

The Model Dockya



POBOX 104 Redruth TR159BJ

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

Wits and Boat Hulls Add £9.00
Timber orders Add £10.00
Other Order value up to £50 Add £5.00
Other Order value 0ver £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	£44.9
Egyptian Ship Sahure Dynasty 350mm	£74.98
Greek Bireme 480 BC 560mm	£74.98
Venetian cargo ship, 1750 450mm	£119.98
Santa Maria 1409 540mm	£120.98
Pinta 1409 450mm 1:65 scale	£89.98
Nina 370mm 1:65 scale	£89.98
Mayflower 1620 1:60 scale 650mm	£164.98
Chinese Junk Scale 1:100 400mm	£84.98
Xebec.1753720mm 1:60scale	£149.98
H.M.A.V Bounty 1:60 scale 750mm	£222.98
Robert E Lee Paddle Steamer 1:150 600mm	£244.95
New Bedford Whaleboat 1860 1:16 scale 550	mm
£117.95	

£87.95 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$100 |
\$

Victory Models Kits

Lady Nelson Cutter. 1:64 scale 530mm	£101.98
Granado, Bomb Ketch 1756 1:64 scale 800mm	£237.95
Fly. Swan Class Sloop. 1776 1:64 800mm	£246.95
Vanguard. 74 gun 3rd rate 1782 1:72 1171mm	£620.95
Pegasus Swan class sloop 1:64 800mm	£337.95
Mercury: 20 gun Brig 1820. 1:64 860mm	£350.95
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 815mr	n
£223.13	
Vacht Chatham 17/11 1:6/ ecolo 530mm	C 003

Vacht Chatham 1741 1:64 scale 530mm Mortar Vessel Convulsion. 1:64 scale 530mm 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 Schooner Pickle 1778 1:64 scale 565mm

Deans Marine Kits

£49.45
£87.50
£40.45
£50.45
£46.95
£51.49
£37.45
£47.45
£46.49
£42.45
£72.45
£91.50
£51.45
£71.50
£86.50

Plan & Material Packs

Plantin Vita	204.50
HMS Temerity CNC Pack 890mm	£54.95
Higgins Hellcat CNC Pack 610mm	£57.49
Vosper MTB Hull Pack 670mm	£52.49

Plastic Kits

Trumpeter HMS Hood 1;200 scale

£206.95
£206.95
£251.95
£238.48
£270.95
£224.99
£160.16
£149.95
£149.95
£149.95
£149.95
£107.10
£161.95
£89.95
£89.95
£89.95
£87.21
£80.09
£64.96
£62.29
£47.16
£62.26
£61.99
£59.99

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	
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 scal	
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 Homet 1:200	£230.70
DX Wooden deck & Railing for Bismarck 1:350	
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	
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.	

Master, Great Little Ships and Eduard. Harold IIndorhill Plans

Harold Undernill 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.	
D/C Doot Blone	

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	
otatio Display Itit Fialls	

Static Display Kit Plans	
Greek Bireme 440mm construction plans. 560m	m £7.1
Vikingship, construction plans. 1:50 440mm	£7.1
Santa Maria planset 1:65 scale 540mm	£8.8
Pinta planset 1:65 scale 450mm	£8.1
Nina planset 1:65 scale 450mm	£8.1
Mayflower, construction plans. Scale 1:60.	£11.2
Sovereign of the Seas, plans 1:78 1100mm	£16.1
HMS Prince, construction plans 750mm	£20.0
San Felipe, construction plans. Length 950mm.	
Chinese Junk, construction plans. 1:100 400mm	
French Xebec construction plans 1:60 720mm	£10.9
HMS Victory, construction plans 1:100 950mm	£18.8

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 availa	ıble
R/C Equipment	

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 Se	t £59.95
Tamco 6 Channel 2.4GHz combo	£49.95
Viper Marine 40 amp speed controller	£53.22
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	е

£45.7
£30.6
£45.7
£37.6
£37.6
£37.6
£37.6
£37.6
£37.6
£37.6
£37.6

Schottel drive unit 40mm dia prop	£62.7
Schottel drive unit 50mm dia prop	£78.9
Schottel drive unit 70mm dia prop	£95.9
543/12 low drain motor for large props	£18.8
Mabuchi Low Drain 545	£9.9
Mabuchi 540	£7.4
Electronize 365/14 low drain	£5.5
Motor mount for MFA 800/850 Motors	£4.5
385 Motor 6 to 15.0 Volt with mount	£6.5
540 Motor 6 to 12.0 Volt with mount	£10.3
RE800 Motor 12.0 Volt with mount	£27.4
RE850 Motor 12.0 Volt with mount	£27.4
Motor mount for 540/500.550 and 600 Motors	£2.7
MFA 540 Motor and 2.5:1 Gearbox 4.5 -15v	£19.3
MFA 540 Motor and 6:1 Gearbox 4.5 -15v	£19.3
MFA 385 Motor and 2.5:1 Gearbox 4.5 -15v	£17.5
950 series 385 Motor and 6:1 Gearbox 4.5 -15v	£17.5
951 series 951 Motor and Gearbox 298:1 6volt,	£9.0
800/850 Belt Drive Reduction Unit 2.1:1	£40.8
D 11 A 111	

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			
55 x 45mm Rudder Assembly	£4.54		
45mm x 30mm Rudder Assembly	£4.95		
53mm x 36mm Rudder Assembly	£5.53		
67mm x 44mm Rudder Assembly	£6.43		

Coupling Assembles

Single Universal Jount Coupling	£8
Double Universal Joint Coupling	£13.
Coupling set includes 2 inserts of your c	hoice and an al
key. Inserts sizes 2.0, 2.3, 3.0, 4.0, 5	i.0, 6.00mm pl
M3, M4, M5 thread	

Standard M/ Propehafts

Standard W4 Fropsharts	
4in long tube 4mm threaded Propshaft	£6.9
5in long tube 4mm threaded Propshaft	£7.3
6in long tube 4mm threaded Propshaft	£7.5
7in long tube 4mm threaded Propshaft	£8.0
8in long tube 4mm threaded Propshaft	£8.2
9in long tube 4mm threaded Propshaft	£8.5
10in long tube 4mm threaded Propshaft	£8.9
11in long tube 4mm threaded Propshaft	£9.4
12in long tube 4mm threaded Propshaft	£10.2
13in long tube 4mm threaded Propshaft	£11.4
This is just a selection from our huge range	

Raboesch Propshafts

Raboesch Brass Propellers	
Waterproof Propeller Shaft M4 261mm	£25.7
Waterproof Propeller Shaft M4 236mm	£23.5
Waterproof Propeller Shaft M4 211mm	£23.5
Waterproof Propeller Shaft M4 186mm	£23.5
Waterproof Propeller Shaft M4 290mm	£25.3

Brass Propeller (A Type) 20 -3 Blade-M4	£9.9
Brass Propeller (A Type) 25 -3 Blade-M4	£9.9
Brass Propeller (A Type) 30 -3 Blade-M4	£10.8
Brass Propeller (A Type) 35 -3 Blade-M4	£10.8
Brass Propeller (A Type) 40 -3 Blade-M4	£10.8
Brass Propeller (A Type) 45 -3 Blade-M4	£12.6
Brass Propeller (A Type) 50 -3 Blade-M4	£12.6
Brass Propeller (A Type) 55 -3 Blade-M4	£12.6
Brass Propeller (A Type) 60 -3 Blade-M5	£15.3
Brass Propeller (A Type) 65 -3 Blade-M4	£15.3
Brass Propeller (A Type) 70 -3 Blade-M5	£17.6
Brass Propeller (A Type) 75 -3 Blade-M5	£17.6
This is just a selection of a huge range of 3, 4	and 5 blade

Raboesch Bow Thrusters

Bow thruster unit with motor 14mm I/D	£33.9
Bow thruster unit with motor 16mm I/D	£33.9
Bow thruster unit with motor 19mm I/D	£33.9
Bow thruster unit with motor 22mm I/D	£38.4

Bow thruster unit with motor 25mm I/D Mini Bow thruster unit with motor 10mm I/D Hi-Thrust Bow thruster with motor 30mm I/D

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/A48/1	5 Searchlight, 21mm dia x 28mm higi	£5.02
CAP/A84	Danforth anchor 50mm long	£5.31
CAP/R940	'D' section fender 9mm high 2 mt	r £7.48
CAP/R6	Liferaft container 58mm long	£10.13
CAP/A62	Enclosed round radar array 30mm d	a£5.70
CAP/A83	CQR Plough anchor. 60mm long	£6.49
CAP/R70/2	0 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£5.6	i1
CAP/R942	'D' section fender 15mm high 2 mt	£11.02
CAP/A70/1	5 Fire monitor kit 37mm high	£11.80
CAP/AQ90	Chrome steering wheel 48mm dia	£11.41
CAP/B60	60mm dia ship's wheel. Chrome	£11.61
This is just a	a selection of the range available.	

BECC Letters&Number sets		
2A Arial Lettering 2 mm,	£4.0	
3A Arial Lettering 3 mm,	£4.5	
4A Arial Lettering 4 mm,	£4.5	
6A Arial Lettering 6 mm,	£4.5	
8A Arial Lettering 8 mm,	£5.1	
10A Arial Lettering 10 mm,	£5.1	
12A Arial Lettering 12 mm,	£6.1	
15A Arial Lettering 15 mm,	£7.1	
20A Arial Lettering 20 mm,	£8.1	
25A Arial Lettering 25 mm,	£10.2	
5A Arial Lettering 5 mm,	£4.5	
Available in most colours		

Qua	ycraft Ship's Boats	
QAL37	1:48 Scale 24ft Clinker Lifeboat 145mm	£19.0
QD51	1:48 Scale 20ft Clinker Dinghy 125mm	£15.8
QAP1	2 1:48 Scale 12ft 6in dinghy 80mm	£11.1
	1:48 Scale 10ft 8in Clinker dinghy	£11.0
QD58	1:48 scale. 19ft jolly boat Clinker 120mm	£16.3
QL42	1:48 Scale 18ft Clinker Lifeboat 114mm	£14.8
QD44	1:48 Scale 14ft Clinker Dinghy 89mm	£11.1
QD41	1:48 Scale 18ft Clinker Dinghy 114mm	£14.8
QL54	1:48 Scale 17ft Clinker Lifeboat 108mm	£16.0
QLM1	1:48 Scale 12ft Lifeboat/Tender 76mm	£9.1
QP15	1:48 Scale 16ft motor dinghy 100mm	£15.1
QP27	1:48 27ft Royal Navy Whaler 172mm	£22.3
QL52	1:48 Scale 20ft clinker lifeboat 125mm	£15.8
QD56	1:48 Scale 17ft Clinker Dinghy 105mm	£16.0
	1:48 Scale 12.5ft Clinker Dinghy 80mm	£11.1
QP16	1:48 Scale 16ft R.N 16' dinghy 100mm	£11.0
QP17	1:48 16ft Fast motor boat 102mm	£18.2
QL53	1:48 Scale 20ft clinker lifeboat 125mm	£15.8
This is	just a selection of over 100 boats availab	le
4.72	ocale Warahin Eittinge	

1:72 scale warship rittings	
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	
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	
= = =	

	Scalellik Licited Diass	
	11mm 3 rail stanchions & railing 840mm	£10.20
	1:96 R.N 3 rail stanchions and railing 11mm	£10.20
1	1:128 scale vertical laddering	£10.20
ı	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.	ilable
	Craw Figures	

Crew Figures

)	1:24 Standing civilian crew member	£8.12
3	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
2	1:24 R.N/Civilian wearing waterproof jacket	£8.12
2	1:24 Standing civilian captain in sheepskin jacket	£8.12
,	1:24 Seated ships captain with cap and pullover	£8.12
2	1:24 Standing officer in wet weather jacket	£8.12
1	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
1	CB205 Ships cat, sitting 1:48 Scale	£1.25
1	CB220 Bearded Officer, 1:32 Scale	£6.97
1	CB223 Crew member, 1:32 Scale	£8.75
1	CB851 Officer, clean shaven, 1 32 Scale	£6.82
1	CB86 Bearded Officer1:48 Scale	£4.89
	CB87 Crew member, leaning on rail 1:48 Scale	£4.89
Ś	CB88 Young boy,1:48 Scale	£4.51
5	CB89 Small standing dog 1:48 Scale	£1.18
ŝ		10.50
ŝ	Modern crew in smock 1:30 scale 60mm £	10.50
1	This is just a selection of the range available.	
1	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

