Clyde Puffer, 400mm	£17.50
Osprey Scottish wooden fishing boat,500mm	£31.50
Altair gaff rigged schooner 1:32nd 1200mm	£33.50
Princess High speed luxury motor yacht.1:24th	£17.50
Constance Bowater paper freighter,1030mm	£17.50
Boston Fury 1960 East Coast Trawler 1125mm	£17.50
Waverley paddle steamer 1365mm,	£17.50
Boston Fury 1960's Trawler 1:48	£17.50
Osprey Scottish fishing boat,500mm	£31.50
Eleanda 1:30 seine netting trawler	£17.50

Static Display Kit Plans

Greek Bireme 440mm construction plans. 560mm	£7.12
Vikingship, construction plans. 1:50 440mm	£7.12
Santa Maria planset 1:65 scale 540mm	£8.85
Pinta planset 1:65 scale 450mm	£8.14
Nina planset 1:65 scale 450mm	£8.14
Mayflower, construction plans. Scale 1:60.	£11.29
Sovereign of the Seas, plans 1:78 1100mm	£16.18
HMS Prince, construction plans 750mm	£20.04
San Felipe, construction plans. Length 950mm.	£13.43
Chinese Junk, construction plans. 1:100 400mm	£7.02
French Xebec construction plans 1:60 720mm	£10.99
HMS Victory, construction plans 1:100 950mm	£18.82
HMS Bounty, plans 1:60 720mm	£13.43
New Bedford Whaler, plans. 1:16. 550mm.	£12.72
Venetian Gondola, plans. Length 570mm.	£5.90
Riva Aquarama plan set 1:10 scale 860mm	£23.09
Endeavour Plan set 1:80 scale 480mm	£8.85
Endeavour J Class Plans set 1:35 1130mm	£22.38
Titanic Plans set 1:250 1070mm	£48.83
Lady Nelson Cutter Plan Set 1:64 530mm	£8.85
Granado Plan Set 1:64 800mm	£16.79
HMS Fly Plan set 1:64 800mm	£21.37
HMS Vanguard Plan set 1:72 1171	£40.49
HMS Pegasus plan set 1:64 800mm	£21.37
Mercury plan set 1:64 860mm	£25.13
Cutty Sark, construction plans, Scale 1:78.	£31.00

This is just a selection of over 1000 plans available

R/C Equipment

Tamco 2 Channel 2.4GHz combo	£34.95
Hitec Optic 6 (2.4 GHz) combo	£119.99
Hitec Optic 5 channel (2.4 GHz) combo	£72.50
Ikkonik 6 channel Transmitter and Receiver Set	£59.95
Tamco 6 Channel 2.4GHz combo	£49.95
Viper Marine 40 amp speed controller	£53.22
Planet 5 Transmitter and Receiver Set	£54.99
FR30HX 30amp speed controller	£47.14
15HVR 15amp speed controller	£37.69
Viper Marine 25 amp speed controller	£34.99
FR12VR 12amp speed controller BEC	£33.86
Hi Tech Mega Arm Sail Winch 19.8kg/cm	£30.99
Proportional Drum Sail Winch	£30.63
Viper Marine 20amp speed controller	£28.99
Viper Marine 15amp speed controller	£22.99
Viper Micro Marine 10amp speed controller	£22.99
Viper Marine 15 Plug Play speed controller	£22.99
Programmable mixing module	£20.34
Waterproof mixing module (w-tail)	£17.80
Waterproof mixing module	£15.70

Full range of R/C installation equipment available

Sound Modules

Petrol/Diesel Engine with Horn	£45.72
Bilge Warning sensor, light and pump	£30.66
Steam Engine Sound	£45.72
Destroyer Whoop Whoop	£37.62
Fog Horn	£37.62
Sub Dive Alarm	£37.62
Air Horns	£37.62
Large Ship Horn	£37.62
Old Steam Whistle	£37.62
16inch Guns Salvo	£37.62
Tug Boat Air Horn	£37.62

Motors

Schottel drive unit 40mm dia prop	£62.70
Schottel drive unit 50mm dia prop	£78.90
Schottel drive unit 70mm dia prop	£95.94
543/12 low drain motor for large props	£18.85
Mabuchi Low Drain 545	£9.96
Mabuchi 540	£7.43
Electronize 365/14 low drain	£5.56
Motor mount for MFA 800/850 Motors	£4.50
385 Motor 6 to 15.0 Volt with mount	£6.56
540 Motor 6 to 12.0 Volt with mount	£10.36
RE800 Motor 12.0 Volt with mount	£27.49
RE850 Motor 12.0 Volt with mount	£27.49
Motor mount for 540/500.550 and 600 Motors	£2.75
MFA 540 Motor and 2.5:1 Gearbox 4.5 -15v	£19.33
MFA 540 Motor and 6:1 Gearbox 4.5 -15v	£19.36
MFA 385 Motor and 2.5:1 Gearbox 4.5 -15v	£17.56
950 series 385 Motor and 6:1 Gearbox 4.5 -15v	£17.56
951 series 951 Motor and Gearbox 298:1 6volt,	£9.00
800/850 Belt Drive Reduction Unit 2.1:1	£40.80

Rudder Assemblies

33 x 22mm Rudder Assembly	£4.56
60 x 41mm Rudder Assembly	£5.34
35 x 26mm Rudder Assembly	£4.54
45 x 35mm Rudder Assembly	£4.54
55 x 45mm Rudder Assembly	£4.54
45mm x 30mm Rudder Assembly	£5.95
53mm x 36mm Rudder Assembly	£5.53
67mm x 44mm Rudder Assembly	£6.43

Raboesch Propshafts

Waterproof Propeller Shaft M4 290mm	£25.32
Waterproof Propeller Shaft M4 186mm	£23.52
Waterproof Propeller Shaft M4 211mm	£23.52
Waterproof Propeller Shaft M4 236mm	£23.52
Waterproof Propeller Shaft M4 261mm	£25.74

Raboesch Brass Propellers

Brass Propeller (A Type) 20 -3 Blade-M4	£9.94
Brass Propeller (A Type) 25 -3 Blade-M4	£9.94
Brass Propeller (A Type) 30 -3 Blade-M4	£10.84
Brass Propeller (A Type) 35 -3 Blade-M4	£10.84
Brass Propeller (A Type) 40 -3 Blade-M4	£10.84
Brass Propeller (A Type) 45 -3 Blade-M4	£12.65
Brass Propeller (A Type) 50 -3 Blade-M4	£12.65
Brass Propeller (A Type) 55 -3 Blade-M4	£12.65
Brass Propeller (A Type) 60 -3 Blade-M5	£15.36
Brass Propeller (A Type) 65 -3 Blade-M5	£15.36
Brass Propeller (A Type) 65 -3 Blade-M4	£15.36
Brass Propeller (A Type) 70 -3 Blade-M5	£17.61
Brass Propeller (A Type) 75 -3 Blade-M5	£17.61

This is just a selection of a huge range of 3, 4 and 5 blades props in stock

Raboesch Bow Thrusters

Bow thruster unit with motor 14mm I/D	£33.90
Bow thruster unit with motor 16mm I/D	£33.90
Bow thruster unit with motor 19mm I/D	£33.90
Bow thruster unit with motor 22mm I/D	£38.40
Bow thruster unit with motor 25mm I/D	£38.40
Mini Bow thruster unit with motor 10mm I/D	£27.12
Hi-Thrust Bow thruster with motor 30mm I/D	£81.30

Asst CAP Maquette Fittings

CAP/R113	Modern boat fender, 48mm long	£5.61
CAP/R112	Modern boat fender, 39,mm long	£5.31
CAP/R114	Modern boat fender, 56mm long	£6.20
CAP/A48/15	Searchlight, 21mm dia x 28mm high	£5.02
CAP/A84	Danforth anchor 50mm long	£5.31
CAP/R940	'D' section fender 9mm high 2 mtr	£7.48
CAP/R6	Liferaft container 58mm long	£10.13
CAP/A62	Enclosed round radar array 30mm dia	£5.70
CAP/A83	CQR Plough anchor. 60mm long	£6.49
CAP/R70/20	Orange Lifebelt 30mm dia	£5.41
CAP/A91/10	Motorboat/yacht winch 47mm wide	£8.95
CAP/R103	Modern boat fender, 32mm dia	£5.61
CAP/A112/10	Echo sounder 23mm x 19mm	£5.61
CAP/R942	'D' section fender 15mm high 2 mtr	£11.02
CAP/A70/15	Fire monitor kit 37mm high	£11.80
CAP/AQ9G	Chrome steering wheel 48mm dia	£11.41
CAP/B60	60mm dia ship's wheel. Chrome	£11.61

BECC Letters&Number sets

2A Arial Lettering 2 mm,	£4.07
3A Arial Lettering 3 mm,	£4.59
4A Arial Lettering 4 mm,	£4.59
6A Arial Lettering 6 mm,	£4.59
8A Arial Lettering 8 mm,	£5.10
10A Arial Lettering 10 mm,	£5.10
12A Arial Lettering 12 mm,	£6.12
15A Arial Lettering 15 mm,	£7.14
20A Arial Lettering 20 mm,	£8.16
25A Arial Lettering 25 mm,	£10.20
5A Arial Lettering 5 mm,	£4.59

Available in most colours

Quaycraft Ship's Boats

QAL37	1:48 Scale 24ft Clinker Lifeboat 145mm	£19.08
QD51	1:48 Scale 20ft Clinker Dinghy 125mm	£15.84
QAP12	1:48 Scale 12ft 6in dinghy 80mm	£11.16
QD57	1:48 Scale 10ft 8in Clinker dinghy	£11.04
QD58	1:48 scale. 19ft jolly boat Clinker 120mm	£16.32
QL42	1:48 Scale 18ft Clinker Lifeboat 114mm	£14.88
QD44	1:48 Scale 14ft Clinker Dinghy 89mm	£11.16
QD41	1:48 Scale 18ft Clinker Dinghy 114mm	£14.88
QL54	1:48 Scale 17ft Clinker Lifeboat 108mm	£16.08
QLM1	1:48 Scale 12ft Lifeboat/Tender 76mm	£9.12
QP15	1:48 Scale 16ft motor dinghy 100mm	£15.12
QP27	1:48 27ft Royal Navy Whaler 172mm	£22.32
QL52	1:48 Scale 20ft clinker lifeboat 125mm	£15.84
QD56	1:48 Scale 17ft Clinker Dinghy 105mm	£16.08
QP12	1:48 Scale 12.5ft Clinker Dinghy 80mm	£11.16
QP16	1:48 Scale 16ft R.N 16' dinghy 100mm	£11.04
QP17	1:48 16ft Fast motor boat 102mm	£18.24
QL53	1:48 Scale 20ft clinker lifeboat 125mm	£15.84

This is just a selection of over 100 boats available

1:72 scale Warship Fittings

Flower Class Corvette Depth Charge Set	£39.38
4in Gun Mark IX Breech Loading Gun 1:72"	£26.35
Coastal Forces Guardrail Set	£17.20
21in Torpedo and Tubes Set (2)"	£17.20
Moored Mine & Sinker Set	£17.20
Single 20mm Oerlikon Guns (2)	£14.99
2 Pdr. Pom-Pom Gun with Bandstand 1:72	£14.99
16ft Dinghy & Stowage 67mm long 1:72 scale	£14.29
Oval Carley Floats 43mm x 25mm (2) 1:72	£13.86
18in Torpedo and Tubes Set (2)	£13.86
Rectangular Carley Floats 38x30mm (2) 1:72	£13.86
2in Rocket Flare Set incl. Stowage Boxes 1:72	£11.28
Hedgehog Anti-Sub. Weapon 1:72 scale	£8.91
Chemical Smoke Apparatus & Smoke Float Set	£8.91
Wooden Reversible Life Raft 1:72	£8.91
Single Depth Charge & Chute Set	£8.91
Type A Mine Set (4)	£8.91
Twin .303 Vickers Gas Operated MG Set (2)	£8.91
9in Porthole (Scuttle) Set 4mm O/D (60)	£7.69
Twin .303 Lewis Gun Set 1;72 scale (2)	£7.69
Holman Projector 1:72 scale	£7.69

Scalelink Etched Brass

11mm 3 rail stanchions & railing 840mm	£10.20
1:96 R.N 3 rail stanchions and railing 11mm	£10.20
1:128 scale vertical laddering	£10.20
1:72 R.N pattern 3 rail stanchions and railing	£10.20
1:192 R.N pattern 3 rail stanchions	£10.20
Clarendon serif Letters 2.5, 3 and 5mm high	£10.20
1:200 Angled step ladders with handrail	£10.20
Vertical rung ladders 4.5mm & 5.5mm wide	£12.00
1:128 Angled step companionway ladders	£10.20
1:128 scale vertical laddering	£10.20
5mm and 6mm wide Angled step ladders	£10.20
6mm & 8mm vertical rung laddering	£10.20

This is just a selection from the huge range available

Crew Figures

1:24 Standing civilian crew member	£8.12
1:24 Seated crew figure wearing woollen hat	£8.12
1:24 Standing R.N/Civilian officer with binoculars	£8.12
1:24 Civilian crew member standing wearing beret	£8.12
1:24 Civilian/R.N Officer wearing cap and pullover	£8.12
1:24 R.N/Civilian wearing waterproof jacket	£8.12
1:24 Standing civilian captain in sheepskin jacket	£8.12
1:24 Seated ships captain with cap and pullover	£8.12
1:24 Standing officer in wet weather jacket	£8.12
1:24 R.N/Civilian wearing waterproof jacket	£8.12
1:24 R.N crew in dress uniform leaning on rail	£8.12
1:24 Seated civilian crew member 1:24 scale	£8.12
CB205 Ships cat, sitting 1:48 Scale	£1.25
CB220 Bearded Officer, 1:32 Scale	£6.97
CB223 Crew member,1:32 Scale	£8.75
CB851 Officer, clean shaven, 1 32 Scale	£6.82
CB86 Bearded Officer1:48 Scale	£4.89
CB87 Crew member, leaning on rail 1:48 Scale	£4.89
CB88 Young boy,1:48 Scale	£4.51
CB89 Small standing dog 1:48 Scale	£1.18
Modern crew wearing dungarees 1:30 60mm	£10.50
Modern crew in smock 1:30 scale 60mm	£10.50

This is just a selection of the range available.

Rigging Thread

Rigging Thread, 0.1mm Natural	£1.76
Rigging Thread, 0.25mm Black	£1.76
Rigging Thread, 0.25mm Natural	£1.76
Rigging Thread, 0.5mm Black	£1.90
Rigging Thread, 0.5mm Natural	£1.90
Rigging Thread, 0.75mm Black	£2.02
Rigging Thread, 0.75mm Natural	£2.02
Rigging Thread, 1mm Black	£2.14
Rigging Thread, 1.0mm Natural	£2.14
Rigging Thread, 1.3mm Black (10mtr)	£2.46
Rigging Thread, 1.3mm Natural (10 mtr)	£2.34
Rigging Thread, 1.7mm Natural 5 mtr	£3.28
Rigging Thread, 1.8mm Black	£4.42
Rigging Thread, 2.5mm Natural (2.5mtr)	£4.54

This is just a selection of the range available.

BECC Flags

GB02 White Ensign, Size: AAA 10mm	£3.05
GB02 White Ensign, Size: AA 15mm	£3.05
GB02 White Ensign, Size: A 20mm	£3.05
GB02 White Ensign, Size: B 25mm	£3.05
GB02 White Ensign, Size: C 38mm	£3.96
GB02 White Ensign, Size: D 50mm	£3.96
GB02 White Ensign, Size: E 75mm	£4.95
GB02 White Ensign, Size: F 100mm	£5.97
GB02 White Ensign, Size: G 125mm	£7.91
GB02 White Ensign, Size: H 150mm	£9.91

Also available, Naval ensigns in red, Blue as well and National flags from most maritime nations

Timber

Lime Strip 0.5mm x 2mm x 1000mm	£0.34
Lime Strip 0.6 x 10mm x approx 1 metre long	£0.31
Lime Strip 0.6 x 3mm x approx 1 metre long	£0.35
Lime Strip 0.6 x 4mm x approx 1 metre long	£0.38
Lime Strip 0.6 x 5mm x approx 1 metre long	£0.41
Lime Strip 0.6 x 6mm x approx 1 metre long	£0.44
Lime Strip 0.5 x 7x approx 1 metre long	£0.47
Lime Strip 0.6 x 8mm x approx 1 metre long	£0.25
Lime Strip 1.5 x 1.5mm x approx 1 metre long	£0.36
Lime Strip 1.5 x 10mm x approx 1 metre long	£0.73
Lime Strip 1.5 x 2.0mm x approx 1 metre long	£0.40
Lime Strip 1.5 x 3.0mm x approx 1 metre long	£0.45
Lime Strip 1.5 x 4.0mm x approx 1 metre long	£0.50
Lime Strip 1.5 x 5mm x approx 1 metre long	£0.55
Lime Strip 1.5 x 6mm x approx 1 metre long	£0.58
Lime Strip 1.5 x 7mm x approx 1 metre long	£0.61
Lime Strip 1.5 x 8mm x approx 1 metre long	£0.65
Lime Strip 1 x 1mm x approx 1 metre long	£0.36
Lime Strip 1 x 1.5mm x approx 1 metre long	£0.36
Lime Strip 1 x 10mm x approx 1 metre long	£0.55
Lime Strip 1 x 2mm x approx 1 metre long	£0.37
Lime Strip 1 x 3mm x approx 1 metre long	£0.38
Lime Strip 1 x 4mm x approx 1 metre long	£0.39
Lime Strip 1 x 5mm x approx 1 metre long	£0.45
Lime Strip 1 x 6mm x approx 1 metre long	£0.50
Lime Strip 1 x 7mm x approx 1 metre long	£0.51
Lime Strip 1 x 8mm x approx 1 metre long	£0.53
Lime Sheet 0.5mm thick x 100mm x 1 mtr	£5.82
Lime Sheet 1mm thick x 100mm x 1 mtr	£5.40
Lime Sheet 1.5mm thick x 100mm x 1 mtr	£6.70
Lime Sheet 10mm thick x 100mm x 1 mtr	£15.59
Lime Sheet 12mm thick x 100mm x 1 mtr	£21.37
Lime Sheet 15mm thick x 100mm x 1 mtr	£25.99
Lime Sheet 2mm thick x 100mm x 1 mtr	£8.09
Lime Sheet 20mm thick x 100mm x 1 mtr	£31.76
Lime Sheet 3mm thick x 100mm x 1 mtr	£9.53
Lime Sheet 4mm thick x 100mm x 1 mtr	£12.71
Lime Sheet 5mm thick x 100mm x 1 mtr	£12.71
Lime Sheet 6mm thick x 100mm x 1 mtr	£12.13
Lime Sheet 8mm thick x 100mm x 1 mtr	£13.86

This is just a selection of sizes. Other woods stocks include Walnut, Maple, Tanganykia, Beech, Pear, Balsa, Obechi

Admiralty Paints

Available in 14ml flip top capped bottles in the following colours. Light Ivory, Red Ensign , Maroon Admiralty, Polished Bronze, Antique Bronze, Olive Green, Walnut Brown, Matt Flesh, Gold/Brass, Copper, Dull Black, Matt Black, Dull White, Matt White, Yellow Ochre, Red Ochre, French Blue, Flat Matt Varnish, Matt Varnish Satin Matt Varnish £2.39 per colour

Books

Plank on Frame Models. Volume Two	£25.00
Plank on Frame Models. Volume One	£20.00
Ship Modeling Simplified	£14.95
Ship Modeling from Stem to Stern	£16.95
Ship Modelling from Scratch	£19.95
Advanced Ship Modelling by Brian King:	£16.95
Scale Model Tugs	£14.95
Historical Sailing Ships: Remote Controlled	£14.95
Period Ship Kit Builders Manual	£16.95
Model Ships Fittings	£12.95
Model Submarine Technology	£12.95
Painting Model Boats	£12.95
Scale Model Steamboats	£12.95
Making Model Boats with Styrene	£12.95
Simply Model Submarines	£12.95
The Model Tug Boat Book:	£12.95
Scale Model Warships	£12.95
Submarines. Models and their Originals	£12.95
Scale Model Boats. Building & Operation	£9.95
Radio Control In Model Boats	£9.95
Introduction to Marine Modelling	£9.95
Ship Modelling Solutions	£9.95
Scratch Building Marine Models	£9.95
Photoetching For The Plastic Ship Modeler	£12.95
Super-detailing the Cutter Sherbourne	£19.00

This is just a selection from our huge range of books.

Modelling Tools

Mantua 4 speed mains transformer	£52.00
Mantua 12v Electric Planer	£79.00
Mantua Spar Lathe. 12V	£99.00
Mantua 12v Electric Fret saw 12v	£110.00
Amati heavy duty Building cradle	£52.60
Building Slip	£54.95
Deluxe Modellers Tool Chest	£38.95
Amati Electric Plank Bender	£31.54
Rope Walk kit	£37.13
Strip Clamp.	£32.95
Swann-Morton 3 knife ACM Tool Set	£22.61
Planet, special work bench	£10.58
20 piece twist drill set .3 to 1.6mm	£13.23
Amati Pin Pusher De-Luxe	£11.45
Pin Pusher	£9.07
Waterline marking tool	£10.48
A3 cutting mat	£11.18
Pounce Tool with 4 wheels	£11.16
Assorted grade Sanding Sticks (5)	£10.94
Shroud Making Jig	£12.72
Zona Ultra Thin Kerf Razor Saw 52tpi	£11.76
Zona Ultra Thin Kerf Razor Saw 42tpi	£11.76
Zona Ultra Thin Kerf Razor Saw 32tpi	£11.94
Zona Medium Kerf Razor Saw 24tpi	£11.94
8 piece twist drill set .5 to 2.0mm	£7.38
Archimedean Hand Drill	£6.74
Pin Vice with collets for .01 to 3.0mm drill bits	£6.64
K&S Tube cutter	£6.50
Miniature hand plane	£5.06

model Boats

Published by **MyTimeMedia Ltd**
Enterprise House, Enterprise Way,
Edenbridge, Kent, TN8 6HF
From outside UK: 01689 869 840
www.modelboats.co.uk

SUBSCRIPTIONS
My Time Media Ltd 3 Queensbridge The Lakes
Northampton NN4 7BF
UK – New, Renewals & Enquiries
Tel: 0344 243 9023
Email: help@mb.secureorder.co.uk
USA & CANADA – New, Renewals & Enquiries
Tel: +44 (0) 344 243 9023
REST OF WORLD – New, Renewals & Enquiries
Tel: +44 (0) 344 243 9023
Email: help@mb.secureorder.co.uk

CURRENT AND BACK ISSUES
Visit: www.mags-uk.com
Telephone: 01733 688964

EDITORIAL
Editor: Paul Freshney
PO BOX 9890, Brentwood, CM14 9EF
Email: editor@modelboats.co.uk

PRODUCTION
Designer: Steve Stoner
Illustrator: Grahame Chambers
Retouching Manager: Brian Vickers
Ad Production: Robin Gray

ACCOUNT MANAGER
Duncan Armstrong: 01634 238893
E-Mail: duncan.armstrong@mytimemedia.com

SUBSCRIPTIONS MANAGER
Kate Hall

MANAGEMENT
Commercial Sales Manager: Rhona Bolger
E-Mail: rhona.bolger@mytimemedia.com
Tel: 01689 869891
Chief Executive: Owen Davies
Chairman: Peter Harkness

Calls are charged at the same rate as standard UK landlines and are included as part of any inclusive or free minutes allowances. There are no additional charges with this number. Overseas calls will cost more.

mytimemedia
print & digital media publishers

Follow us on Facebook and Twitter

www.facebook.com/modelboatsmag
twitter.com/modelboatsmag

Model Boats, ISSN 0140-2910, is published monthly with an additional issue in January by MYTIMEMEDIA Ltd, Enterprise House, Enterprise Way, Edenbridge, Kent, TN8 6HF, UK. The US annual subscription price is approximately 53.40GBP (equivalent to approximately 89USD). Airfreight and mailing in the USA by agent named Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Jamaica NY 11431. US Postmaster: Send address changes to Model Boats, Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Subscription records are maintained at dsb.net Ltd, 3 Queensbridge, The Lakes, Northampton, NN4 7BF.

contents

Regular Features

Bow piece

This 84 page issue includes Part One of the conversion of the Revell 1:400 scale Queen Mary 2 kit to full radio control with four pod drive units, a considerable achievement by Tony Dalton who undertook this project. In addition, James Pottinger returns with a new Plan, that is available direct from MyHobbyStore, for Nesejenta a modern gill netter.

John Blackwell refurbishes his 50 year old radio controlled Admiral's Barge, ready for another 50 years of service and John Parker in Flotsam & Jetsam looks back at Electrotor and the Foam Wraith electric outboard motor, something quite unique in its day.

Readers' Models includes three of your super models, one being an Admiralty MFV from a James Pottinger Free Plan, the Shrek airboat from Andy Cope and the other being a matchstick model of HMS Hood. In addition there is a Gallery of vessels in Bergen, Norway and the usual regulars of Range Finder, BMPRS News, Test Bench and Boiler Room for the steam enthusiasts amongst you.

MyTimeMedia are also pleased to confirm that the Model Engineer Exhibition, with a dedicated marine section, will take place once again in September this year. Please see the advertisement on Page 63 for full details.

So, I hope there is something for everyone in this July issue which is on a sale in the middle of June, just as the 2016 model boating season is reaching its mid-point.

***Paul Freshney** - Editor*

Special Features

Compass 360

Model Boats notice board for your news

Editorial Contact - **Paul Freshney**

You can reach the Editor, Paul Freshney, on 01277 849927. The editorial postal address is: Model Boats, PO Box 9890, Brentwood, CM14 9EF.

The email is editor@modelboats.co.uk

Model Boats** is Published by **MyTimeMedia Ltd
Enterprise House, Enterprise Way, Edenbridge, Kent, TN8 6HF.

Plans Service at **www.myhobbystore.com**

The Plans Service is expanding all the time!

Over 3000 plans for model builders of all persuasions, Aircraft, Boats, Locomotives, Traction Engines, Steam and IC Engines - we even do Woodworking plans.

See and buy all of these at www.myhobbystore.com

2016 Fireboat Fun Day & Vintage Model Boat Day

King Lear MBC will be hosting this event on Sunday **11th September 2016** All vintage model boater's (the boats not you!) are most welcome for this informal and fun event. There is a jetty and slipway for ease of access to the lake (with good access for less able-bodied people) so please take your boats along for a sail. There is ample parking and picnic facilities at the lake in Watermead Country Park, Leicestershire, LE7 1PD. There is a £2.50 entrance fee payable to an unmanned machine, so having the correct change is required. The club hope to have a BBQ and provide hot drinks on the day. Further information can be obtained from Graham Taylor, tel: 01162 613959

Email: kinglearmbc@ntlworld.com or please check: www.kinglearmodelboatclub.co.uk

Balne Moor MBC

Forthcoming 2016 Open Events:
Sunday 3rd July: Tug Towing and Scale Sailing. An informal day towing or scale steering to your heart's content. £1 per boat.

Sunday 24th July: Scale Day. Separate classes for large or small boats so bring yours along whatever it is. £1 per boat.

Both events 1030hrs start and bacon or sausage butties are available until 1230hrs. Hot and cold drinks all day and home made cakes until they're gone. Sat Nav location: DN14 0ER. More information on the club's website: http://balne-moor-model-boat-club.myfreesites.net or please contact by email: michael.butler1949@talktalk.net

Society of Model Shipwrights

This society is holding its Biennial Exhibition on **20th August 2016** at Petts Wood Memorial Hall, 200 Petts Wood Rd, Orpington, Kent BR5 1LA. The Society is dedicated to the art and skills of making model ships and other maritime subjects to museum quality standards and currently has a membership of 80 active model shipwrights whose workmanship covers static & working scale model ships of all types including sail & steam, Navy Board style, miniatures, open boats & dioramas. It holds regular meetings with guest speakers, or for a general discussion, on the last Friday of each month at The Club Hall, St Peter's & St Paul's Church, Church Road, Bromley, Kent. Kent, BR2 0EG. They also have the use of a local pond in Orpington every Tuesday afternoon during the summer months from April to October.

For further details please contact:
Mr. Adrian Roberts
Hon. Secretary SMS
21 Wickham Court Road,
West Wickham, Kent, BR4 9LW
ajja.roberts@ntlworld.com

Model Engineer Exhibition 2016

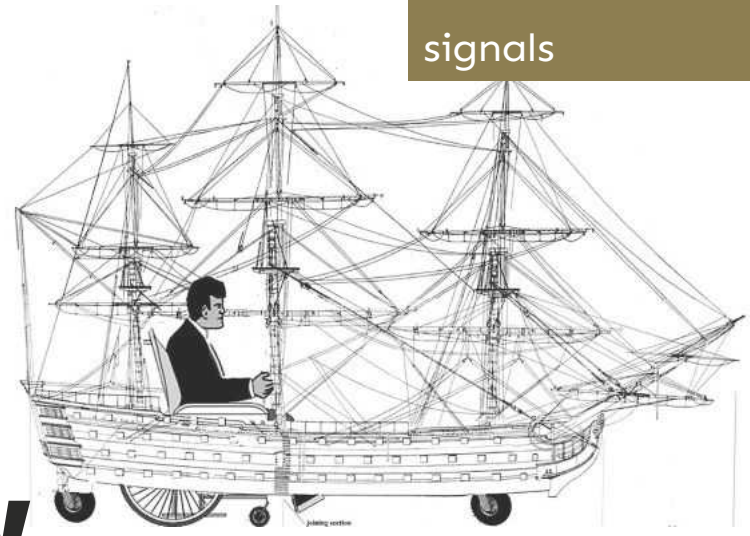
This is on again this year, but is between **16th and 18th September 2016** inclusive at the Brooklands Museum, Brooklands Rd, Weybridge, Surrey, KT13 0QN, an exciting new venue as the advertisement elsewhere in this issue reveals. For those wishing to enter the marine competition classes, the entry forms are available via the website: www.modelengineershow.co.uk

Chantry MBC

A reminder that their Open Day has been moved forward one week to **17th July 2016.** The location is the lake at the Eastern end of: Bluewater Shopping Centre, Greenhithe, Dartford, Kent, DA9 9SF, and it starts at 0930hrs. Parking is adjacent to the lake. Further information available from the club website: chantrymodelboatclub.co.uk or email: info.chantrymbc@gmail.com
Information supplied ***by Martin Oliver***

Butterworth Productions & HMS Victory

A large-scale model for wheelchair users in their theatre productions



ABOVE: The outline drawing of the concept.

This American production company received a grant in January 2016 to build a new addition to their series of Wheelchair Theatrical Attachments. Convinced by the boat building community in Bristol, Rhode Island, USA, that their next design should be for a sailing ship, it was decided that a large scale model, split in half to allow wheelchair access, would be something of a challenge, but would meet the requirements.

The Newport Naval War College (USA) is currently interested in a dramatisation of the Battle of Trafalgar with at least two single 'wheelchair' ships on stage and in the background would be backdrops of groups of warships, so this is added stimulus to the project. Those 'at the helm' will run the sails up and down, and tip the (model) ship to show wind pressure and strategy, as 'pushers' dressed as seamen help move the ships and their associated wheelchairs across the stage.

That is all for the future, but for now they are concentrating on making one good looking model that works and some pictures of HMS Victory as it is progressing are included here.

Website:
www. butterworthproductions.org

ABOVE: The bow section framework.

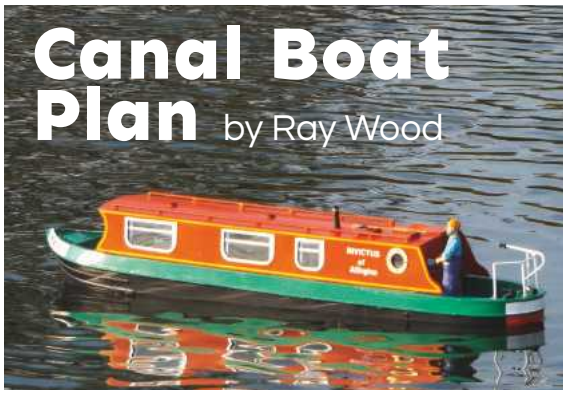
ABOVE: Carpenters hard at work!

LEFT: Hull planking underway.

Model Boats August 2016 issue is on sale on the 15th July 2016

Next month in Model Boats

The August 2016 issue of Model Boats will include a two-sided full-size Complimentary Free Plan, drawn to a scale of 1:30 by James Pottinger, for Hagbart Waage, this vessel being one of thirteen 22.87 metre rescue boats originally commissioned by the Norwegian Society for Sea Rescue. Also included is a new in-depth Feature Plan article for Invictus of Allington, a simple to build Canal Boat designed by Ray Wood, the plan being now available from MyHobbyStore.



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

We have a great range of subscription packages that you can choose from, including **our new Print + Digital package** which give subscribers 13 issues a year with 6 free plans, 13 digital editions to download and keep PLUS access to an Online Archive dating all the way back to January 2007.

Don't forget! The August 2016 issue will be published on **15th July 2016** price £4.90 – don't miss it! Order your copy now! Or better still why not make it your first copy in a year's subscription to Model Boats magazine? See our subscription offer on **Page 30** in this issue...

Please reserve/deliver my copy of Model Boats on a regular basis, starting with issue _____

Title _____ First name _____

Surname. _____

Address _____

_____

_____

_____ Postcode _____

email address _____

Telephone number _____

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!

If you don't want to miss an issue

Just ask!

Contents may be subject to change.

PLASTIC MAGIC

PART ONE

1:400 Scale Queen Mary 2

Tony Dalton converts the Revell kit to full radio control

All the plastic model kit conversions that I have built to date seem to be of warships, so when coming across this Revell kit (No. 05223) of the Queen Mary 2 (QM2) at a 2013 IPMS show, and which was discounted by about 50%, it was immediately purchased. The finished model length is 85cm (33 inches) and prices at the time of writing in late-2015 were around £80. The boxed kit is shown in **Photo 1,** but before describing how the kit model was modified for sailing on open water, here are some facts about the ship.