£27.12 £81.30

DECC Hags	
GB02 White Ensign, Size: AAA 10mm	£3.0
GB02 White Ensign, Size: AA 15mm	£3.0
GB02 White Ensign, Size: A 20mm	£3.0
GB02 White Ensign, Size: B 25mm	£3.0
GB02 White Ensign, Size: C 38mm	£3.96
GB02 White Ensign, Size: D 50mm	£3.96
GB02 White Ensign, Size: E 75mm	£4.9
GB02 White Ensign, Size: F 100mm	£5.97
GB02 White Ensign, Size: G 125mm	£7.9
GB02 White Ensign, Size: H 150mm	£9.9
Also available, Naval ensigns in red, Blue as well and I	√ation
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 stock	
Walnut, Maple, Tanganykia, Beech, Pear, Balsa,	Obechi

Admiralty Paints

Available in 14ml flip top capped bottles in the following colours. Light Ivory, Red Ensign , Marcon Admiralty, Polished Bronze, Antique Bronze, Olive Green, Wahnt Brown, Matt Flesh, Goldfrass, Copper, Dul Black, Matt Black, Dull White, Matt White, Yellow Ochre, Red Cohre, French Blue, Flat Matt Varnish, Matt Varnish Satin Matt Varnish

Books

Plank on Frame Models. Volume Two	£25.0
Plank on Frame Models. Volume One	£20.0
Ship Modeling Simplified	£14.9
Ship Modeling from Stem to Stern	£16.9
Ship Modelling from Scratch	£19.9
Advanced Ship Modelling by Brian King:	£16.9
Scale Model Tugs	£14.9
Historical Sailing Ships: Remote Controlled	£14.9
Period Ship Kit Builders Manual	£16.9
Model Ships Fittings	£12.9
Model Submarine Technology	£12.9
Painting Model Boats	£12.9
Scale Model Steamboats	£12.9
Making Model Boats with Styrene	£12.9
Simply Model Submarines	£12.9
The Model Tug Boat Book:	£12.9
Scale Model Warships	£12.9
Submarines. Models and their Originals	£12.9
Scale Model Boats. Building & Operation	£9.9
Radio Control In Model Boats	£9.9
Introduction to Marine Modelling	£9.9
Ship Modelling Solutions	£9.9
Scratch Building Marine Models	£9.9
Photoetching For The Plastic Ship Modeler	£12.9
Super-detailing the Cutter Sherbourne	£19.0
This is just a selection from our huge range of	

Modelling Tools

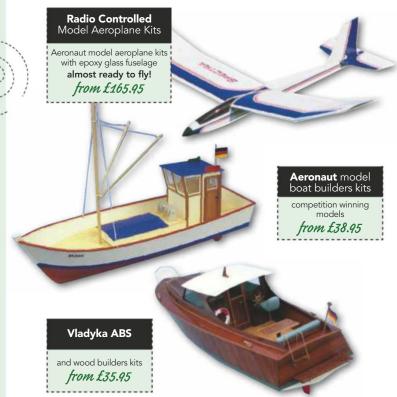
Modelling Tools	
Mantua 4 speed mains transformer	£52.00
Mantua 12v Electric Planer	£79.00
Mantua Spar Lathe. 12V	£99.00
Mantua 12v Electric Fret saw 12v	£110.00
Amati heavy duty Building cradle	£52.60
Building Slip	£54.9
Amati Electric Plank Bender	£31.54
Strip Clamp.	£32.98
Swann-Morton 3 knife ACM Tool Set	£22.6
Planet, special work bench	£10.58
20 piece twist drill set .3 to 1.6mm	£13.23
Amati Pin Pusher De-Luxe	£11.4
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	£12.7
Zona Ultra Thin Kerf Razor Saw 52tpi	£11.7
Zona Ultra Thin Kerf Razor Saw 42tpi	£11.7
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



Almost all of our products come directly from small specialist manufacturers in the EU, so we can give you the best advice and support on those top quality products

Puffin Models, Unit D3 Backfield Farm, Wotton Road Iron Acton, Bristol, BS37 9XD 01454 228184 info@puffinmodels.com

www.puffinmodels.com



Puffin Models www.puffinmodels.com

Visitors welcome, please phone for directions

Boats

BECOME PART OF THE ONLINE COMMUNITY FOR MODEL BOATS MAGAZINE

- Get access to exclusive competitions and giveaways
- Exclusive articles and advice from professionals
- ▶ Join our forum and make your views count
- Sign up to receive our monthly newsletter
- ▶ Subscribe and get additional content including Online Archives dating back to 2007*
- ▶ Register for free today and join our friendly community!

WWW.MODELBOATS.CO.UK



Published by MyTimeMedia Ltd Suite 25, Eden House, Enterprise Way,

Edenbridge, Kent TN8 6HF UK and Overseas:

Tel: +44 (0) 1689 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: (001)-866-647-9191

REST OF WORLD - New, Renewals & Enquiries

Tel: +44 1604 828 748

Email: help@mb.secureorder.co.uk

CURRENT AND BACK ISSUES

Visit: www.mags-uk.com Telephone: 01733 688994

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



Follow us on Facebook and Twitter





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

© MyTimeMedia Ltd. 2014

All rights reserved ISSN 0140-2910

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

Model Boats, ISSN 0140-2910, is published monthly 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 mailling 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. USP Dostmaster: 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.



Paper supplied from wood grown in forests managed in a sustainable way.

For plans, hulls, binders, books, and many other products, please visit www.myhobbystore.co.uk

Regular Features

COMPASS 360

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



RANGE FINDER

Dave Wooley's Worldwide Review of Warships and Warship Modelling includes the superbly posed figures aboard Joseph Slydlowski's USS Arizona battleship, a superb scratch built Vosper Thornycroft corvette and a close view of what's new in 3D printed naval fittings, plus the HMS Skirmisher project continues



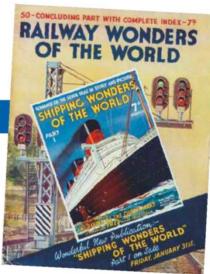
BOILER ROOM

Richard Simpson discusses Secondhand Steam - PART ONE



SCALEFORCE GALLERY

Phil' Scales unique model based on a Model Slipway kit



FLOTSAM & JETSAM

John Parker looks at the 1930's series 'Shipping Wonders of the World'

AROUND THE CLUBS

This features the 2016 Metropolitan and Southern District Marblehead



READERS' MODELS

Big Al' is featured - something to strike fear into other pond users, and a Fantail launch

TEST BENCH

New items for the modeller

READERS' FREE CLASSIFIED

Your free private advertisements



BMPRS NEWS

Craig Dickson reports from their second 2016 visit to Branston Water Park



Special Features

OCEAN TRADER

Charlie Oates saves and brings back to life a 1950's Triang model



23rd MODEL ENGINEERING AND **MODELLING EXHIBITION** Dave Wooley reports from Doncaster



Dr. Marcus Rooks continues with his unique all-metal steam turbine powered model project



THE LISBON MARITIME **MUSEUM**

Anthony Addams visits this classic museum and examines Portuguese traditional craft

COALVILLE MODEL BOAT SHOW - 2016

Anthony Addams reports from this event sponsored by The Component Shop

Bow piece

Part One of Streamlinia Too with a full supporting construction article by Ron Rees and a New Plan now available from MyHobbyStore. This is an updated reduced size, brushless motor powered version of the original Streamlinia, the famous Bassett-Lowke wooden hull and steam powered model of the 1930's, something that is very collectable nowadays. Ron has designed his version with a working dummy steam engine and smoke unit, the hull being built from Depron, but wood is a perfectly viable alternative.

In addition, Charlie Oates saved a 1950's Triang Ocean Trader from an antique shop and Dr. Marcus Rooks returns to these pages with Part Two of his unique all-metal, steam turbine powered HMS Dreadnought model project.

We welcome Phil' Scales to these pages with his Scaleforce tug, a much modified Model Slipway Al Khubar kit model, and this is the first of his new occasional Gallery series about the models in his eight ship Scales Towing and Salvage Company fleet.

In addition, Anthony Addams has been travelling once again and has visited the Lisbon Maritime Museum, and we have the usual regulars including Range Finder, Flotsam and Jetsam, Boiler Room and BMPRS News, Test Bench and your Free Advertisements. So as always, I hope there is something here for everyone within these pages with an interest in building and operating model boats.

Paul Freshney - Editor

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** Suite 25, Eden 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

Kirklees Model Boat Club

On Sunday 11th September this club is holding a Navy and Warship Day from 1000hrs to 1600hrs at Wilton Park, Bradford Road, Birstall, Batley, WF17 8JH. Any type of boat, except i.c. powered or high performance fast electric, can come along as it is not limited to just naval vessels. Visiting clubs, static displays, on the water display, free sailing, refreshments all day, free car parking and a small raffle are all scheduled. Steam powered models require up to date paperwork. Please see diary pages on the club website for past events. For further information please contact Stan Reffin at:

kmbc2015pr@gmail.com or tel: 01132 675790. Information supplied by **Stan Reffin**

Balne Moor MBC

This club has a forthcoming **Sunday 20th September** Open Event for the Svitzer Tug
Towing Shield. This is an annual towing
competition sponsored by Svitzer Tugs.
Single, two and three tug formats, £1 per boat.
1030hrs start and bacon or sausage butties
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

Change of Club Name

As Leighton Buzzard Model Boat Club is now based in Milton Keynes and no longer has links to Leighton Buzzard, a unanimous decision was taken by the club members attending the AGM to rename the club as the Lake Bank Model Boat Club.

Club meetings are held at 8pm on the second Thursday of each month at the Roman Park Residence Club, Constantine Way Milton Keynes MK13 0RA. Sailing takes place on the North West side of Furzton Lake using the access from Shirwell Crescent, off Chaffron Way. To avoid the risk of frequency conflict with the Two Island Yacht Club, which also uses the lake, the main sailing time is on the Sunday afternoon following the Thursday club meeting.

For further information please contact Brian Nex. tel: 01908 561904

Blackpool Model Boat Show - 2016

This is being held on **22nd and 23rd October 2016** at the Norbreck Castle Hotel, Queens Promenade, Blackpool, FY2 9AA, United Kingdom. The Blackpool Model Boat Show is back again for

2016 and under new management. Following the emigration of the event's previous headline sponsor, the show is now being organised by Component Shop and this year promises to be bigger and better than ever with the inclusion of model tanks, trucks and cars. This year sees the event return to its previous home of the Norbreck Castle Hotel, but it will now use two halls at the hotel, rather than just one as in previous years. Hundreds of models on display as well as a boat pool, truck roadway and tank range. Admission £6.00 for one day, or £9.00 for the weekend. Full details at:

www.blackpoolmodelboatshow.co.uk or please tel: 01248 719353 (office hours).

Midlands Model Engineer Exhibition

A further reminder that this is being held at the Warwickshire Exhibition Centre, Nr. Leamington Spa, on the junction of the A425/ B4455 (SAT NAV CV31 1XN), from **Thursday**

13th to Sunday 16th October 2016. The theme is the bi-centenary of Robert Stirling and the 80th Anniversary of the iconic Spitfire. This event should not be confused with the International Model Boat Show being held in November at the same venue. Further information from the website:

www.midlandsmodelengineering.co.uk

Model Boat Convention 2016

A final reminder that this is being held at Haydock Park Racecourse, Newton le Willows, WA12 0HQ (M6 Junction 23), on **Saturday 27th and Sunday 28th August 2016.** Opening time is 1000hrs on both days. This promises to be an excellent show with numerous traders and supporting clubs already booked. Further information from Jean Barlow: secretary@modelboatconvention.co.uk or please check the website: www.modelboatconvention.co.uk

Kirklees MBC Open Day - July 2016

Stan Reffin has confirmed that £455 was raised for the RNLI at this club's recent charitable event.

Böäts







BECOME PART OF THE ONLINE COMMUNITY FOR MODEL BOATS MAGAZINE

- Get access to exclusive competitions and giveaways
- Exclusive articles and advice from professionals
- ▶ Join our forum and make your views count
- ▶ Sign up to receive our monthly newsletter
- ▶ Subscribe and get additional content including Online Archives dating back to 2007*
- Register for free today and join our friendly community!

WWW.MODELBOATS.CO.UK

*only available with digital or print + digital subscriptions



LEFT: Astern view of john Edwards' HMS Argonaut project.



SWA News

From the July 2016 issue of Quarter Deck Ramblings

his is the regular newsletter of the Surface Warship Association which arrived recently in the Editorial Office. This association is a national organisation, its members all having an interest in warships and as a group they support many model boating and general interest events in the UK and Europe. One such recent event where they were promoting warship model making and the hobby, was at the Poole Vikings Model Show on 9th April 2016.

Poole Vikings Model Show

The SWA has been represented for many years at this annual show organised by the Poole Vikings Model Club, who are closely

associated with the International Plastic Modellers Society (IPMS), and are always made most welcome. The show combines model clubs and trade suppliers and was held at Parkstone Grammar School in Poole, Dorset

As usual space was limited, but David McNair-Taylor and John Edwards filled their three allotted tables with a wide range of models including David's HMS Wild Goose and HMS Lancaster, USS McNair and for a change, a very nicely weathered U-boat. John Edward's models were HMS Amethyst (Mk. 2!), the minesweeper HMS Sharpshooter and as 'work in progress', the cruiser HMS Argonaut.

All in all a busy day with some bargains to be had on the trade stands including White



ABOVE: A close-up picture of the model warships and it is always nice to see work in progress.

Ensign Paints for 50p a tinlet and discounted kits such as the Trumpeter USS Arizona. One change noticed from when these shows first started, nearly 10 years ago now, was the absence of old sailors who would often be delighted to find a model of their vessel on the SWA stand, or a class of warship they recognised. The SWA have been invited back for 2017 and hopefully will have a little more table space next time.

(Information supplied by **John Edwards**)

Contact information

The SWA is a progressive organisation positively participating in a number of public events in the UK and overseas. Discounts from some suppliers are available to members. The Membership Secretary is Mr. Hilary Breeze, 38 Birch Crescent, Holtwood, Aylesford, Kent, ME20 7QE.

Email: hbreeze@ecgroup.co.uk.
Tel: 01622 710528
Surface Warship Association website:
www.surface-warships.org.uk

LEFT: A general view of the SWA stand,





Waddler, an r/c two man canoe, will be the included Complimentary Free Plan with full construction advice presented by Glynn Guest and we feature as a Gallery, USS Chawasha by Alan Owens, a truly fantastic Reader's Model. We also have Part Two of the Streamlinia Too new plan Feature article by Ron Rees.

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 October 2016 issue will be published on



9th september 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 32 in this issue...

Please reserve/deliver my copy of Model Boats				
on a regular basis, starting with issue				
itleEirst name				
Surname				
.ddress				
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

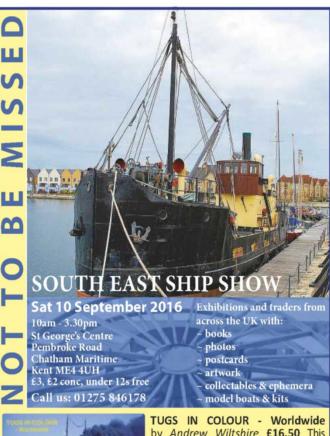
Contents may be subject to change











Website: www.nylet.co.uk

by Andrew Wiltshire £16.50 This hardback book is the latest in the successful maritime series with 106 stunning colour photographs and detailed captions of a huge variety of tugs in an equally wide variety of locations. www.coastalshipping.co.uk



PayPal®& VISA accepted

Customised projects with the Desktop 3D System

- CNC router
- CNC plotter

All you need

- 3D printer
- Vinyl cutter
- to CNC from

- Foam cutter

£1000

Visit www.stoneycnc.co.uk and watch the machine in action!

Distributed exclusively in the UK by

STONEY CNC @

Happy to help at all times: +44 (0) 1432 607 908

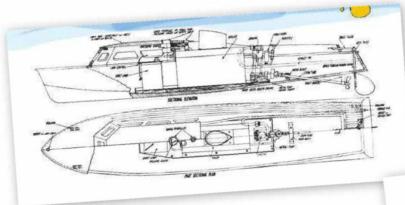
info@stoneycnc.co.uk www.stoneycnc.co.uk





Ron Rees with something slightly different, but still familiar

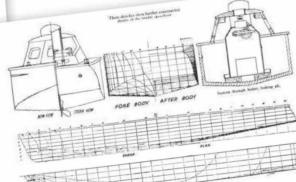
he Bassett-Lowke Streamlinia was featured in John Parker's Flotsam and Jetsam of March 2015 MB and our Editor asked me to look at this with a view to creating a smaller 21st Century brushless powered, foam and stocking hull r/c model, and so the challenge was on. After some research and a few very helpful emails back and forth to John in Australia, an idea started to formulate which did not just mean re-designing the original model and building it with more up-to-date methods and equipment, but also simulating the steam engine and boiler as well, thus creating a scale model of a model if you follow what I mean.



ABOVE: First printed in Flotsam and Jetsam in March 2015 MB, photo courtesy of John Parker.

A working steam plant in a foam hulled model boat?

Well, NO is the answer, but a vaporising type of smoke generator within a dummy boiler and a replica, but rotating, steam engine driven by the main driveline brushless motor was a practical option, and so the challenge was now solved as building a Depron foam and stocking hull was already a well tried and successful concept. Colin Graham is the designer and builder of the vaporising smoke unit featured here and he advertises in this magazine from time to time and attends various shows. He agreed to convert one of his units to the same shape as the original Bassett-Lowke style of boiler as fitted to their Streamlinia model and which could then have a dummy outer casing to match. Based on the original boiler, some drawings were rapidly prepared and within a short time Colin had supplied an angled top version of his smoke unit. Tests using a 2.2 Amp, 11.1v LiPo battery had this smoke (actually a water vapour) generator unit running for 30 minutes without problems, and so the hull was sized and designed around this replica boiler unit. A dummy casing was made, and using the small line drawings reproduced in John Parker's March 2015 MB article and enlarging them with the 'scaling up the boxes' method, these were duly made bigger and bigger until the dummy boiler casing unit fitted them -'Simmmple as the Meerkat says', as you can see in **Photo 1.** This resulted in a hull of just over 27.5 inches (700mm) long, roughly 70% of the size of the original. In this picture you can see the scaled-up line drawings and card templates used to cut







out the main parts of the hull.

The first Bassett-Lowke models were supplied ready built with a working steam plant installed and the cost? Probably rather more than an average month's net salary at the time. A year or so later, drawings for the same model were produced as a series of articles in Practical Mechanics Magazine and advertisements for the boiler and engine began to appear as items on their own. These were aimed at the 'not so well off', but average handyman of the time, and these articles assured readers that with a 'well selected and seasoned piece of hardwood' any budding model maker could make this steam powered marvel for a fraction of the cost of the RTR (Ready-to-Run) version.

Surfing the World Wide Web found some steam turbine options and simplified designs by modellers who had built their own versions, including plans for a slightly later model which was electric powered and looked a bit like an RAF Crash Tender. Many of these designs lacked the 'streamlined' inward curves at the bows and the gradual rounded flare of the hull sides towards the sloping transom of the original, which I wanted to replicate and what of course gave the original its name. This 27.5 inch version follows the lines of the original as far as is practically possible and with each bulkhead (rib) template roughly matching the outer original shape, but with their insides cut-away to match modern equipment including the dummy replica boiler, burner and steam engine, brushless motor, receiver, servos, Li-Po battery and the other electronic wizardry, plus allowing for the modern external running gear. In other words, this is a reduced size updated version based on the original larger model.

You could carve the entire hull with its lovely

LEFT: The hull lines of the Bassett Lowke Streamlinia, photo courtesy of John Parker.

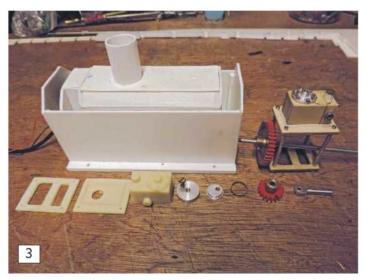
curves from a solid block of Depron foam, but for maximum internal space it has to be built with a conventional open-frame structure and the prototype hull framework was built largely from 6mm Depron foam with some balsawood stringers and strengthening where needed. Hull skins are of 3mm Depron sheet, then covered with nylon (stocking) and acrylic epoxy resin, but before all that some consideration had to be given to the dummy steam engine. How could it be made to rotate; could it be made to actually fit and what would drive it?

KIS (Keep It Simple)?

The best idea appeared to be to have a gap in the propshaft tube where it entered the hull behind the rear of the steam engine and have two separate propshafts in a straight line, with either a small pulley and belt or gear driven connection to the dummy steam engine. However, in practical terms, this meant waiting until the hull was at least partly complete to see how everything would, or would not, fit. It was also clear that a 100% metal dummy engine would be too heavy, so the dummy cylinder heads as a minimum would have to be perhaps resin castings, although the rotating crankshaft would have to be of metal. Pistons would of course actually not do anything, but connecting rods most definitely needed to be connected to something. A reduction ratio of 6:1 or more between the dummy engine crankshaft and the actual propshaft would slow the engine sufficiently when driven by a slower type of brushless motor, as clearly even a 950Kv motor running at 7.4v (a two cell LiPo battery) could be revolving at 7000rpm, a ridiculous speed for a reciprocating model steam engine. In practical terms, this meant possibly extending the engine's crankshaft to an independent flywheel, but all that could all wait until the hull was built.

Bassett-Lowke models were supplied ready built with a working steam plant installed and the cost? Probably rather more than an average month's net salary at the time









The hull

The model construction falls into five distinct sections: Hull; dummy boiler; dummy engine; radio and brushless motor installation, and cabin top. This last item is in fact very important as it gives Streamlinia Too its 'style', but anyway on with the hull.

Photo 2 shows the key parts of the hull's framework, these being of some 3mm, but mostly 6mm Depron. The stringers, keel doublers and stressed areas such as the motor and hardware mounting plates are from Obechi square section or plywood as required. Also in this picture (at the back) you can see Colin Graham's bespoke smoke unit inside a dummy outer casing, which will ultimately be covered in Litho plate and fitted with the trappings to mimic an original Bassett-Lowke boiler. The smoke (water vaporiser) unit itself holds up to 200ml of water and will need emptying from time to time, so making it easily removable negates the need to turn the model upside down or syringe out any leftover water after a morning's sailing.

In order to get the spaces and support rails for the hardware right, a complete dummy steam engine plant would be needed and **Photo 3** shows the boiler with outer casing (which will be fixed and permanently wired in the hull) and alongside it is the wood dummy engine, parts of it then being cast in Polyurethane resin as you can see. As you will have gathered, building the hull requires at the very least a decent mock-up of the steam plant to make sure everything will fit.

The hull was started by laying down the fully marked-up foam deck upside down on a flat baseboard, **Photo 4.** The inside edges where the cabin top would sit were reinforced using balsawood strip before the frames were fitted. The central main area where all the heavy hardware will be, has 6mm foam frames because the inside will have Obechi (a light, strong hardwood) rails fitted and the hull skins in the centre are almost straight, but the bow and stern sections have 3mm foam frames and are much closer spaced, because this is where the curved and shaped hull sheeting will be fitted. **Photo 5** shows all the frames and keel fitted, a relatively easy and quick task, the time taken being in cutting and preparing everything.

All the foam to foam and foam to wood joints are with Deluxe Materials R/C Modellers Canopy Glue which was used like a PVA glue on one or both sides of a joint. It is very good on foam and not at all messy and after about one hour the glue goes clear as it dries and makes a very strong bond which is still







slightly flexible. Overnight it hardens further and then is so strong that the foam will break before the glue. It can be used for gap filling and fillets with the aid of the Mark One Digital Spreader (AKA forefinger). One bottle is enough for two to three models, so it is good value.

Streamlinia Too does not have a very deep hull, so to maintain stability all the hardware should sit as low down inside it as possible. To this end it was envisaged that some of the internal foam keel would need later trimming, but to maintain rigidity

of the hull framework whilst building it, the keel was kept deeper as shown on the plan. Reinforcement of the keel down its centreline will also be needed, not least to provide a wide bonding area for the hull bottom skins, apart from the added strength and rigidity. In Photo 6 you can see the hull turned over and some of the balsa stringers being stuck to it. This picture also shows how the problem of reinforcing the foam keel was resolved, which while not a normal method, worked very well. The spaces either side of the keel were filled with 3mm (1/8 inch) balsawood sheet down the centre of the hull between the bulkheads, and eventually extended to the transom, with conventional light 6mm (1/4 inch) square balsawood doublers used forward to the bow stem and sanded at an angle to increase the gluing area, all to support the hull outer skin pieces around its sharp curves.

This method added a lot of rigidity to the hull framework and **Photo 7** shows the second layer of $6 \times 3 \text{mm} (1/4 \times 1/18 \text{ inch})$ balsawood stringers being added to the chines as well as the keel strengtheners down the centreline to the transom. The square cutout, was about where the propshaft would emerge and at this point, I was not sure what work would be needed to get the drive system for the dummy model engine into the same area, so that space was left open to increase the options.

Laying out the hardware

The hull's frame was now removed from the building board and turned over, **Photo 8**, and all the parts that would need to be installed inside it were assembled. A rigid motor to propshaft coupling was used to help line it all up for marking out and a very long stainless (J. Perkins) 4mm propshaft in a 6mm outer tube temporarily dry-fitted. As you can see, the dummy boiler, its casing and engine occupy much of the hull's internal volume, but they also did on the original large Basset-Lowke wood version.