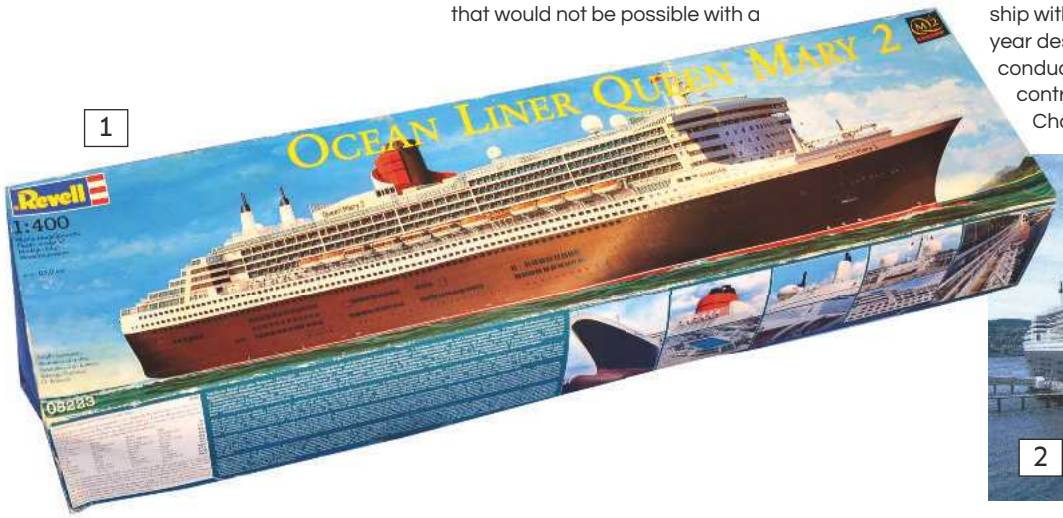
Queen Mary 2

At 150000 gross tons, the Cunard Liner Queen Mary 2 (QM2) is the largest, longest, widest, tallest ocean liner ever built. She is also the first ship of her type built since Queen Elizabeth 2, being a true ocean liner rather than a cruise ship. With her long, slender and exceptionally strong bow, deep draught hull and powerful engines, Queen Mary 2 has been designed to cross the North Atlantic between Europe (Southampton England) and North America (New York) in as little as six days. The ship's unique liner characteristics enable her to maintain an arduous schedule in most weather conditions that would not be possible with a conventional cruise ship and **Photo 2** is of QM2 moored at Trondheim in 2007.

The vessel is propelled by four 21.5MW Rolls Royce/Alstrom Mermaid electric podded propulsion units, each weighing nearly 300 tons. These are electric motors, hung from the stern of the ship below the waterline with forward facing stainless steel propellers. The forward two pods are fixed, but the aft pair can be laterally rotated to provide accurate steering, so negating the need for rudders. Electricity for the pods and ship's hotel services is supplied by four medium speed diesel engines, plus two gas turbines, collectively producing 120MW, sufficient electrical power for a city the size of Southampton. With 86MW of normal propulsion power, the ship can travel at over 29 knots making her one of the fastest passenger ships ever commissioned, the gas turbines only being used for outright maximum speed and emergencies.

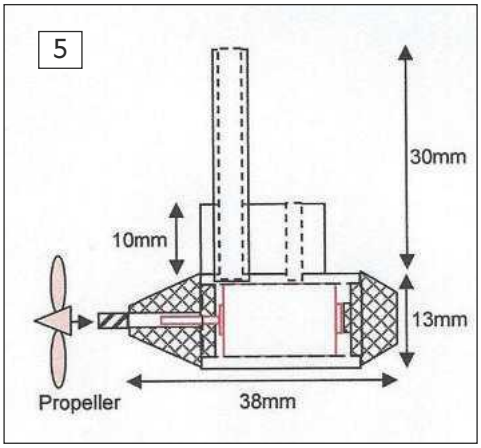
The concept for this liner was born from the purchase of the legendry Cunard Line by the Carnival Corporation in May 1998. Carnival's Chairman initiated a new ship study that was code named 'Project Queen Mary'. The naval architect Stephen Payne and Cunard Line's Director of New Building, Gerry Ellis, developed the design of the ship with their respective colleagues. After a two year design period, contract negotiations were conducted with five European shipyards before the contract was placed on 6th November 2000 with Chantiers De L'Atlantique of St. Nazaire, France,

1



2


3



builders of many famous French transatlantic liners such as the S. S. Normandie in 1935 and S. S. France in 1962.

Queen Mary 2 was delivered to Cunard Line on 22nd December 2003 and after a short shakedown delivery voyage the ship arrived at her homeport of Southampton for the first time on the 26th December. Following numerous travel and trade functions and her formal naming by H.M. Queen Elizabeth II on 8th January 2004, the ship departed on her maiden voyage to Fort Lauderdale on 12th January. After wintering in the Caribbean, the ship commenced her transatlantic service in April 2004, one celebrated crossing being in tandem with the older, and soon to be retired, Queen Elizabeth 2 (QE2). Today Queen Mary 2 continues the tradition of grand North Atlantic travel and is set to maintain the style of transatlantic ocean travel that many thought would finish forever with the advent of the jet airliner.


4

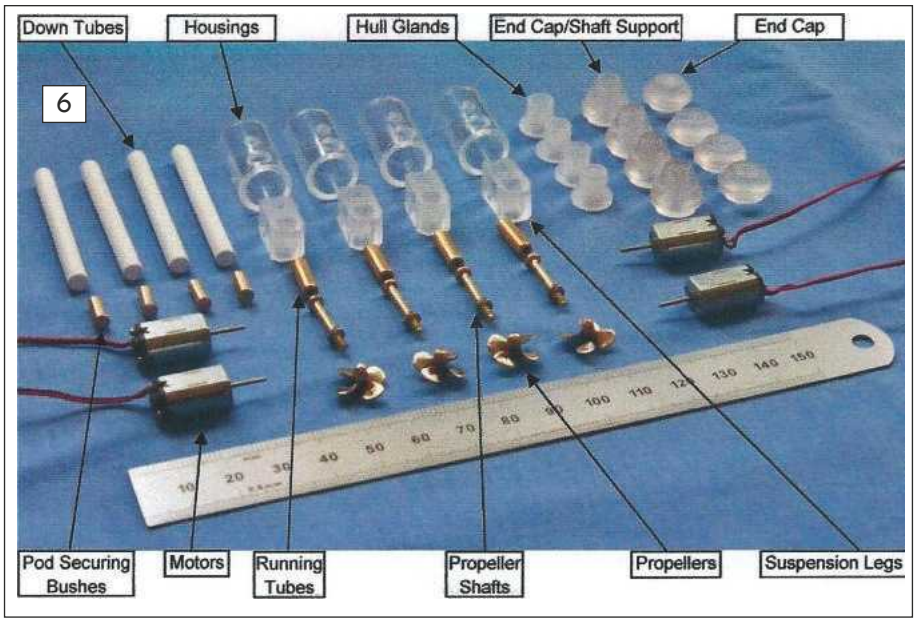
Design phase of the model

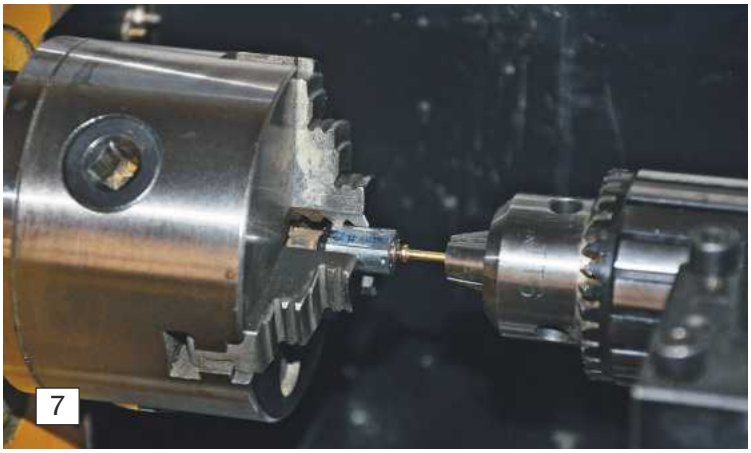
The kit comprises a two part moulded hull, twenty one moulded frets in plastic bags, designated A to M and mostly moulded in white plastic, but some in clear plastic being suitable for the glazed items, the total number of parts being 249. There is a single sheet of decals with 87 sets of transfers, a 36 page book of instructions and a black moulded stand for display purposes, which can all be seen in **Photo 3.**

Before attempting to build the model, a little research was necessary and during this period of investigation I was informed by a number of fellow modellers that if built as supplied and fitting motors inside the hull complete with running gear, it would be likely to be a little unstable, requiring additional ballast which would result in the hull sitting below its designed waterline (please see article by Richard Webb in MB May 2006). Glynn Guest built the Airfix model of QM2 in October 2005, but he used two propulsion pods obtained from a toy submarine which was reasonably successful. After considering all the pros and cons, I decided to increase the depth of the hull by 15mm and to use four fixed pods for the propulsion system with a mixer for the aft pair, thus providing steering capability.

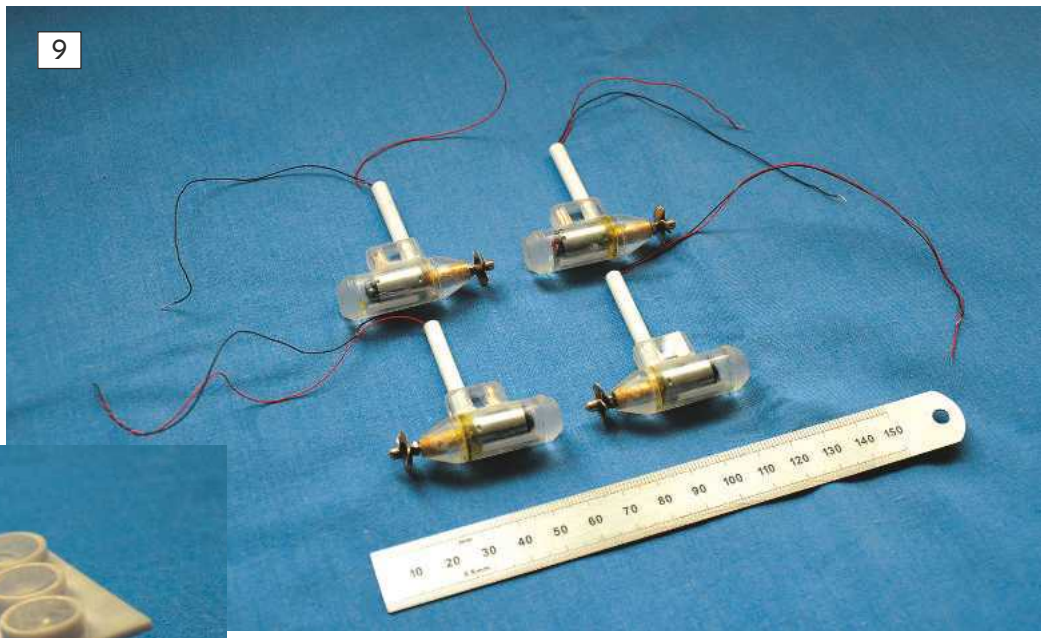
The pods

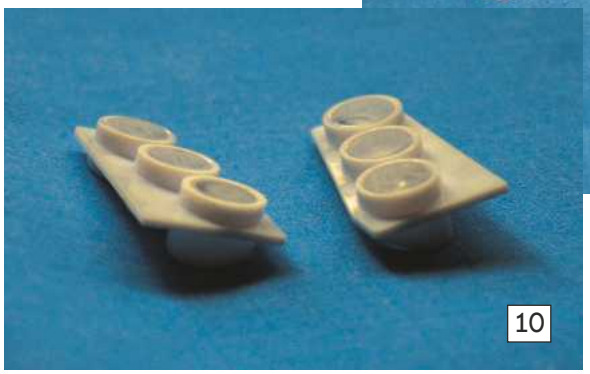
After testing a number of small motors that would fit inside the moulded pods together with the propellers supplied, I discovered that the current taken by these motors was far in excess of their rated maximum. **Photo 4** shows a motor being tested with a propeller in a plastic container of water. Some larger motors were also tested, finally settling on one that was 10mm diameter and 15.5mm long, rated at 1.5 to 4.5 volts at 1.3amps max), this decision resulting in having to design new pods. After sketching out a number of prototypes, a drawing for the new design was created, as in **Photo 5.** The material used for the pods is 13mm diameter clear acrylic tubing for the housing, round and square bar for the ends, suspension legs and hull glands. Brass for the running tubes, propshafts and securing bushes and styrene (Plasticard) for the down tubes. All the machined parts may be seen in **Photo 6.**




7


8


9


10

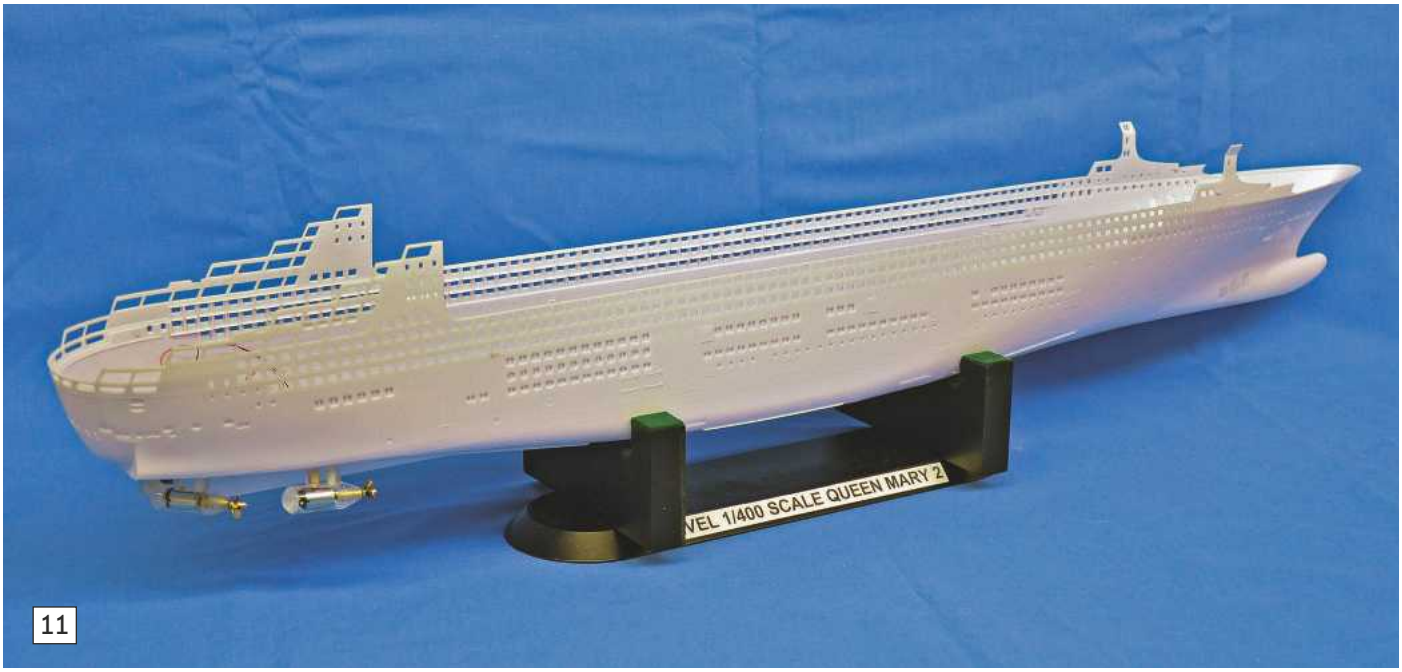
Having made all the individual parts it was time to carry out some assembly. First, the propshafts were fitted and glued to the motor's output shafts. As the propshafts are very short it was important to ensure that the alignment was, at the very worst, perfect. In order to achieve this, the motor was fitted into the chuck of a lathe and the shaft inserted into the tail stock. A small amount of thick superglue was applied to the motor shaft and the propshaft then moved along to mate with the former. It was then necessary to wait until the glue had fully cured and **Photo 7** shows a motor and its propshaft in the process of being bonded together.

The next stage was to assemble each Pod. The running tube was pressed and glued into the shaft support which was then inserted into the housing and likewise bonded. The Pod securing bushes were then inserted into the housings and glued together with a thin strip of styrene which acts as an anti-rotational wedge for the motor. Finally the down tubes were inserted into the suspension legs and glued. **Photo 8** shows all these parts together with a motor and propeller awaiting final assembly.

Prior to final assembly, each motor and propshaft were packed out with Vaseline before being inserted into their housings and at the same time the motor connection wires inserted into the housing and up through the down-tube hole. At this point, the motor function was tested by applying a few volts to the connection wires. With this part of the assembly complete, the down-tube (suspension leg) assembly and the end cap were bonded to the housing, and **Photo 9** shows all four Pods assembled, and awaiting final testing.

Initial hull and pod testing

The next step was to part-build the hull sufficiently to allow the Pods to be fitted and tested. The bow thrusters were removed from their carrier sprue and three plastic blanking plugs fitted and glued to the inside of each thruster hole as in **Photo 10.** These units were then bonded into each half of the hull, together with the thruster doors. They are non-functioning on this model. The two halves of the hull were then fitted and glued together, the resulting glue line being later cleaned-up. The holes in the hull for the Pods were then drilled-out to accept the new hull glands which were glued in place. Finally the four thrusters were fitted to the underside of the hull, each being secured in place with a single M2 screw.



11


12


13

The two forward pods are set parallel to the line of the hull, but the two aft pods are set at an angle of 35 degrees in order to facilitate steering when using a mixer within the r/c system. At this stage it was necessary to create a proper stand for the model, this being achieved by screwing two 15mm fibreboard supports to the kit supplied plastic stand, **Photo 11.**

The control system comprises three speed controllers, one mixer, a receiver and a 4.5v battery. These were laid out loose in the bottom of the hull and the function of the Pods dry tested and found to be satisfactory. The hull was then placed in water, **Photo 12,** to check the performance. Phew! All systems performed as planned and the final test was on open water at the local lake. I am pleased to say that the bare hull performed extremely well, with the mixer reducing power to either of the aft motor pods as demanded to enable it to steer and turn easily within its own length, **Photo 13.**


14

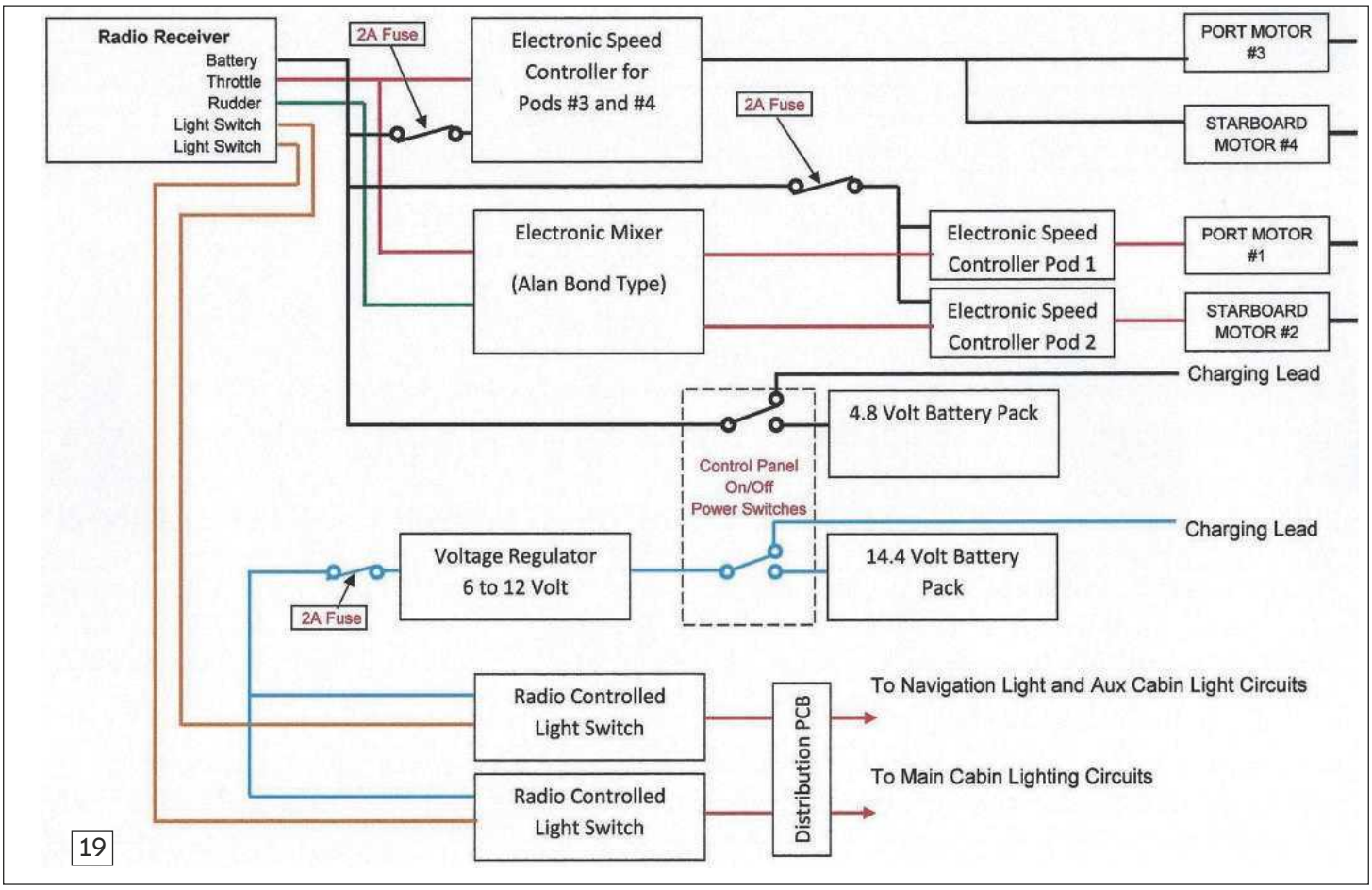
Hull modification and reconstruction

As mentioned earlier, it was proposed to increase the depth of the hull in order to improve the model's stability. The method used was to cut the hull in half along the waterline and insert 15mm wide strips of styrene to increase the overall depth of the hull. The advantage of modifying the model in this way is that the detail moulding characteristics of the hull below the waterline, such as the Pod mountings, stabilizers and bow thrusters can all be retained and **Photo 14** shows the hull after being cut into two parts.

The lower part of the hull had the 15mm wide strips of styrene glued into position along the top edges of it. The two main bulkheads were glued into position


15


16

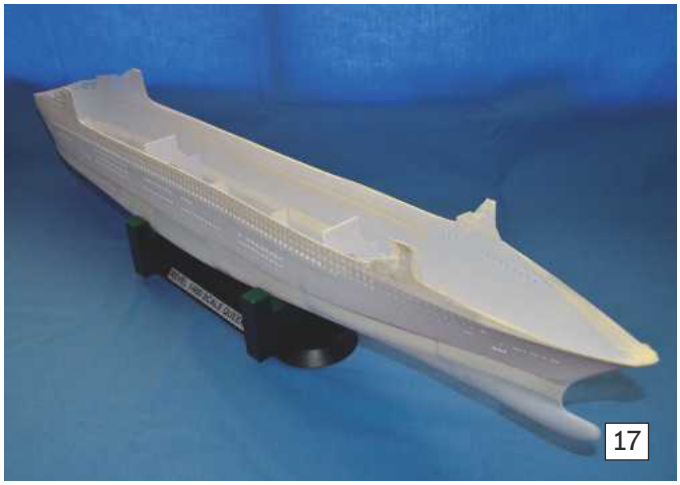


together with an additional bulkhead towards the bow to ensure the shape of the hull was maintained, **Photo 15.** At this stage, it was decided to construct some of the internal fittings such as the battery compartments and fixing points for the electronic control systems. When this was completed, the upper part of the hull was placed into position and glued to the lower half with some additional re-enforcement using fine fibreglass cloth on its inside, **Photo 16.** The hull was then carefully sanded and filled using epoxy filler repeatedly until a smooth blemish-free finish was obtained, the completed and unpainted hull being shown here in **Photo 17.**

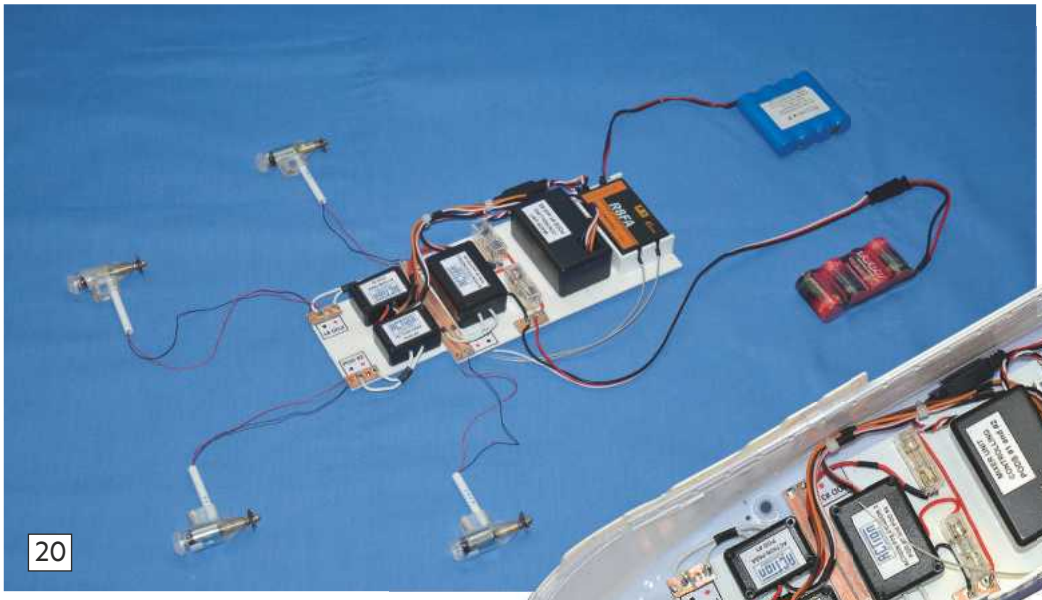
With the basic hull construction completed it was now time for painting. First, three coats of sprayed white primer were applied with a light sanding between each coat. The top of the hull was then masked to allow the bottom of the hull below the waterline to be painted with a couple of coats of red oxide primer. The bottom and the very top were then masked and the hull sides painted matt black and then the hull was masked (again) to allow the white waterline to be painted and finally the complete hull was over-sprayed with a coat of clear satin varnish and the result can be seen in **Photo 18.**

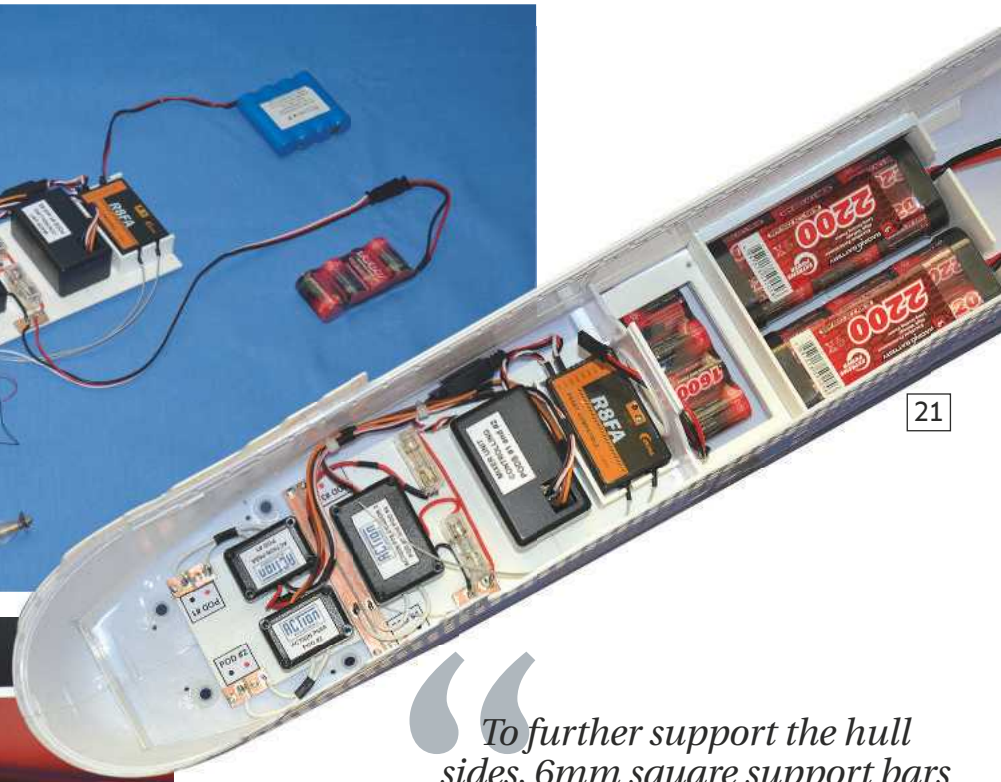
Propulsion control system

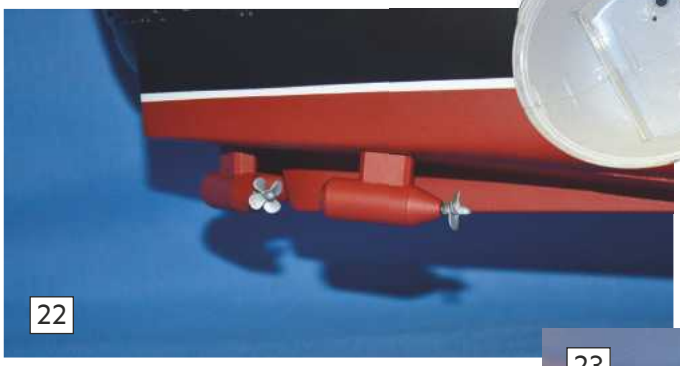
A schematic diagram of this control system is shown in **Photo 19.** The Pod propulsion system shown in the diagram is mounted on a single 2mm thick piece of styrene and comprises two ACTion P64A speed controllers and a home built mixer of an Alan Bond design, driving the two aft Pods. One ACTion P78 speed controller drives the two forward Pods, all via a Corona R8FA 2.4GHz radio receiver. **Photo 20** shows the propulsion control system complete with the four Pods and batteries in the process of being tested.


17


18


20


21


22

To further support the hull sides, 6mm square support bars were added across the whole width of the hull

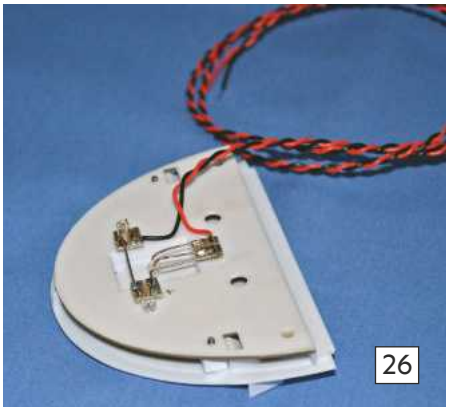

23

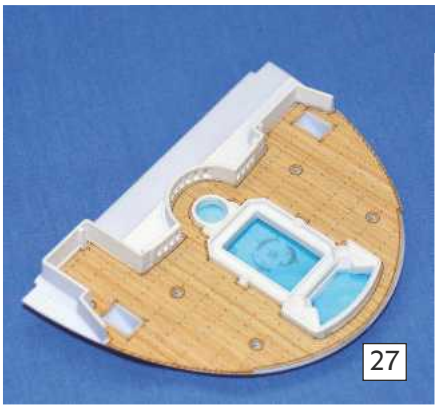
The propulsion control system now installed within the hull complete with two batteries, the larger being for lighting yet to be installed, is shown in **Photo 21.** The pods were all now finally permanently mounted on the underside of the hull as in **Photo 22,** and wired to the speed controllers.

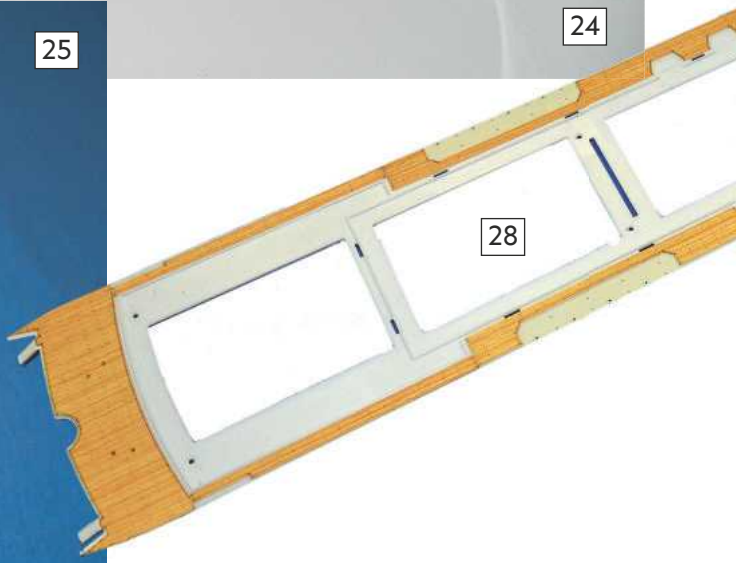
In order to strengthen and support the sides of the hull, the lower cabin balcony mouldings were removed from their frets, cleaned of all moulding flash, and the floors of the balconies brush painted in Matt Natural Wood for all 478 of them. This was, as you can imagine, a long and tedious job requiring much patience. Having completed this task, these two cabin balcony mouldings were glued and clamped to the inner sides of the hull as shown in **Photo 23.** To further support the hull sides, 6mm square support bars were added across the whole width of the hull, pulling the sides into alignment


24


25


26


27


28

and allowing the main deck to be supported and secured with small M2 screws. The deck and superstructure are removable to give access to the control systems and batteries and it was now bath time again. The hull was placed in the water and the amount of additional ballast calculated as being around 1.5kg, based on the distance between the water and waterline. Lead sheet was duly acquired and cut and shaped to fit along the bottom of the hull. The hull was returned to the bath and now found to settle, such that the water was still a couple of millimetres below the intended waterline to allow for the unexpected, **Photo 24,** so far, so good.