The 2830 Turnigy 750Kv motor with its 3mm plywood mounting, boiler casing, boiler, dummy engine and battery pack were all positioned 'dry' and their exact positions marked on the 8 x 6mm Obechi support rails that would hold them in place. Space for the quite chunky 12v to 24v regulator (the steam unit runs on 24v) was also determined and it needed to be raised a bit to clear the propshaft. Encasing this clearly modern piece of kit inside the dummy paraffin burner had appeal and some thought went into ways of achieving this.

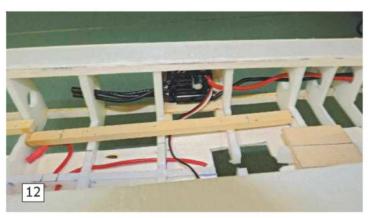
The steam unit had already been tested with an 11.1v LiPo battery via the 12 to 24v regulator and worked fine with no appreciable heat generated from the regulator or the boiler, so it would be safe to utilise the dummy burner, but lack of physical volume meant the round shape of the original Basset-Lowke unit could not be truly replicated. As it so happened, a bit of research then revealed that Basset-Lowke had also manufactured a square burner unit for their Streamlinia and so the problem was solved.

With all this in place, it now became apparent that there might be no room for any r/c equipment, and the solution? Get on with something else as my brain was starting to hurt and best to return later to the problem, something I am sure we all do from time to time.









Boiler casing and voltage regulator

The Bassett-Lowke boiler was of the Babcock type which means that the main water holding part of the boiler was a horizontal cylinder of copper with slightly domed ends flanged into the main tube. These were silver soldered and often fitted with two or more longitudinal bronze or copper stays bolted and brazed through the boiler's internal length. The stay's external ends were often threaded and used to support the boiler tube inside its casing.

Under this main tube, several, four usually, fire tubes exited at the front and entered at the back of the boiler. These tubes were in the cone of fire from the burner and were where the water boiled expanding back into the main tube and causing un-boiled water to be sucked down via the steam expanding in the tubes and inducing a vacuum. This unit was encased in an outer jacket, squared off at the base which became the firebox and was, on this model, angled at the top. Also at the top of this casing was a chimney (stack or funnel) where the exhaust gases and excess heat from the burner exited and along the sides at its base, several air holes allowed fresh air to enter to aid combustion. This type of boiler was simple to make and small model and toy versions were heated by burning wicks or fuel pellets. The large Bassett-Lowke version had a pump pressurised paraffin burner, which worked like a paraffin blowlamp and was capable of bringing a pint or so of water up to steam pressure in about 5 to 10 minutes and then power the engine for about 15 to 20 minutes. Basic though it was, the boiler was fitted with an excess pressure blow-off safety valve, a filler valve (or cap) and a visual calibrated bi-metal spring operated pressure

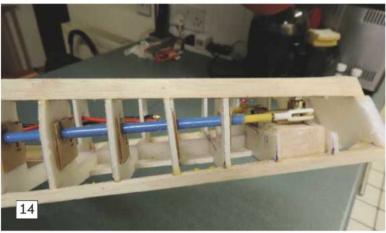
gauge. Later versions were fitted with a water level sight glass at one end. Inside the outer casing, the boiler tube was often lagged with asbestos, then covered with polished tinplate or thin aluminium with the steel end plates riveted on to it all. The alternative was a matt black heatproof paint finish, but the look of polished aluminium is preferable.

To simulate all this, the outer casing is of 1mm styrene sheet, reinforced at its corners with 3mm sq. strip. The unassembled parts were sprayed matt black, along with the top of the supplied steam effect unit. Litho plate (an aluminium offset printer material) was cut and glued with thick superglue to the sides and a separate piece folded up and over the centre section. Air holes and allowance for the exhaust at the top were marked and slowly drilled through both laminations using a cone-step drill, which makes very neat and large holes, but with no burring.

In order to lift the whole smoke unit out of its casing, a method of contacts was devised to connect and disconnect the four circuit wires, two for the 24v steam generator unit and two 12v feeds for the built in fan that forces the steam-like vapour out of the funnel.

In the 12mm gap under the fan unit four brass balls from Radio Active ball connector control rod ends were inserted, Behind these, each wire was shortened and fitted to a small spade connector and joined to the back threaded part of the ball joint. The front plate of the outer casing was fitted with strips of thin and springy brass, which make contact with the balls as they slip in, **Photo 9.** The positions of the contacts were clearly marked and were such that it was impossible for one ball to touch the wrong terminal, this being important as mixing up the polarity of the 24 volt circuit or connecting the





wrong wire to the voltage regulator would inevitably blow the circuit's pc board.

The voltage regulator was built into a 1mm thick styrene box representing the burner body with a short dummy fire tube that enters the boiler and its base is fitted with lugs to screw it down to the bearers inside the model. The top is removable and fitted with a piece of clear acrylic rod over where the On/Off red LED is on the PC board, making it easy to see that it is actually working. The wires were all fitted with polarised 4mm gold connectors and fed through the tube inside the front of the boiler casing as in **Photo 10**, and you can see here the funnel master of Pine, its silicone mould and a more robust cast version in polyurethane resin which although a bit heavier, is much more rigid.

Squeezing in the r/c

When speaking with John Parker about this project, he intimated that it would be nice to get an Edwardian gentleman sitting at the stern working the tiller arm and so this became an additional challenge. The battery pack would have to go at the stern as there was nowhere else to put it, and if low enough, a drop in rear well deck would cover it and give a nice seating area for the aforesaid gentleman.

The only spaces left in the hull for r/c equipment are the gaps between the ribs under the side decks. Also, as it is not desirable that the LiPo battery providing power to the brushless motor and steam unit drops below its safe voltage, an audible alarm (available from Component Shop) would need to be found a home. This would tell me, and they make a quite a noise, when to shut off the steam unit leaving a minute or so to get Streamlinia Too back to the bank before all power is lost. This failsafe system needs an additional servo operated by the retract switch on the transmitter operating a micro-switch to remotely disconnect the power to the steam unit. Photo 11 (looking at the Port inside of the hull), shows the micro-servo with a micro-switch, fitted into one of the gaps between the ribs next to where the boiler will sit, with the receiver and rudder servo adjacent, as well as the Obechi support rails for the boiler and burner. Holes for cable access were melted through the relevant ribs by using a short piece of brass tube heated with a small blowtorch. The receiver is a 6ch 'Orange' Spektrum compatible generic unit mounted in a similar way, its aerial wires running through holes.

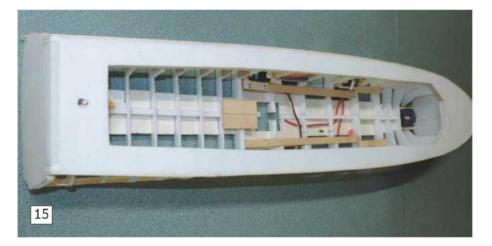
Readers will have noticed that this type of installation is best done when the hull is NOT skinned. It is also worth considering how to remove

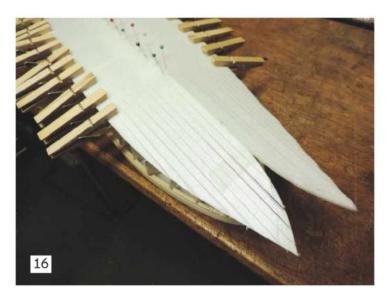
the installed components, because as sure as day follows night, if you build-in something electrical that cannot be removed or accessed, it will very rapidly go wrong. On the starboard is installed the brushless electronic speed controller (esc), this being a 100% waterproof Engel (Germany) Sub-Commander 30 Amp unit, programmable with optional watercooling, Photo 12, and its price is only 29.90 euros. A scrap piece of 1/16 inch plywood with Litho plate acts as extra protection against any heat produced and is glued vertically inboard of the forthcoming hull's outer skin piece. The double-sided tape supplied with the esc holds it firmly enough to the Litho plate. In any case, in tests by both myself and Paul Freshney, these controllers don't seem to get warm at all, provided they are not abused.

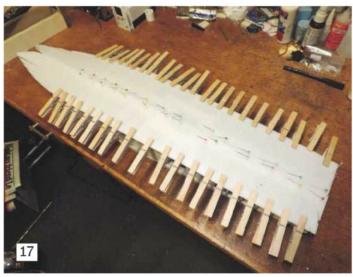
Photo 13 shows the ball raced and metal geared micro-servo for rudder control, sitting in a homemade tray connected to a piece of Flexible Sullivan rod (blue and yellow) running under the deck. The outer (blue) part needs to be held firmly to the bulkheads and you must make sure that none of the assembly can come undone or disconnected since once the hull skins are in place, this cannot be readily serviced. The rudder linkage uses a homemade 90 degree brass bell-crank in the corner of the hull just in front of the transom and across to the tiller arm, also homemade, Photo 14. These are of 1/16 inch brass sheet, cut to shape, drilled and soldered to 4mm brass wheel collets (from model aeroplane landing gear). For a system like this to work smoothly all the parts should move freely and connections ideally must be at 90 degrees to each other. The rudder is cut from brass sheet, soldered to a rudder post. All the wiring was made as neat as possible, tucked away down each side of the hull and Photo 15 is a general view of the hull thus far.



When speaking with John Parker about this project, he intimated that it would be nice to get an Edwardian gentleman sitting at the stern working the tiller arm and so this became an additional challenge.







Skinning the hull

Bottom first, and 3mm Depron sheet was used, glued in place with the same adhesive as before and all held in place to set using an assortment of pins and wooden clothes pegs. Wooden pegs are the best as they are strong enough to do the job and cheap, but more importantly, they don't squash the foam as much as stronger clamps.

The joint between the bottom sheets at the keel needs to be trimmed at an angle with a sharp scalpel whilst held in place 'dry-fitted'. At the bows there is a marked inward and sloping curve to contend with, so a new method was tried. It is impossible to bend any material up and inwards curving at the same time as there is more material than the available space can handle and the solution?

Several straight knife cuts were made 6mm apart to the end of each bottom skin from the bulkhead before the curved section started, **Photo 16.** The skins were then stuck in place, pinned and pegged in position, but only up to where their slotted forward sections commenced, **Photo 17.**

After carefully bending one strip from the centre into place, the frames were marked with a fine felt-tip pen where it touched and small blobs of glue put on each mark. The strip was then bent down into the glue and carefully pinned. The corresponding strip on the other side was treated likewise on the other side of the hull, both being trimmed as needed. Using the same technique, the other strips were treated likewise, being trimmed in-situ to create the unique curved bow and under-part of Streamlinia Too. More glue down their lengths

and more clamps helped hold it all together and for those clever modellers, an angled cut can be made whilst trimming, to ensure perfect joints. They were left to properly set before the pins and clamps were removed. Because the Depron is 3mm thick, a little light sanding (and filling) will reduce any really bad bumps. Red Devil One Time lightweight filler was used in this example, but anything will do as long as it does not attack the foam, **Photo 18**. A homemade sanding block that spans the distance between the chine and the deck line should now be used to trim those edges before the side skins are added,

Photo 19. An extra 3mm transom piece was added at the stern to hide the ends of the chine strips, **Photo 20**, before a final all over light rub-down using 400 grit wet and dry sandpaper.

Stocking time.....

Depron foam when used as the skin of a model boat hull is not resilient enough to withstand the treatment it's likely to receive, but as a material to make the overall shape of a hull, it's absolutely brilliant. Once the structure of the hull has been formed, strength is added by covering it with a further layer (or layers) of material to make a composite structure that is waterproof, rot-proof, insect-proof, UV resistant, impact absorbing and stable under stress.

Readers that have read my previous articles will know that nylon mesh is used as a covering for these foam hulls, mainly in the guise of ladies stockings which easily conform to complex shapes









with no joins or overlaps. This is not a new idea, going back to the 1960's, when control line aircraft were covered with sheets of thin white nylon plus dope to strengthen and cover their fuselages and wings. We now have numerous new products that can replace the cellulose dope, which is no bad thing as it can be somewhat smelly in a domestic environment. Acrylic based products are the best, being non-toxic, having no appreciable smell, washing out when wet with water, but waterproof when dry. These products dry quickly and bond well to previous applications and are readily available in DIY outlets, particularly in the form of milky looking varnishes for wood and floors. Deluxe Materials Eze-Kote Finishing Resin (500ml is around £20) will cover numerous models and is available from most decent model supplier outlets and does exactly what it says on the container and is what has been used here.

The sanded hull was carefully pushed into a stocking, or one leg of a pair of tights, and stretched to a uniform thickness, **Photo 21.** Pull the ends up making sure the thicker woven areas of the thigh and toes are clear of the hull and tie these together over the deck area. It is best to use a new un-laddered stocking or pair of tights for this and 15 denier seem to be about right, and you definitely don't need to worry about their colour!

The tied ends can be used to hang up the hull for drying and make a convenient handle while you are applying the resin. This hull had two coats of resin applied thinly and left to dry. Once the epoxy resin has fully cured, it is easy to trim off the excess nylon at deck level with a sharp scalpel. Because the resin raises and stiffens the fibres in the stocking



material, a very light sanding should be performed taking care not to break though to the Depron. If you do, all is not lost as another application of resin will go some way to solving that problem, or you can go through the stocking/tight process again which will further strengthen the hull. Either way, it all depends on how heavy you want to make the hull, but in practice the stocking and resin application add very little weight, but what is certain is that additional coats of resin will be required after the careful sanding of the initial application, to completely fill the nylon weave. Streamlinia did not have spray rails and normally if being fitted, they are added after the hull is declared 'sound', but before the final finishing coats of epoxy resin, the number of which is a personal choice, but could be up to ten applications depending on the desired finish.

PLAN FOR

Streamlinia Too

The highly detailed full size plan No. MM 2118 is available from MyHobbyStore Ltd and is priced at £12.50 + p/p as of August 2016. MyHobbyStore plans may be purchased online at www.Myhobbystore.com.



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



TAMES



Tamco 2 Channel 2.4GHz Combo Special Price! (Includes Transmitter & Receiver) **Digital Trims!**

RRP £39.99 Our Price Only £34.00!



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 wits fitted with tamiya plug bullet connectors and switch

Now Only £29.99!

2.4GHz & 27MHz Receivers

SPEKTRUM RECEIVERS IN STOCK

AR400 4 Ch 2.4 GHz £22.00 AR610 6 Ch 2.4 Ghz £29.99 MR3000 3 Ch 2.4 Ghz £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 Futaha 2ch Am 40mhz £21.99 Futaba R202GF 2 Ch 2.4GHz £23.50 TAMCO 40H 2.4Ghz RX £15.99 TAMCO 3CH 2.4Ghz RX £14.99 TAMCO 60H 2.4Ghz RX £15.99 Saturn 6CH 2.4GHz RX £19.50 QSF 27 MHz AM 2 Channel RX £8.50



OVERLANDER 7.2 VOLT 5000MAH NOW £22.99



Unit 16B Cherwell Business Centre (Part of Station Field Industrial Estate) Rowles Way, Kidlington, OX5 1JD

www.howesmodels.co.uk

Fast mail order - Overseas postage at cost

2 Turn Winch Drum Servos

Torque: 6KG Size: 40.5x20.2x38mm

£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 2.4GI Radio Complete With 6Ch 2.4Ghz Receiver. Additional RX £15.00

Now Only £29.99!



Spektrum DXE

NEW! DSMX 6 Channel Set INCLUDES ARG10 RECEIVER VERY EASY TO USE **FULL RANGE - TOP QUALITY OUR PRICE £89.99**



2.4GHz Systems

Saturns Full Range 2.4GHz Combos







X6 6 Channel £53.99





4.8-16.8v RRP £86.99

Our Special Price Only £29.99!





TOP PRICES ON HIGH QUALITY 7.2 VOLTBATTERY PACKS

2000MAH OWLY £8.99

2400MAH OWLY £9.99

2500MAH OWLY £10.50

3000MAH OWLY £11.99

3300MAH OWLY £12.50

3800MAH OWLY £15.99

4500MAH OWLY £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!

Waterproof

Electronic Speed Controllers

10AH 4.8-12v ONLY £18.99 NEW PRICE 15AH6-12 VONLY £18.99 NEW PRICE!

5AH 12-24 V ONLY £29.99 20AH 6-12 VONLY £24.99 25AH 6-12 VONLY £28.99 40AH 6-12 VONLY £44.99

RV1148-9.6V RRP£57.99 OUR PRICE ONLYE24.99!!

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

Mains Chargers

Fusion NX96 -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-lon/Li-Po 1-4, cells lead acid 1-12volts integrated balancing port mains or 12voperation, £49.99



NX-20

Overlander Mains Powered Peak Detection Fast Charger 4-8 cell 4.8u-9.6u NIMh & NICD Fitted with Tamiya connecter and mains lead.

Bargain Price Only £11.50!



AURA

Ready to Run Sailboat with 2.4GHz Radio. Sail Winch & **Rudder Servo** Sturdy ABS Hull Length: 650mm Ama Height: 1025mm

Beam: 135mm RRP £129.99

(Including Keel)

Our Price Only £85.00!



Howes Micro Servo

Torque - 1.7KG Speed - 0.11 sec (L) 22mmx (W)11mm x (H) 26mm

Only £3.50



Howes Mini Servo Torque - 2.7KG

Speed - 0.14 sec (L) 29mm x (W) 12mm x (H) 30mm

Only £4.00



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

7.4v3900mah-£24.99

11.1v 1350mah -£17.99

11.1v 1000mah -£13.99

11.1v 1600mah -£18.99

11.1v 2200mah -£14.99

SERVOS

11.1v3900mah -£35.99

NEW POWER 3KG STANDARD - £5.00 AAS-700STD WATERPROOF STD - £6.73 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

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

POWER HD 9g Micro £3.50

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 #2600 FUTABA \$3802 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!







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 47KG/CM @ 6v Speed: 0.14 sec /60' @ 4.8v 0.12 sec / 60' @ 6v Dimensions: 41 x 20 x 36 mm

Electric Motors

385 5-POLE £3.10 each 400 3-POLE £5.99 545 5-POLE £2.99 MFA RE 140 (3-6v) £2.75 MFA RE 360 (6-15v) £4.99

MFA 385 (45-15v) £5.75

MFA RE 540 (4.5-15v) 3 POLE £750 MFA RE 700 (6-8.4v) £28.99 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 RANGE OF MODEL BOAT KITS AT SUPERB PRICES ON THE NEXT PAGE!

01865 848000 WWW.HOWESMODELS.CO.UK

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 Mc



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 VOLTPACKS

1300MAH FLAT ORSQUARE -66.99 2600MAH FLAT ORSQUARE £8.99

1300MAH FLAT OR TRI - \$8.99 2600MAH FLAT OR TRI - \$11.75

9.6 VOLTTRANSMITTER PACKS. 1300 MAHFLAT - £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 M43 BLADE M4 NYLON PROPS 2/3 BLADE STAINLESS STEEL SHAFTS M4 BRASS RUDDERS S/M/L

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 VI.EAD £1.75 each

> BEC RED BOTH ENDS £0.90 SWITCH HARNESS £2.99

Graupner Speed 400! G3321



2.4-7.2 Volt RRP £7.99 Only £2.99!

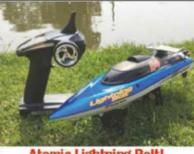
Very Limited Stocks!

Spektrum DX6i

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

£99.99





Atomic Lightning Bolt!

Ready to Run RC Speed Boat with 2.4GHz Radio with Reverse Very Fast (540 Motor) with Self Righting! Includes 7.4v Li-ion battery & Mains Balance charger! Overall Length - 460mm RRP £59.99

Only £34.99





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

Our Price £89.99!



Richardson Tug

Ready to run model includes 2.4GHz Radio, Battery & Charger Includes Smoke Generator Length - 560mm Height - 420mm

Our Price £149.99!

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! Length: 450mm

RRP £49.99 Only £34.99





NEW IN!

FLASH V HULL

Ready to Run RC Speed Boat with 2.4GHz Radio with Reverse Very Fast with Self Righting Available in Blue or Red. des 7.4v Li-ion battery & Mains Balance charger! Overall Length - 350mm RRP £39.99

Only £23.99

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 (TwinScrew) £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 HMBrigSupply -£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



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 O. 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 M 1/150 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 WPSurfer Girl RTR - £170.00



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-BootType 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 16B Cherwell Business Centre** (Part of Station Field Industrial Estate) Rowles Way, Kidlington, OX5 1JD











lay back in the early 1960's I was seven years old and a frequent visitor to our local model club on Sundays where my dad went to play with live steam model trains. Like many kids at that time, I spent a lot of time at the pondside where the boat boffins would sail all manner of boats, some with elaborate radio control. Nowadays that doesn't seem special, but back then radio control would have been better named if it had been called 'radio affected'. Radio valves were the norm', which needed transmitter batteries of 120 volts, plus an accumulator (lead acid battery) of two volts for their filaments and in the model boat the wiring looked like a scene from a mad scientist's dungeon. Far more time was spent tinkering than sailing, but through my young eyes it all looked fantastic.

As time passed, dad was asked how much radio control would cost and my heart immediately sank. About four times the normal adult weekly wage would buy a decent outfit, so it was no wonder that many enthusiasts made things for themselves. My big brother had some old Model Maker Magazines and in a 1955 edition there was an article about a Triang radio controlled model boat, an adaptation of the plastic model of the Ocean Trader toy that they then sold, **Photo 1.** It was quite an achievement in the 1950's to put radio control in a 'toy boat' that was only 50cm long and 9cm beam. Obviously I wanted that Triang Ocean Trader very badly, but it cost a fortune and anyway it was now 1964 and things had moved on, taking it with them.

Well, that was then and now, just like in the films, we move to the present when the inevitable happened and I was looking in the window of a junk shop that said 'Antiques' over the door and saw it. Five minutes later I was back outside the shop, a few pounds (£'s) Sterling poorer holding it, and what was it?

'It' was a Triang Ocean Trader, the normal electric model and not the radio controlled version (they made a clockwork one too). Its condition wasn't great, but not too bad either, with the

usual fittings, vents, derricks, masts etc., some of which were broken or missing, **Photo 2.** On the plus side it had the original FROG Tornado motor, the battery box and time hadn't been too hard on the rest of it, **Photo 3.**

Restoration

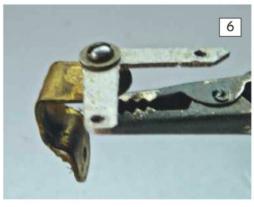
It was soon into the shed and work started. Most of the missing fittings were easy to make, substituting metal and brass for the original plastic components. The replacement vents are a piece of brass wire with a drilled 0.77 air gun pellet mounted on top and



1







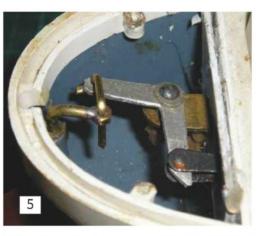


Radio control?

Soon the boat was back on the bench and I began to think how to change it into an r/c model without doing anything that would spoil the original condition. Luckily the hull had a small section of deck at the stern held on with two tiny screws - perhaps a hangover from the original radio controlled version? After extracting these screws and removing the deck, the potential problems became evident. The rudder is right at the stern, which means that even with a new post, there would be no room for a normal tiller arm to function. We don't know how Triang overcame this, but here's how this problem was solved, **Photo 5.**

First, a new rudder post shaft was made which had its top bent over at 90 degrees and a 3mm nut soldered to the end. The shaft was pushed through the hole in the hull (the rudder could be attached later), and then a small plywood plate fixed, running from the hull bottom to the underside of the deck. This acts as a support for the bell-crank and its mounting. Gaps were left at each side of the plate to allow for the push rod linkage to go to the servo. The actual linkage is much easier to show as in this picture, than describe.

The bell crank was made from some scrap aluminium sheet, cut a little over the 90 degree mark so that it would give the best leverage in the space available. Three holes were drilled; one for rudder link, one for the push rod and one for the pivot. Next a bit of brass strip was bent to the odd shape you can see in **Photo 6** that acts as a mount for the bell crank. The screw through the pivot and mounting





bracket is held in place with washers and lock-nuts. A bit of bent brass wire goes from the bell crank to the top of the rudder shaft, and there we have it, a rather odd but practical linkage for a rudder post that has no working space behind. I'm quite proud of this solution, as it has applications elsewhere and turning junk (antiques) into something useful is all part of the modeller's art.

A new rudder blade was cut from some brass, a little larger than the original to obtain a good turning circle with the limited throw from the linkage, **Photo 7,** but this was where it all went a bit wrong.

As you can see in this last picture, which is of the final result, the problem is that with the blade fixed to the rudder post, its supporting skeg has to be separate as you cannot configure the entire thing in one go together with a bent tiller arm inside the hull.

Anyway, this Mark 2 version has a removable skeg support made from copper tubing and the finished rudder works very well, so was worth the additional effort.

Remaining work

The rest of the conversion was fairly conventional with the rudder linkage made from brass wire from the bell crank to the servo. This was mounted on a piece of scrap wood stuck to the side of the hull with double-sided tape. This prevents any damage to the hull and more important, it can be removed later without any problems.

A receiver was fitted in front of the battery box, and it takes its power direct from the drive batteries. This is normally bad practice unless using a BEC (Battery Elimination Circuit), but as it will only be sailing in the garden pond, the risk is not too high.