Decks and superstructure

With the hull basically completed, the next step was to build the decks and superstructure. First, the Fore Deck was removed from its sprue and carefully fitted and glued into position on the hull. Once the adhesive was set, any small voids in the joint line were filled and lightly sanded smooth before airbrushing light grey, **Photo 25.**

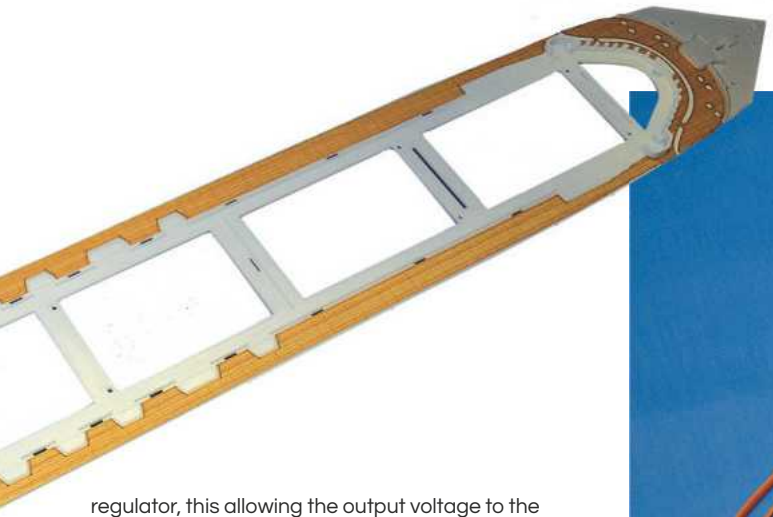
The aft Deck 5 was the next to be assembled. Three 2mm diameter holes were drilled in it, one in the centre of the swimming pool base and one each side. Into each of these holes, 2mm LED's were inserted, connected in series and terminated on small pieces of copper faced board together with a pair of connecting leads, **Photo 26.**

Deck 6 was next and for the open decks an imitation wood laminate deck kit was purchased and the correct piece(s) peeled from their backing film and carefully positioned. Then the relevant detailed bulkhead and superstructure parts were removed from their sprues, painted white and glued to the deck. For the swimming pools, a 'water' design was printed on some very thin clear acrylic sheet and placed in the base of the pools and the result of that can also be seen in **Photo 27.**

Deck 7, the Main Deck, was the next to be attended to. First, it was placed in position on the hull and drilled through and tapped M2 in the places where it was to be secured to the hull. In all instances additional bracing has been added to the hull in order to accommodate the screws. The deck was then removed and just a small amount of light grey airbrushing was required, two areas for the liferaft storage and a section in front of the bridge. The remainder of the deck was covered with the wood laminate decking, which is supplied divided into six sections. Each section was peeled from its backing film and carefully placed into position on the deck, and **Photo 28** shows Deck 7 completed awaiting further assembly into the hull. Deck 7 is also known as the Promenade Deck, passengers being able to walk all around it.

LED lighting

This was next and the plan was to have two radio controlled electronic switches for the lights; one to switch on and off the bridge, aft decks and swimming pool lights, and the other to control the LED strip lights illuminating the main cabins. These strip lights are designed to run from 12 volts and when tested have proved to be extremely bright. So, it was decided to supply all the LED's from 14.4 volts using two 7.2v batteries via an adjustable voltage



regulator, this allowing the output voltage to the lights to be adjusted between 6 and 12 volts. These three items (all home built) were placed on to a 2mm thick sheet of styrene card together with a fuse holder and a connection/distribution board for the wiring, **Photo 29.**

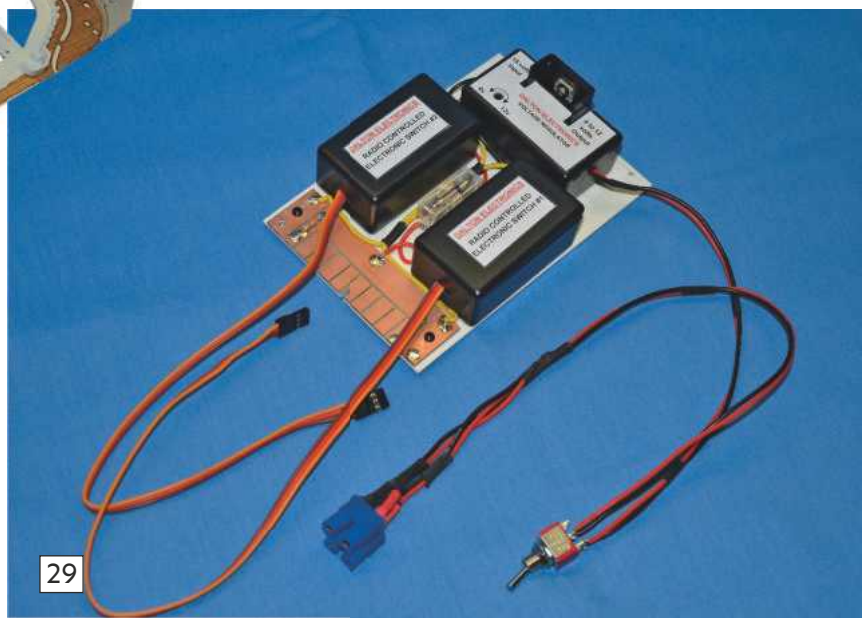
With the LED control system all now built, this entire assembly could be mounted inside the hull and screwed to the bulkhead supports already provided. Once installed, the rest of the hull wiring was completed and a temporary switchboard, in the form of a spare piece of plywood, was fixed to the top of the hull using double-sided tape, **Photo 30.** As you can see, there is a lot of equipment squeezed into the artificially deepened hull.

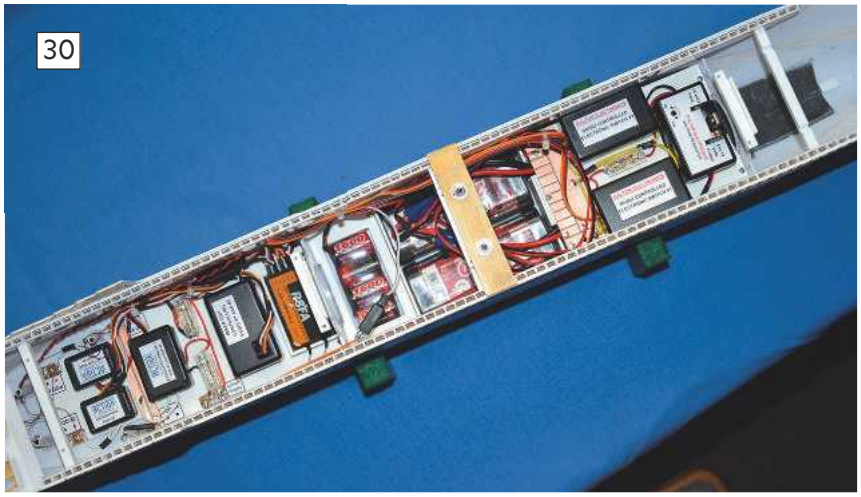
Trials

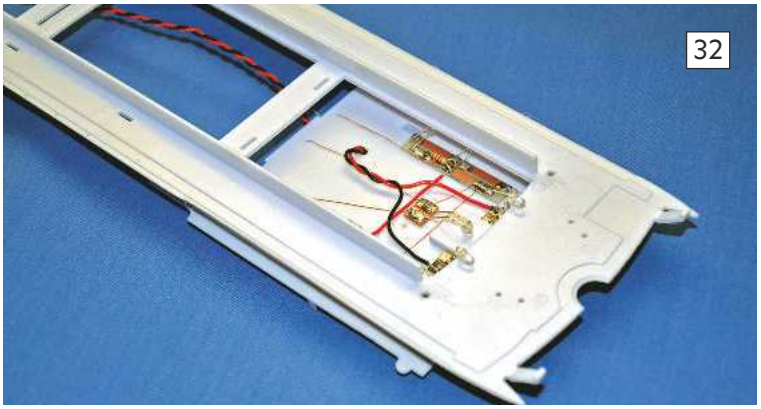
With all of the control systems within the hull it was time to try the model on open water, so with a friend I ventured down to our local lake on one of the few fine summer days of 2015. Placing the incomplete hull in water, it remained upright with no noticeable instability and so, hands to the transmitter and away it sailed as in **Photo 31,** of this first proper sea trial.

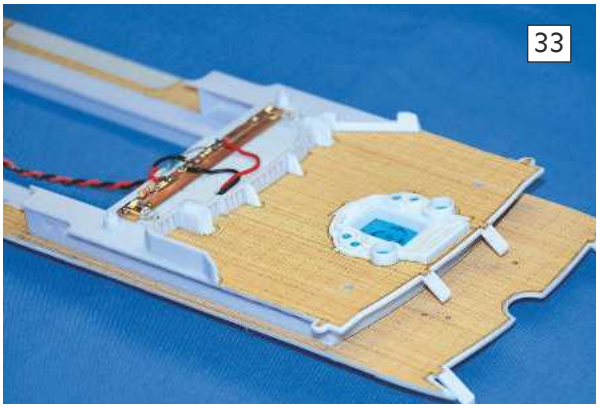
Back to the workshop

Continuing now with the construction of the superstructure, the sides of the aft bulkheads on Deck 7 were positioned and glued into position. Deck 8, having had its wood laminate decking and cabin sides fitted, was then glued into position on top of the vertical sides of Deck 7. With these two decks assembled together, more LED lighting was added, first to the underside to illuminate the pool and Deck 7 area as well as the cabins of Deck 6 below, **Photo 32,** and second, to the top side in order to illuminate the Deck 8 area, **Photo 33.** This may seem confusing, but QM2 has two pools at her stern on different levels.

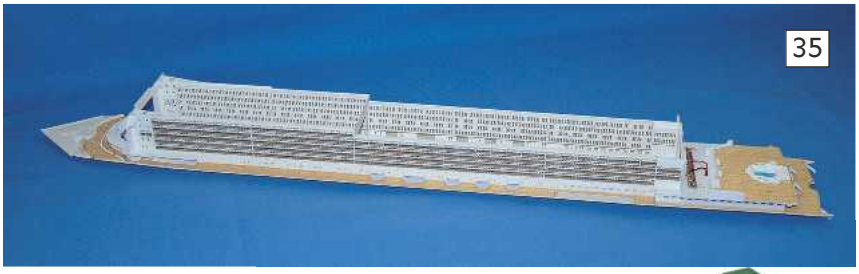


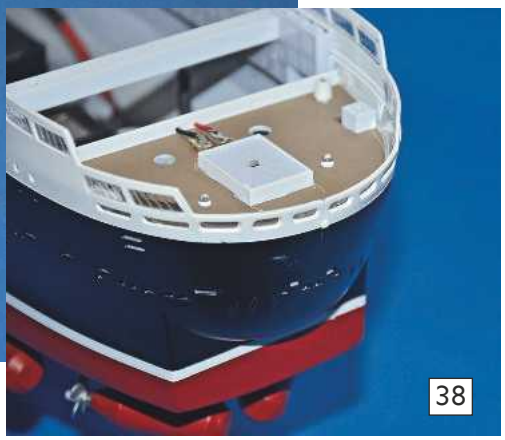


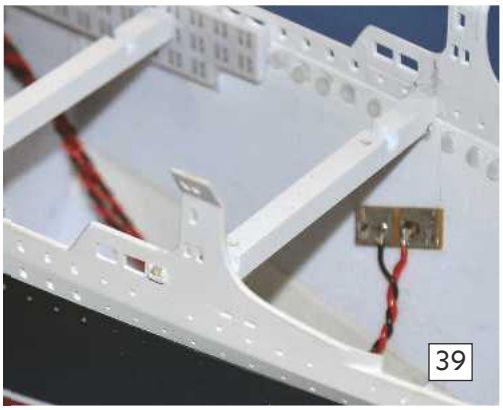




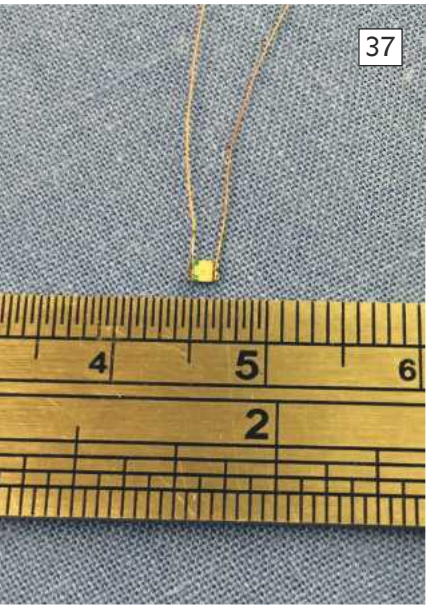

34


35


38


39

36



37

The upper cabin balcony mouldings were removed from their frets, cleaned of all moulding flash and the floors of the cabins brush painted in Matt Natural Wood as for the lower cabins, but this time there were only 470 of them to do. Having completed this somewhat exasperating painting task, it was then necessary to fit and glue all the guard rails to these cabin balconies, but not before the top of each rail was painted. A short cut for this was to use a black fibre tip permanent marker pen and the completed balcony units are shown in **Photo 34.**

These now completed upper balcony and superstructure sides were then positioned and glued to Deck 8, complete with three upper deck bulkheads which are required to complete the assembly, **Photo 35.** It was noticed that as the model was getting heavier as it now began to sway on the temporary stand constructed earlier, due to its thin plastic base as supplied with the kit. So, this was replaced with a 15mm thick fibreboard base but utilising the thick cross member supports previously made, **Photo 36** and yes, I know Revell should have two 'L's'!

More lighting

For the navigation lights, surface mounted LED's have been used, measuring 1 x 1.5mm. The first task was to attach two supply wires to each of the LED's, the copper wires being only 0.15mm diameter and needing to be soldered to each side of the LED, **Photo 37.** With the LED termination wires fitted, the LED's were installed in their respective positions starting with the stern light. Two small holes were drilled into the stern, level with Deck 6 and the LED wires were inserted into these holes and pulled through until the light rested on the stern where it was glued into position. **Photo 38.** The wires were glued to the deck face and soldered to a termination board that had previously been fitted with all the wiring hidden once Deck 7 was fitted. The Port and Starboard lights were installed in a similar manner and **Photo 39** shows the Starboard navigation light LED on the white part of the upper hull side, and in the background is the termination board for the Port LED inside the hull.

To be continued in the next issue

Data box

Queen Mary 2 kit	Revell
Small drive motors	Via online Amazon & 'Sourcingnet'
Revell Acrylic Paints	E-Models
ACTion esc & 4.8v battery pack	Component Shop
LED's and lighting strip	Component Shop
Propellers (4 bladed brass)	Prop Shop
Black, White, Red Oxide	Halfords aerosols
Fuse Holders with covers	Maplin (high street retailer)
Queen Mary 2 name	Scale Model Flags
Wood deck sheets	Artwox A50028 - Axels Modellbau Shop (Germany)

Deck Plans for Queen Mary 2 may be found on the Cunard website.

FAST UK DELIVERY!

HOWES MODELS

01865 848000

OVER 75 YEARS IN THE MODEL TRADE!

Now Stocking a New Range of Model Boats & Kits!

www.howesmodels.co.uk

FREE UK SHIPPING ON ORDERS OVER £150!

PLUS 10% OFF ALL EQUIPMENT WHEN PURCHASED WITH A KIT

Aeronaut Kits

AN3031/00 Torben Tug (includes fittings)- £217.99
AN3032/00 Kalle - £143.95
AN3046/00 Pilot Boat - £145.00
AN3048/00 Ramborator - £73.99
AN3052/00 Spitfire - £100.00
AN3055/00 Jenny - £113.00
AN3056/00 Delphin - £103.95
AN3057/00 Caribic - 44.99
AN3075/00 Anna 2 Fishing Boat inc Fittings £205.00
AN3080/00 Queen - £153.99
AN3081/00 Princess - £138.99
AN3082/00 Victoria - £128.95
AN3092/00 Classic Sport Boat - £53.99
AN3093/00 Diva Cabin Cruiser - £64.99
AN3254/00 Mora Viking Longboat with sail set- £67.99
AN3255/00 La Capitana DI Venetia Complete - £176.99
AN3270/00 Santa Elena inc Fittings & Sails - £194.99
AN3600/00 Graf Spee Complete - £323.99
AN3619/00 Tirpitz with Fittings - £428.95
AN3620/00 Bismark includes Fittings - £403.99
AN3625/00 Scharnhorst includes Fittings- £364.99

Billings Boats

B100 Us Coast Guard 1/40Th Scale - £36.50
B101 Rnli Waveny Lifeboat 1/40Th Scale - £36.50
B201 Rainbow Fishing Cutter 1/40Th Scale - £36.50
B478C Smit Rotterdam Incs Fittings - £264.95
B492C HMS Bounty 1/50Th Scale - £167.99
B498 1:75 HMS Victory - £245.00
B512 HMS Warrior 1/100 Kit Complete With Fittings - £395.00
B606 Colin Archer 1/40Th Scale - £79.99
B720 Viking Ship Oseberg - £104.99

Caldercraft Kits

C7000 Joffre - £285.00
C7001 Northlight - £270.00
C7003 Marie Felling - £425.00
C7005 Talacre - £270.00
C7009 Cumbrae - £285.00
C7010 Fifie Amaranth - £128.00
C7011 Sir Kay - £320.00
C7012 Imara (Single Screw) - £500.00
C7012/1 Imara (Twin Screw) £500.00
C7015 Branneran - £325.00
C7019 Milford Star - £250.00
C7020 Alte Liebe - £282.00
C7021 Schaarhorn - £360.00
C7024 Resolve - £550.00
C9000 HMS Diana - £465.00
C9001 HMS Cruiser - £200.00
C9002 HMS Snake - £200.00
C9003 HMS Agamemnon - £650.00
C9004 Mary Rose - £255.00
C9005 HMBrig Supply - £142.00
C9006 HMBark Endeavour - £240.00
C9007 HMS Jalouse - £220.00
C9008 HMAV Bounty - £195.00
C9009 HMS Mars - £195.00
C9010 HM Cutter Sherbourne - £72.00
C9011 HM Yacht Chatham - £87.00
C9012 HM Mortar Vessel Convulsion - £93.00
C9013 HM Schooner Ballahoo - £60.00
C9014 HMS Victory - £730.00
C9015 HM Bomb Vessel Granado - £215.00
C9016 HM Gunboat William - £172.00
C9017 HM Brig Badger - £172.00
C9018 HM Schooner Pickle - £127.00

Dumas RC Kits

American Beauty Mississippi - £185.00
Big Swamp Buggy Airboat Kit - £117.99
Carol Moran Tug - £78.00
Creole Queen Mississippi Riverboat - £320.00
Dauntless Commuter Boat - £162.00
George W Washburn - £156.00
Huson 24 Sailboat - £110.00
Jersey City Tugboat - £250.00
Jolly Jay Gulf Fishing Trawler - £127.00
Myrtle Corey Memphis River Tow Boat - £231.00
U.S.S Whitehall - £78.00

Graupner Models

B-2011 Cap San Diego - £1070.00
B-2013 Theodor Heuss Seenotrettungskreuzer - £849.99
B-2059 U-Boot Type Vii Premium Line - £635.00
B-2072 Divers 0.Wulf 6 RC Boat - £185.00
B-2089 Bismarck Battleship - £1200.00
B-2089/G Bismarck Battleship (without Camouflage) £1200.00
B-2096 Schlachtkreuzer H.M.S Hood - £1070.00
B-21008 SK32 Harro Koebke - £1200.00
B-21013 USS Missouri - £895.00
B-21018 WP Yamato M1/150 Battleship Premium - £1160.00
B-2104 Titanic Premium Line - £1225.00
B-2159 H.M.S Prince of Wales Premium Line - £850.00
B-2200 H.M.S Blue Bell Premium Line - £980.00
B-2201 Yacht 72 Ft. Child Design Premium - £635.00
B-2205 H.M.S Belfast 1:150 - £795.00
B-2206 Adolph Bermpohl - £1120.00
B-2212 USS Nimitz - £940.00
B-2214 Seabex One - £1500.00
B-2217 Queen Mary II - £1500.00
2704 WP Surfer Girl RTR - £170.00

Krick Kits

K20200 Karl & Marie - £147.99
K20211 Anna - £98.95
K20212 Anna Inc Steam Plant -
K20213 Anna Steam Engine - £98.99
K20240 Alert - £184.95
K20250 Gulnara - £270.00
K20261 Victoria with Fittings - £349.99
K20281 Alexandra inc Fittings £294.99
K20291 Borkum inc Fittings - £337.99
K20300 Felix Hamburg Harbour Launch - £87.90
K20310C U-Boot Type VIIb Submarine (inc running gear) - £325.00
K20320 Lisa M - £101.00
K20340 Hanse Cog - £139.99
K20350 Muritz Cabin Cruiser - £141.50
K20360 Police Launch - £122.50
K21430 Nordstrand Trawler Yacht - £165.00
K21440 Grimmershorn Motor Vessel - £235.00

NOW STOCKING A RANGE OF AERONAUT FITTINGS!

LARGER STOCK-LOWER PRICES

Open Mon-Fri 09.00-17.00 / Sat 09.00-16.00

Unit 2C & 2D Cherwell Business Centre

(Part of Station Field Industrial Estate)

Rowles Way, Kidlington, OX5 1LA

HOWES MODELS

01865 848000

Unit 2C & 2D Cherwell Business Centre
(Part of Station Field Industrial Estate)
Rowles Way, Kidlington, OX5 1LA

www.howesmodels.co.uk

Fast mail order - Overseas postage at cost

Just Arrived!

Cajun Commander Air Boat
Supplied with: Waterproof 50A ESC
- 1800kV Outrunner Brushless Motor
- 12 Piece LED Spotlight System
- Tactic 3 CH 2.4GHz Radio
Requires: Li-Po Battery & Charger

Our Price £215.00

TAMCO

Tamco 2 Channel 2.4GHz Combo
Special Price!
(Includes Transmitter & Receiver)
Digital Trims!
RRP £39.99
Our Price Only £34.00!

BACK IN!

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 £22.00!

SPECIAL OFFER
Tornado 50Amp ESC
Forward & Reverse
Waterproof
Electronic Speed Controller.
6-12 volts fitted
with tamiya plug
bullet connectors
and switch
Now Only £29.99!

2.4GHz & 27MHz Receivers

SPEKTRUM RECEIVERS IN STOCK
AR400 4 Ch 2.4GHz £25.00
AR610 6 Ch 2.4Ghz £29.99
MR200 2Ch 2.4Ghz £35.99
MR3000 3Ch 2.4Ghz £51.50
Planet R4M & R4Ms £16.99
Planet R7M £19.99
Planet 6CH Receivers still available
PLEASE CALL FOR PRICE
Radio Link 6CH Receiver £15.00
Futaba R2006 4CH 2.4Ghz £39.99
Futaba 617FS 7Ch 2.4Ghz RX £63.99
Futaba 2 Ch Am 27mhz £21.99
Futaba 2ch Am 40mhz £21.99
TAMCO 4CH 2.4Ghz RX £15.99
TAMCO 3CH 2.4Ghz RX £14.99
TAMCO 6CH 2.4Ghz RX £15.99
Saturn 6CH 2.4GHz RX £19.50
QSF 27MHz AM 2 Channel RX £8.50

OVERLANDER 7.2 VOLT 5000MAH NOW £22.99

New In!
2 Turn & 4 Turn
Winch Drum Servos
Torque: 6KG
Size: 40.5x20.2x38mm
Special Price Only
£12.50 Each!

FULL RANGE
Tamco 2.4Ghz 6 Channel Combo
Superb Quality
Only £45.00
Transmitter & Receiver
Additional RX £15.99

NEW! Futaba T2HR
2 Channel 2.4Ghz Radio
Complete with 2 Channel
2.4Ghz Receiver.
Only £47.50

Futaba 4YF 2.4Ghz Combo
Includes transmitter, receiver
& switch harness
Excellent Quality
Only £86.99

Radio Link T4U
4 Channel 2.4Ghz
Radio Complete With
6Ch 2.4Ghz Receiver.
Additional RX £15.00
Now Only £29.99!

Spektrum DXE
NEW! DSMX 6 Channel Set
INCLUDES AR610 RECEIVER
VERY EASY TO USE
FULL RANGE - TOP QUALITY
OUR PRICE £69.99

Saturn **2.4GHz Systems**

Saturns Full Range 2.4GHz Combos

X4 4 Channel £38.99
X5 5 Channel £44.50
X6 6 Channel £53.99

Back in stock! Robbe F-14 Navy

Small amount available
Includes 8 Channel
receiver, switch har-
ness and 1 servo.
40 MHz FM
Only £169.99

robbe
Modellsport

Futaba 6K Combo Set
Ideal step up from a 6 channel system.
30 Model memory, Digital trims.
Futaba Quality at only
£179.00!

Mini/Midi 1250MG
Metal Geared Servo
Torque 6V : 3.5KG Speed 6V 0.12
Length 31mm x Width 16mm x Height 35mm
NOW ONLY £6.50!

TOP PRICES ON HIGH QUALITY
7.2 VOLT BATTERY PACKS
2000MAH *ONLY* £8.99
2400MAH *ONLY* £9.99
2500MAH *ONLY* £10.50
3000MAH *ONLY* £11.99
3300MAH *ONLY* £12.50
3800MAH *ONLY* £15.99
4500MAH *ONLY* £19.99
5000MAH *ONLY* £22.99

Lead Acid Batteries

6 VOLT 1.0 AMP - £4.99
6 VOLT 1.3AMP - £4.99
6 VOLT 3.4 AMP - £5.99
6 VOLT 4.5 AMP - £5.50
6 VOLT 7 AMP - £7.45
6 VOLT 12 AMP - £12.50
12 VOLT 2.1 AMP - £6.99
12 VOLT 3.4 AMP - £11.50
12 VOLT 4.5 AMP - £12.99
12 VOLT 7 AMP - £9.99
6V JELLY CHAGER - £8.99
12V JELLY CHARGER - £8.99
2-6-12V JELLY CHARGER - £14.99

NEW LOW PRICES!

Mtroniks **Waterproof**
Electronic Speed Controllers
10AH 4.8-12v ONLY £18.99 *NEW PRICE!*
15AH 6-12 V ONLY £18.99 *NEW PRICE!*
15AH 12-24 V ONLY £29.99
20AH 6-12 V ONLY £24.99
25AH 6-12 V ONLY £28.99
40AH 6-12 V ONLY £44.99
RV11 4.8-9.6V RRP £57.99
OUR PRICE ONLY £24.99!!
FUSION AQUAPOWER 280AH Only £34.99
MTRONIKS G2 HYDRA 15AH BRUSHLESS
RRP £45.99 - NOW £34.99
MTRONIKS G2 HYDRA 30AH BRUSHLESS
RRP £54.99 – NOW £41.99
MTRONIKS G2 HYDRA 50AH BRUSHLESS
RRP £79.99 - NOW £59.99

NEW **Mains Chargers**

Fusion NX86 - 4-8 Cells Ni-CD/Ni-MH, Variable charge rate, 0.5-5amps. Mains operated, Peak detection. £24.99

Fusion NX87 - 6-8 Cells Ni-CD/Ni-MH, TWIN 5amp output charger. Peak detection on both outputs. £24.99

Ethos LX41B Pro - Charge rate 0.4-4amps 1-12cells ni-cad/ni-mh Li-ion/Li-Po 1-4, cells lead acid 1-12volts integrated balancing port mains or 12v operation. £49.99

OVERLANDER **NX-20**

Overlander Mains Powered
Peak Detection Fast Charger
- 4-8 cell 4.8v-9.6v
- NiMh & NiCD
Fitted with Tamiya connecter
and mains lead.
Bargain Price
Only £11.50!

BINARY
Ready to Run
Micro Catamaran
Sailboat with
2.4GHz Radio
Available In Blue
or Red
Length: 390mm
Height: 710mm
Width: 250mm
RRP £69.99
Our Price
£59.99

Howes Micro Servo
Torque - 1.7KG
Speed - 0.11 sec
(L) 22mm x (W) 11mm
x (H) 26mm
Only £3.50
4.8v-6v

Howes Mini Servo
Torque - 2.7KG
Speed - 0.14 sec
(L) 29mm x (W) 12mm
x (H) 30mm
Only £4.00
4.8v-6v

OVERLANDER BATTERIES
Li-Po Batteries
at Great Prices
7.4v 1000mah - £8.99
7.4v 1300mah - £10.49
7.4v 1600mah - £13.49
7.4v 2200mah - £13.99
7.4v 3900mah - £24.99
11.1v 1350mah - £17.99
11.1v 1000mah - £13.99
11.1v 1600mah - £18.99
11.1v 2200mah - £14.99
11.1v 3900mah - £35.99

SERVOS

NEW POWER 3KG STANDARD - £5.00
AAS-700STD WATERPROOF STD - £6.75
FUTABA 3003 STANDARD - £8.99
ACOMS AS17 STANDARD - £6.25
FUTABA 3010 6.5 TORQUE - £23.99
FUT 3014 WATERPROOF - £24.99
HITEC 325 BALLRACE - £11.50
FUTABA 3004 BALLRACE - £11.75
BUY 4 x 3004 FOR ONLY £46.00
ZEBRA/HITEC 135 Feather £5.25
HOWES MIDI MG Servo £6.50
POWER HD 9g Micro £3.50
OR 4 For £13.50
MINI SERVO ONLY £4.00 (4 for £15.00)
HIGH POWERED BALLRACED £7.99
High Powered Waterproof Servo £6.99

SAIL ARM, WINCH & SPECIALIST SERVOS

HITEC 785 HB SAIL WINCH
WITH FULL ROTATION DRUM
OUR SPECIAL PRICE £26.99
HITEC 765BB SAIL ARM
WITH 12 CM LONG ARM
OUR SPECIAL PRICE £26.99
FUTABA S3802 SAIL ARM
WITH 12CM LONG ARM £56.25
HITEC HS 805BB SAIL ARM HUGE
WITH 20KG TRQ £32.99

Metal Geared 17KG
Hi-Torque Servo
Standard Size
Fits All Brands
Was £29.99
NOW £9.99!
Limited Stocks!

NEW RANGE OF MODEL BOAT KITS AT SUPERB PRICES ON THE NEXT PAGE!
01865 848000 WWW.HOWESMODELS.CO.UK

Dragon Flite 95
ARTR
Requires 2.4GHz Radio
Includes Servos
Length: 950mm
Height: 1473mm
RRP £309.99
Our Price £279.99

AAS-700STD
Waterproof Standard Size Ball Bearing Servo

Only £6.75!
Torque: 3.6KG/CM @ 4.8v
4.7KG/CM @ 6v
Speed: 0.14 sec /60° @ 4.8v
0.12 sec / 60° @ 6v
Dimensions: 41 x 20 x 36mm

Electric Motors

385 5-POLE £3.10 each
400 3-POLE £5.99
540 3-POLE £2.99
545 5-POLE £2.99
550 3-POLE £6.25
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 RE 700 (6-8.4v) £28.99
MFA TORPEDO 800 £22.50
MFA TORPEDO 850 £22.50

VERY POPULAR
Joysway Dragon Force RTR RG65 Yacht V5
Superb Racing Yacht which is easy to transport!
Includes 2.4GHz Radio
RRP £174.99
Only £149.99!
Available without TX-RX
Only £139.99

NEW IN!
Fantastic Range of Brushless Motors & Speed Controllers. Now in Stock from Mtroniks, a name you can trust. Call us for details and super low prices!

MTRONIKS Hydra 15A & 30A Brushless Motor and Speed Controller Combo
Auto set up - Forwards and reverse - 6.0 to 12.0V Operation
Motor Speciation
KV (rpm/v) - 1100
Power - 120W
Diameter: 28mm - Length: 38mm
Hydra 15A Combo - Only £44.99
Hydra 30A Combo - Only £52.99
Ideal Replacement for 380 - 400 Motors

Atlantic II Tug Boat
Length 768mm x Beam 267mm x Height 495mm
Supplied with: 550 Size Motor, 30A ESC - Tactic 4 CH 2.4GHz Radio
Requires: Li-Po Battery & Charger
Our Price £229.99

4.8v-6v Receiver Batteries & 9.6V Transmitter Batteries

4.8 VOLT PACKS
1300MAH FLAT OR SQUARE - £6.99
2700MAH FLAT OR SQUARE £8.99
6 VOLT PACKS
1300MAH FLAT OR TRI - £8.99
2700MAH FLAT OR TRI - £11.75
9.6 VOLT TRANSMITTER PACKS.
1300 MAH FLAT - £15.00
2600MAH Flat or Square £19.99

HOWES SPECIAL!
Mtroniks Viper RV11 4.8v-9.6v.
RRP £57.99
Low Price £24.99

BACK IN STOCK!
Ready to Go 1/275 scale
Destroyer & Aircraft Carrier
Aircraft Carrier Length: 780MM
Destroyer Length: 790MM
Everything you need in one box including Radio, battery and mains charger!
RRP £45.99
Our Price Only £34.99

Props, Shafts etc
LARGE RANGE OF THE FOLLOWING
BRASS PROPS M4 3 BLADE
M4 NYLON PROPS 2/3 BLADE
STAINLESS STEEL SHAFTS M4
BRASS RUDDERS S/M/L
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 £2.99

Howes Special!

Core-RC
7.2v 2500mAh
Only £10.50
Very Limited Stocks!

Spektrum DX6i
Full Range 2.4GHz Transmitter and Receiver Combo, Includes AR610 RX
RRP £119.99
Only Price
£99.99

SAILING YACHT KITS
Joysway Orion £79.99
T/Tiger Volans £169.99
T/Tiger Naulantia £149.99
T/Tiger Victoria £92.50
T/Tiger Entz £150.00
T/Tiger Voyager £129.99
Joysway Dragon Force £149.99
Joysway Explorer/Pirate - £139.99
Joysway Force 2 60 £149.99
Surmount £95.00
Monsoon £140.00
Phantom £150.00
Pro Boat Westward V2 £99.99
Joysway Dragon Flite 95 £279.99

NEW IN! TIGER SHARK
Ready to Run RC Speed Boat with 2.4GHz Radio, Max Speed 24KM/H, Available in White. Includes Li-PO battery and mains Li-PO charger!

RRP £49.99
Only £34.99

Joysway
RC hobby world
Force2 60
Catamaran Yacht
RTR Yacht includes 2.4GHz Radio.
Length 660mm
Overall Height 1117mm
RRP £174.99
Our Price Only
£149.99!