Interestingly, there haven't been any problems subsequently, probably because the power in the battery never drops too low, **Photo 8.** There is now some decent suppression on the FROG motor as at first it caused havoc with the radio control, but a couple of capacitors and a suppressing choke solved that problem. This does show how much better brushed motors are nowadays, and of course brushless motors are in a class of their own.

The last job in this conversion exercise was a bit of a headache, namely what to do with the aerial? A look at a picture of the original in the 1950's and it appeared to have a wire running from the foremast to the stern. I was not too keen on this arrangement, but 'give it a try' was the thought. A temporary mast was rigged on the foredeck and a wire run to the stern, but it just didn't look right, so off it came, but by this time the answer was obvious.

The thin wire mast was removed from the foredeck and a hole drilled through this into the forward hull space. Next, a 1mm hole was drilled in the forward bulkhead from inside the model and the fiddly part? Bending a piece of thin springy brass wire into a gentle curve and poking it down the mast hole and then out of the hole in the bulkhead. A thin aerial lead was soldered to the end of the brass, and with a gentle tug this wire came out of the mast hole

on the deck and was duly soldered to the lower end of the mast. The rest of the aerial was bundled in the hull to keep the overall length as per the original. A word of caution here when soldering. Personally I think it is always best to use some sort of eye protection as a spluttering blob of molten solder will always end up where it shouldn't. **Photo 9** is of the bow section and the r/c range? At least 40 metres, which is more than enough for this model.

Conclusion

Was it worth it? Yes it was, and after waiting 50 years to have this Triang Ocean Trader model boat, that bug is now out of my system. When one thinks about it, it was probably my longing for the Ocean Trader that started me on this 'model boating thing', which has given a lifetime of pleasure. Ocean Trader will not be used very often, but it does work on the water and has been a nice challenge, **Photo 10.** As a final thought, the original Triang r/c version had valve radio gear, LT batteries, HT batteries, rudder and engine control that was all heavy and crude by current standards and it was quite an achievement in its day by the manufacturer, for those that could afford it.

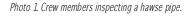
Enjoy your hobby - Charlie Oates

Was it worth it?
Yes it was, and
after waiting 50
years to have this
Triang Ocean Trader
model boat, that bug
is now out of
my system





elcome once again to our regular sortie into the world of fighting ships and this month we look at the figures aboard Joseph Slydlowski's 1:72 scale USS Arizona battleship, a scratch built Vosper Thornycroft corvette, and have a close view of what's new in 3D printed naval fittings from Shapeways in association with Mark Hawkins. We also have Part 23 of the HMS Skirmisher project and the usual brain teaser of the Mystery Picture slot, the answer being in the October issue.





Photos 1 to 11 - USS Arizona figures

These pictures are of the US Navy figures on Joseph Slydlowski's fantastic 1:72 scale USS Arizona. One of the most frequently asked questions for scale warship building concerns whether or not to include figures. In March 2016 at the Spring Model Boat Show (see June 2016 MB) Joseph Slydlowski had made the decision to add figures to his exceptional 1:72 USS Arizona, but not without some careful thought as they can make or break a model if not chosen carefully. Any figures, regardless of scale, have to be life-like and depict a task that is applicable to what the model as a whole represents. The cardinal rule is also to have figures that are appropriate for the original vessel and its timeline, plus being of the correct scale and with suitable clothing. For the model maker, the final task is then to paint them to be as life-like as possible.

In this series of pictures, Joseph has captured the period perfectly. He used figures purchased from Shapeways and a selection of Humbrol paints, these being: No. 24 Matt Trainer Yellow; No. 29 Matt

warship scale



Photo 2. Here the crew are involved in mopping the decks, a mundane but necessary task

Photo 3. Another nice touch with the crew reeving out the cordage.

Photo 4. Some of the ship's company moving around 01 deck, but also undergoing training on the 3 inch AA guns.

Photo 5. Officers of the watch moving around the bridge wings whilst a sailor is cleaning one of the pillar mounted telescopes.

Photo 6. Although only a training exercise for the gun crews, they are wearing their life preservers and helmets.

Photo 7. A Chief PO giving orders to three of the crew, whilst over to starboard one crew member with foot perched on a bollard, is gazing lazily out to sea whilst a fellow crewman is working on the windlass close to the turret barbette.

















Photo 8. Making sure one of the ship's motor boats is well secured.

Photo 9. Looking very closely at the stern of the motor boat, two of the crew have been assigned to ensure that the propeller is in good condition.

Photo 10. High up in the spotting top, drills are underway, here being overseen by a Chief PO.

Photo 11. Aircrew of the OS2U Kingfisher float plane arriving for a catapult assisted take-off.

Photo 12. The 140 scale Al Mua'zzar built by Brian Clewes of the Crewe MBC.

Dark Earth; No. 33 Matt Black; No. 34 Matt White; No. 61 Matt Flesh: No. 94 Matt Brown/Yellow and the final result? The pictures speak for themselves as the Shapeways figures are 'printed' to be in different positions and the trick, as I found previously with Preiser figures, is to decide how to use them to best advantage. For example, some are kneeling, others crouching, some with their hands behind their backs and some with their arms in front at waist height. On the USS Arizona model, all the figures are in poses you would expect them to be and I particularly like those employed in mopping the deck as you very rarely see that. Others are seen working cordage reels or performing drills with a 3 inch AA gun. There are some preparing or inspecting the ship's motor boat prior to its use and the aircrew of the Kingfisher float plane are arriving for a pre-flight inspection. There is only one task left and that it to record this outstanding USS Arizona model on the water, which will be shown in this magazine in due course.



1:40 scale Vosper Thornycroft corvette Al Mua'zzar

In 2005 a series of pictures were compiled from a visit to Portsmouth when I saw the Qahir Class corvette Al Mua'zzar built for the Navy of Oman by Vosper Thornycroft.

As with all of the pictures published here in MB, their intention is to provide help to model builders as onboard pictures are not always easy to come by. However I never thought that they would provide anything more than a basic reference guide, but at this year's Spring Model Boat Show at Ellesmere Port, a particular model caught my eye and it was this Al Mua'zzar built by Brian Clewes.

Whilst chatting to Brian it transpired that the pictures in this magazine had provided not just the basic structural detail, but helped him create his own set of drawings to produce a superb model of this attractive corvette. Using a CAD package from the world wide web and a drawing of an RN Type 21 hull as the basic starting point, Brian was able to adjust the shapes to blend into those images published in this magazine. A plug (a former as a precursor to a mould) was made using expanded polyurethane foam and trimmed to the shapes of the sections. From this a mould was made, and then a GRP hull, and what you see here was the result, **Photo 12.** The superstructure is entirely scratch built from styrene sheet with all the fittings such as the Exocet launchers and the OTO Melara 76mm gun also being handmade as in Photos 13, 14 and 15. The scale of 1:40 is not a standard scale we tend to use in our hobby, so all credit to Brian for his

He also used an unusual driveline, namely two discarded Smith's Morris Minor fan motors coupled to a 12v 35amp lawn tractor battery with a discarded MP3 player and two salvaged computer speakers providing a very effective sound system.



Photo 13. The M40 Exocet launch tubes, 76mm OTO Melara gun and on each side of the bridge are 12 round launchers for the Super Barricade decoy launchers - all are scratch built.

Photo 14. The bridge and the entire superstructure lifts clear of the hull for easy access.

Photo 15. Fittings such as the watertight doors are moulded from masters and others such as the GAM-B01 20mm gun in the lower half of the picture have been made individually.

Photo 16. Brian Clewes preparing Al Mua'zzar for a sailing session. The semi -circular device within the hull is a retractable boat sling to make lifting it much easier.







16

Photo 17. Al Mua'zzar underway.

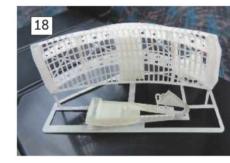
Photo 18. Mark Hawkins and Shapeways are developing radar arrays at various scales, one being this LW-08 radar as was fitted to the Dutch frigate Kortenaer.

It's amazing what can be used if one puts one's mind to it, which can certainly keep costs down, **Photo 16.** This Al Mua'zzar model performs really well and due to its beam to length ratio has excellent stability and is an attractive model in its own right, particular when on the water, **Photo 17.**

Hawkins & Shapeways LW-O8 radar assembly

Also seen at this Spring Model Boat Show were a number of products designed and prepared by Mark Hawkins and available from Shapeways 3D Printing (contact details in the references at the end).

The example shown here, **Photo 18**, is the LW-08 radar to 1:96 scale and is an amazing example of precision 3D manufacturing as not only are all the parts of the array precisely made, including the main dish framework and feed horn assembly, but it is possible to have the radar rotate. There is no doubt of the quality of fittings made nowadays using 3D printing, although some aspects of detail can be so fine as to appear too delicate for use as a working fitting, but no doubt as time progresses these limitations will be overcome as the process is continuing to improve, almost on a daily basis.



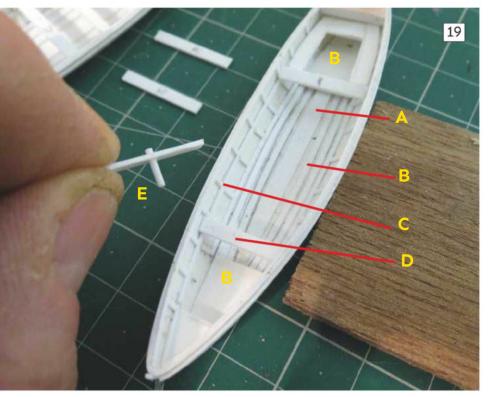




Photo 19. With the 27ft whaler prepared, the thwarts could be cut to size and their supporting 16mm pillars inserted.

Photo 20. All the thwarts and their pillars in place, but not fixed.

Photo 21. A primer coat has been applied and lightly sanded in preparation for airbrushing the final colour coat.

HMS Skirmisher

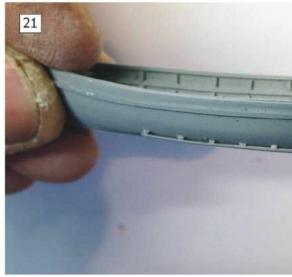
whaler and preparing the cutters. As previously mentioned, the boats carried aboard warships of the 1905 timeline of HMS Skirmisher, were a significant feature, especially as there are eight on this warship and time spent on them can add much to the general appearance of any model.

Last month (August 2016 MB), Part 22 finished with the completion of the 32ft steam cutter and now we can move on to the 27ft whaler and the remainder of the boats carried aboard HMS Skirmisher. The 27ft whaler, like the steam cutter are the only two ship's boats formed from styrene sheet over a wooden former. Various sizes of cutter are made by Deans Marine, they being cast in resin and only requiring their thwarts, rudders and internal fitments to be added.

27ft whaler

Like the steam cutter, the hull was formed in styrene over a wooden master by warming the plastic sheet and allowing it to 'fold' over the mould. Vac-forming is an alternative process, but most of us don't





possess such equipment. Some remedial work to arrive at the final desired shape was required and in a future stand-alone article I will demonstrate this moulding technique.

Anyway, with the basic styrene hull, work could begin on creating its interior as in Photo 19. First, strips of 1mm styrene were used for the Keelson, Part A, and the Bottom Boards, Part B, with the internal hull frames being from 0.4 x 1.0mm Evergreen No. 112 strip, Part C. 1 x 3mm styrene was used to form each of the four thwarts (seats), Part D. The seating around the stern was also cut from 1mm styrene, followed by drilling 1.6mm o.d. holes on the centreline of the thwarts to insert the pillars, Part E, that support them, they being formed from Evergreen No. 222 styrene rod, the individual parts being adjusted until the bottom of each pillar made contact with the keelson. Excess material from the pillar tops was then trimmed away. Bottom boards were inserted fore and aft after being cut to shape. It's worth bearing in mind that only the internal frames, the longitudinal strips for supporting the thwarts, gunwales, keelson and bottom boards were firmly fixed in place now, as the other parts





Photo 22. All the bottom boards and keelson have been carefully brush painted using a mix of Humbrol Nos. 63 & 85 enamel paint.

Photo 23. The bottom boards, thwarts and aft seating are in place.

Photo 24. The thwarts and knees being cut to size for the resin cast cutters.

Photo 25. All the thwarts and seats are airbrushed together.



needed to be removed for painting, **Photo 20.**

A rubbing strake and small bilge keels were added followed by a primer coat of paint, **Photo 21.** The keelson and bottom boards, which are fixed into position, were carefully hand painted, **Photo 22.** Each thwart was then permanently added, together with the aft seating, all as in **Photo 23.**

Fitting out the resin moulded boats

Although these various cutters are superbly moulded, they still do require some preparation, particularly to the outsides of their hulls. After that, internal preparation follows pretty much that of the whalers, but with the addition of thwart knees. These are a small angled section that locates at the end of each thwart and fit tight against the inside of the gunwale. As always, a simple jig was created that enabled the identical cutting of each the knees, **Photo 24.**

Once all of the thwarts, the stern seating and gratings had been prepared, they were laid out and airbrushed using a mix of Humbrol Nos. 63 \pm 85 enamel paint, **Photo 25.**





warship scale

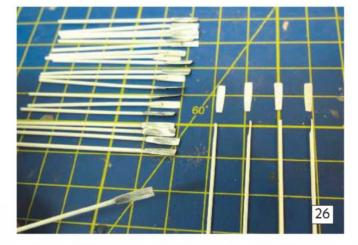




Photo 26. The oars are simple to make using Evergreen styrene rod and strips of 0.5mm Litho plate.

Photo 27. A simple but practical method for holding each of the oars for airbrushing.

Photo 28. Here we have the 27ft whaler, 32ft steam cutter and the 34ft cutter ready to be finally fitted-out.

Photo 29. The fully equipped 32ft cutter with its mast, furled sails and oars.

Photo 30. Two fully fitted 34ft cutters and only the mast steps are needed to complete them.

Photo 31. A fully prepared 27ft whaler with rudder and tiller.

Photo 32. HMS Skirmisher had eight boats and here is a selection of them with only the 16ft dinghy still to be made.

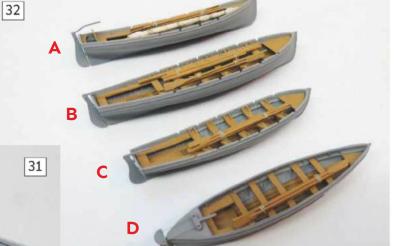
Photo 33. Mystery Picture and the clue is: The only RN carrier to serve in two allied navies during WW2.



28

Making these could not be easier. All that was required is Evergreen No. 222 1.6mm o.d. styrene rod and a strip of Litho plate, 2.5mm wide. The styrene rod is cut into 45mm lengths to form the wood shafts and gently scalloped at one end. Each







oar blade is then cut to size, 9mm in length, shaped at the root and then fixed to the shaft, **Photo 26** with thin superglue. Okay, there are rather a lot of them, but that's how it is. Preparation for airbrushing is equally very simple as a series of holes were made in a convenient section of scrap wood and the oars slotted into place, **Photo 27.** Progress thus far has the 27ft whaler, 32ft steam cutter and 34ft cutter painted and ready for their oars and the two sets of masts, **Photo 28.**

Sails

With the interiors painted, each boat could be fittedout as required and one example is the 32ft cutter where the masts, furled sail and bound oars have been included. Many cutters and whalers were fitted with various types of rig and the example here is a De Horsey Rig with gaff and staysail. The sails were formed by the simple expedient of using toilet paper (unused!) with a coating of clear vanish, which has the effect of dulling the white and making the paper slightly stiff, a bit like canvas, **Photo 29.**

34ft cutters

Mounted on the forward davits are two of the larger dipping lug 34ft cutters, each having a mainsail and staysail. As yet, the mast steps for securing the mast to the bottom of the boats have still to be fitted though, **Photo 30.**

Completing the whaler

On the 27ft whaler is a rudder which is connected by two arms of 0.2mm fine wire to a quadrant which in turn is attached to the tiller and this example is now almost complete, **Photo 31.**

To complete this model making session, **Photo 32** is of four of the eight boats, annotated:

A: 32ft cutter

B: 34ft cutter

C: 30ft cutter

D: 27ft whaler

In the next issue of MB we will hopefully be rigging these boats to their davits.

References and acknowledgements

Whalers, cutters and ship's sailing boats in the RN ref:

Manual of Seamanship Volume One, 1905 Rigging of ships boats Manual of Seamanship Volume One, 1937 Oars – Lore of the Ship, revised edition, pages 148 & 149

Admiral Gorshkov ref:

Guide to the Soviet Navy, Fourth Edition by Norman Polmar, pages 164 to 167 Kiev & Kuznetzov Russian Aircraft Carriers by Barry Dean, pages 49 to 56

I.N. Vikramaditya ref:

Combat Fleets of the World, page 288 Russian shipyards ref:

Guide to the Soviet Navy page 453

Mark Hawkins & Shapeways 3D fittings ref: www.shapeways.com
My thanks to Brian Clewes for

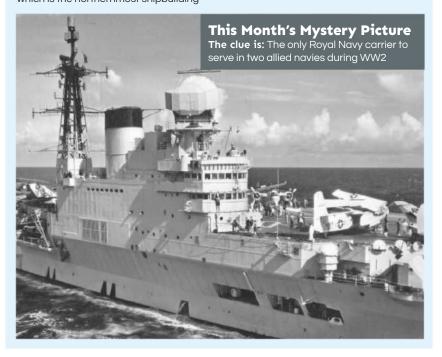
information regarding his Al Mua'zzar model and David Melville for his help sourcing the on the water pictures.

Answer to the August 2016 Mystery Picture

The clue was I.N., their Pride and Joy. This was a reference to the Indian Navy's new aircraft carrier Vikramaditya, previously the Russian Kiev class Admiral Gorshkov. This was the last of the Kiev class and differed somewhat in appearance with additional launcher tubes for the SS-N-12 surface to surface missiles forward whilst having a more substantial island superstructure with a prominent drum like radar array known as 'Cake Stand' and 'Sky Watch' phased array panels fore and aft of the island. Also there are two 100mm guns forward producing a very different appearance to the first three Kiev class aircraft

The sale of the Admiral Gorshkov to the Indian Navy began with a letter of interest on the 21st December 1998 with conversion work being undertaken at the Sevmash Shipyard at Severodvinsk which is the northernmost shipbuilding facility in Russia, but also the only one capable of converting such a large warship. The shipyard was originally built to construct the Soviet battleships of the Sovietsky Soyuz class and then a number of Sverdlov class cruisers, but latterly has been a shipyard for ballistic missile submarine construction.

The conversion was a very protracted affair and not without its acrimony as costs spiralled, deadlines came and went, the whole job taking from 20th January 2004 to November 2013. In Russian service the aircraft carrier was equipped with the underperforming Yak 38 VTOL aircraft, but now in Indian hands and with a 14 degree ski jump (as on current RN aircraft carriers), it can accommodate 21 MIG 29K aircraft, and ten Kamov KA28's (or 31's) ASW/AEW helicopters, but the project cost overruns have been phenomenal.



Boats SUBSCRIPTION ORDER FORM

DIRECT DEBIT SUBSCRIPTIONS (UK ONLY)

Yes, I would like to subscribe to Model Boats ☐ Print + Digital: £13.25 quarterly ☐ Print Subscription: £10.99 quarterly YOUR DETAILS MUST BE COMPLETED Mr/Mrs/Miss/Ms..... Initial Surname Postcode Country Tel Mobile Email D.O.B I WOULD LIKE TO SEND A GIFT TO: Mr/Mrs/Miss/Ms..... Initial Surname INSTRUCTIONS TO YOUR BANK/BUILDING SOCIETY Originator's reference 422562 Address of bank Account number Sort code 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

PATRICINI DETAI			
Postal Order/Cheque Visa/MasterCard Maestro Please make cheques payable to MyTimeMedia Ltd and write code V953 on the back			
Cardholder's name			
Card no:			(Maestro)
Valid from	Expiry date	Maestro issue	no
Signature		Date	

TERMS & CONDITIONS: Offer ends 9th September 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 the 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 9th September 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.

CALL OUR ORDER LINE

Quote ref: V953









ABOVE: Our own regular columnist Richard Simpson's Borkum steam launch.



LEFT: Stan Reffin's Federal German Navv minesweeper Schutze is an example of what can be achieved with a standard, but much improved. Robbe kit.

RIGHT: Give a model character, and it's done here by adding these little touches on Ron Shepard's Booth Bay lobster boat.

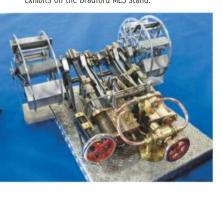


23rd National Model Engineering and Modelling Exhibition - 2016

Dave Wooley reports from Doncaster



BELOW: One of a number of the marine-orientated exhibits on the Bradford MES stand.



eld in late-May 2016 over three days, it is always a challenge when an established event moves and in this instance from Harrogate to the Doncaster Race Course, but the regular organising team headed by Gavin Rex managed it all rather well. The new location consisted of the entire ground floor and part of the first floor of the main stand with the escalators being a major benefit. There is an imposing entrance to the venue which was used to good advantage by having locomotives and rolling stock in view as you walked in. As at Harrogate, the trader area was generally separated from the model club area, and noticeably there was plenty of room to move around on both exhibition levels. There were flying displays outside, decent catering and personal facilities as you would expect at such a venue and a temporary small pond. We will concentrate here on the model boating element of the show.

Model boat clubs

The number of model boat clubs attending this year was less than when at Harrogate in previous years, but those that did attend put on a superb display, so much so that their stands were kept busy. There was also a the small pond in close proximity to them that was in regular use every day.

York MBC had a number of excellent scratch built model sailing vessels on their substantial and varied display creating much interest, and Kirklees MBC who were long serving stalwarts of the Harrogate event with their enthusiastic membership, also worked hard promoting the hobby. The same applies to the Redcar MBC and the Ship Modelling Society, the latter having Paul Bannon with his amazing multi-functioning new model of the aircraft carrier USS Midway as a key element of their display.

A number of model engineering societies were also showing marine models, such as Bradford MES and SMEE (Society of Model & Experimental Engineers) with models of a monitor's steam plant, ash handling equipment and an emergency generator, all configured for display as if within a ship.

Models

Communication with the viewing public is always the key to promoting our hobby positively and Stan Reffin of Kirklees MBC is a master of the art, explaining how the deck is being retained with



show report

LEFT: Chris Behan is well known for his highly detailed submarine and hovercraft models and HMS Upholder is the latest addition to his fleet.

BELOW: Wow! A finely detailed 148 scale model of the armed trawler HMS Sapper on the York MBC stand, built by Mike Nesbit and nicely presented on its stand as well.



ABOVE: The forward windlass on the tug Fighting Cock, entered in the Scratch Built Class by Alan Mountfield. A fine piece of workmanship.

BELOW: A lovely Joffre tug from one of the York MBC members.



magnets on his r/c 'Plastic Magic' conversion of the Italeri ELCO MTB. Another model that caught my eye was one which was featured in July 1962 Model Maker, this being the coaster Ann M and the version on display modelled by Redcar MBC member John Heseltine, was an all-metal 1:48 scale example - quite unique. On the same stand there was also a very attractive (and large) Ro-Ro ferry of the Celtic Line built by David Hughes. The temporary pond was well-used, with a variety of models being operated during all three days of the event.

Trade

As you would expect, most stalls had an engineering bias, but nevertheless there was much in the way of tools, materials and paints of value to us and our hobby. Notably from the marine hobby as such, were the well-known Component Shop and SHG Models.

Conclusion

There is little doubt, at least for me, that Doncaster Racecourse is a much better venue than that at Harrogate, but of course the catchment area inevitably is different. The organising team fully intend there will be a 2017 event, the 24th, and long term advance planning is already well underway.





LEFT: Yes, 52-01 was the original Arun design, and this model is totally scratch built by Arthur Barlow.

BELOW: Just some of the models on the York MBC stand, the club seemingly also guarding a cash machine!





Boiler Room PART Secondhand Sixty Nine: Secondhand

Richard Simpson's

series on model steam plants

Photo 1. A typical secondhand package that can be easily and cheaply picked up from a number of sources including model show Bring & Buy stalls, online and secondhand shops

fall the topics that we seem to discuss regarding steam at the pondside, the one thing that seems to arise more than anything else, is the subject of cost. There is no doubt that the cost of getting into steam driven models can be prohibitive, although in all fairness, the cost of high performance electric powered models seems to remain in step and be not too far behind. To this end I am in the process of putting together a model to see just what can be done on a tight budget with off-the-shelf items and it will be completed in the next few months. However, in the meantime thoughts will inevitably turn to the possibilities of the secondhand market. I have many boilers, engines and complete steam plants obtained secondhand in my collection, so they are well worth considering, but as to be expected the pitfalls need to be also considered and the whole aspect of obtaining a secondhand (used) steam plant should be something to approach with an open mind and a preparedness to tackle anything untoward which

What really prompted this article was when I was

asked by an acquaintance in the hobby if I would have a look at a steam plant that he had received as part of a deal, **Photo 1.** I agreed to have a look and see what needed doing and when I got my hands on it, realised immediately that this was just the sort of steam plant that one could pick up for a very reasonable price from such sources as online auction sites and was typical of what enthusiasts might want to consider for their models.