Revell

Flower Class Corvette
'Platinum Edition' Kit
1/72 Scale - Length 850mm
RRP £119.99
Our Price £89.99!

HOBBY
Top Seller!

Richardson Tug
Ready to run model includes 2.4GHz Radio, Battery & Charger
Includes Smoke Generator
Length - 560mm Height - 420mm
Our Price £149.99!

BACK IN STOCK!
Century 7004
Ready to Run Speed Boat
Includes 7.2v Battery & Charger
Length: 750mm
RRP £59.99 Only **£29.99**

Range Finder

Dave Wooley with his Worldwide Review of Warships and Warship Modelling

Welcome once again to our regular sortie into the world of fighting ships and this month we look at the Russian guided missile destroyer Vice-Admiral Kulakov, and continue with the Deans Marine HMS Skirmisher project and have the usual brain teaser of the Mystery Picture.

The guided missile destroyer Vice-Admiral Kulakov - Part One

In 2013 the Russian Udaloy 1 class anti–submarine destroyer Vice-Admiral Kulakov visited the River Mersey as part of the 75th Commemoration of The Battle of the Atlantic. Although there was only limited access to this warship, I was able to go aboard and allowed to take a number of pictures of the superstructure and the surrounding fittings. Designated Project 1155R, this destroyer was laid down at what is now the Severnaya Verf St. Petersburg Shipyard on the 4th November 1977 and entered service with the Soviet Northern Fleet on 10th January 1982. The shipyard was formerly known as Soviet Shipyard No. 190, and between 1935 and 1989 as the Zhdanov Shipyard.

Although now considered elderly, this warship of 8404 tons and 163.5 metres length can still pack a considerable punch, having a main armament of:

- Eight URK-5 Rastub SS-N-14 long range anti-submarine and anti-ship missiles.
- Four vertical launchers for surface to air SA-N-9 missiles.
- Two 100mm (3.9 inch) 50 calibre guns with a range of 15000 metres.
- Gatling guns, torpedo tubes and anti-submarine rocket launchers.

Photo tour

The first picture is of the current Russian naval flag being flown from the jack staff, **Photo 1.** Access to the forecastle area was limited to seeing the capstans and cable tube bonnets, **Photo 2,** the latter leading to the cable locker. Immediately aft of the breakwater are four vertical launch tubes tubes

Photo 1. The ensign of the Russian Navy.

Photo 2. The cable holders and bonnets.

The Russian destroyer Vice-Admiral Kulakov arriving at Liverpool in May 2013.

for the SA-N-9 surface to air system and mounted behind, but above, are the two 100mm guns and it's worth noting that their barrels are watercooled, **Photo 3.**

The next picture is from starboard looking at the fittings and paint scheme of the forward deck housing beneath the 100mm guns, **Photo 4.** Note how the red painted deck scheme extends upwards behind the ladder. The next picture is from the quayside and shows the launch tubes for the SS-N-14 Rastrub anti-ship and anti-submarine missiles having a range of 90km, **Photo 5.** On top of the bridge is a small platform with a Strella 3 SA-N-5 Grail point (close-in) defence air missile launcher and just forward of it, but still above the bridge, are the Eye Bowel SS-N-14 tracking radars, **Photo 6.** General overall pictures can be useful in

Photo 3. One of the AK 100 100mm 70 calibre guns.

Photo 4. The starboard side of the forward deck housing.

Photo 5. These containers each have four launcher tubes for long range SS-N-14 missiles.

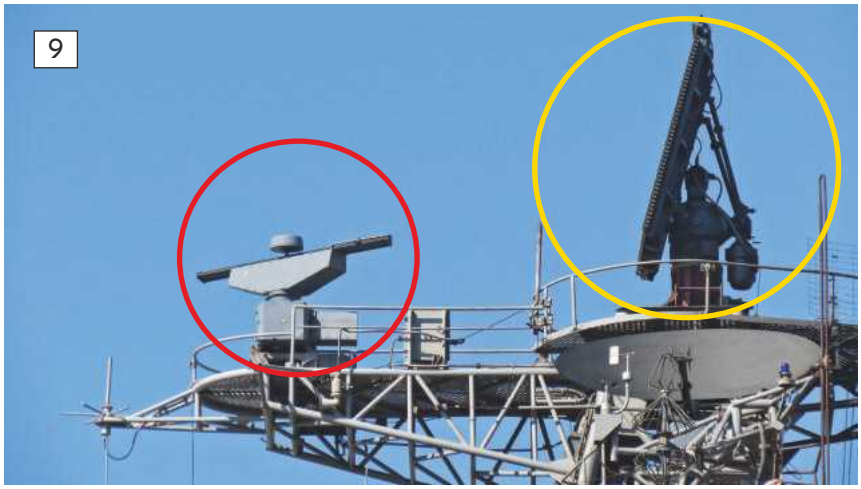
Photo 6. Above the front face of the bridge are two Eye Bowl S Band tracking antennae for the SS-N-14 missiles, one scanning horizontally and the other vertically.

Photo 7. A general picture highlighting specific detail - please see text for more information.

Photo 8. Ringed in white are the lightweight PK 10, ten tube 120mm chaff and infra red decoy launchers.

Photo 9. There are two radars on top of the foremast, a navigation surface search device and an air search radar.

Photo 10. A view beneath the bridge showing the rear section of one of the large launch containers for the SS-N-14 missiles. These missiles are not reloadable at sea.



ascertaining where specific fittings are sited, and for example in **Photo 7,** the large radar array (ringed in red) is an MR 145 Lev director for the 100mm guns which NATO refer to as 'Kite Screech'. The device ringed in yellow in this last photo is a 'Half-Cup' infra red warning and laser pulse detector. Continuing now to **Photo 8,** ringed in white are the port side PK 10 lightweight ten tube decoy launchers that can fire as many as 80 rounds at a time and ringed in yellow is a 'Bell Shroud' and the component on its top with a dimple is a 'Bell Squat', the prime task of this entire fitting being a signal jammer.

At the top of the forward lattice mast, ringed in red, is the MR 212 navigation radar, whilst the larger array ringed in yellow, is the MR 320 Topaz V surface and air search radar, **Photo 9.**

Moving now to the main weather deck, from the starboard side we have a view of the structure surrounding the rear of the SS-N-14 missile launcher tubes, **Photo 10.** The next picture focuses on the forward funnel casing with its prominent extension at the top and its other fittings including vents, cabling and the lower platform, **Photo 11.**

Ship's boats

The Udaloy destroyers, like other larger units of the Russian Navy, carry rigid inflatable boats (RIB's) as well as conventional hard hull power boats. Mounted on the port side of Vice-Admiral Kulakov is a 12.5 metre RIB, **Photo 12,** and **Photo 13** is of the stern of the power boat which is not unlike a fast pleasure cruiser having a Z-drive outboard drive unit and adjustable trim tabs, here ringed in red. **Photo 14** is of the same boat, but looking aft and note how it is secured to the davit and chocks with additional tensioning cables to its hull.

Amidships

At the base of the main mast, this port side view, **Photo 15,** gives an excellent view of how it is constructed and perhaps not something for the faint-hearted prospective model maker. Moving now to starboard and **Photo 16** clearly shows the red painted decks and upstand on the superstructure sides and ringed in blue is a laser detector. Looking aft now and we have the lattice main mast, **Photo 17,** and ringed in yellow is one of the two 'Wine Glass' jammers. Russian warships, even nowadays, seem to mount a huge variety of radar systems, rather more than are often openly apparent on western navy ships. Our final picture for this issue moves to the top of the main mast and a detailed view of the huge MR 760 (Top Plate) Fregat MA 3D air search radar. The two drum like fittings either side

Photo 11. A view of the fore funnel uptake with its rear extension at the top.

Photo 12. The 10.5 metre RIB.

Photo 13. Most larger Russian warships carry a conventional power boat, not unlike a modern leisure craft and please note its transom mounted trim tabs.

Photo 14. A view of the underneath of the power boat.

Photo 15. The base of the lattice main mast viewed from the port side.

Photo 16. The base of the main mast and its adjacent areas from the starboard side. Ringed in blue is a laser detector pod and please note the red painted decks.

Photo 17. A general view of the main mast with its 'Wine Glass' jammers ringed in yellow.

Photo 18. The 'Top Plate' 3D air search radar - a rather complicated piece of kit.

of the array are TACAN (Tactical Air Navigation) for bearing and distance determination, **Photo 18.**

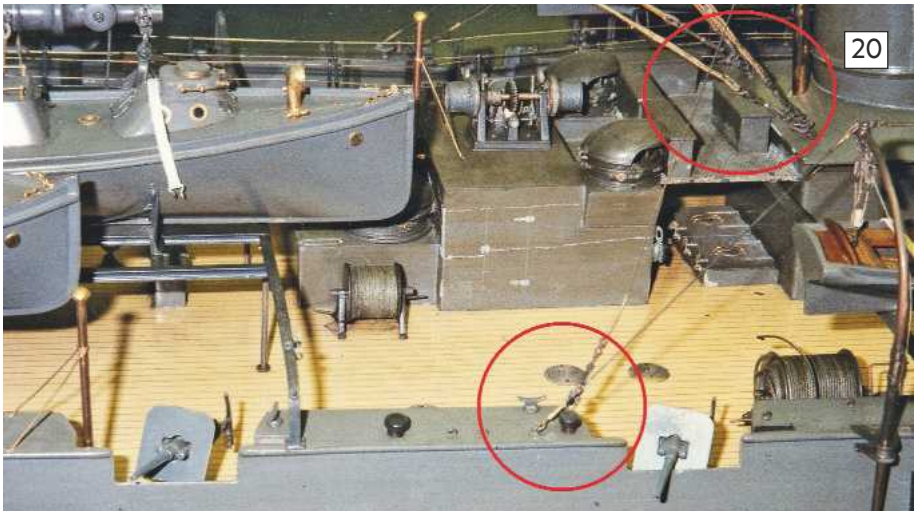
Conclusion

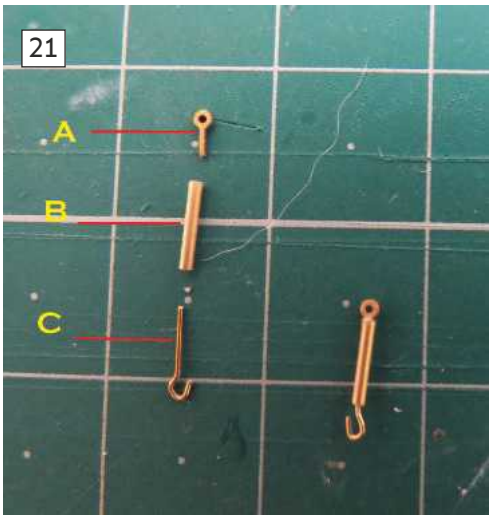
Finishing this Part One, we cannot but be aware how the Russian Navy is evolving once again in the 21st Century and what a potent military force it is now becoming. In Part Two in the August issue of MB, we will be looking at the Helix KA 27 anti-submarine helicopter and some other fittings on this warship.

Photo 19. Much of HMS Skirmisher has been painted and is now being made ready for the eye plates plus dummy bottle screws for the rigging and the handrail stanchions.

Photo 20. Decent builder's models are always a good source of information about how a ship is constructed and put together.

Photo 21. Creating a simulated bottle screw, its link and pin slip, all to connect the standing rigging to an eye plate.





HMS Skirmisher

PART TWENTY ONE

In this issue we will be looking at such mundane items as bottle screws and handrails.

After 21 months, this project has come of age with much of the main paintwork (baring touch-ups) almost complete and we can now prepare for the rigging and handrail installation. Working to a sequential plan will help to avoid problems at a later stage of the project and rigging is one of those things that can substantially enhance the appearance of a model. However, first and foremost, this is a working model, so some compromises will have to be made.

Adding the ship's boats to their davits is being left to later, ensuring the model's main deck and superstructure is still sufficiently accessible to locate and fix the eye plates to the deck edge and superstructure units, **Photo 19** as well as the railings. The eye plates will hold the bottle screws which are part of this warship's standing rigging and ratlines. There is plenty of information available as to how the standing rigging of warships of this period was secured and good examples are illustrations in the book, Manual of Seamanship 1905 to 1915, as well as onboard pictures of vessels of the period and builder's models which usually to mirror the full-size vessels. A picture of the1:48 scale model of the armoured cruiser HMS Argyle c1905 perhaps best illustrates this, **Photo 20,** with the standing rigging points ringed in red.

The connections differ depending on their role, but generally the bottle screw, pin slip and shackle were the most common method used. The first task was to refer to the drawing and rigging plan from the National Maritime Museum, which confirmed the locations of the eye plates. For this model, these are nothing more than a square of (usually) Litho plate, but sometimes brass, with the eye itself being a photo-etched off-the-shelf product. Once all the eye plates had been installed on the model, attention could turn to making the bottle screws and their sizes depend on their purpose.

For example the shrouds and ratlines require a larger bottle screw which was often covered in painted canvas, whilst the funnel and davit stays had a smaller version, **Photo 21** showing the size used for the latter. The parts as shown in this photo are:

A. The eye is from a photo-etch commercial brass sheet.
B. The bottle screw body is 6mm of 1mm o.d. brass tube.
C. The hook-like slip is of 0.22mm brass wire.

Bottle screws

To ensure consistency, as always a jig was made from styrene, and all that was required was to feed the brass tube through the jig and part off the required length as in **Photo 22.** With each part of the bottle screw fixed together (superglued or

Photo 22. A jig for forming the same length of bottle screw body from 1mm o.d. tube.

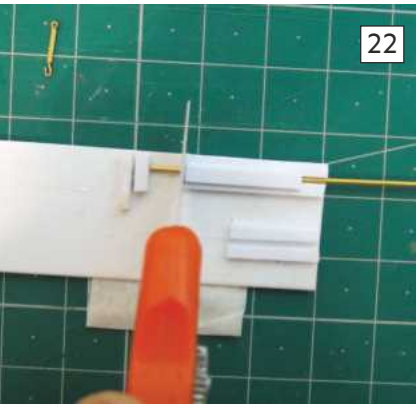


Photo 23. A bottle screw hooked to the eye plate ready to accept the thimble of the shroud.

Photo 24. The larger bottle screw connectors for the foremast ratlines.

Photo 25. Two bottle screws for the forward funnel stays.

Photo 26. An onboard picture of a warship of the period showing its railings and awning stanchions.

Photo 27. A selection of brass and nickel silver wire that can be used as the rail between the stanchions. If in doubt, always go thinner as at small scales the paint will (if brushed) add enormously to the scale thickness.

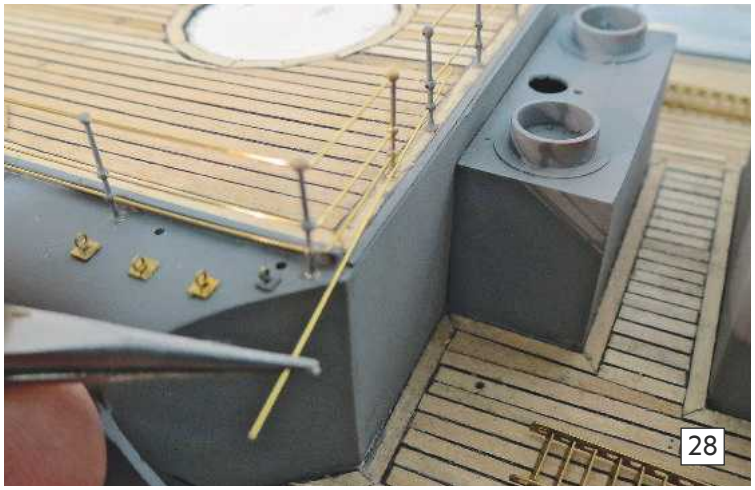
soldered) each could be located to an eye plate, but unlike full-size, the bottle screws have a hook at one end to enable easy de-rigging of the model, **Photo 23.**

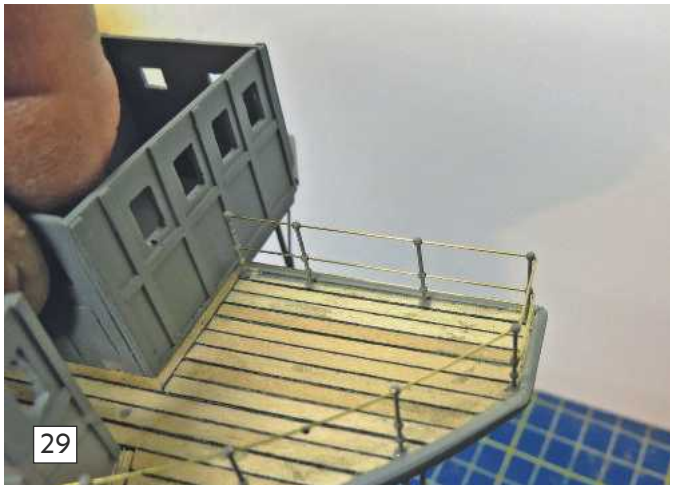
Using the same method, bottle screws and slips for the ratlines can also be made, but now the body is an 8mm length of 1mm o.d. brass tube. Final arrangements for the ratlines will have to wait though until the foremast is in position, **Photo 24**, and two of the bottle screws for the forward funnel stays can be seen in **Photo 25.**

Handrails

The appearance and type of material selected for a model's handrails can vary depending on its nationality, period and timespan. With British warships of the period of HMS Skirmisher, the railings would have been of a flexible three bar wire type and an excellent example is this can be seen in the onboard picture of a protected cruiser c1900 looking towards the bridge from the forecastle, **Photo 26,** where clearly visible are the handrails and awning stanchions.

For the purposes of this article I thought it would be better to show not just the type of wire used on this model, but also a number of alternatives, **Photo 27.** Albion Alloys have a range of wire in different gauges to suit the size of the opening through each stanchion ball. The wire is available in brass or nickel silver, the finest being 0.2mm with 0.33 being the largest that will fit each stanchion on this model. As an alternative, there is a fine copper





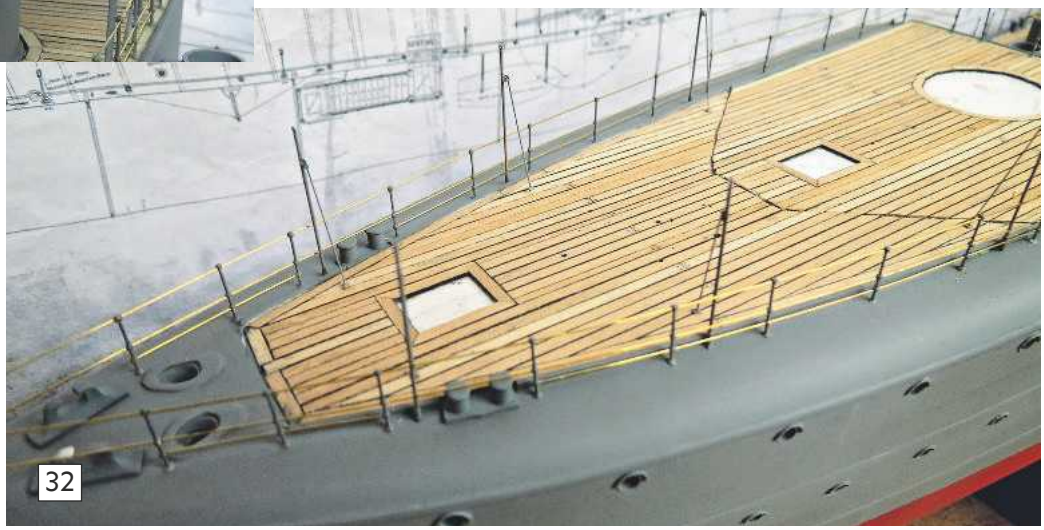


Photo 28. Brass wire of 0.3mm o.d. was eventually selected for the rails. as it was easy to thread through each ball of the stanchions. At 1:96 scale. 0.3mm represents a fraction over one inch diameter.

Photo 29. Forming the rails around the bridge platform.

Photo 30. Another view of the railings around the bridge. The 0.3mm brass wire from Albion Alloys normally comes in 305mm (12 inch) lengths and can be easily cut to length using a curved blade on a normal modelling knife. Longer lengths can be obtained, but carriage can then become a problem.

Photo 31. The upper compass and searchlight platform is detachable.

Photo 32. The same method was used to complete the main weather deck railings, but with some sections of the lower rail removed to clear the bollards and fairleads.

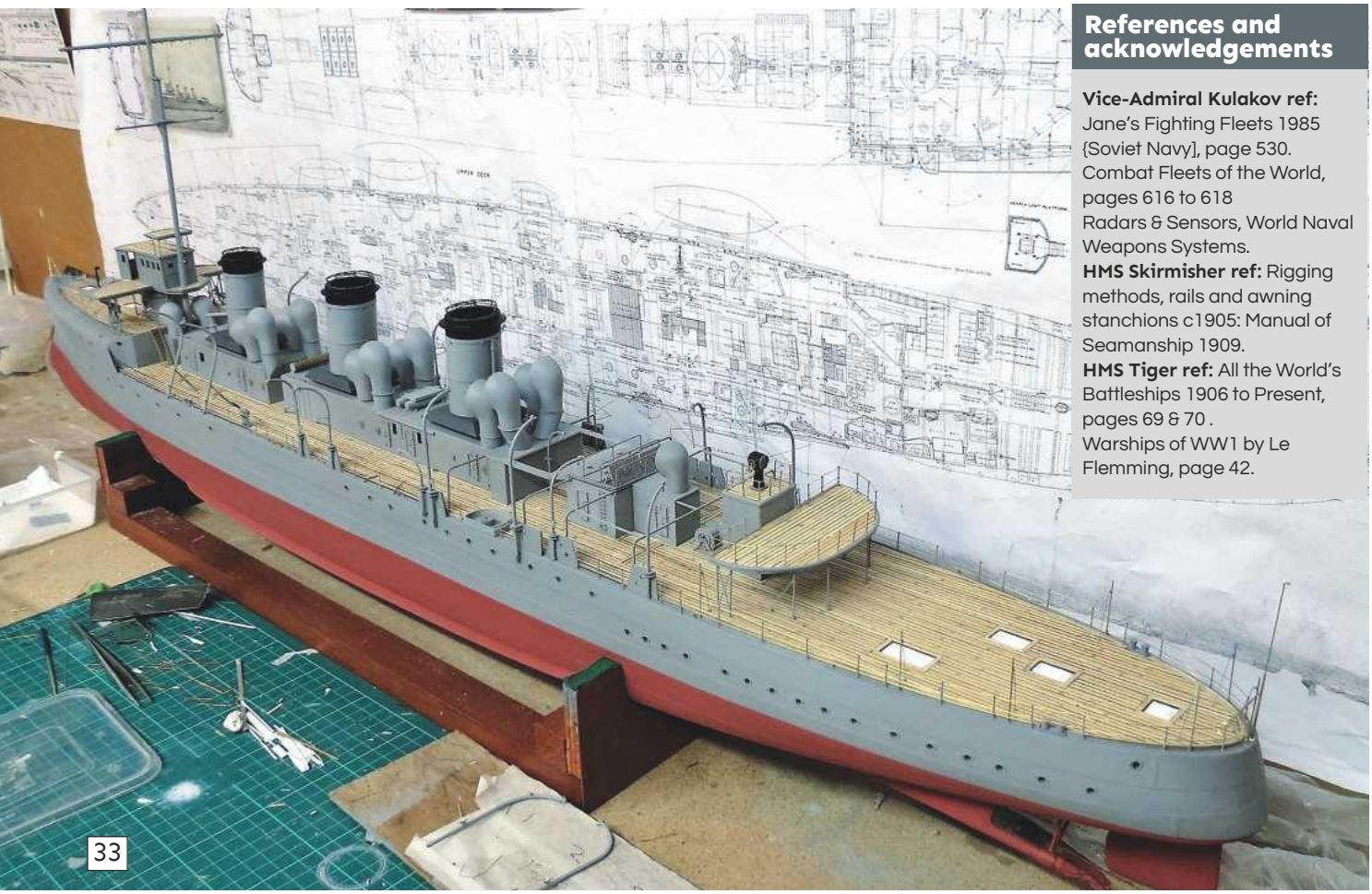
Photo 33. Nearly there, but the ship's boats and rigging still have to be completed.

Photo 34. This Month's Mystery Picture. The clue is: The first of its type.

wire that is basically fuse wire of 0.31mm diameter which when stretched will form reasonably straight lengths. The third alternative at 0.33mm diameter is a braided wire. This looks by far the most authentic when threaded though the stanchions, but being braided the end chaffs easily which makes the process of creating a full three bar railing somewhat time-consuming. The best compromise was to use Albion Alloys 0.3mm brass wire which could be easily threaded through each stanchion without problems, **Photo 28,** this picture also showing three of the aforementioned rigging eye plates.

The same approach was applied throughout the entire model and **Photo 29** shows the handrails around the bridge. The entire bridge platform can be removed with the railings on the roof and searchlight platform being fitted separately as in **Photo 30.**

Provision was made for the awning stanchions on the bridge roof and for the stairway leading up to the searchlight platform to be fitted at a later date, **Photo 31.** When fitting the railings to the main deck, almost all of the fittings were removed, except those that have a direct interference with them such as the bollards and fairleads, **Photo 32.** There is nothing worse than being layer unable to insert a bollard because of lack of 'fiddle' room. The final picture for this issue shows progress thus far, **Photo 33,** the deck housings and fittings at this stage of the project still being removable. Next month we will start building and preparing the ship's boats including cutters (one steam powered) and whalers.



References and acknowledgements

Vice-Admiral Kulakov ref: Jane's Fighting Fleets 1985 {Soviet Navy], page 530.
Combat Fleets of the World, pages 616 to 618
Radars & Sensors, World Naval Weapons Systems.
HMS Skirmisher ref: Rigging methods, rails and awning stanchions c1905: Manual of Seamanship 1909.
HMS Tiger ref: All the World's Battleships 1906 to Present, pages 69 & 70 .
Warships of WW1 by Le Flemming, page 42.

Answer to the May 2016 Mystery Picture

Answer to the June 2016 Mystery Picture

The clue was: The Heaviest of the Fleet. The picture was of the battle cruiser HMS Tiger, at 35000 tons the heaviest capital ship to see service in WW1 and also the first to develop 100000shp. She was laid down on the 20th June 1912 at John Brown & Co of Clydebank. It has been said more than once that the construction of HMS Tiger was influenced in part by the Vickers built Japanese battle cruiser IJN Kongo, although this is based on conjecture rather than hard facts, but there are distinct similarities.

HMS Tiger was 704 feet long and 90 feet beam, but she was not the longest warship of the WW1 period as that distinction went to HMS Repulse and HMS Renown, those battle cruisers completing in 1916. HMS Hood was even larger, but was not launched until August 1918. HMS Tiger had an eight x 13.5 inch main armament, twelve x 6 inch secondary battery and just two 3 inch anti-aircraft guns, and she joined the Grand Fleet and the First Battle Cruiser Squadron on the 6th November 1914. On Admiral Beatty's own admission, HMS Tiger was not worked-up by the time of the Battle of Dogger Bank on 23rd January 1915, and as a result of battle damage had Q turret put out of action.

HMS Tiger was quickly repaired and by the time of the Battle of Jutland on 31st May and 1st June 1916, she should have been at a high level of efficiency, yet records show that of the 303 heavy rounds fired only three found their mark, yet in return she was hit 15 times, with six from the 11 inch gunned German battle cruiser SMS Moltke in a period of just seven minutes. On the plus side though, HMS Tiger did not suffer the catastrophic explosions that ripped apart the battlecruiser HMS Queen Mary. HMS Tiger survived WW1 serving on various RN stations postwar, but as part of the London Naval Agreement of 1930, she was withdrawn from service in May 1931.

This Month's Mystery Picture

The clue is: The first of its type.

Model Boats SUBSCRIPTION ORDER FORM

DIRECT DEBIT SUBSCRIPTIONS (UK ONLY)

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

❑ Print + Digital: £53.00 every per year
❑ Print Subscription: £44.00 per year

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 422562

DIRECT Debit

Name of bank.....

Address of bank .....

.....

..... Postcode .....

Account holder .....

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

Sort code ☐☐☐☐☐☐ Account number ☐☐☐☐☐☐☐☐

Instructions to your bank or building society: Please pay MyTimeMedia 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 MyTimeMedia 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* (13 issues) with a one-off payment

UK ONLY:

☐ Print + Digital: £56.00) ☐ Print: £47.00

EUROPE & ROW:

☐ EU Print + Digital: £72.00 ☐ EU Print: £63.00

☐ ROW Print + Digital: £72.00 ☐ ROW Print: £63.00

PAYMENT DETAILS

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro

Please make cheques payable to MyTimeMedia Ltd and write code V915 on the back

Cardholder's name.....

Card no: (Maestro)

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ ☐☐☐

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

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

TERMS & CONDITIONS: Offer ends 15th July 2016. MyTimeMedia Ltd & Model Boats may contact you with information about our other products and services. If you DO NOT wish to be contacted by MyTimeMedia Ltd & Model Collector please tick here: ❑ Email ❑ Post ❑ Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: ❑ Post ❑ Phone. If you wish to be contacted by email by carefully chosen 3rd parties, please tick here: ❑ Email

POST THIS FORM TO:
MODEL BOATS SUBSCRIPTIONS, MY TIME MEDIA LTD, 3 QUEENSBRIDGE, THE LAKES, NORTHAMPTON, NN4 7BF

Please visit www.mytimemedia.co.uk/terms for full terms & conditions

PRINT + DIGITAL SUBSCRIPTION

13 Issues **delivered to your door**

- Great savings **on shop price**
- **Download** each new issue to your device
- A **70% discount** on your Digital Subscription
- Access your subscription on **multiple devices**
- Access to the **Online Archive** dating back to January 2007

PRINT SUBSCRIPTION

- 13 issues **delivered to your door**
- Great savings on shop price
- Never miss an issue

SUBSCRIBE TODAY

Great savings when you subscribe today

- Model Boats is now in its 66th Year of continuous publication and is the World's Best Seller with 12 regular monthly issues and a 100 page Winter Special Edition, subscribers receiving all these issues. Uniquely, the regular magazine includes six FREE PLANS per annum in alternate 76 page regular monthly issues and the non-plan issues are always of at least 84 pages, which is more than any other UK based model boating magazine.

- Model Boats, is a magazine for anyone with a passion for model boating in all its various forms, be it static models, radio controlled scale, fast electric and internal combustion engine models, as well as steam driven craft. Model yachting is not forgotten with contributions from leading model yachtsman.

- Each regular issue has as its foundation, regular columns from a selection of respected internationally known enthusiasts on a range of subjects and the 100 page Winter Special Edition published in late-October of each year always incudes at least one extra special plan feature for a new model boat and articles that support the model enthusiast in their endeavours.

- The magazine also has a regular Readers' Models section, because this is the part of the magazine where readers can showcase their models, and this is coupled with Around the Clubs, another popular section where clubs let the readership know what they are doing, when and where.

TERMS & CONDITIONS: Offer ends 15th July 2016.
Please see www.mytimemedia.co.uk/terms for full terms & conditions.

*This digital discount is only available when you subscribe to the 'Print + Digital' package. You can still get a great discount on the digital package, please visit the URL stated below for more information.

John Blackwell restores his model built in 1966

Admiral's Barge Refurbished!

Admiral's Barge Data

Length:	87cm (34 ins)
Beam:	23cm (9 ins)
Weight:	4kg
Motor:	Johnson 6v
Battery:	7.2v sub-C NiMH
Radio:	Futaba 40Mhz two channel
Plan:	MM242

This Admiral's Barge, being stand-off scale (i.e. looks good at a distance!), still continues to sail on nowadays and is not yet into its sunset. The model was originally built in 1966 from plans selected from the old Model Maker Plans Service Manual. Why the Admiral's Barge was chosen I do not remember, but probably it just appealed to me at the time and it seemed a bit different. Notably though, this was the first model boat I had built from start to finish.

Starting back in 1966, I remember that on receiving the plans and seeing that construction was to be of plywood, a friend with a DIY store was contacted. He stocked a good selection of plywood, most of which had been destined for the Mosquito aircraft factories in WW2. In the 1960's there were numerous shops selling WW2 military surplus clothing, electrical gear and much more, and I guess that with wooden aircraft production being scaled-back post-WW2, there must have been huge stocks of timber not required and still unused.


1

1966

Constructing the barge from this special 'Mosquito' plywood gave the model its own unique nostalgia. Power for the model then was a 2.46cc E.D. Sea Otter diesel engine, this being the type that had the flywheel on the rear of its crankcase. This was a very reliable and easy engine to ripcord start, as we did then, and **Photo 1** shows the completed model afloat just after it was built in 1966. The Sea Otter diesel engine can just be seen in the central motor compartment.

Anyway, going back to the very start of the project, and with the 'special plywood' to hand, construction of the model proceeded and I recollect that Humbrol paint was used for the final colour scheme; Red No. 19 for the hull's underside, Dark Blue No. 15 for the main body of the hull and its interior, Light Blue No. 48 on the cabin sides including rear of the wheelhouse and White No. 22 for all the cabin hatch tops etc.

Thin brazing rod and mini-screwed eyelets were used to form handrails on the removable cabin tops, including the rear one that had a fold-down mast, **Photo 2.** Other accessories added were lifebelts, air vents and bollards on the planked deck, the two front ones holding in place a now more substantial hand crocheted, but not by me(!), full bow fender as can be seen in **Photo 3.** This picture shows the model in the colours as it was and remained so up until now in the 21st Century, 50 years later. The model actually still looked okay, but closer observation revealed that the years had taken their toll as the following pictures will show.

In the beginning a secondhand RCS radio was installed, later to be replaced with a 27MHz Sprengbrook unit. The barge was regularly seen


2


3

5


4

at Northern model boat club regattas from 1966 onwards, one of the earliest events being The Model Boats Trophy and the first National Pairs Championship held at Fleetwood over the weekend of the 8th and 9th July 1967. This magazine ran a four page article and photos of the event in the September issue of that year. One photo showed the line-up of competing models and this Admiral's Barge was mentioned and can clearly be seen amongst the other boats, all of a similar style as purpose built racing boats had not really come into their own at that time. An assortment of cabin cruisers, RAF crash tenders, MTB's and Fairey Swordsman were regular entries in this type of event, so an Admiral's Barge was not out of place. That 1967 weekend's events were won by Arthur Ambrose with a Cachalot and Alec Clegg with a Remora.

First conversion

This gave more control over it when entering steering competitions and the first electric motor installed was a nondescript 12v motor purchased at the club's Bring an' Buy Sale. It used two 6v wet lead acid scooter batteries and there was plenty of room in the centre motor compartment to house them both, and the extra weight gave the barge improved stability. Motor control consisted just of being able to stop, start, forward and reverse the motor, all achieved by installing a double microswitch unit positioned next to the motor, **Photo 4,** and yes, it all worked perfectly. This device was connected with a push-pull rod to its servo that was housed in the stern radio compartment, **Photo 5.** The radio equipment as a whole was totally removable, the receiver and battery pack being in its own box and the servos on a detachable board, meaning it could all be easily installed in other models, including a cabin cruiser of my own design that is still also in use to this day, **Photo 6,** or a power boat, **Photo 7.**


6


7

"The barge continued to take part in regattas, one notable event being a balloon-bursting competition (remember those?) and hence the Meccano clamp on the bow that retained the bursting spike,"


8


9


12


10


11

The year's roll on....

The Admiral's Barge sailed on, the Sprengbrook radio later being replaced with a Futaba two channel set and the 12v motor and batteries being substituted by a Johnson 6v motor using a 6v 4ah battery and a touch-up paint job just to keep it looking presentable. The barge continued to take part in regattas, one notable event being a balloon-bursting competition (remember those?) and hence the Meccano clamp on the bow that retained the bursting spike, **Photo 8.** In the 1960's and early 1970's, steering courses and straight running events were very common. **Photo 9** shows the barge and myself just prior to a straight run at the Sheffield Ship Model Society (SSMS) regatta of 1972. In the distance you can see two of the 'catchers' in the water and note the huge crowd of spectators who would stay with us from start to finish - those were the days. Later, in 1979 it competed in a National Scale event. The model remained competitive into the 1990's when it was eventually given a rest and stored in the loft for some considerable time.

Eventually it was brought back into service in 2009 when I attended the Blackpool Model Show weekend. I thought it would a good idea to take it with me and before returning home visit Fleetwood again and give the barge a nostalgic sail on the same lake, some forty two years on from that Model


13


14


15


16

Boats Trophy weekend, **Photo 10.** This shows the model on the Fleetwood water, but this time it is of course electric powered. Despite the model's age, other events it took part in were the Sheffield Ship Model Society 75th Anniversary celebrations in 2012, our regular annual Open Day(s) and with temporary lighting, our popular Venetian Nights.

Sadly though, the years of regular use eventually took their toll on this wooden hulled craft and leaks started to appear in the aft compartment, water seeping in through the 0.5 inch thick plywood keel. This was speedily rectified by brushing over this part of the keel with glassfibre resin, both within the hull and underneath it. The overall condition of the barge could not be repaired as quickly, so a complete refurbishment and update was required.

The 2015 refurbishment

A start was made by tacking out all the main interior working gear including the motor, microswitch unit (yes still working perfectly), 6v battery with its housing, the propshaft with its three blade propeller, rudder assembly and some external fittings to enable the refurbishment to proceed.

Once the hull interior was cleared, balsawood was used to create a new battery compartment to house a flat pack 7.2v motor & radio battery, the old battery now having died the death, plus an adjacent compartment to house a four cell AA battery pack for the navigation and mast lighting, **Photo 11.** Another revamp to the hull interior was in the aft radio compartment where the floor of the hull was now very uneven with lumps of old resin and remnants of various support blocks, **Photo 12**. The hollows were filled to level it and a new floor cut from 1/8 inch (3mm) balsa sheet edged with 1/8 x 3/16 inch (3 x 4.5mm) strip. In **Photo 13**, the new floor can seen after sanding, but prior to painting.

Cabin side repairs

These are of 1/8 inch (3mm) three-ply and were in a sorry state. All down the port side, splits and blisters had formed on its outer surface, **Photos 14 and 15** showing this clearly and there was also damage to a roof corner. Restoring this port side back to something like being half-decent required some thought.

The splits were extended and the blisters all cut open with a trim knife until it was possible to peel off a large thin piece of the plywood's outer surface, **Photo 16.** Two pack epoxy adhesive was spread over the now exposed inner surface and


17


18


19


20


21

the 'peeled-off' piece re-inserted, clamped and pinned until set, **Photo 17.** Other smaller broken off pieces were also glued and inserted back in their appropriate positions. Once the glue had set and the pins and clamps removed, Isopon P38 body filler was skimmed over the repaired area, filling in any cavities where the plywood skin was missing altogether and sanded smooth, **Photo 18.**

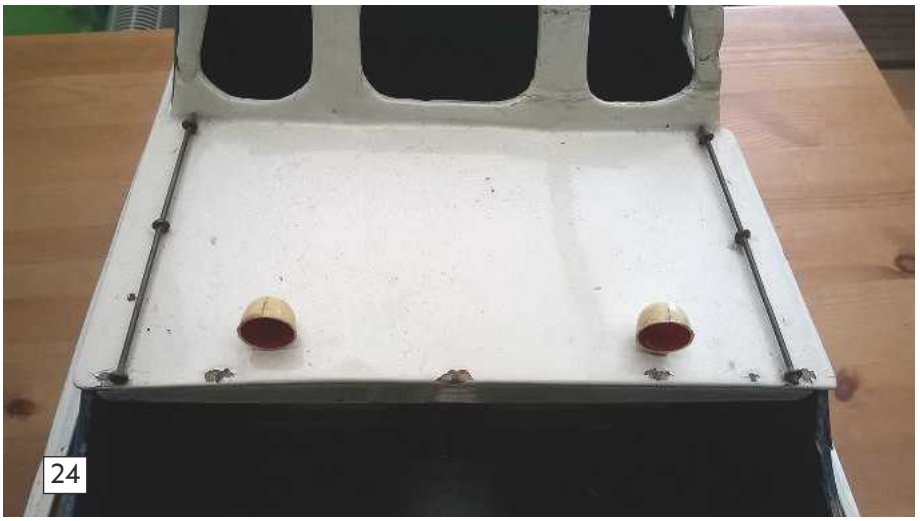
The top edges of the cabin port side had also split open in more than one place, **Photos 19 and 20.** The easiest way to put this right was to wedge open the split (please see Photo 19 again) insert adhesive, remove the wedge and clamp the repair until set. The condition of the starboard cabin side was not too bad, although its plywood top edges had the centre of the 'three ply' missing in several places,

Photo 21. Thin strips of wood were glued and inserted into these gaps to overcome that problem. However, the inner surface of this starboard side had suffered some separation like the port side had to its outer face.

Once again, it was possible to peel the plywood lamination upwards from its bottom edge to approximately halfway-up where it seemed to be firmly secured. Keeping it propped open and using a small spatula, two pack epoxy adhesive was spread on the exposed surface. The peeled-up surface then had glue applied, put back into position and clamped until dry. After checking there were no further splits, cracks or plywood separation, all the repaired areas were sanded and cleaned where adhesive had squeezed out and the net result? Strength once more restored to an ageing cabin structure.

Cabin tops and windscreen repairs

Next to sort out were the removable cabin tops, **Photos 22 and 23.** These pictures show how they had suffered with the passing of time, notably with damage caused by the original brass pin nails eroding and creating small craters on the painted surfaces. The old brass pins were extracted and with everything still holding in place without them, the craters were filled with body filler, sanded and spot primed. The windscreen framework and its attached cabin top in front also looked tatty, **Photo 24.** The windscreen framework was originally made from balsawood, the indentation damage to its port side just evident in this last picture. This damage was enlarged and using balsa cement as adhesive, new balsawood pieces were inserted, sanded to shape and primed. On all the hatch tops were still the original brazing rod handrails. These were removed to be later replaced with more-substantial modern commercial brass rails.



“The condition of the starboard cabin side was not too bad, although its plywood top edges had the centre of the ‘three ply’ missing in several places,”


25


26


27


28

Stern deck section

Photo 25 shows the ill-fitting removable stern deck section which has attached to it the rear part of the aft cabin. On the transom can be seen the barge's lifetime (until now) trademark, namely a grab handle used when it was diesel powered and reluctantly it was decided to remove this. The ill-fitting deck was to be replaced with a new one constructed over a balsawood base, **Photo 26,** then planked with 0.25 inch (6mm) Pine strips and edged with 3/16 x 1/8 inch (4.5 x 3mm) Mahogany. After sealing and sanding with a fine grit paper it was given a coat of clear varnish, **Photo 27** and like the original, was made removable. **Photo 28** shows how this compares to the 1966 version. This new deck sits on the stepped floor shoulders and when in position with the rear cabin top fitted, it now creates a much improved stern area, **Photo 29.**

Propshaft

During this refurbishment, one thing overlooked was the propshaft, as when sailing the model, it would often emit a strange vibrating sound. On inspection, the hole in the bearing at the coupling end had enlarged, allowing some 'play' for the rotating propshaft. The outer propeller end was okay, so to overcome the problem and not being able to knock out the bearing which seemed to be an integral part of the brass propshaft tube, the only thing to do was to sleeve it.

A small stainless steel ball-raced bearing of the appropriate size was to hand in the Bits Box, **Photo 30.** The short piece of metal tubing shown had the correct internal diameter for the bearing to be pressed into it and secured with superglue as in **Photo 31.** This combination was then sleeved over the worn propshaft tube end and fixed with epoxy adhesive, **Photo 32.** Testing proved this was all okay, the propshaft now spinning nicely in the upper internal ball-raced end and the original plain outer bearing. I guess that the diesel engine when fitted had taken its toll on the upper propshaft bearing, particularly bearing in mind the leverage applied when using a ripcord to start the engine.


29

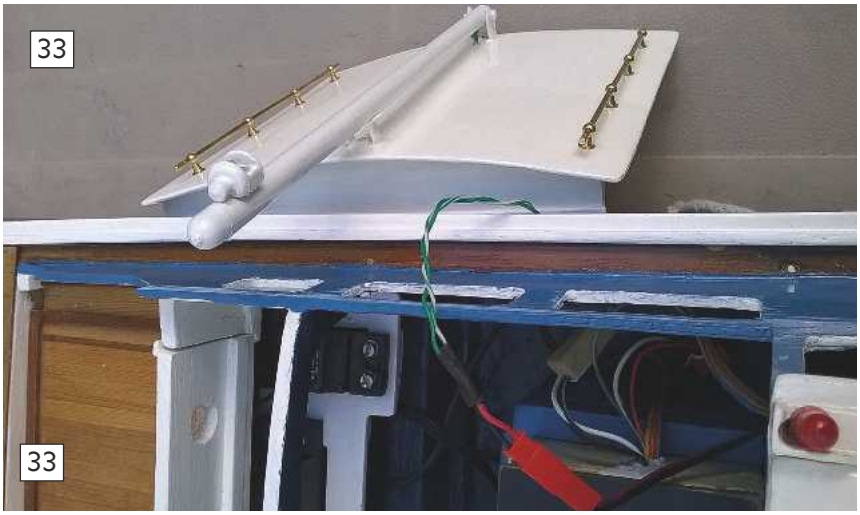

30


31


32

Lights?

It was mentioned earlier that the barge had taken part in the SSMS Venetian Evening using temporary lighting and this was now re-addressed by fitting permanent working navigation lights. Suitable port and starboard navigation light housings were made and positioned on the wheelhouse roof. Also, the original wooden mast was replaced with a metal tubular version enabling lighting wires to be run up through its centre. Power for all the lights comes from a switched quadruple AA battery pack housed in its own compartment adjacent to the main battery in the centre section of the barge. The wires for the mast light pass through the wheelhouse bulkhead into the aft section where a miniature plug and socket enable easy dismantling. The wires are also long enough to allow the rear cabin top to be detached and the mast to fold, **Photo 33.** The installation of these lights and their wiring were all done after the model had been repainted, so we had better discuss that now.


33

Painting

Everything was repainted after sanding with fine grit wet and dry sandpaper until all the surfaces had a smooth matt finish ideal for top coating without being totally primed all over. However, some areas were spot-primed where filler had been used or the painted surfaces had rubbed through to bare wood.

Photo 34 shows the hull, cabin and roof sections in readiness for painting. Using Humbrol paints the colour scheme of red, white, dark and light blue follows the same original format of 1966,


34


35


36

37


38

A nicely painted hull interior always looks good and more to the point, usually makes it easier to locate a missing screw.

including a dark blue for the hull's interior, which itself was also sanded as far as practicable, **Photo 35.** A nicely painted hull interior always looks good and more to the point, usually makes it easier to locate a missing screw. Where the radio and servos fit is shown in **Photo 36,** plus how the aft cockpit deck sits adjacent to the removable stern deck piece. The Meccano 'balloon bursting device' bow clamp has now been permanently removed and the remaining original planked deck scraped with trimming knife blade to remove all the old varnish and then sanding sealer was applied. After further sanding, several coats of a weatherproof clear varnish were applied.

Running gear

With painting complete and now thoroughly dry, it was time to re-install the running gear. The motor was first, screwing it back on to its original wooden motor mount and coupling it to the now well-greased propshaft still using the original 4BA threaded universal joint. A new 20amp esc replaces the twin micro switch on-off system as they are cheap enough nowadays.

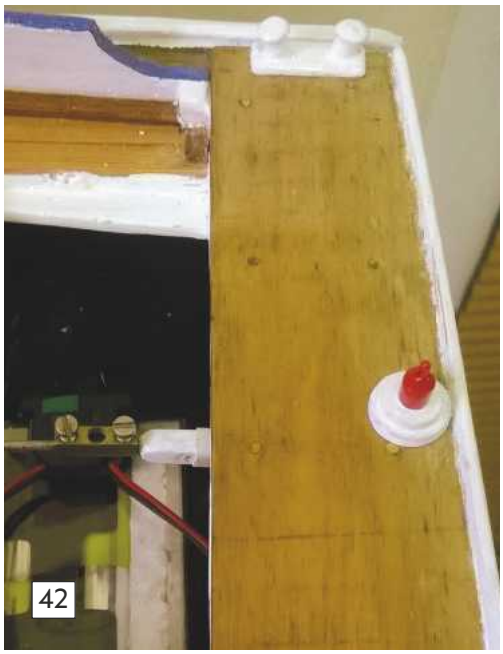
The 7.2v battery providing power for the radio and motor was placed in its housing in the centre compartment along with a four AA battery pack for the lights, **Photo 37.** A new rudder blade had been easily made to replace the old one, soldering it to the existing post, together with a more substantial tiller arm than the original, which incidentally had been adapted from a piece of Meccano back in 1966. Access to the top of the rudder post is easy, due to the rear deck section being removable. To bring this refurbishing project to its conclusion, the deck fittings were re-installed as per the 1966 version. Also the forward brass stanchions were cleaned before refitting on the bow deck and new brass rails for the cabin hatch tops cut to their correct lengths and fixed in place, all giving the barge a somewhat sharper look.

A Futaba 40MHz r/c now replaces the old 27MHz set and was simple enough to install and just a matter of slotting the radio box containing the receiver and battery pack into the stern compartment. The detachable platform complete with the two servos was screwed to its support blocks and the rudder servo connected to the tiller arm, **Photo 38.** Now using an electronic speed


39


40


41


42


43

controller with a BEC facility and the 7.2v sub-C battery pack battery supplying all the power, one of the two servos and the battery pack are actually redundant in this model, but it was decided to keep the boat's radio installation as a complete unit so it could be used in other models as desired. There is little weight penalty by doing this.

On the water

After a bench test to ensure everything was in working order, the barge was taken to the Sheffield Ship Model Society's sailing water at Millhouses Park for the re-launch, **Photo 39.** This proved to be quite successful and **Photos 40 and 41** show the Admiral's Barge underway once again.

Some club members thought it was a new model, but of course I knew different. There was one slight hiccup in that with the aerial wire running around the interior of the barge, this seemed to limit the r/c range. This was easily resolved once back at home by running the wire up through a small bore styrene tube on the exterior of the folding mast. Doing this was easier than trying to force the aerial up inside the mast tube where there are the navigation light wires. This aerial re-routing adjustment overcame the r/c range problem.

Conclusion

Now into its 51st year, refurbishing the barge was well worthwhile. Once again it is giving me pleasure at the pond and how many of us can say that we are still operating 50 year old models? One thing discovered at the subsequent post-refit Venetian Night was that a stern light was very much needed, since when the barge sailed away from oneself at the controls, it simply disappeared into the gloom. So, a red stern light has been added operated from a switched battery pack in the aft compartment, **Photo 42.** This was not the only late modification, as a removable deck in the mid-section was suggested as another improvement, and **Photo 43** is of that.

Finally to end this story, I wonder whether there will be another article in 2066 in this magazine about this Admiral's Barge?

(Editor's note - Sadly for me anyway, I won't see it as there is a fair chance that I will be with the angels)

By David Walter

RIGHT: Stord 1 is a preserved passenger and cargo vessel built in 1913 by Yarwood of Northwich, Cheshire, England.

Ships at Bergen

The City of Bergen has World Heritage status and is surrounded by the spectacular scenery of the Norwegian Fjords. It is also Norway's largest port and receives a variety of vessels as pictured here in 2015.

LEFT: The Norwegian Society for Sea Rescue vessel Askerbaeringen RS102,

RIGHT: The sail training ship Statsraad Lehmkuhl built in 1914 currently sails from Bergen with merchant navy cadets.

LEFT: The offshore supply vessel Far Scorpion is owned by Farstad Shipping Ltd.

BELOW LEFT & RIGHT: Granvin is a preserved passenger and cargo vessel built in 1931 and offers summer trips to the fjords.

LEFT: Maersk Flensburg arriving in Bergen.

BELOW: The offshore supply vessel Boa Jarl.

RIGHT: The Holland America Cruise Line vessel Ryndam departing Bergen.

BELOW: The Norwegian Coastguard offshore patrol vessel Nordkapp W320, whilst under repair.

LEFT: Beffen - an inner harbour ferry.

ABOVE: The Norwegian Sail Training vessel Sorlandet, built in 1927 arriving in Bergen.

Nesejenta

James Pottinger presents a new 1:33 scale Feature Plan for this Gill Netter

ABOVE: Starboard side, with the deck crane extended. Note the satnav dome on aft side of the after mast. Photo courtesy Frode Adofsen

There have been a number of Danish fishing boats of this name and having often been successfully sold and renamed, it has been quite a problem to identify their various succeeding identities. In contrast to the severely utilitarian appearance of much of the current commercial shipping, fishing boat designers, the builders, plus the skippers and owners, still endeavour to impart some degree of aesthetic appeal to the appearance of their boats.

This can range from the almost flamboyant to the more restrained and workmanlike, but the larger pursers and deep water trawlers now being built, often in Scandinavian countries (but with the hulls sub-contracted to shipyards in Turkey, Romania and Poland) frequently exhibit quite handsome lines. Dutch builders have long exhibited a flair for more elaborate and curved appendages around the deckhouses and wheelhouses of their boats, my theory being that they would never use a straight line when a curved shape can be substituted. I was fortunate to receive a small general arrangement drawing of this vessel and a body plan, some detail drawings of the main features above decks, and several on-board views from the builders, to whom grateful acknowledgement is due.

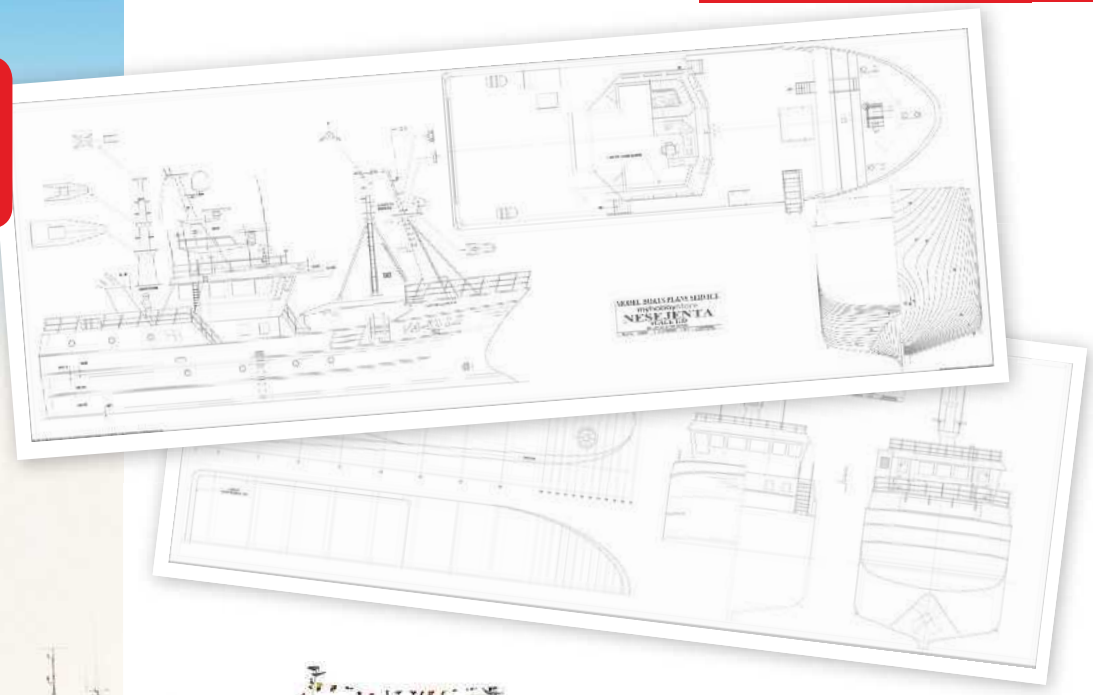
Principal particulars

Builder	Vest Vaerftet ApS, Hivde Sande, Denmark
LOA:	27.49 metres
Length BP:	23.75 metres
Moulded breadth:	9 metres
Main engine:	Cummins diesel KTA38-M1@1800 RPM
Gearbox 6:	**1** reduction
Yard No:	272
Delivered:	2008
Owner:	Kjetil & August Fjeldskar
Home port:	Mandal, Denmark

Model plans

When drawing these, now numbering around 200 over the last fifty years or so, I have always subscribed to the maxim that at the very least, a basic understanding of the purpose and mode of operation of the fittings on board adds to general interest and more important, avoids errors when considering the practicalities of operating them. I am grateful here for assistance in this respect by a local professional fishing contact and that of NetOp, the Danish suppliers of the special type of hydraulically powered net drum and hauler

FEATURE PLAN



LEFT: Port side view when commissioning. This gives a good view of the colour scheme and also the location of deadlights in the hull and the windows in the quarterdeck. Photo courtesy of builder

mounted on the starboard side deck forward. They directed me to two short films illustrating the method of hauling the net aboard and the subsequent fish handling and separation arrangements aboard.

The basic principle is that the net is shot through the open doors in the transom and then hauled aboard via the hauler mounted on the starboard bulwark forward. The net is then sent down through a hatch directly under the inboard end of the net hauler to the deck below, where the fish are then manually picked from the net and passed to the grading and processing station on the main deck inside the enclosed shelter deck, then finally to the storage space in the fish hold. The empty net is then funnelled aft through a chute to be stowed in bins in the enclosed space in the transom ready for shooting again through the hinged openings at the stern.

Perusal of these plans will reveal that the Danish builders are not lacking in flair as evidenced by the marked harmony of the various elements of the hull and its upperworks, a successful compromise given the bulky and volumetric hull. These proportions are starkly illustrated by the relatively small outline of the main engine. The body plan also shows the outline of the hull which for a large portion of its length is broadly rectangular and a view of the deck also shows that it has parallel straight sides for a large portion of its length.

So, apart from the extreme curvature of the bulbous bow, the remainder of the hull should be reasonably easy to construct, as it is distinctly box-like. The hull body shapes at each frame spacing are drawn, but in practice the actual number of hull frames on a model can be to the preference of the model maker. The bulbous bow though will almost certainly need to be carved from a solid block of wood. A similar method can be applied to the construction of the bulb which gradually tapers to near-amidships from aft in the region of the propshaft,.

BELOW: Another view of Hauge Junior M-80-A at Lerwick, Shetland. Note the extended wheelhouse window at the starboard side of the wheelhouse front. Photo courtesy Sydney Sinclair

ABOVE: Same vessel is now renamed Hauge Junior M-80-A. This is a clear picture of the hull deadlights etc. Photo courtesy Aage

BELOW: View of net hauling winch in fore and aft position. Photo from author's collection

On Sheet Two is the body plan, deck and profile plan which indicate the position of each frame on the profile. The deck line of the quarter deck aft is slightly stepped inboard from the line of upper hull proper. Please note that there is a substantial square bar keel running the full length of the hull. This can be advantageous for model makers when adding ballast to obtain the correct waterline and which will inevitably be substantial, given the large hull volume and its consequent heavy displacement.

Also shown on Sheet Two are pictorial views looking on the bow and the forward bulkhead of the deckhouse under the wheelhouse, with an access ladder to the quarterdeck on the port side. Please note that the extreme starboard wheelhouse window is full length to allow the skipper to have a view of the net winch and net hauling when fishing. A view on the stern shows the hinged net shooting doors in the transom and wheelhouse aft bulkhead and spot the deliberate error. The exhaust trunking is (I am sorry to say) on wrong side on Sheet Two, but is correctly shown on Sheet One. Also shown is the detail of guardrail and stanchion construction.

Fuller details of the deck and side arrangements are on Sheet One. There is a windlass on the forecastle deck, the cable leading down through the hawse hole via a guide roller, but realistically I would expect a cable lifter sprocket type disc would be fitted on the shaft aligned to the line of chain. The anchor is housed in a large square recess on the port side, shown dotted in profile view. In common with many vessels of this type, a roll damping tunnel is fitted on the forecastle deck. This is in the form of a trunk extending across the hull on the deck with steps and guard rails for access over it to the bow area. Three sets of bollards are provided for mooring and the foremast is fully detailed with views of the various light platforms and brackets etc. The special type of net hauler is fitted in a recess on the starboard bulwark and a separate detailed illustration is included here.

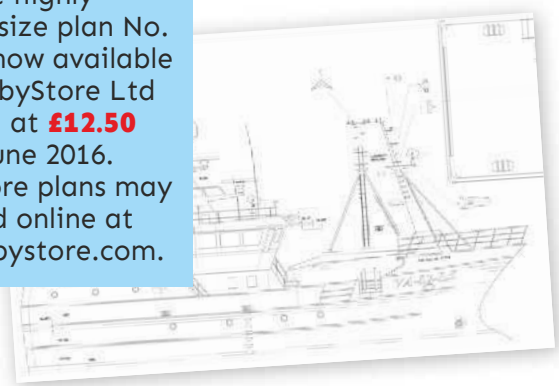
Accommodation

The deckhouse has crew cabins, a galley, mess room and a skipper's cabin, all under the wheelhouse and set on the main deck. It is offset to port (see hatched line on plan view) to allow passage of the clean net to the storage and shooting area aft. Now common in many larger fishing boats, all the accommodation is above the main deck and many newer fishing vessels have the cabins mounted on flexible and soundproof mountings to reduce noise, vibration and fatigue. The control position in the wheelhouse is offset to starboard to allow a clear sight for net hauling etc. Full details of the fairly complex design of the aft mast mounted on the wheelhouse top are included, the main body being of a tapered rectangular form with rounded corners at its front.

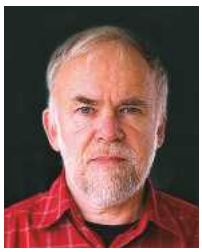
Colour scheme

This can be readily discerned from comments on the plans and the accompanying illustrations - thank goodness for colour printing. Suffice to say that the main colour has changed from blue to black when the name has changed, but then seemed to change back again.

RIGHT: Starboard conning position in wheelhouse, with extended window depth to allow sight of net hauling operations. Photo courtesy of builder



Flotsam & Jetsam



John Parker delves into the archives

40: Electrotor and Foam Wraith

Though the title for this month's column might sound like a B-grade science fiction movie, in which the mighty robotic Electrotor battles an evil alien substance known as the Foam Wraith, the names actually refer to two early post-war products intended for the toy and model-making market. The Electrotor was a sub-miniature electric motor of entirely novel design, whilst the Foam Wraith was a model outboard motor that made use of an Electrotor as its source of power. Neither product fulfilled the hopes of their manufacturers and both soon disappeared from the scene, leaving some interesting history to unravel.

Electrotor

The Electrotor was publicly displayed for the first time at the 1947 British Industries Fair, made by REV Motors Ltd. of Bolton, Lancashire, a company which had been set up to manufacture motors utilising the 'Gap Ring Armature Principle', patented by the brothers J E and J E V Eurich. Judging by widespread reporting in the technical press of the time (Flight magazine, The Engineer, Popular Mechanics, modelling magazines and even newspapers) it caused quite a stir due to its small size and unique design, which lacked a commutator.

The case of the Electrotor was formed by a permanent ring magnet, but instead of a conventional armature, it enclosed windings that had been wound flat over a core of iron wires and then formed into a cylinder. A brush at each end of the assembly made contact with the bared winding wires as they wrapped around the edges of the core. The principle of operation is quite complex and I don't intend to try and explain it here, suffice to say that, without a commutator to reverse the magnet poles and maintain rotation, operation depended on an imbalance of magnet flux causing a net rotation in one direction. A full explanation if you are

> *"The Electrotor was publicly displayed for the first time at the 1947 British Industries Fair, made by REV Motors Ltd. of Bolton, Lancashire"*

RIGHT: Announcement of the Electrotor, the January 1948 advertisement.

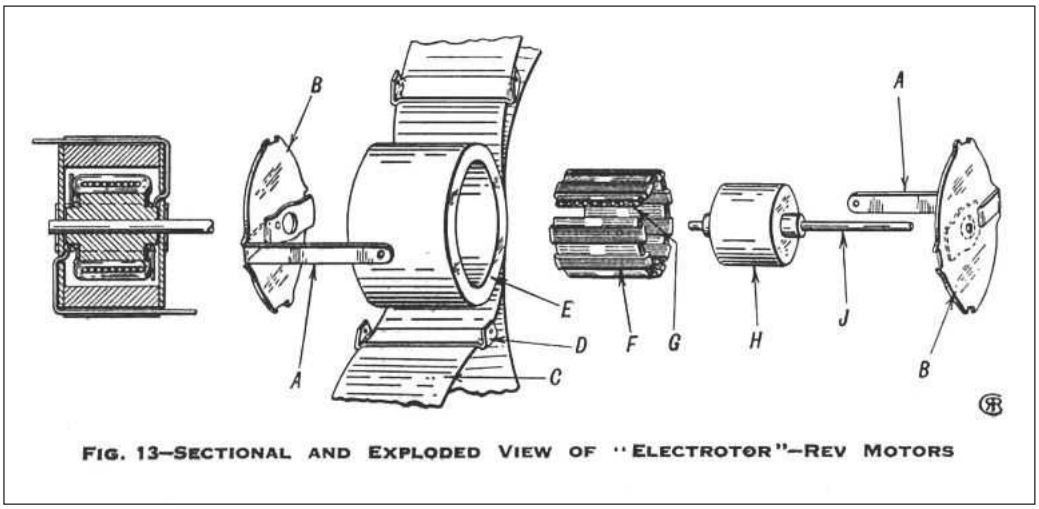


FIG. 13—SECTIONAL AND EXPLODED VIEW OF "ELECTROTOR"—REV MOTORS

LEFT: Electrotor construction.

technically minded may be found here (please refer to page 397):

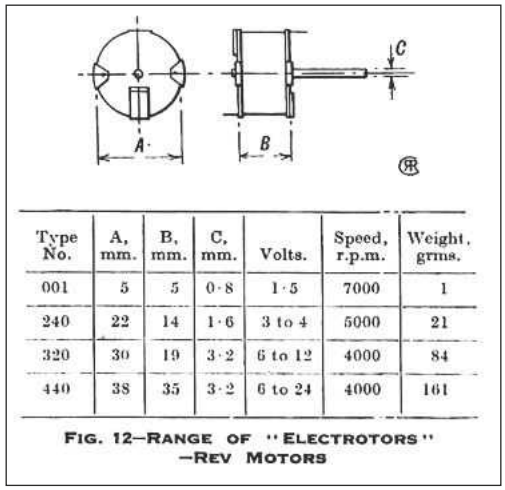
http://www.gracesguide.co.uk/images/a/a5/Er19470509.pdf

The most common type of Electrotor was the Type 240, 9/16 inch (14mm) wide by 7/8 inch (22mm) diameter and intended for 3 to 6 volt battery operation. It had a 'controlled retail price' of eight shillings and sixpence (8s/6d) pre-decimal currency, the equivalent of some £16 today. Two variations are shown on the 1947 leaflet packed with the motor, the Type 242 with mounting base and terminals at 10s/6d (available December 1947) and the Type 243 with three peripheral fixing bolts at 9/6d (available 1948). These were both electrically identical to the Type 240.

A larger type 'planned for 1948' in an egg-shaped Bakelite case is also depicted, the Type 441, 442 or 443 depending on the intended voltage of 6,12 or 24 volts. I am not certain that all or any of these models actually appeared. Confusingly, a published table from 1947 shows four models, Types 001, 240, 320 and 440, with the Type 001, just 5mm wide by 5mm diameter, believed to be the smallest motor in production and intended for specialist instrument applications.

Excited by the prospects of this new motor, modelling magazines and toy manufacturers were eager to incorporate it into their designs. It appears on many simpler model plans of the time, such as those of Hobbies Weekly magazine or Vic Smeed's Waterbug model boat in Model Maker, for example.

Childs and Smith Ltd produced Electrotor powered round-the-pole model aircraft under the Nulli Secundus name, whilst the Scale Model Equipment Company Ltd (SMEC) of Steyning, Sussex, used Electrotors to power their range of racing cars with carved wooden bodies. SMEC also undertook a more ambitious project, producing a model outboard motor powered by an Electrotor, which they called the Foam Wraith.



Type No.	A, mm.	B, mm.	C, mm.	Volts.	Speed, r.p.m.	Weight, grms.
001	5	5	0·8	1·5	7000	1
240	22	14	1·6	3 to 4	5000	21
320	30	19	3·2	6 to 12	4000	84
440	38	35	3·2	6 to 24	4000	161

FIG. 12—RANGE OF "ELECTROTORS" —REV MOTORS

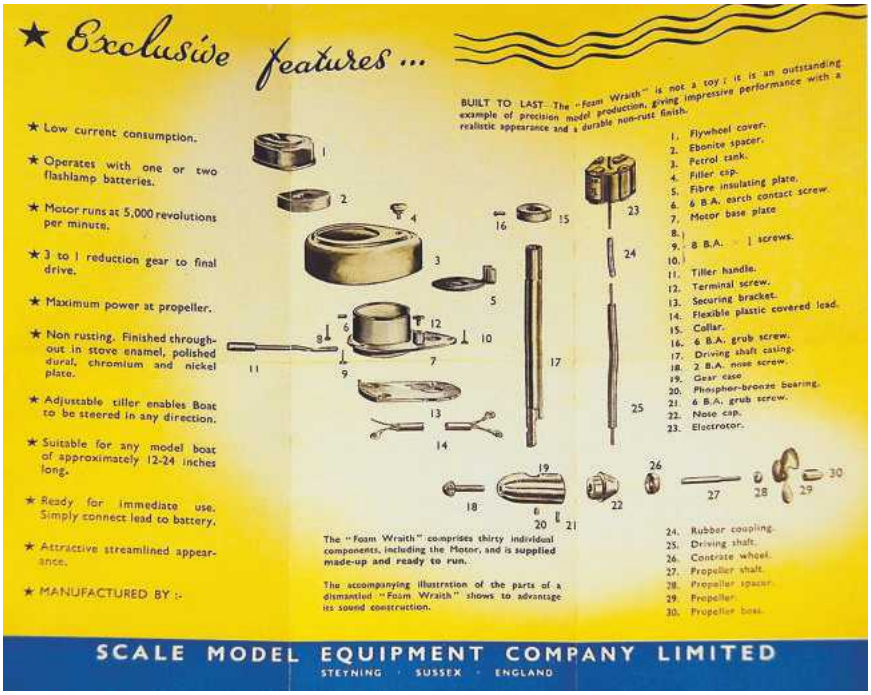
ABOVE: Electrotor sizes available.

> *"Excited by the prospects of this new motor, modelling magazines and toy manufacturers were eager to incorporate it into their designs. It appears on many simpler model plans of the time"*

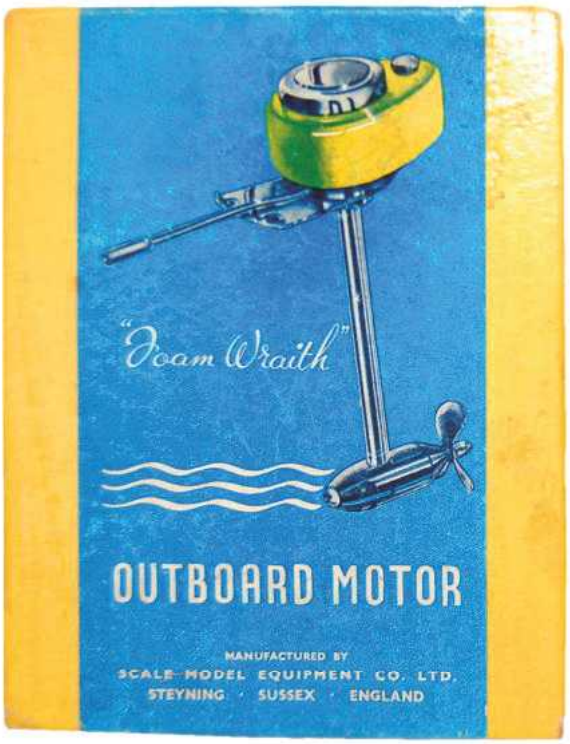
BELOW: Four examples of the Electrotor, one in a sealed box.

Foam Wraith

The Foam Wraith was announced in an advertisement that appeared, rather oddly, in the June 1948 issue of Aeromodeller magazine. Its appearance is quite distinctive, for instead of trying to realistically represent a full-size outboard



ABOVE: Parts listing from the accompanying brochure (big-boy-collectable-toys).

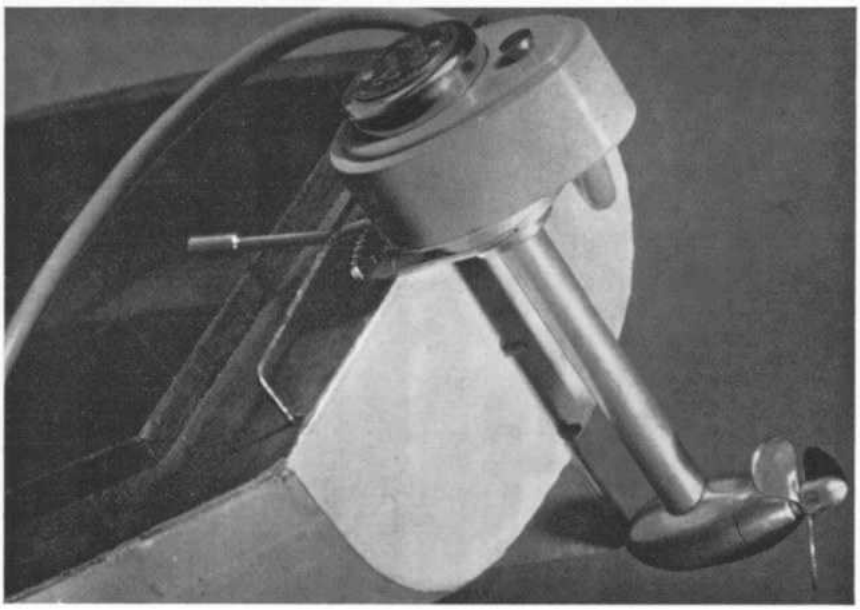


ABOVE: Boxed example for sale on an auction site (big-boy-collectable-toys).

motor, it is a starkly simple, unadorned functional design of its own with all the parts reduced to simple geometric shapes – a tubular upright, a bullet-shaped bottom fitting and a streamlined engine cover. The selling price was 37s/6d (around £66 today) and it was intended for model boats 12 to 24 inches (305 to 610mm) long. Helping to justify the quite high price was a rust resistant plated, polished and enamelled finish, attractive packaging and paperwork that included a suggested hull design and an exploded view showing the 30 parts it was constructed from, including the Electrotor power source.

Few designs appeared that were suitable for powering by the Foam Wraith and it never seemed to attract much attention from the limited model boat literature available at the time. One exception is G. H. Deason's 1950 The Model Boat Book, where it is shown powering a small dinghy with the observation that, 'it is worth a special description, in view of its novelty and usefulness'. That description goes on to mention that it could be supplied finished in cream, blue or red.

BELOW: Foam Wraith as illustrated in The Model Boat Book, 1950.



Efficiency

The Electrotor, and as a consequence all the models powered by it, suffered from a fundamental problem that was related to the innovative operating principle, namely its efficiency was appalling. Efficiency is a measure of the proportion of the electrical power supplied to it that a motor can transform into mechanical power, and according to Model Maker magazine's Motor Test of the Electrotor in their August 1956 issue, its efficiency peaked at 7.5% or to put another way, it wasted at least 92.5% of the expensive battery power it was being fed with.

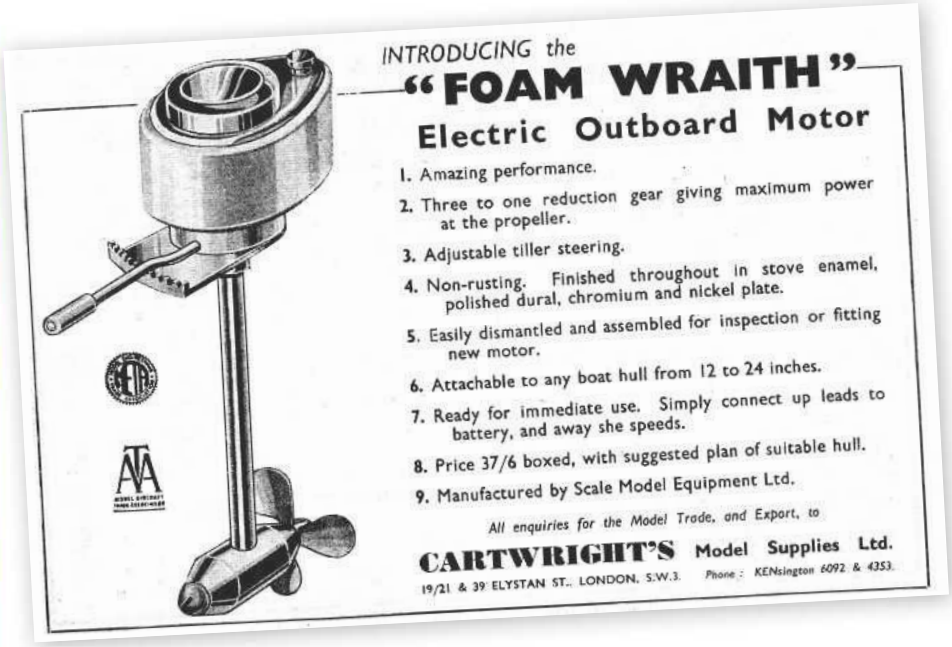
Even in a toy, the low efficiency was a problem, especially with the weak powered batteries of the day, and on a larger scale, it surely must have ended the prospects for the motor being developed into fractional horsepower sizes for industry, as had been originally touted. Within a few years of the Electrotor's appearance, sub-miniature motors of conventional design, such as the Eveready TG-18 and Frog Tornado, came along that weren't much larger than the Electrotor but were 20 to 25% efficient, thus three times as good. The Electrotor thus failed to sustain the market it helped to create. By the time of the Model Maker test, it was no longer being made by REV Motors but by Childs and Smith, who were probably committed to it to power their models. I think it's a particular shame that SMEC chose to use it for their otherwise fine Foam Wraith. The company didn't look back, going on to gain a fine reputation for their hi-fi tone arms.

And today?

If you come across an Electrotor today, it will most likely be a Type 240, and it most likely won't work. I find that by applying a moderate voltage of 4.5 volts, whilst turning the shaft by hand, the oxidation of the bared rotor ends inside gets removed and the motor slowly revives. I have a few boxed examples of the Type 240 and its variants in my collection and of the two larger boxes, one is printed with the name of the Australasian agents, Medo Distributors of Adelaide.

One motor has a brass pulley whilst the other has a red plastic mounting base and worm wheel, an unknown type number as the label is largely missing. None are very inspiring to look at, their phenolic board end caps being held to the body by clips and a wrapping of sticky tape. One has not seen the light of day for 68 years, trapped in its tiny box that is sealed shut by the label, and I don't intend to disturb it.

Today, the Foam Wraith outboard is a rare apparition indeed, suggesting that only a few were ever made. The last one I spotted on a well-known Internet auction site sold for £260, far in excess of my own modest bid, and this is the reason I don't have one in my collection to photograph for you. Any reader wishing to donate a blue one in mint boxed condition may do so via the editor, but only kidding as actually any colour would do!



ABOVE: Announcement of the Foam Wraith, June 1948.

MM2094 HMS Temerity
NOW AVAILABLE
As featured in the Model Boats Warship special

HMS Temerity MM2094

Designed by Glynn Guest this freelance model is based on the Royal Navy destroyers built during World War Two.

The simple balsa hull enables a quick built without compromising on strength and can easily accommodate RC equipment.

Length: 35" (89cm). Approximate operating weight 5lbs 8oz (2.25kg)

Item	Description	Price
MM2094	HMS Temerity Plan	£17.50
HULLMM2094	HMS Temerity CNC Hull Pack	
£42.45		
SETMM2094	HMS Temerity Plan & Hull	£56.95*

Online: www.myhobbystore.com/Temerity

MODEL ENGINEER MEX EXHIBITION

Since 1907

AN EXHIBITION OF TRULY INSPIRATIONAL MODEL ENGINEERING

BROOKLANDS MUSEUM

at the Birthplace of British Motor Sport and Aviation

16-18 SEPTEMBER 2016

World Class Competition
Clubs • Trade

Locomotives • Traction Engines • Aero Engines
Ships • Marine, Stationary Steam, I/C and
Hot Air Engines • Railway Layouts
Fairgrounds • Outdoor Live Steam

SMEE DEMONSTRATIONS and **LECTURES**

TICKETS INCLUDE ENTRY INTO BROOKLANDS MUSEUM AND THE LONDON BUS MUSEUM

Tickets are available online at
www.brooklandsmuseum.com
Telephone: 01932 857381 (ext 268)
Email: info@brooklandsmuseum.com

PRICES	In Advance	On the Day
Adults	£12.00	£15.00
Seniors	£11.00	£14.00
Child	£5.00	£6.00
Family	£30.00	£37.00

mytimemedia print & digital media publishers
www.mytimemedia.com

MODEL ENGINEER | MODEL ENGINEERS' WORKSHOP | BROOKLANDS MUSEUM

www.modelengineershow.co.uk

Boiler Room
Some interesting

PART Sixty Seven:

Richard Simpson's series on model steam plants

After a couple of months of going on about Boiler Definitions and Gas Tank regulations. I thought it was about time we got into something a bit more enjoyable, like steam engines! I don't know what drives you into the realms of a steam plant in a model boat, but one of the key aspects for me is not just the knowledge that a live steam system is actually propelling the model around the water, but in the case of an open-hulled model, actually seeing the engine buzzing away as it sails past is what really does it for me. Even such a small model as a Borkum with nothing more complex than an old Cheddar Pintail engine in it is something quite special when it steams by you standing on the pond side, with the engine glittering in the sun and the lovely soft plume of steam hanging over the water as it smoothly and quietly glides past. It was actually mentioned by a fellow club member recently just how quiet the model was as it sailed past at full speed one Sunday morning. I'm not quite sure just what noise he was expecting, but I think he had been listening recently to too many electronic sound generating systems.

So, if like me you enjoy all aspects of steam propulsion in model boats you will probably also be interested in the one or two slightly more unusual engines that I have come across over the years. I of course, have to hold my hands up immediately and admit that they are mainly not suitable for model boat operations, but nevertheless they are all interesting in their own way and well worth sharing.

The usual suspects

First of all let's have a brief look at the usual suspects that we have all seen in operation in our boats over the years such as the Vee Twin oscillator Hemmens Richmond, **Photo 1,** the in-line Twin

Photo 1. A Hemmens Richmond Vee Twin double acting oscillator engine. This one also has the accessory engine driven water pump fitted.

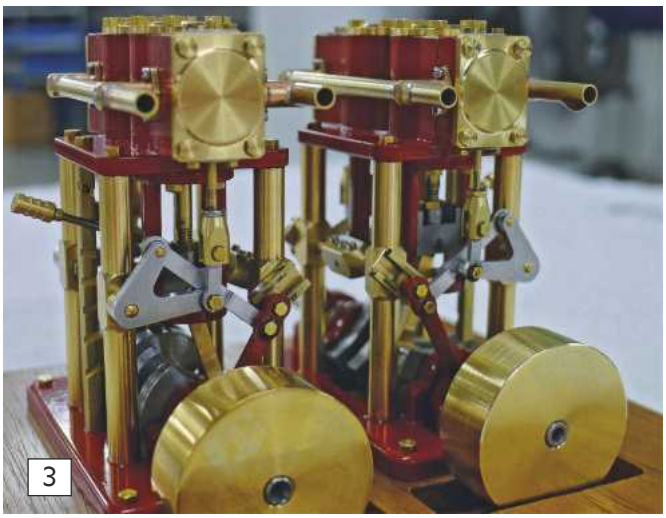
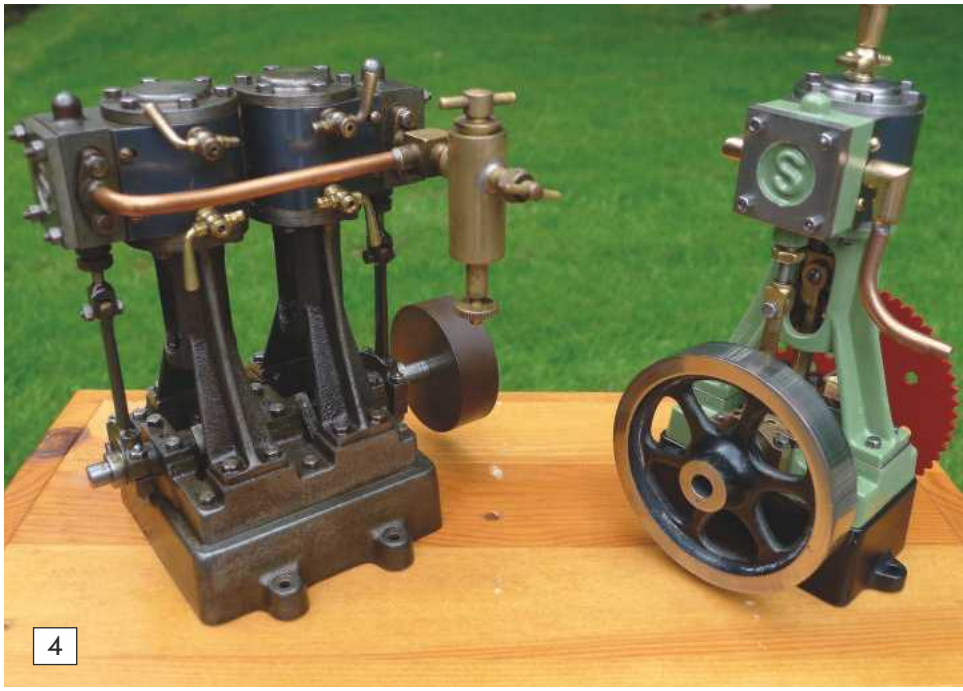


Photo 2. A pair of old Cheddar Puffin engines. This engine has been around for many years and even now there are very similar engine configurations still being produced by current manufacturers, all demonstrating just what a solid little engine it is.

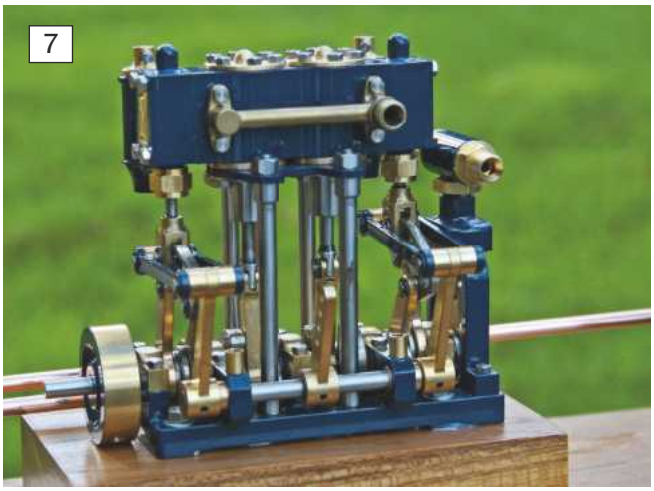
Photo 3. The TVR1A from Graham Industries in the USA is proving to be a more and more popular engine. It is extremely well made and very easy to assemble as a kit.

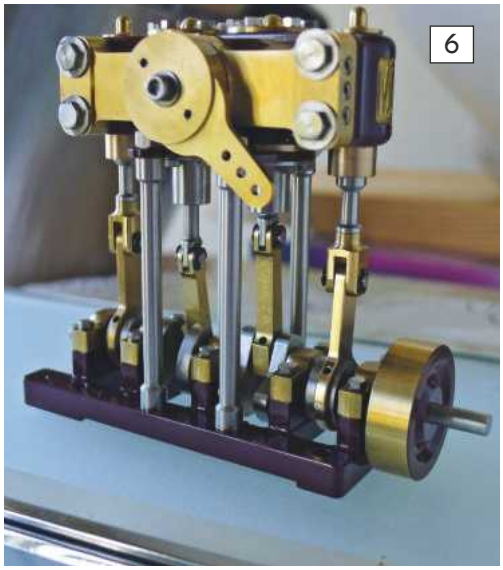
Engines


4

Oscillator Cheddar Puffin, **Photo 2,** and the ever more popular Slide Valve TVR1A engine, **Photo 3.** These engines in conjunction with the odd French Anton, one or two Unit Steam Engine (USE) combinations, the new Clyde plant from Miniature Steam and maybe a couple of homemade oscillators, probably make up over 50% of the propulsion power found in model boats nowadays. If you are really lucky however you might see a nice old Stuart Turner 10V or even a D10 in an older model, **Photo 4.** It always surprises me to see engines such as these still in regular use, sometimes after many years of operation and still as reliable as the day they were built. What I am interested though this month are the much more unusual engines where sheer ingenuity has been poured into their design and creation and we get to thoroughly enjoy watching a piece of art spinning around. Some of them are completely impractical, but you will be captivated by them anyway.


5


7


6

Rare model boat engines

It is always worth keeping your eyes open on such outlets as the online auction sites as well as magazine adverts, just in case you are lucky enough to find something considerably rarer and significantly more beautiful than a normal engine. In this category I would put my prized Monahan engines built by the very talented Nick Monahan in California. Very sadly he stopped the production of steam plants as he simply couldn't make them pay, but I consider myself to be extremely lucky to have got my hands on a Cirrus, **Photo 5,** a Sparrow, **Photo 6** and a Heron, **Photo 7,** before he ceased production.

These engines truly are beautiful and one day will find themselves in a polished wooden open hull model where they can be observed in all their

Photo 4. Stuart Turner engines can still be found propelling model boats around the ponds. Some may be modern versions, but the design is still basically the same as it was when introduced over 100 years ago and some can be quite old.

Photo 5. Such a shame that an engine as beautiful as the Monahan built Cirrus never really went into long term production. A Vee Twin oscillator, this example is fitted with a water pump, driven by a scotch crank directly from the crankshaft.

Photo 6. Another Monahan engine is this Sparrow. This is a piston valve engine with, very unusually, a reversing lever combined with the speed control lever requiring only a single servo to operate.

Photo 7. The final Monahan engine is an earlier Heron engine. This one is a slide valve engine and comes complete with full reversing linkages. Beautifully designed and manufactured and a pleasure to watch in operation.

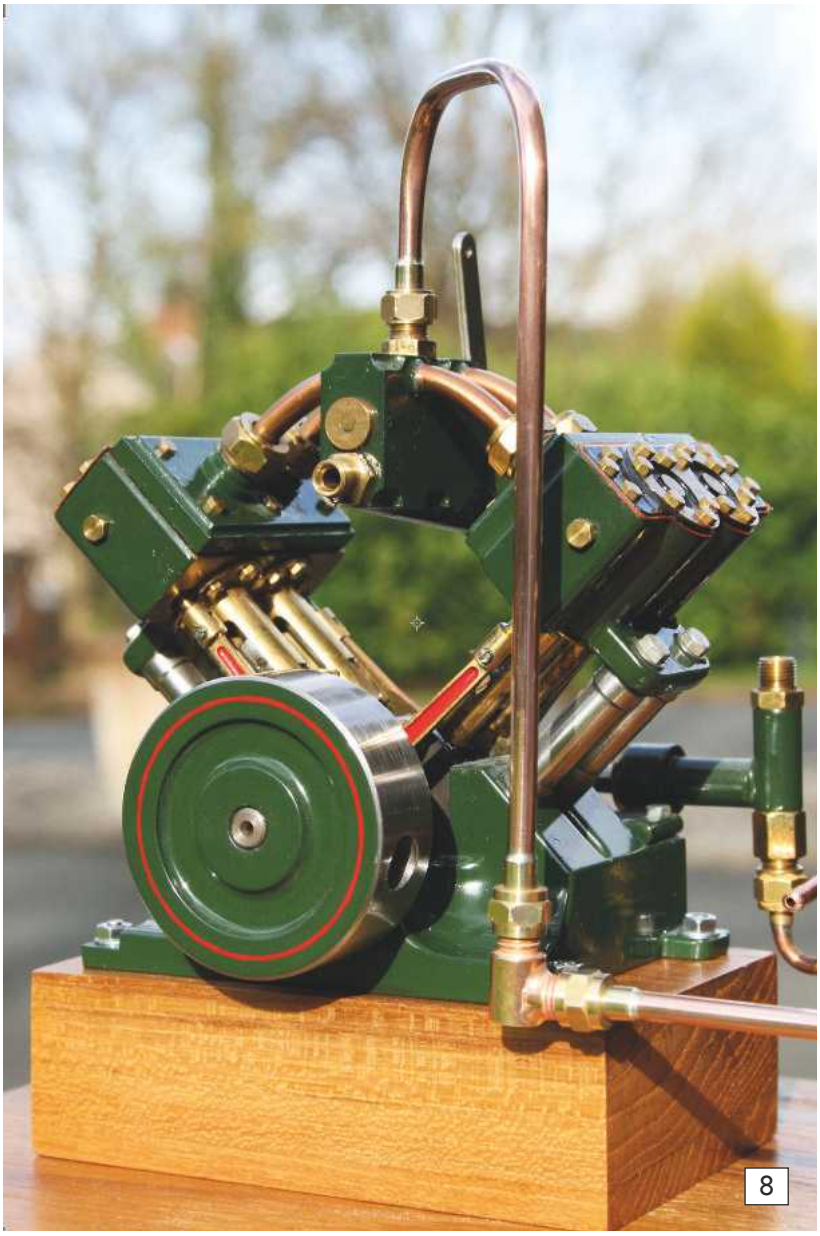


Photo 8. One of my luckiest finds on line was this Hemmens Vee Four piston-valved Caton engine. The engineering is stunning and testament to the quality and complexity of engines that were being built some years' ago. When I received it, the engine had never run on steam despite its age, and yet still immediately performed perfectly when run on compressed air.

Photo 10. You can quite clearly see in this photo that the Hansen engine does not have a crankshaft. The piston rods and piston valve rods are all operated by eccentrics locked to a straight shaft. Simple, ingenious and a lot easier to manufacture than a conventional crankshaft.

glory. It is such a great shame to see engines such as these no longer produced, in particular because they contain so many innovative design features that bring them into the 21st Century. If they cannot be manufactured profitably by using the latest CNC technologies then we can only accept that we may never see such quality engines produced again. Also in this category of rarer engines, I would put my pride and joy, which is the Vee Four piston-valved Caton engine from Hemmens, **Photo 8**. Just watching all those piston connecting rods as well as the valve connecting rods going around that crankshaft is really mesmerising and it is a tribute to the art of the model engineer. This engine is destined to be fitted to a polished clinker planked Wide-a-Wake hull where it can be fully observed in operation, however in the meantime it has been run frequently on air to loosen things up and bed in the running parts suitably. One thing that always makes me smile with this engine is just how slow it will rotate, **Photo 9.**

The real odd balls

These are the ones that will make you appreciate some manufacturing creativity.
First up is an engine built by the German manufacturer Hansen, **Photo 10.** The thing that attracted me to it, apart from its poor condition that needed a thorough clean-up, was the ingenious way

Photo 9. The Caton Vee Four is so beautiful you could simply enjoy looking at it. When it runs though, it takes on a presence that can only instill a degree of amazement in oneself.

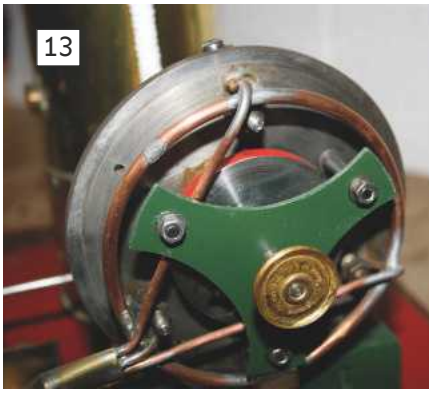
Photo 11. The three cylinder oscillating radial engine came complete as a plant but I have only ever run the engine on compressed air. It would be interesting to know just who built it and whether it was from a purchased design or a homemade design. Either way, it is fascinating to watch in operation.

Photo 12. From this side you can quite clearly see the relationship of the cylinders and how they connect to a common crank, but you have to see it in operation to really appreciate how clever the design is.

in which it had been manufactured. The crankshaft isn't actually a crankshaft as it is simply a steel rod. The throw of the connecting rods and the piston valve rods are all generated by eccentric bottom ends, locked to the main shaft by screws, in much the same way a Stuart Turner engine would operate its slide valve. This has obviously been designed with ease and cost of manufacture in mind, but the result is a lovely twin cylinder double acting piston-valved engine, which is surprisingly easy to maintain and operate and incorporates very little in the way of time consuming manufacturing processes. It is such an interesting concept that I'm surprised that no-one else has used the idea, although I suspect that there may be a tendency for some owners to have a play with the piston timing and I can see the engine ending up with an unfair reputation for unreliable operation. When I first tried to run my own engine it vibrated quite dramatically until I realised that someone had upset the timing of the piston rods.

The next one I couldn't resist when I saw it on an online auction site a number of years ago, and this is the three cylinder radial oscillator, **Photo 11.** If you imagine the aircraft radial engine where the cylinders all radiate around the crankshaft and the pistons all work on the crankshaft in the middle, then this engine does pretty much the same, except the cylinders also oscillate on their mounting plate, **Photo 12.** You have to study the arrangement to see just how it works, but putting compressed air through it makes it all so much clearer. It works perfectly smoothly with the three cylinders providing even power strokes and the clever manifold arrangement of collecting the exhaust is even reminiscent of an aircraft radial engine exhaust, **Photo 13.** Each piston is only single acting, but with the 120 degree spacing of the three cylinders it should always be self-starting. A fascinating piece of engineering and a credit to the designer and manufacturer, both of whom I strongly suspect were simply hobbyists and probably the same person. The last engine is one of those that I connect up to an air line and simply enjoy watching when other things may be that bit too challenging and I feel the need for an uplifting moment. Again this originated from our famous online auction site a good few years ago, when I considered myself very lucky to have obtained this piece of machinery. My great regret is not getting more information from the seller

Photo 13. On the other side of the mounting plate you can see the exhaust outlets and how the three cylinder exhausts collect into a manifold, pretty much the same as an aircraft radial engine.



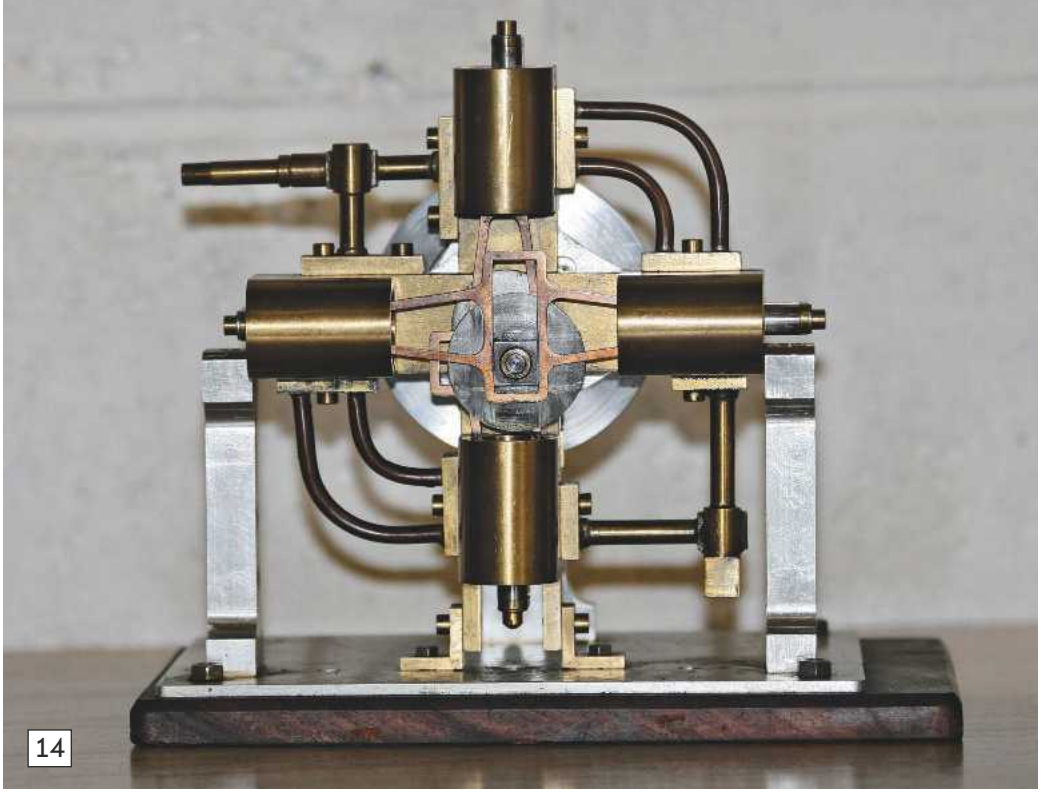


Photo 14. The Harmonique engine built from plans and a real home machinist's work of art. Although the pistons are only single acting, having them arranged in opposed pairs like this effectively gives you a double acting operation and having four in total makes the engine self starting. You can quite clearly see the front Scotch Crank on the horizontal cylinders and the vertical pair have their crank behind it.

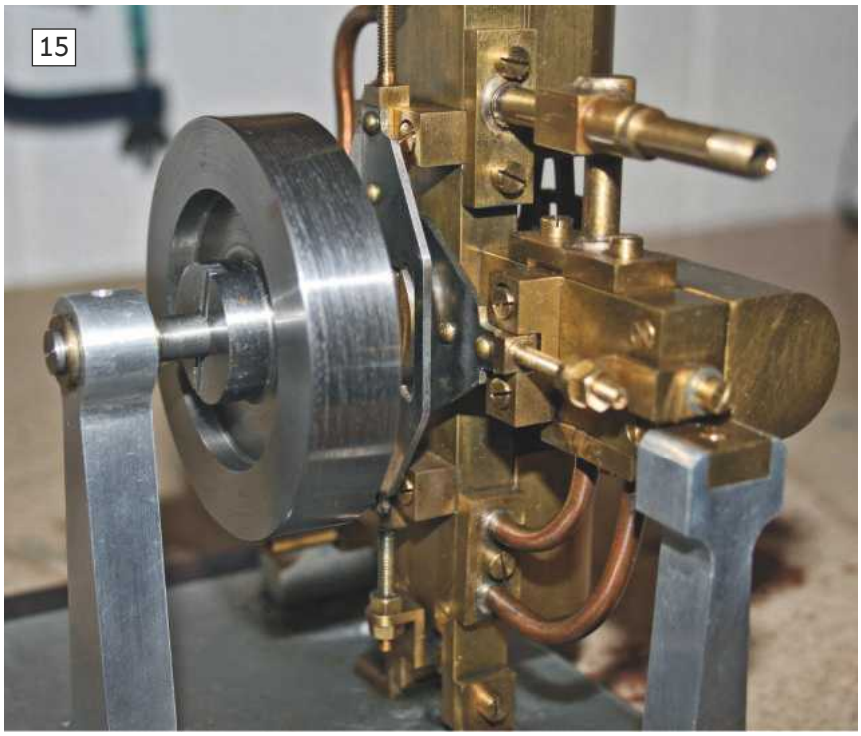


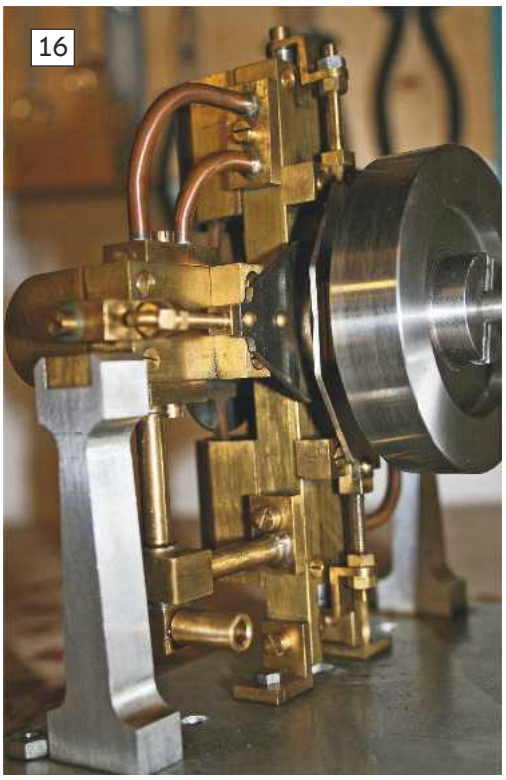
Photo 15. Behind the cylinders on the Harmonique engine, you can see two further scotch cranks, which operate the piston valves to admit or exhaust the steam. This arrangement is a real work of art and simply fascinating to watch in operation.

Photo 16. The final view of Harmonique engine giving you an idea of the complexity of manufacture that has gone into this model engineering masterpiece. I would dearly love to know who built this and know a bit more about its history.

as regards the history of this particular engine, however it came described as a Harmonique Engine built from plans supplied in a model engineering magazine from the early 1960's, **Photo 14.**
I contacted the magazine and asked whether they would be able to supply any information regarding the engine and was absolutely amazed to discover they could supply me with copies of the six original magazines that contained the series of drawings and building instructions. After receiving them and reading through the series of articles the complexity of the project and the degree of skill that had gone into this build became apparent. It really is a stunning piece of hobby engineering and considering the time when it was built, was made with machinery of a significantly more basic nature than that you will find available nowadays, **Photo 15.**
Basically this engine is two pairs of opposing single acting cylinders. Each pair of pistons are connected by a Scotch Yoke, which operates on a square sliding section of the crank. The two pairs of pistons operate at 90 degrees to each other so effectively you have the same torque set up as a pair of double acting cylinders and this ensures self-starting every time. The arrangement is amazingly ingenious and again, one of the great pleasures is seeing just how amazingly slowly the engine will rotate and all a great testament to the quality of the build. The external pipe work seems to give the engine a sort of Flash Gordon 1960's science fiction look about it, all of which adds to the beautiful appearance, **Photo 16.**

Conclusion

So there you have a few interesting engines. Apologies for drifting away from model boat engines this month, but I am sure that those of you who enjoy playing with model boat steam plant will also enjoy



EUROMILITAIRE

2016 17th & 18th September

The Leas Cliff Hall, Folkestone

36 Competition Classes now including aircraft and ships

International traders and manufacturers, tools materials and demonstrations

Military and civilian figures, vehicles, aircraft, maritime, vignettes, dioramas, flats, fantasy, wildlife, costume, history - something for everyone - see the finest miniature art and sculpture World wide

Pre-order your tickets today at:

www.euromilitaire.co.uk

or email: david.holden@mytimemedia.com

New look for Buxton Model Boat Club

Keith Holmes and Andy Cope update MB readers

ABOVE: The new club banner.

Our club is now an established feature in Buxton's Pavilion Gardens, this Derbyshire town's historic Victorian park. We meet every Sunday morning throughout the year at the main boating lake to sail a wide variety of radio controlled model boats, which is also very popular with members of the public and tourists, who enjoy watching the small ships and yachts as they navigate the lake whilst they enjoy a drink in the adjacent café.

The current chairman is Keith Holmes who resurrected the club in 2007 with the goal of encouraging local adults and children to engage in the rewarding hobby of building and sailing model boats and since then the club has gone from strength to strength. As Keith says; 'We now have a stable and growing membership and regularly display our model boats at local venues, as well as sailing them in this park on Sundays'.

BELOW: Buxton MBC members in the Pavilion Gardens with Chairman Keith Holmes on the far left.

ABOVE: Looking towards the regular model boat sailing area.

BELOW: A typical model seen at Pavilion Gardens.

LEFT: The new club badge.

A bit of history....

The club was originally known as the Pavilion Gardens Model Boat Club Buxton, all a bit of a mouthful, so to celebrate the club's ongoing success, we recently commissioned a Coat of Arms and shortened the name to Buxton Model Boat Club.

This Coat of Arms shield is now used for all the club's promotional activities, website and YouTube channel, to establish a strong image that references both the hobby and Buxton's iconic Pavilion Gardens, so inevitably a backdrop of the beautiful Pavilion building itself was also included. This Coat of Arms is also incorporated in our new club badge.

The club chose to launch its new look at Buxton's Spring Fair on Monday 2nd May 2016, where it had a stand and sailing demonstration area. This Spring Fair is just one of the town's annual events that attract hundreds of people to the park and is a great opportunity to recruit new members and was well attended, despite the weather trying its best to wash us away.

For more information on our activities and future events, please visit our website: www.buxtonmodelboatclub.co.uk
Live videos can be found on YouTube - just search for Buxton Model Boat Club.

DON'T FORGET DAD!

£19.99* FOR ANY OF THESE TITLES

*UK OFFER ONLY

SAVING 37%

7 ISSUES FOR £19.99
FULL PRICE £31.50

SAVING 32%

6 ISSUES FOR £19.99
FULL PRICE £29.40

SAVING 31%

7 ISSUES FOR £19.99
FULL PRICE £29.05

SAVING 34%

8 ISSUES FOR £19.99
FULL PRICE £30.40

Father's Day will be here before you know it (June 19th), so why not get organised now?

Treat Dad with a subscription to his favourite magazine for less than £20. You could even treat yourself.
Don't miss out! Offer ends 15th July 2016

SAVING 26%

6 ISSUES FOR £19.99
FULL PRICE £27.00

SAVING 30%

6 ISSUES FOR £19.99
FULL PRICE £28.50

SAVING 33%

6 ISSUES FOR £19.99
FULL PRICE £29.94

SAVING 31%

7 ISSUES FOR £19.99
FULL PRICE £29.05

SAVING 26%

6 ISSUES FOR £19.99
FULL PRICE £27.00

SUBSCRIBE SECURELY ONLINE: www.mymagazineoffers.co.uk/FD55

CALL: 0844 243 9023** AND QUOTE FD55

BY POST: PLEASE COMPLETE THE FORM AND POST IT TO THE ADDRESS PROVIDED. QUOTE REF: FD55

YOUR DETAILS: (This section must be completed)

Mr/Mrs/Miss/Ms..... Name.....

Surname.....

Address .....

.....

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

Tel/Mob.....

Email.....

D.O.B.....

Magazine..... Price .....

GIFT RECIPIENT (Complete 'Your details' first)

Mr/Mrs/Miss/Ms..... Name.....

Surname.....

Address .....

.....

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

Tel/Mob.....

Email.....

D.O.B.....

Magazine..... Price .....

PAYMENT DETAILS

Please make cheques payable to MyTimeMedia Ltd and write code **FD55** and magazine title on the back.

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro

Card no: (Maestro)

Cardholder's name: .....

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

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

SEND TO: My Time Media Ltd, 3 Queensbridge The Lakes, Northampton NN4 7BF

TERMS & CONDITIONS: Offer ends 15th July 2016. *UK offer only.
Gift Subscriptions will start with the first available issue after 19th June 2016. Personal Subscriptions will start with the next available issue. **Lines open Mon - Fri - 8.00am - 8.00pm GMT & Sat - 9.30am - 3.30pm GMT. UK Calls costs 7p per minute plus your phone company's access charge. Overseas calls will cost more. For full terms & conditions visit www.mytimemedia.co.uk/terms. From time to time, your chosen magazine & MyTimeMedia Ltd may contact you regarding your subscription, or with details of its products and services. Your details will be processed in full accordance with all relevant UK and EU data protection legislation. If you DO NOT wish to be contacted by MyTimeMedia Ltd & your magazine please tick here: ☐Email ☐Post ☐Phone If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: ☐Post ☐Phone
If you DO wish to be contacted by carefully chosen 3rd parties, please tick here: ☐Email

Matchstick Modelling

Nigel Bailey's model of HMS Hood

ABOVE: HMS Hood as in 1941. Some detail fittings such as anchors still need to be made.

Nigel is 55 years old and works as a Precision Engineering Inspector working for Wärtsilä Propulsion UK, a large marine engineering company. He has always worked in engineering and this hobby is a nice diversion for him, the flexibility of working with matchsticks being appealing and he even takes a supply on holiday so as to spend 'free' time fabricating small items like guns and superstructure parts etc. Nick initially started model making with matchsticks as a boy aged 10, when he built a boat with some of them found in a gutter when on the way to school. As with many hobbyists, interests such as this were later put to one side in his formative years, but rekindled later in life as more free time became available.

BELOW: The basic hull framework is of balsawood.

HMS Hood

This is Nigel's interpretation of this famous warship as she was just before her deadly encounter with KM Bismarck in 1941. The model is made almost entirely from matchsticks, one of their hidden benefits being that they are easily able to be bent and adjusted to form the battle cruiser's beautiful hull lines.

The starting point was with the plans from the Anatomy of the Ship book for HMS Hood and the model is a little over 40 inches in length. Balsawood was cut to shape to create the hull's internal framework. Once reasonably satisfied with this, it was then all 'skinned' with matches, each having to be adjusted individually to the correct shape and profile.

Construction of the superstructure followed much the same sequence, it also being built of matches around a balsawood framework. Turrets, guns and the fittings were all made in the same way, proving the versatility of the common match.

This is of course a static model, so displacement and weight was not a consideration, all the 'match work' being carefully sanded before the application of a number of coats of thinned varnish to produce the results seen in the photographs.

Conclusion

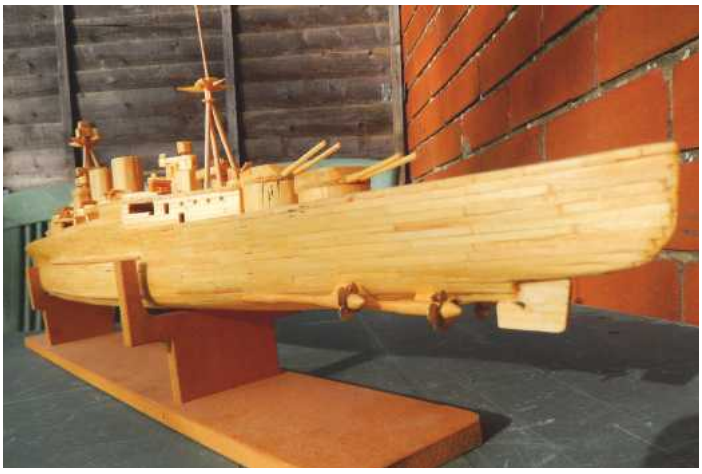
Nick intends as he approaches retirement to start building models from metal, but in the meantime, there being no shortage of matchsticks(!), other projects are planned, he having already built a smaller matchstick model of HMS Janus, a WW2 destroyer on which his father served.

*Enjoy your hobby - **Nigel Bailey***

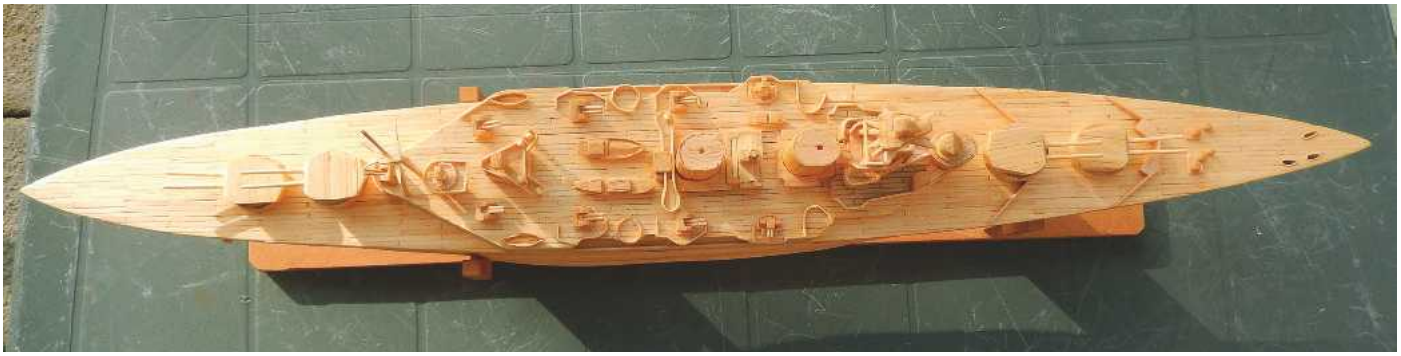
BELOW: Amidships view of HMS Hood.

RIGHT: Bow view of the model. Nigel has captured the sleek lines of the famous battlecruiser perfectly.

BELOW: Everything is from matchsticks, including the decking.



RIGHT: Stern view of HMS Hood.



Shrek Ski Boat

Andy Cope's Airboat

In the December 2015 Model Boats magazine on Pages 59 & 60, Shrek was featured learning to water ski, **Photo 1.** However, he soon had enough of getting wet, so it was decided to build him a more civilised mode of transport befitting his swamp home, and so the Shrek Ski Boat was conceived.

Shrek Ski Boat

This is of course actually a very simple airboat, scratch built from 4mm plywood as in Diagram One. It also makes an excellent recovery craft for stranded club members with its flat leading edge, perfect for damage-free shunting. The lack of a rudder or propeller below the waterline is also an obvious advantage when retrieving another model boat tangled in weed or overhanging branches.

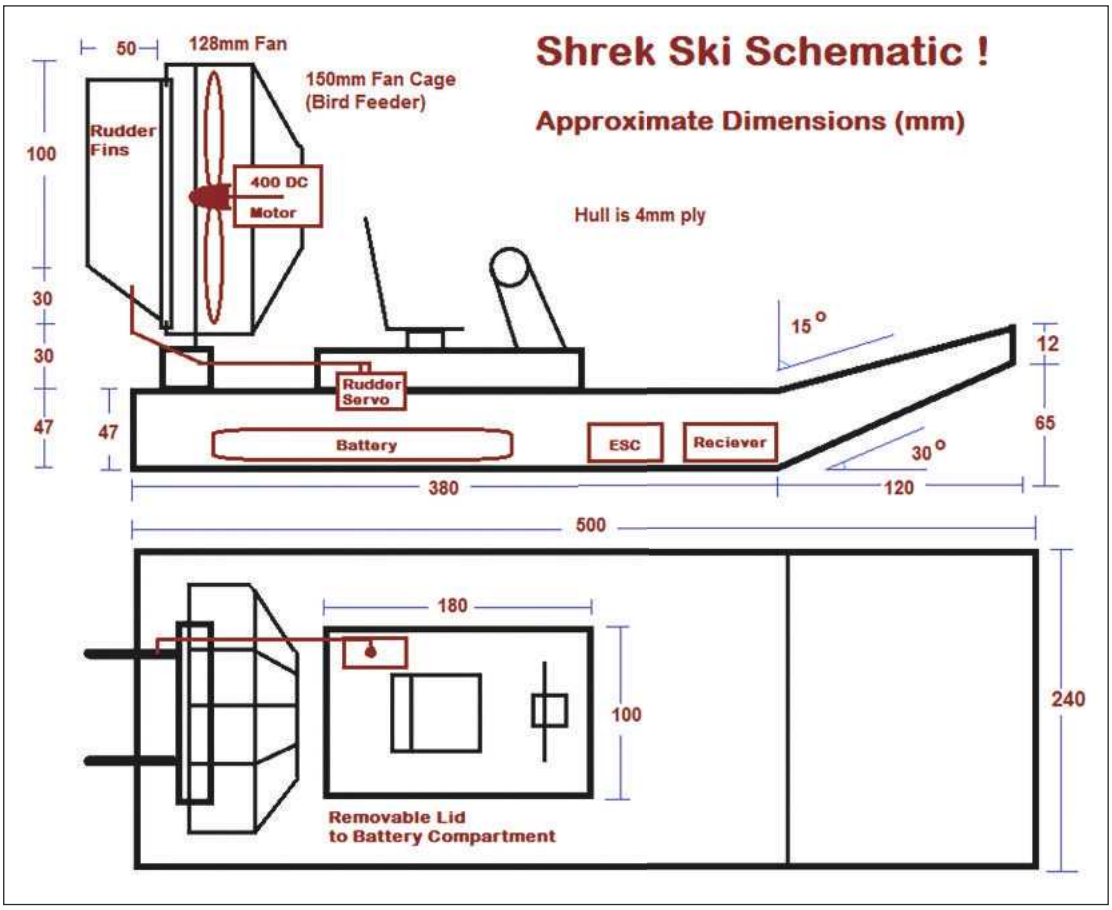
The model has also proved to be a popular visual attraction for the children that come to see us sailing our boats and is often the first port of call for them when attending an exhibition event. It is also a highly manoeuverable and stable(ish) platform for filming water level model boat videos, a good example being our recent October 2015 Venetian Lights event, a short video of which can be seen on the Buxton Model Boat Club YouTube Channel. Please just search the web using the club's name to find it.

The box hull design is very simple to construct and would make a great parent and child project as an introduction to radio controlled model boat making. The project requires no tricky curved hull components to shape or clamp during its construction and the radio control set-up is also very simple. The only potentially awkward bit is selecting a suitable aero propeller and motor that pushes, rather than pulls, assuming the motor faces backwards as in the design shown here. Consulting a model airplane enthusiast for advice about this is therefore often far more helpful when building airboats than asking a model boat enthusiast.

Photo 2. A Bird Feeder is handy for making the essential propeller guard.

Photo 1. Shrek water skiing before he had his own boat. He got tired of having wet feet!

Photo 3. The new Shrek Ski Boat (airboat) finished and ready to go.



LEFT: This is a schematic layout of the design and the builder can amend as he or she thinks best.

> *The model has also proved to be a popular visual attraction for the children that come to see us sailing our boats and is often the first port of call for them when attending an exhibition event*

Photo 4. The finished model's rear view.

Photo 5. Although not fast, the new airboat serves its purpose and has a useful secondary role as a rescue craft.

The schematic layout of the design has been included, should anyone wish to have a go at building it. The dimensions and materials are not critical, as it is not designed to 'plane' under power, thus negating the need for complex power to weight calculations, as it's actually all about the fun of creating 'your own statement'.

A single standard-size servo acts to steer via a connecting rod from the hull to the rudder fins and a cheap single direction speed controller can be used to operate the fan, but remember there is no reverse on an airboat with this arrangement. **Photo 3 and 4** are of the completed airboat, that was simple and quick to build.

Safety first?

As with all modern radio controlled devices, the combination of powerful batteries, motors and propellers does mean that a protective cage for the airboat drive fan is a good idea. This can be fabricated from a host of materials, but the old trick of cutting-off the top of a squirrel proof bird feeder cage as in **Photo 2,** makes it all so easy. If you carefully plan the cutting of the bird feeder cage, the wires can be cut and bent to form fan cage supports, motor mounts and the rudder fixings all in one go.

On the water and conclusion

Yes, perhaps it does not plane, **Photo 5,** but is fun to operate and has also proved to be a handy rescue craft for other stranded models, something that was not anticipated when the thought first arose. A bit of fun perhaps, but our hobby is all about enjoying oneself and trying different things is perhaps what it is all about, and as mentioned earlier, it certainly attracts attention at the pondside and would perhaps make for being a nice project for youngsters, but with some parental guidance to ensure the propeller is properly guarded.

61.5 foot Admiralty Motor Fishing Vessel

Leonard Treppa's latest model in his own words

ABOVE: Leonard Treppa's static model has been built using the Free Plan in the December 2015 MB issue.

The James Pottinger Free Plan and article in Model Boats, December 2015 was very interesting and I liked the lines of the hull and decided to build it using the complimentary plan as a guide. However, instead of the model being approx. 30 inches long at the Free Plan scale of 1:25, this version is 20 inches long and the other dimensions have been adjusted accordingly.

The hull

This is of bread and butter construction being built in three sections, with separate port and starboard sides and the central keel piece. The hard part of making this hull was to make mirror images of each half as I do not use templates, but rely on sight and feel. Also the inside was cut away to make the hull lighter. To shape the hull, a hand plane, gouge, rasp and various sanders were initially used, the three sections being finally glued together and sanded to an overall smooth finish. This was a lot of hard work and quite time consuming, not to mention a lot of wood shavings as well.

Deck and superstructure

The deck is piece of thin Mahogany, cut to shape with openings for the superstructure unit and large aft facing triangular companionway. Later, the deck was scribed with lines, using an extra fine black ball point pen, to look like planking.

Most of the wheelhouse and deckhouse are from 1/16 inch Basswood. All of the fittings, except for the tyres, propeller, portholes, brass handrails, stropped blocks and turnbuckles, are scratch built from wood or brass rod. Notably, the cowl vents are made from two different sizes of dowel rod, shaped and sanded to size. The turnbuckles for the rigging lines are in fact the very small barrel swivels used for fishing, cheaper than specific model boat versions, and they look great. For the glazing in the wheelhouse and skylight, black card stock paper was applied to the inside of the clear styrene sheet. The hardest part of building this static model was making the gunnel

ABOVE: The hull is of conventional bed and butter construction with a plywood keel insert.

BELOW: The superstructure is all wood, including the cowl vents.

BELOW: The deck is of mahogany veneered plywood and still to have the planks marked in this picture.

The completed 615 foot Admiralty Motor Fishing Vessel static model from the James Pottinger Free Plan.

and gluing in the timber heads and bulwark top rail, which all took quite some time.

The deck is varnished and the hull is painted matt black, with the rest being of matt grey.

Conclusion

I really enjoyed building this model and was happy at how well it turned out and as it so happened was also invited to display some of my model boats at the Hobby-Rama show of 20th Feb 2016, this event including trains, planes, automobiles and boats. I took along 14 models for display and the P.S. Monarch (December 2015 MB) and Admiralty MFV 96 were a big hit at the show as well as Orca from the Jaws movie and African Queen from the film of the same name.

Thank you for your interest - ***Leonard Treppa.***

ABOVE: This overhead view shows the marked planks. The model was completed in February 2016, not much more than two month's after receiving the Dec 2015 MB Free Plan issue.

LEFT: Leonard Treppa's Orca and African Queen at Hobby-Rama.

RIGHT: Leonard Treppa at Hobby-Rama.

The Airbrush Company Ltd

DARKSTAR
MOLTEN METALS

WATER-BASED ACRYLIC METALLIC PAINTS

www.Airbrushes.com 01903 767800 sales@airbrushes.com

Test Bench

Model Boats looks at new products

Attention-Manufacturers & Distributors

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

News from The Airbrush Company

This supplier is now distributing Alclad II products

Alclad II Metallic Lacquers already have a good reputation as excellent, highly polish-able, realistic metal finishes and they have now added:

Alclad II Mil-Spec Airbrush Enamels

A new range of quick-drying enamel colours formulated especially for airbrushing. The colours have been extensively researched to produce the most accurately matched collection of colours available to modellers. They can be used with any Alclad Primer and be easily be sealed for decals and weathering with any varnish including Alclad Aqua Gloss Acrylic and the Alclad Klear Kote range.

LEFT: Alclad II enamel paints are supplied in 30ml jars, ready for spraying.

In addition there is a range of washes and weathering pigments, but the enamels may be of most interest to Model Boats' readers. Currently there are some standard, army and air force colours, some of which can be used on model warships, but dedicated naval colours are planned. The paints come in 30ml containers and are priced at £4.50 each.

These products may be obtained from selected retailers and direct online or by telephone from The Airbrush Company Ltd, 79 Marlborough Road (East), Lancing Business Park, Lancing, West Sussex, BN15 8UF, tel:+44 (0)1903 767800. Website: www.airbrushes.com

Review by ***Paul Freshney***

ShipCraft 22 – German Battlecruisers

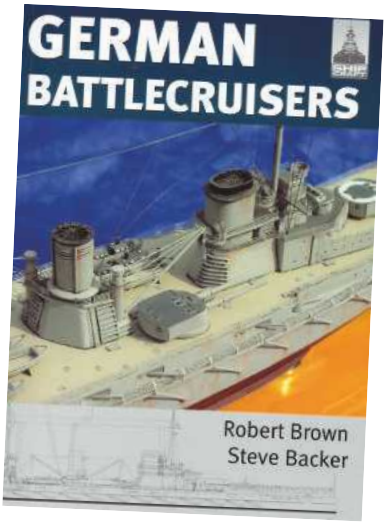
Written by Robert Brown and Steve Backer with plans and camouflage schemes by George Richardson. Softback, 64 pages, 297 x 210mm, over 180 photographs drawings, and plans in both colour and black & white. ISBN: 978-1-84832-181-6, price (RRP) £14.99. Published by Seaforth Publishing, an imprint of Pen & Sword Books Limited, 47 Church Street, Barnsley, South Yorkshire, S70 2AS. Tel: 01226 734222, website: www.seaforthpublishing.com. Available direct from the publisher or through the usual retail outlets.

In this new book, maritime authors Robert Brown and Steve Backer, cover the seven German battlecruisers that saw service in the First World War: Von Der Tann, Moltke, Seydlitz, Derfflinger, Lützow, Goeben, and Hindenburg, as well as their hybrid predecessor Blücher and the uncompleted Mackensen and Ersatz Yorck classes. Designed to a different philosophy from their British equivalents, being more fast battleships than big-gun cruisers, they famously survived massive damage at Dogger Bank and Jutland, establishing a reputation which has generated admiration and interest among warship modellers and enthusiasts ever since.

This is the latest volume in the ShipCraft Series which provides in-depth information about building and modifying kits of these famous warships. Lavishly illustrated, it takes the modeller through a brief history of the classes, highlighting differences between sister ships and changes in their appearance over their careers. This includes paint schemes and camouflage, featuring colour profiles, highly detailed line drawings and scale plans. The modelling section reviews the strengths and weaknesses of available kits, lists commercial accessory sets for super detailing of ships and provides hints on modifying and improving the basic kit. This is followed by an extensive photographic gallery of selected high quality models in a variety of scales. The book concludes with a section on research references, including: books, large scale plans and relevant websites.

In short, this book is essential reading and reference material for anyone contemplating, or in the process of, building a model of one of these charismatic German warships.

Book Review by ***John Deamer***

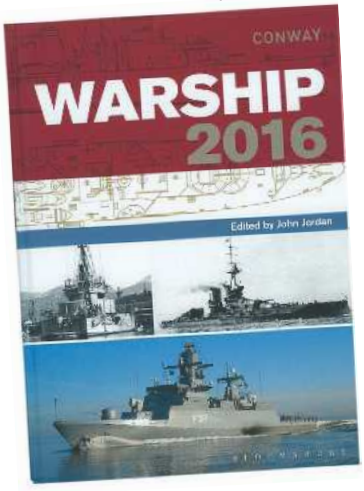


Warship 2016

Edited by John Jordan. Hardback, 208 pages, 27 x 20cm with numerous B&W drawings and photographs. ISBN: 9781844863266, first published in May 2016 by Conway, Bloomsbury Publishing PLC, 50 Bedford Square, London, WC1B 3DP, UK, tel: +44 (0)20 7631 5600, website: www.bloomsbury.com. RRP is £40 though the usual retail outlets, but it is also available at a discount online from a number of retailers.

Warship 2016 is devoted to the design, development and service history of the world's combat ships. It features a broad range of articles from a select panel of distinguished international contributors and this latest volume combines original research, new book reviews, warship notes, an image gallery and much more to maintain the impressive standards of scholarship and research from the field of warship history.

This 38th edition features the usual range of diverse articles including: The Colonial Sloops of the Bougainville Class; The Colonial Sloop Eritrea; Japanese destroyers of the Asashio Class; The Naval War in the Adriatic, Part Two 1917 to 1918; Post-war AIO and command Systems in the Royal Navy; The Soviet Fugas Class Minesweepers; Divisional Tactics at the Battle of Jutland: Modern Littoral Surface Combatants and three other interesting chapters on diverse subjects as well as the Warship Gallery for HMS Colossus.



This annual is one of those books that is handy to have because of its included wide breath of interesting warship related articles and information and pictures that are of real value to model makers.

Book Review by ***Paul Freshney***

MODEL BOATS MARKETPLACE FREE READERS' ADVERTISEMENTS

Selling or buying? You can place a FREE reader's advertisement here. Simply fill in the coupon printed on this page and send it to us at Model Boats, Marketplace Free Readers' Advertisements, P.O. Box 9890, Brentwood, Essex, CM14 9EF

Sales

BILLINGS NORDKAPP TRAWLER. Battery, Futaba 2ch r/c, good looking boat, £180. Rex Clingan, tel: 01789 292493 (Warwickshire).

MMM LADY WOOS TUG. Superstructure built, steering & motors fitted, propshafts and brass propellers, some fittings including lifeboats & davits. Includes Robbe Lader 6 charger, Digifleet esc's & servos. Offers? Buyer collects. Graham Lea, tel: 01522 800087 or 07728 233446 (Lincoln).

MTB/MGB GAY ARCHER, 29 ins long as seen in Watchet Harbour. Twin motors, carrier box, buyer collects, photos available, £240. Also 1:24 scale 40mm Bofors, Oerlikon, Twin Vickers MG's. H.S. Harvey, tel: 01934 413207 (Weston-Super-Mare, Somerset).

JOFFRE 1916 TYNE TUG, complete with r/c, working lights, smoke unit, carry case, £205. Also: Small tug, working lights, tow hook, but no r/c. £90. Buyer collects either model. Alan Argent, tel: 01279 812418 (Stansted, Essex).

CLAUDIA, semi-scale Venice cruiser. Scratch built from holiday photo. 500 type motor, 50A esc, servo, no Rx or battery, £100, or without esc & servo for £50 and £40 if no motor. Buyer collects, Charles Santer, tel: 01626 8623756 (Dawlish Warren, Devon).

KYOSHO FAIRWIND YACHT. Sails very well, with crew and stand £150. Also, Al Khubar II, red hull, brass prop's, Electronize esc's, sails & manoeuvres well, £230. Need the space! Robert Murray, tel: 01294 462393 (Ardrossan, Ayrshire).

MODEL BOATS magazines from 1957 to 2010, total of 161 but some gaps. Buyer collects, offers please? David Walley, tel: 01823 254868 (Taunton, Somerset).

SAMARBETA TRENT LIFEBOAT from Model Slipway kit. Good quality build, all electrics including lights, ready to go, £465. Buyer collects, Mr. A. D. Coupe, tel: 01614 273712 (Stockport, Cheshire).

RAF FIRE BOAT. Scratch built, navigation, masthead & searchlights, working fire monitors, all r/c controlled. No batteries but includes Hitec Laser 4 Tx, Rx, charger, water pump, 4 servos, Bobs Board speed controller. Photos on request. Offers iro £185 plus p&p, approx. £18 if reqd. Chris Wright, tel: 01383 728770, email: croxley53@gmail.com (Fife).

BOSTON TYPHOON by Mountfleet Models, with lighting, smoke effect, engine sound, very well built, used once, £850. Also two other large model boats. Buyer collects, poor health forces sale. Brian Lane, tel: 01268 766838 (Wickford, Essex).

Wants

BUILDING INSTRUCTIONS for Graupner True Blue yacht. A photocopy would suffice and all expenses reimbursed. Peter Morris, tel: 01634 290430 (Rochester, Kent).

Your own FREE advertisement could be filling this space. To place an advert here simply fill in the form below and send it to us.

Model Boats

Post or email a copy of the coupon to: Model Boats, Marketplace Free Readers' Advertisements, P.O. Box 9890, Brentwood, Essex, CM14 9EF

FREE READERS' ADVERTISING

Please write your details in **CAPITALS** in the grid below including a contact name and address or telephone number in the word count. Please also enter your full details in the address box below the grid.

PLEASE TICK: FOR SALE ☐ WANTED ☐

* Free Readers' ads are only accepted on a coupon by post, or email.

PLEASE NOTE: 'Free Advertisements are limited to one per reader for each issue. If multiple forms are sent as a batch, then unless the advertisements can be combined within the word allowance, they are spread over subsequent issues'.

Terms and conditions

We will endeavour to print your advertisement in the next available issue of Model Boats. Free Readers' Advertisements will only be accepted on this coupon, or by email with all details as required on the coupon with a maximum of 36 words per advertisement. Any received after copy date will be held over until the next issue. No responsibility can be accepted for misprints. Please comply with the Trade Descriptions Act when detailing goods for sale. This service is only available for private sales. Other services and trader advertisers must use the pre-paid classified section of the magazine. By law, consumers must be able to differentiate between an advertisement for private or trade sale (traders would include modellers who have previously purchased items with a view to then selling them at a profit). Only ONE free advertisement per person will be listed each month. Multiple advertisements from the same person will be inserted in subsequent issues, space allowing. MyTimeMedia Ltd reserve the right to refuse a free private advertisement.

Name: .....

Address: .....

.....

.....

..... Postcode: .....

Telephone: .....

Signature: ..... Date: .....

* If you don't wish to spoil your magazine, then please photocopy this coupon.

BMPRS News

Website: www.bmprs.co.uk

Craig Dickson reports from the opening race of 2016, held at Branston Water Park

The opening race of the season is always filled with anticipation following the winter break which has left a gap of several months over the winter. It is great to meet again all the members, who in some cases have not seen each other since the previous season.

The run up to this opening event had a potential difficulty in that despite our Chairman Ian Searle appealing beforehand for volunteers to run the race, no one stepped up to the challenge. Thankfully, at the last minute our Health and Safety Officer, Mark Wild, stepped in and agreed to run the event. However this meant that the booking office was only opened about a week before the actual race day, which may explain why the entry numbers were a bit lower than anticipated.

The role of OOD (Officer of The Day) is one that is not everybody's cup of tea so to speak and the prospect of managing between 25 and 50 men, women and juniors eager to race their boats and ensuring that the races run to schedule, can be quite daunting to the inexperienced. Mark has that experience and is naturally suited to this role, so it was good that he stepped in, otherwise we would have been really stuck as without an OOD the race could not have gone ahead.

Unlike some previous seasons that have seen their first event(s) cancelled due to lousy weather, the opening race for 2016 brought with it some really glorious Spring weather, setting the scene for a great day's racing.

Mark Wild rightly decided to run the B and C Class boats together and also the AA Class and smaller T1 Catamaran Class boats as one, due to the relatively low number of entries. The boats in these merged heats were still independently scored according to their respective classes, but it made the racing more exciting to watch and put less pressure on the actual timing of the race heats. The first Driver's Meeting of the season was called as soon as the competitors had booked-in with Madelyn Reid at race control. This lake lends itself to making the race course as big as desired, and Peter Dimberline and Alan of the host Burton & District MBC did a great job of making the course large. Some members requested that the furthest buoys be brought in slightly to allow for a little more room between them and the sides of the lake, something Peter and Alan duly did - Thank You!

Mark as OOD emphasised the usual health and safety points with special care needed launching off the lake bed, due to the water level remaining low and not being high enough to launch from the jetty. With all of the winter rain, one would have thought that the lake would be well topped-up, but its level was still significantly higher than when we last raced here. With everyone happy it was time to get the racing underway and how did it go?

BELOW: No. 85: Mike Proudman's T2 Aeromarine catamaran.

The big T2 Cats in action and unusually this class had the joint highest number of entries on the day.

LEFT: Garry Dickson's preparing his fleet of four racing boats.

BELOW LEFT: A55: The Crusader 3 raced by Craig Dickson.

BELOW: Kevin Alcock's Patriot Evo, one of the latest versions of this design of hull. His Red Conquest catamaran is on the table behind.

AA Class

This class was supposed to have four entries, but Mark Wild's CMB powered Lizard had recently had its engine stripped-down and rebuilt. Upon firing up the engine, he was not happy with the way it was running and decided to withdraw rather than risk possible costly damage to the engine. This left three in this class so it was good that the smaller catamarans were also racing against each other making the heat more exciting.

This race was quite special for my identical twin brother Garry and myself, as it was the first time we had actually raced against each other in the BMPRS and the first time in decades as it so happened..

Garry Dickson's brand new West 28 powered Magnet enjoyed a superb run clocking up 63 laps in total to win the race. I don't recall his boat stopping, although he was having to throttle back in the afternoon session, as the wind had increased making it very lively. He realised that with an 11 lap lead from the morning heat it was vital just to keep going rather than risk flipping the boat which could have cost him first place. All in all, a superb result for this new boat's first race!

Incidentally, I commented to Garry that his new Magnet seemed to have been built almost identically to mine. He replied; 'Yes Craig. I used your article featured in the 2015 Winter Special of Model Boats and copied the way you built yours'!

Anyway, much to his delight, but not mine, I was pushed into second place with the West 28 powered Magnet and a 49 lap total, losing a lot of ground in the first heat when it was a struggle to get the engine started. The fuel mixture settings appeared to be too rich, so they had to be adjusted at the lakeside, which is far from perfect. Even then, the engine stalled in both heats when slowing down near the rescue boat, so some work is needed to get it all sorted before the next race. David Hough raced his Go 28 Powered Pursuit, which for a small hull went remarkably quickly, but similar to myself, his morning heat dented his lap total with several stoppages although he ended with a respectable 48 laps in total for third place.

A Class

The four entries in this class included Robert Daniel, who it was good to see back racing with us again. Robert races on international circuits with a very demanding schedule, so has limited opportunities to attend our events.

Mike Barnes raced his ASP 46 powered Challenger and the fine tuning he had done to the

BELOW: The A Class Challenger 43's in action, Luke Bramwell's red boat being chased by the luminescent yellow/green hull of Mike Barnes.

RIGHT: Three of the A Class boats jostling for position.

LEFT: D75: Kevin Alcock's Patriot in action on the pit straight.

BELOW: Kevin Alcock (left) inspecting his Patriot on its rather tall launch stand.

ABOVE: Neck and neck here, Kevin Alcock's red Conquest eventually beating Garry Dickson's Mercury by only one lap in total.

BELOW: Luke Bramwell and Mike Barnes approaching the nearly submerged Stratos of Mike Gelson - an urgent rescue needed!

boat during the winter break made it look like his boat was running quite a bit quicker than it did during 2015. His consistency in both heats gave him a total of 83 laps for first place. Robert Daniel's CMB 45 powered AC Magnum took second place with 81 laps in total. Robert's boat was extremely quick, but a stop in the first heat, needing rescue and a restart, cost him valuable time and laps. Luke Bramwell raced his ASP 46 powered Challenger and although the boat ran really well, that of Mike Barnes seemed to be slightly quicker. It is worth pointing out that Luke's Challenger, (same hull as Mike's) has a submerged drive with the propshaft and propeller beneath the hull, whereas Mike's Challenger has a surface drive with the propshaft and propeller situated at surface level, all protruding to the rear of the hull's transom. Notably, surface driven hulls tend to have a speed advantage in straight lines and gentle turns.

This race proved to be very frustrating for me. The SC 46 engine had been replaced with a considerably more powerful West 46 engine for 2016, but it was done perhaps a bit too much 'last minute' and with insufficient time for proper pre-race testing. That's the excuse anyway for managing only 33 laps in total and fourth place. When the engine was running flat out, if anything it was perhaps over-powering the hull, because the boat flipped over twice or spun-out several times, including once straight into the path of Luke's Challenger, causing both boats to stop.

B and C Classes

Only two entries in B Class, so they were combined with the C Class which had three, so five boats were now running in both the morning and afternoon heats. Despite the low number of entries, these two heats were really exciting to watch with some superb driving and fast running boats.

In the B Class, Malcolm Pratt's CMB 67 powered Apache 50 took first place with 78 laps and Garry Dickson's West 52 powered Challenger having to settle for second being only one lap behind. A good result considering that Garry's engine is only about 75% of the capacity of Malcolm's CMB 67.

In the C Class, the three competitors in this mono hull class (featuring the largest size of nitro engine) enjoyed some very competitive racing, but not without incident and it is worth noting that on this occasion the total lap scores for this class were generally below those achieved in all of the smaller classes, but why?

Robert Daniel's Delta Force scored 55 laps in total for first place. His boat had more than one stop needing recovery and a restart and this included it nose diving for no obvious reason, flooding the engine bay and stopping the craft dead in its tracks. Also while turning around Buoy 4, Mike Gelson's Stratos whilst going flat out and taking the inside line, slid out and went straight over the top of Robert's boat causing both to stop. Sally Dickson captured all this on video, and it can be seen by clicking on the BMPRS website and going to:

2016 Results – Branston 1 (to see the link to the video of these combined B & C Classes).

This collision also affected Mike Gelson's final lap score, he only achieving 36 laps in total for second place. His impressively fast Stratos experienced some other problems when it spun-out at full throttle in the morning heat. The force of this dislodged the radio box, which in turn wrecked the throttle servo leaving much work to be done during the lunch break before resuming racing in the afternoon. Mike

LEFT: Kevin Alcock launching Robert Daniel's C Class Delta Force.

ABOVE: Plenty of smiles on the faces of the certificate winners.

RIGHT: B9: Malcolm Pratt's fine looking and excellently performing Apache 50.

BELOW: Two Patriots head to head: D4 Mike Barnes and D9 Malcolm Pratt.

used cable ties to temporarily secure the radio box in place and redeployed a servo that would normally enable a fuel mixture adjustment capability.

Harry Stuart's OPS 90 powered Warhawk had a poor first heat performance with only one lap completed. Harry, had fitted a new piston and piston liner to the engine, but as he discovered in the morning heat, the carburettor fuel needle settings were not correct, being too lean and causing the engine to keep stopping. After a full turn of the main needle prior to the second heat, the boat was back on form running as fast as I have ever seen it go, but Harry ended with only 24 laps.

D Class

With five entries in this popular class of Spark Ignition (S.I.) powered mono hulls, the big course proved perfectly suited to these hugely powerful boats. Garry Dickson's impressively presented MPM powered Saturn was driven with superb consistency in both heats clocking up 85 laps to give him his second win of the day. Kevin Alcock's Gizmo 30 powered Patriot Evo was not far behind achieving 80 laps for second place. In his second heat this boat was going ballistic, but still not enough laps to overtake Garry.

All of the first three places in this class achieved their best lap scores in the afternoon's heats when perhaps the more choppy water and the increased wind helping these boats go faster? What about the two guys that came fourth and fifth?

Mike Barnes had two hard collisions with Buoys One and Three in the morning heat causing the boat to stop after the second collision. It's rudder took a mighty clout, flipping the rudder blade back and shearing the lower mounting bolt. This small bolt is intended to snap in such circumstances to avoid wrecking the mounting gear and damaging the transom, so did its job very well. Soon after sorting this out, Mike's four-bladed CNC propeller inexplicably shed two of its blades, so he had to bring the boat back in again. As if that wasn't enough, in the afternoon heat after a re-launch following a stalled engine, the flexi-shaft snapped near the propeller end, but luckily the new prop' was not lost and with just 52 laps in total, Mike was left in fourth place.

Malcolm Pratt's Patriot ended fifth with 36 laps. In the first heat, he noticed that the ignition source coil on the engine was scraping against the flywheel. These coils need to be mounted close to the flywheel, but definitely not in direct contact. Malcolm

BELOW: Oh dear, this CNC prop' belonging to Mike Barnes did have four blades when it started the race!

RIGHT: D44: Garry Dickson's imposing looking Saturn at full speed.

BELOW RIGHT: D8: Mike Durant's Phantom powering its way to third place in the D Class.

ABOVE: Mike Barnes emptying water from the hull of his D Class Patriot. This photo gives an idea of how big these D Class boats are and you can only imagine how heavy they are when full of water?

wisely retired the boat early and removed the engine at lunch time to reposition this essential component for the second heat, but he had however lost a lot of ground as a result.

Catamaran T1 Class

With only two entries, those boats in this class ran with the AA Class. Mike Barnes entered his new X-Cat 38 powered by an SC 46 engine. He had done a lot of testing and fine tuning of the boat, he having not previously raced in this smaller of the catamaran classes. Having experimented with weight distribution for best cornering and different prop's for best speed, all this preparation delivered a great result of 75 laps in total, putting him comfortably in first place.

Luke Bramwell's SC 46 powered X-Cat took second place with 48 laps, he having been frustrated in the first heat with the engine not seeming to want to go to its maximum speed. The problem was traced to the inline fuel filter having lots of debris in it, but in the second heat, the SC engine with a new glow plug fitted was back on form, and he enjoyed some great head to head racing against Mike's boat.

BELOW: The D Class battling it out around Buoy 3 (top right section of the rectangular course).

Catamaran T2 Class

This class features the larger and more powerful catamarans and had five entries, and was the final heat to be run in both the morning and afternoon sessions. Race action in this class was fantastic with some really talented driving, the large course and relatively calm conditions suiting these boats, and allowing their maximum speed potential to be demonstrated.

Malcolm Pratt's CMB 91 Aeromarine (the only nitro powered boat in the class), delivered impeccable performance achieving the highest total laps of the day of 93 and first place - well done Malcolm'!

Kevin Alcock's RCMK 26 powered Conquest was second with 70 laps. In the choppier water conditions of the afternoon heat, the Conquest appeared to be taking on some water which meant that when it slowed down, it moved forward and splashed into the engine's carburettor air intake causing the boat to stop. A niggling problem and such leaks or ingress points being hard to diagnose.

Garry Dickson's well set-up Mercury achieved 69 laps for third place, but in the first heat, it did a spectacular barrel roll and stopped, and in the second the same thing happened on the back straight whilst throttling-up into a head wind. These two stops lost him a considerable number of potential laps.

Mike Proudman's Zenoah powered Aeromarine achieved a respectable 60 laps, but a few stops meant that this score was only sufficient for fourth place. Harry Stuart raced his wooden hulled Skippy Sport Hydro. This hull is always such a pleasure to watch as it generates a spectacular propwash, but the second heat score of only two laps unfortunately left him with only 31 laps in total and fifth position.

ABOVE: One of the few collisions in the T2 Catamaran Class. Malcolm Pratt's yellow Aeromarine bumping into Garry Dickson's Mercury, but thankfully only minor damage resulting.

BELOW: Garry Dickson's very nice new Magnet boat which won the AA Class.

ABOVE: The favoured launch section off the lake bed gave good visibility of the large course.

Conclusion

This opening event proved to be really enjoyable for all who participated. After the racing had concluded it was time to present the certificates to the winners and thank everyone involved in making the day such good fun. Special thanks were given to Madelyn Reid for manning the race control desk and handling all the lap scoring, and to Peter Dimberline and his colleague Alan from the resident Burton & District MBC for allowing us the use of their facilities and including the rescue boat. In terms of the results in the respective classes, this venue demonstrated the old adage that, in racing to finish in first place, you still have to finish the race.

*Cheers for now - **Craig***

Branston Results - 10th April 2016

Position	Name	Race No.	Hull	Engine	Heat 1	Heat 2	Total
AA Class							
1	Garry Dickson	44	Magnet	West 28	33	30	63
2	Craig Dickson	55	Magnet	West 28	21	28	49
3	David Hough	87	Pursuit	Go 28	18	30	48
A Class							
1	Mike Barnes	4	Challenger 43	ASP 46	40	43	83
2	Robert Danie	17	AC Magnum	CMB 45	38	43	81
3	Luke Bramwell	6	Challenger 43	ASP 46	37	26	63
4	Craig Dickson	55	Crusader 3	West 46	29	4	33
B Class							
1	Malcolm Prat	9	Apache 50	CMB 67	40	38	78
2	Garry Dickson	44	Challenger 48	West 52	38	39	77
C Class							
1	Robert Daniel	17	Delta Force	CMB 91	28	27	55
2	Mike Gelson	3	Stratos	CMB 91EVO geared	19	17	36
3	Harry Stuart		Warhawk 133	OPS 90	1	23	24
D Class							
1	Garry Dickson	44	Saturn 44	MPM Tuned Zen 31	41	44	85
2	Kevin Alcock	75	Patriot 75	Gizmo 30	34	46	80
3	Mike Durant	8	Phantom 145	Gizmo 30	28	44	72
4	Mike Barnes	4	Patriot	Zen 28.5	26	26	52
5	Malcolm Prat	9	Patriot	Tiger King	14	22	36
T1 Catamaran Class							
1	Mike Barnes	4	X-Cat 38	SC 46	39	36	75
2	Luke Bramwell	6	X-Cat 38	SC 46	14	34	48
T2 Catamaran Class							
1	Malcolm Pratt	9	Aeromarine	CMB 91RS	49	44	93
2	Kevin Alcock	75	Conquest 43	RCMK 26	40	30	70
3	Garry Dickson	44	PMC Mercury	MPM Tuned Zen 31	34	35	69
4	Mike Proudman	85	Aeromarine	Zen 28.5	32	28	60
5	Harry Stuart	133	Skippy Sport Hydro	Tiger King	29	2	31

BELOW: Kevin Alcock (left) preparing to launch Robert Daniel's winning C Class Delta Force.

Luke and his A Class Challenger. Note the submerged (but parallel) drive flexi-shaft system.

MEMBER PROFILE

Luke Bramwell

This features junior member Luke Bramwell who turns 16 this year and who has been a prolific racer and contributor to the BMPRS ever since he first got involved. His willingness to always be on hand to help out and get involved, is perhaps a trait inherited from his dad, and it makes him a very valuable, well liked and respected member of our society. Luke has achieved some great racing results throughout the last few seasons, showing us older racers' how it should be done on more than one occasion.

Luke is currently in full-time education and due to sit his exams in this crucial year of schooling and also attends college, seeking the accolade of Motor Vehicle Level 1 in due course. What is it about this hobby that made Luke get so heavily involved? I put some questions to him:

How did you first get involved in racing model power boats?

My dad (Mark Wild) has been on the boating scene for quite some time now and he got me hooked on this hobby when I was about 11 years old. He took me to our local lake and gave me taste as to what the hobby was about seeing boats flying around the lake, and I loved it! BMPRS member Bernard Holder got wind of my interest and very kindly donated a Sea Spirit 2 boat for me to build and race. Initially though, I attended a few of the BMPRS race meetings with my dad, volunteering to be the pit man for Andy Rennie to help him with his racing. This experience gave me great intuition as to what this fantastic hobby really encompassed. Incidentally, Andy subsequently re-paid my efforts by being my pit man when I first started racing in 2013.

BELOW: Luke's X-Cat with his self-designed and made decals.

Tell me more about your first year of racing in 2013?

I fitted the Sea Spirit 2 out with an SC 40 nitro fuelled engine, which took some considerable time and testing to get set-up so that it ran with consistent reliability. That time and effort paid off, as I ended that first (2013) season of racing in third place, in the A Class Championship table. To be honest though, initially it was quite nerve wracking, being in the thick of lots of boats battling to be first around each buoy. As the season progressed and experience increased, so did my confidence racing amongst other boats. At the end of the 2013 season, I was put forward and accepted as being the new Junior Representative on our BMPRS committee, a position that I still hold.

How did things develop during the 2014 season?

In 2014 I raced the same Sea Spirit 2 throughout the season, but noticed that the class had upped its game in terms of more competition and faster boats etc. I suffered a fair share of mechanical problems, but this proved to be a great learning opportunity. 2014 was the year that I learnt a great deal about how boats are set-up, maintained, adjusted and repaired and it is nice now not to have to ask my dad how to do things. I ended up in fifth place (out of 11) in the A Class for 2014.

What about the last season during 2015?

In that year I entered the Catamaran T1 Class in addition to the A Class, using the X-Cat hull designed and produced Darren (Daz) Elson, powered by an ASP 46 engine ending up as Champion in the 2015 T1 Cat Class. That 2015 season also gave me an appetite for learning more about fibreglass (GRP) moulding – how is it done -could I do it - etc? Having purchased a few moulds via eBay I am now making decent quality GRP radio boxes and boat stands. In addition I have ventured into producing high quality vinyl decals, not only model boats, but also for cars, wall art and even aeroplanes. I have already set up my own business and it is looking most promising.

What was your most satisfying win ever?

That has to be the 2015 T1 Catamaran Championship. That made me realise that you don't have to be an expert to win, and you don't have to have a fast or super engine to be able to win.

Can you tell me about your biggest disappointment?

It was at Branston Water Park in 2014 in the first heat when my boat collided with Craig Dickson's Crusader 3. It came off worse as the engine in my boat suffered a snapped conrod ending what was a great race until then, but that is all part of racing.

What makes you laugh most on race days?

That has to be the banter between the racers about their boats and how they will do well or not so well, even though only the actual results always reveal the eventual truth! The banter is always good and mostly between members that have got to know each other well knowing the boundaries of what they can say.

Conclusion

My thanks go to Luke for such an open insight into what makes him tick. Clubs and societies like ours are fortunate to have young and enthusiastic members such as him.

***Craig Dickson** - April 2016*

SHOP GUIDE

Please call Duncan Armstrong **01689 869 855**

WEB GUIDE

Please call Duncan Armstrong **01689 869 855**

SYLMASTA .com

Buy Online: www.sylmasta.com

Adhesives, Modelling Materials & Tools

Casting Kit

ONLY £35.40 +P&P

INCLUDES

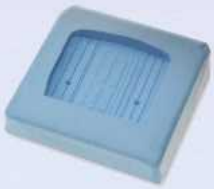
- Moulding Rubber
- Casting Resins
- Mixing Tools
- Release Agent
- Instructions

EVERYTHING YOU NEED TO START CASTING

SYLMASTA.COM/CASTING

RUBBER

RESIN



Carriage end section made using Sylmasta Casting Kit

Available in large quantities up to 10kg

MICRO-MESH™

For a Perfect Finish

Craft Kit

Angled Flexi-Files

A complete range of Micro-Mesh abrasives including: Sheets, Pads, Belts, Discs, Kits, Abrasive Creams & Much more.

SYLMASTA A+B

AVAILABLE IN: WHITE, RED, BLUE, YELLOW, BROWN & BIACK

Sylmasta A+B is used extensively in modelling, particularly when it comes to sculpting miniature figures & filling gaps.

A+B bonds extremely well to wire armatures, sets very hard & is easy to smooth & shape without crumbling.

Only £9.90 +P&P

Superglue Bonding Kit

Only £18.00 +P&P

Comprehensive Kit Contains:

Thin: for bonding fine gaps and hairline cracks

Medium: general purpose bonding

Thick: gap-filling and accurate bonding

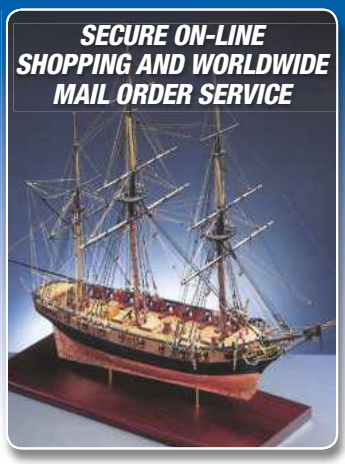
Activator: for instant curing

Precision Nozzles: for pin-point application

Buy online at www.sylmasta.com or phone +44 (0)1444 831459

Email: sales@sylmasta.com Sylmasta delivers WORLDWIDE

Prices shown are exclusive of P&P. Colours are representative and may not reflect exact shades. Colours are subject to change.



CORNWALL MODEL BOATS

www.cornwallmodelboats.co.uk

Highfield Road Industrial Estate, Camelford, Cornwall PL32 9RA

Telephone: **01840 211009**

MAIL ORDER ONLY

FREE UK SHIPPING ON ORDERS OVER £150

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

SECURE ONLINE SHOPPING AND MAIL ORDER SERVICE

AEROKITS, AERONAUT, AMATI, BILLING BOATS, CALDERCRAFT, DUMAS, COREL, GRAUPNER, PANART, KRICK, MAMOLI, MANTUA, OCCRE, SERGAL

Aeronaut

Sportsboat	£54.95
Diva Cabin Cruiser	£65.99
Queen Sports Boat	£154.99
Ramborator Springer Tug	£74.95
Victoria Motor Yacht	£129.95

Amati Kits

Arno XI Ferrari 800kg Hydroplane	£329.00
Arno XI Ferrari Pre Built Hull	£384.00
Bluenose - Fishing Schooner 1921	£87.95
Endeavour 1:35 Wood Hull	£259.00
Endeavour (Wood Hull) 1:80	£79.90
Endeavour Pre Formed Wood Hull 1:50	£239.95
Enterprise Pre-formed 1:80	£79.90
Golden Yacht Ship in a Bottle	£44.95
Grand Banks Motor Yacht	£397.00
Greek Bireme 480BC 1:35 Scale	£74.95
HMAV Bounty 1787 1:60	£222.00
Mayflower, English Galleon 1620	£154.99
Oseberg Viking Ship 1:50	£99.95
Rainbow (pre-formed) 1:80	£79.90
Riva Aquarama Italian Runabout	£274.94
RMS Titanic	£369.00
Robert E Lee	£243.99
Viking Ship	£99.95

Artesania Latina

Hermione La Fayette 1:89 Scale	£152.00
HMS Surprise 1:48 Scale	£595.00
HMS Victory 1:84	£679.99
King of the Mississippi	£143.00
Titanic Lifeboat	£58.99
Santa Maria	£121.50
US Constellation, American Frigate 1:85	£277.00

Billing Boats

Banckert	£157.00
Bluenose	£109.99
Building Slip	£44.99
Cutty Sark 1:75	£266.95
Fairmount Alpine	£324.00
HMS Warrior	£400.00
Nordkap 1:50	£269.00
St Canute Tug	£136.99
USS Constitution	£179.95
Viking Ship Oseberg 1:25	£111.98
Waveney Lifeboat	£37.50
Zwarte Zee	£215.95

Caldercraft RC Kits

Alte Liebe - Harbour Tug	£286.00
Brannaren - Swedish Tanker	£329.00
Cumbrae - Clyde Pilot	£289.00
Imara – Single or double screw	£508.00
Joffre - Tyne Tug	£286.00
Marie Felling single or double screw	£430.00
Milford Star	£254.00
Motor Fifie "Amaranth"	£129.00
North Light - Steam Clyde Puffer	£275.00
Resolve	£557.00
Schaarhorn	£363.00
Sir Kay	£325.00
SS Talacre	£275.00

Caldercraft Static Kits

HM Bark Endeavour 1768 1:64	£242.00
HM Schooner Ballahoo 1804	£62.00
HM Bomb Vessel Granado 1756	£218.00
HM Brig Badger 1778	£175.00
HM Brig Supply 1759 1:64	£145.00
HM Cutter Sherbourne 1763	£74.00
HM Gunboat William 1795	£175.00
HM Mortar Vessel Convulsion	£95.00
HM Schooner Ballahoo	£62.00
HM Schooner Pickle 1778	£129.00
HM Yacht Chatham 1741	£89.00
HMAV Bounty 1789	£200.00
HMS Agamemnon 1781	£655.00
HMS Cruiser 1797 1:64	£205.00
HMS Diana 1794 1:64	£468.00
HMS Jalouse 1794 1:64	£223.00
HMS Mars 1:64	£200.00
HMS Snake	£205.00
HMS Victory 1781 1:72	£740.00
The Mary Rose 1510 Tudor Warship	£258.00

Caldercraft Heritage Series

HMAV Bounty 1789 1w:64	£200.00
HM Bark Endeavour 1768 1:64	£242.00
The Mary Rose 1510 Tudor Warship 1:80	£258.00

Constructo Kits

Altair 1840 1:67 Scale	£84.95
Cutty Sark	£176.34
Gjoa - Amundsen Expedition Ship	£79.94
HMS Bounty	£174.95
HMS Victory	£326.95
Le Pourquoi-Pas	£160.90
Louise	£80.99
Robert E Lee	£167.57
USS Constitution 1:82	£310.93

Corel Kits

Berlin	£330.00
HM Endeavour	£196.00
HMS Bellona	£299.00
HMS Neptune	£264.00
HMS Resolution	£169.00
HMS Unicorn	£205.00
HMS Victory	£317.00
HMS Victory Cross Section	£99.00
Prins William	£334.00
Ranger	£66.00
Reale de France	£540.00
Scotland	£66.00
Wasa	£405.00

Dumas RC

American Beauty Mississippi River Towboat	£188.00
Big Swamp Buggy	£119.00
Carol Moran Tug	£79.00
Creole Queen Mississippi Riverboat	£322.00
Dauntless Commuter Boat #1211	£163.00
George W Washburn #1260	£158.00
Huson 24 Sailboat #1117	£112.49
Jersey City Tugboat #1248	£251.00
Jolly Jay Gulf Fishing Trawler #1231	£128.00
Myrtle Corey Memphis River #1253	£232.00
US Coastguard 41' Utility Boat	£158.99
USS Whitehall	£77.99

Euromodel Como Kits

Ajax 18th Century European Frigate 1:72 Scale	£518.95
Derfflinger 17th Century Felucca 1:66 Scale	£260.95
Falmouth 18th Century "East India"	£594.94
La Renommee 18th Cen Frigate 1:70 Scale	£602.95
Lyde 18th Century Schooner 1:70 Scale	£296.95

Joysway - *Ready to run models*

Blue Mania Brushed RTR	£139.99
Bullet	£145.12
Caribbean Yacht 1:46	£52.00
Explorer Yacht	£148.99
Dragon Force Yacht	£148.99
Force2 60 Catamaran Yacht 2.4GHz	£157.49
Focus 1 Meter Yacht	£218.99
Pirate Yacht RTR	£148.99
Orion Yacht (Red or Blue) 2.4GHz	£89.99

Krick Kits

Alexandra Steam Launch inc Fittings	£300.00
Anna Steam Launch	£99.95
Borkum Steam Launch inc Fittings	£338.95
Felix	£88.93
Lisa M	£102.00
Gulnara	£271.99
U-Boat	£326.95
Victoria Steam Launch inc Fittings	£355.00

Modellers Shipyard

Colonial Ketch Mary Byrne	£214.99
HMS Supply – First Fleet 1788	£274.99
HM Cutter Mermaid 1817	£244.00
Colonial Sloop Norfolk 1798	£181.99
Colonial Brig Perseverance 1807	£278.99
Colonial Schooner Port Jackson 1803	£214.99
HMS Supply - First Fleet 1788	£274.99

Mantua Kits

Amerigo Vespucci	£296.00
Armed Swedish Gunboat	£140.00
Astrolabe. French Sloop 1812	£197.00
Bruma Open Cruiser Yacht 1:43	£165.00
Golden Star	£77.00
HM Endeavour Bark 1768 1:60	£156.00
HMS Victory 1:200 Scale	£103.00
HMS Victory 1:98	£283.00
Mercator	£145.00
Mincio	£94.00
Le Superbe	£322.00

Occre Kits

Albatros	£79.00
Apostol Felipe (Galleon)	£216.00
Bounty with Cutaway Hull Section 1:45 Scale	£228.95
Buccaneer 1:100 Scale	£84.95
Cazador Xebec	£180.00
Diana (Frigate)	£214.00
Dos Amigos Brigantine Schooner 1:53 Scale	£106.00
Gorch Foch	£320.00
Nuestra Senora del Pilar 1:46 Scale	£450.00
Mississippi Paddle Steamer	£168.95
San Marcos (Galleon)	£215.00
Santisima Trinidad	£359.95
Santisima Trinidad Cross Section	£112.00
Ulises Ocean Going Steam Tug	£186.95
London Tram	£104.00
Dennis Bus Type B	£87.95
Stephensons Rocket	£70.94

Panart Kits

Amerigo Vespucci 1:84	£670.00
Anteo Harbour Tug	£329.00
Armed Naval Pinnace	£132.00
HMS Victory 1:78 Scale	£389.00
HMS Victory Bow Section	£173.00
Section Deck	£130.00
San Felipe	£583.00
The Royal Caroline	£265.00

Pro Boat - *Ready to Run*

Miss Geico 29 Brushless Catamaran V2 RTR	£324.00
Blackjack 29 Catamaran	£275.99

Robbe Kits

Bussard 1:20 Almost Ready to Run	£234.95
Dolly Harbour Launch 1:20 - New Version	£129.95
Dusseldorf 1:25 Almost Ready to Run	£374.95
Paula IV	£165.00
Sylt Police Boat	£549.95

Sergal Kits

Cutty Sark	£358.00
HMS Bounty	£174.00
HMS Peregrine	£182.00
HMS President Light Frigate	£73.99
HMS Racehorse	£77.00
Mississippi 1870	£356.00
Soleil Royale 1669	£710.00
Sovereign of the Seas	£699.95
Thermopylae Tea Clipper	£73.99
Vasa Swedish Man of War	£710.00

Thunder Tiger

ETNZ 1M Racing Yacht	£179.99
Naulantia 1M Yacht	£149.99
Desperado Jr. ARTR Catamaran	£165.95
Atlantic Motor Yacht Combo Plus	£150.00
Sergal Kits Thermopylae	£69.95

Victory Models

HM Granado	£261.95
HMS Fly	£289.00
HMS Pegasus	£340.00
HMS Vanguard	£679.99
Lady Nelson	£117.95
Mercury Russian Brig	£354.00
Revenge 1577 Elizabethan Navy	£362.00

Plastic models also available in:

Airfix, Revell, Trumpeter and many more!!

All prices correct at time of going to press

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

Visit the website for our full range of kits:

Find us on Facebook

Follow us on Twitter

www.cornwallmodelboats.co.uk

email: **sales@cornwallmodelboats.co.uk**

Mtroniks
electronics innovation

25 years of Mtroniks

24V VIPER Marine
Brushed speed controller

FROM £29.99

15A, 20A, 25A or 40A

No Relays or moving parts!

100% Waterproof,24V, marine speed controller for traditional brushed motors. Easy to set up and use. Small size and weight. Ultra fine motor control with built in receiver power. Available for all size of motors, 15A, 20A, 25A and 40A. See website or contact your local dealer for more information.

VIPER Marine
Brushed speed controller

FROM £22.99

15A, 20A, 25A, 40A or 75A

100% Waterproof,12V, marine speed controller for traditional brushed motors. Easy to set up and use. Small size and weight. Ultra fine motor control with built in receiver power. Available for all size of motors, 15A, 20A, 25A and 40A. See website or contact your local dealer for more information.

microVIPER
Brushed speed controller

£22.99

100% Waterproof,12V, 10A marine speed controller for traditional brushed motors. Easy to set up and use. Incredible small size and weight. Ultra fine motor control with built in receiver power.

tio Marine
Brushed speed controller

FROM £26.99

15A, 30A or 50A

100% Waterproof,12V, marine speed controller for traditional brushed motors. Easy to set up and use. Small size and weight. Ultra fine motor control with built in receiver power and now compatible with the new Lipo battery type. Available in 15A, 30A and 50A. See website or contact your local dealer for more information.

DIGISOUND
Realistic engine sound system

£59.99

--SOUNDS--

Small Diesel Tug
Large Multi Cylinder, Air Start
Napier Delta Diesel
Diesel Canal Boat

100% Waterproof,12V, marine engine sound system. This is the worlds 1st, 100% waterproof, active, marine model sound system. It can be installed in minutes, giving you ultra realistic engine and horn sounds straight away. Everything is included in the system, wires, module and speaker! These systems come with adjustable volume and realistic engine speed change as standard. See website or contact your local dealer for more information.

100% Waterproof, 12V, marine speed controller for brushless motors. Easy to set up and use. Small size and weight. Ultra fine motor control with built in receiver power. Suitable for use with any battery type. Available in 15A, 30A and 50A. Also available as a complete system with motor included. See website or contact your local dealer for more information.

HYDRA Marine
Brushless speed controller

FROM £45.99

15A, 30A or 50A

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
www.facebook.com/MtroniksLtd
Twitter : @mtroniksteam