I thought therefore that I would use this particular steam plant as an example of what can be found out there and demonstrate some of the things that you might expect to find, some of the pitfalls you could typically encounter and just what can then be done to overcome them. As with many secondhand units, this came with no paperwork, so no pressure test certificates, no steam test certificates, no indication of working pressure, capacity or anything else really to give us a clue as to its providence.

The first step is always a thorough visual inspection to see just what has been obtained and take stock of what potential it has. Normally I would



Steam Part 1

recommend getting your hands on a steam plant that at least comes with some (old) certification, but that may then preclude many of the super bargains out there which nevertheless may require a bit more work to get properly certificated. At the end of the day if you have any doubts, have a chat with your local boiler inspector and see what advice he or she may be able to provide.

Visual inspection

Never underestimate the value of a good thorough visual inspection and be prepared to take notes if necessary. This particular steam plant seemed to be intact and included a boiler of an apparently greater capacity than that which the engine really required. This engine is a simple twin cylinder, double acting oscillator with built in steam control valve and in an arrangement making me think it was almost certainly an old Cheddar Plover, **Photo 2.** A significant advantage of such an engine is that spares can still be obtained and in this case through

such people as Clevedon Steam, so you are not completely on your own if assistance is needed. The engine turned over smoothly and with the control valve in the OFF position, good compression was felt on both cylinders, which is always a very positive sign. The engine was also fitted with a water pump and a displacement lubricator as well as seeming to be well lubricated and free of any signs of rust.

The boiler was intact with all fittings in place such as the pressure gauge, Photo 3, a safety valve and also a sight glass as in **Photo 4.** The steam plant included the water supply pipework and a rather large burner at its business end, Photo 5, as well as the necessary piping to connect the burner to a gas tank. Also included was a plastic water tank and a separator, which was almost certainly designed and homemade to fit a specific model as it is of an unusually long and low configuration. This actually makes it significantly less effective as a separator, and as it also seemed to be of a rather small size would probably be better being replaced with a larger upright unit. One thing that was also very apparent from the boiler visual inspection was the fact that the plastic water tank and the sight glass were both heavily stained with some sort of red dye. I can only assume that this had been someone's attempt to achieve a clearer reading from the sight glass, but of course every surface had become stained and exactly the opposite result achieved.

Apart from these points, everything seemed sound and while there was water sloshing around in the boiler there were no signs of leaks, so that also looked promising.

Photo 2. The engine appears to be sound and in good order, something that is not always the case. Spares and support are usually available for such engines if required, but the absence of rust and the liberal coating of oil would indicate that it had been well looked-after in the past. This steam plant also includes a water pump and a displacement lubricator.

Photo 3. All normal fittings seemed to be in place including a correct zero reading pressure gauge connected to a distribution dama.

Photo 4. The sight glass indicated that some sort of experiment with dye had been undertaken which left the glass badly stained. This glass also broke when it was being dismantled, so the decision to replace it was already taken.

Photo 5. A significant large-sized burner indicated the capability to put significant quantities of heat into the boiler. Interestingly as well, the safety valve did not appear to be as equally generously proportioned and might well not be able to cope even if working correctly.











Photo 6. Cross tubes inside the flue indicate a potent boiler, but these need inspecting thoroughly both from the outside and as much as possible, from the inside as well.

Photo 7. Pickling all the parts removes all traces of scale and internal sludge. The pipework and fittings were also pickled to remove internal gunge and the remaining traces of the red dye.

Deeper inspection

The ideal course of action is to get the best possible idea of what we actually had as regards the boiler, so the next task was a strip-down and a good cleaning. All the fittings were removed from the boiler to leave its bare shell, at which point it was discovered that this wasn't just a simple through flue boiler, but it was also fitted with cross tubes,

Photo 6, as well as a rather large circular ceramic burner. All in all, this was clearly quite a high capacity boiler for the size of engine and could certainly provide steam for a much larger unit.



From a boiler inspector's perspective, my concerns are always:

First: what is the quality of the build, internally and externally.

Second: What is its capacity and the working pressure, all this being to enable the bar-litre figure to be properly calculated?

The next task then then was a good clean internally and externally, and so the 'Pickling Procedure', as described in Boiler Room No. 61 of January 2016 MB, was commenced but not just an internal clean as this time we wanted all the fittings, pipework and external surfaces to be 'spick an' span' once again. For this purpose, the acid was prepared in a plastic bucket and the boiler and all the relevant fittings immersed in it for enough time to give them a good 'pickling'. This was certainly effective, as the colour of the water testified before everything was given a thorough rinse after the process, **Photo 7.**

Up until now I have shied-away from certifying boilers of an unknown origin if I am not able to see the quality of their internal structure and soldering. However a very neat little Borescope was recently obtained, a device that plugs into a laptop computer and has a 5.5mm head and LED lighting. This device can be inserted through many boiler mounting bushes and while probably not allowing every internal soldered joint to be inspected, you can definitely see a number of them and get a good feeling as to the quality of the internal structure, **Photo 8.**

In this case I could get to see a number of the boiler's internal cross tube internal joints, the end cover joints and some of the mountings. One could clearly see that the solder had penetrated the joints and all the internal surfaces were sound and clean,

steam basics

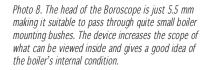




Photo 9. Not the best quality pictures being screen shots, but these give a very good idea of the quality and presence of internal silver soldering penetration and the cleanliness of the normally unseen surfaces.

Photo 10. A simple and very cheap set-up using a home device that has a USB port and the ability to read an external input to produce live internal pictures as well as snap shots of the insides of the boiler. Having now used this equipment, I would recommend them to anyone involved in the inspection of old boilers of unknown origins.



9







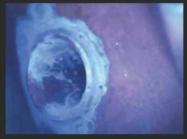


Photo 9. The quality of this last picture is far from stunning, however this was the first time I have ever been able to see anything of the insides of an old boiler and it really was quite a revelation. These Borescopes are also quite cheap in this format, although you can buy a type with a hand-held monitor which is significantly dearer. The Borescope purchased is powered via a standard USB plug so it can be used with any compatible laptop computer or other personal device. In this case, the laptop's camera input was selected and one could see a live feed from the camera as well as being able to use the screen capture facility to take a snapshot,

So now there was a pile of clean pieces and the internal inspection of the boiler had revealed nothing of concern. Two screws had sheared, these having held the end cover of the smoke box in place, so that problem would need to be resolved; the sight glass was not only too badly stained to clean, but it also cracked during dismantling, so it needed

replacing; the safety valve looked to be in a poor state, so rather than mess around cleaning it and trying to get its old tired spring to do the business, this would almost certainly also need replacing as well as a number of seals, such as those on the sight glass and the filling cap.

As to the engine, following a good cleaning, a dose of engine oil externally and a shot of steam oil internally, plus a run on compressed air, this all proved to be very successful so rather than dismantle it all for the sake of it, leaving 'well-alone' was the best option. Basically the only things that can wear on an engine are the cylinder port and control valve faces, piston rod seals and the piston seals. Any leaks from such places can easily be identified in operation so if none are discovered, there is nothing to be gained by pulling it all apart.

Next month we will conduct a pressure test, work out the bar-litre number to determine how the testing regime should be conducted in the future, and start to process some of the remedial work.





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









MM2094 HMS Temerity NOW AVAILABLE

As featured in the Model Boats Warship special



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 Hu	ll Pack
£42.45		
SETMM2094	HMS Temerity Plan & Hull £56.95*	

Online: www.myhobbystore.com/Temerity

Boats READER'S MODEL GALLERY

hy would we want to mess around with a perfectly good model boat kit? Well one of the answers may be in the question, since not all model boat kits are perfect and some to be truthful are not very good at all, but there are several other very good reasons for modifying or customising a kit, some of which are:

- 1) To make something a bit different to the supplied kit. For example, at shows you will see numerous models of the Imara tug, sometimes in different colours but essentially the same. The original Imara was in service for only two years before being purchased and modified by the Royal Navy, and then spent 26 years as Perseverance, so why not convert it to that tug and be different?
- **2)** To build a model of a vessel in its later life by modifying the original kit.
- **3)** To use parts of the kit, such as the hull and some fittings to semi-scratch build something a bit different, and sometimes totally different.



ABOVE: An overall view of all modifications and the new colour scheme.

RIGHT: A full port side view of the superstructure, showing the modified bridge roof, fire monitor and base of the folding mast.



Scaleforce

Phil' Scales modifies the Model Slipway Al Khubar kit

- **4)** To improve on parts of a kit which are not accurate or of a good standard.
- **5)** To create your own unique fleet of craft and personally I have formed the fictitious 'Scales Towing and Salvage Company' complete with its own distinctive livery and have modified some kits accordingly.

Modifying kits is not difficult and can involve cutting and re-shaping the hull, for example from a freighter to a tanker; changing the superstructure using plastic (styrene) card and modifying deck openings. Moving the fittings around is easy and adding more (and corrected detail) is perfectly possible. Last, and perhaps easiest, a repaint in different colours is often very effective. Here we are modifying the Model Slipway Al Khubar kit, not because there is anything wrong with it, but because I wanted something a bit different

The conversion

The Model Slipway kit is excellent, but a bit ubiquitous and dare I say it, in its original form not too good looking. I wanted to build a slightly different tug, fully suitable for tug towing events and the first to be in the livery of 'Scales Towing and Salvage Company' and so Scaleforce is the result.

Starting with the hull, this is an excellent moulding, but the upsweep at the stern was reduced and in view

of its proposed proper towing role and possible bumps and bangs, the anchors were recessed in housings and not left proud of the hull. Proper rubber fenders in channels have also been added to the bow and stern.

The main alteration though was to the driveline components and slightly bigger resin Kort nozzles have been substituted for those in the kit, allowing slightly larger four-bladed propellers to be installed. The rudders have been scratch built to be of the 'Schilling' or 'Fish Tail' style to improve the model's turning performance. These changes are very positive and on a fully charged 6v battery, this model tug produces almost 4lbs of bollard pull.

Other major changes are to the superstructure, which seemed too boxy and old fashioned, plus I also wanted two funnels to go with the two engines. The lower superstructure was given a half-sloping front, a feature of most modern tugs enabling a good view of the foredeck from the wheelhouse. The wheelhouse front was modified with a larger central window and an angled and bowed front. A fully detailed and realistic bridge interior was also installed, in full view of the large glazed areas. The rear window was also enlarged and reshaped between the new twin funnels. The original single funnel was re-modelled into the two funnels to suit the twin engine layout, all with a suitably modified rear superstructure area.

On the bridge roof, two main changes were made: 1) A fire monitor and feed pipes were installed, simply because this is a feature I like, and why not? Second,











ABOVE: The modified and enlarged Kort nozzles and Schilling (Fish-Tail) rudders. The propshafts are also of a greater diameter than those supplied with the kit.



ABOVE: The bridge interior through its windows, all fully detailed with a helmsman.

LEFT: The rear superstructure with the new twin funnels, an amended shape and slope to rear window, plus added detail around the modified tow hook.

BELOW: All three interior access hatches open.





the original tripod mast was made into a folding version with a tabernacle, which can help with storage and transport.

2) The foredeck was altered to take a stout H-Bitt for bow towing and a non slip, pimpled deck covering added. The main aft towing deck is largely the same as Al Khubar, but with a stout H-Bitt added as a tow point with the modified hook being only decorative. Only a single tow bow has been used, rather than two, and a bit of extra detail by way of fire hydrants, fuel filler pipes, a Molgogger and towing pins added, together with fire boxes and deck clutter.

It was painted in a colour scheme of dark blue hull and funnels, grey decks and yellow superstructure, this scheme originally being seen on the Rotterdam harbour tugs and launches, and found to be appealing.

Possible other changes?

If to be done again, one change would be to lower the height of the superstructure box units which are apparently true to scale, but do seem rather high. The lower deckhouse scales out at 8ft high and the bridge at 9ft 4 inches, a total of 17ft 4 inches. This can make the resulting model a little top heavy and the superstructure could be lowered by possibly an inch or so with no detrimental effects. The big benefit though of all this is that when on the water, observers initially think they are seeing an Al Khubar, but then have to do a double-take when they see the alterations. In summary, an easy conversion to a well designed and presented model boat kit.

Kit manufacturer

Model Slipway

Website:

www.modelslipway.com **Tel:** +44 (0) 1226 715576 Kit price: £235 (UK) as of Summer 2016



HMS Dreadnought



Dr. Marcus Rooks' continues with his unique project

o continue the analogy, now that the skeleton had been completed (May 2016 MB), the next step is to deal with the organs and some of the circulatory and nervous systems. I still only had a vague idea about the model's internal layout and basically made it up as things progressed, something we perhaps all do from time to time, but don't care to admit. Starting at the stern seemed

logical which includes the rudders and propellers, both important working aspects of this project.

Steering gear

This was tackled first and a more robust mechanism was perhaps needed rather than the usual model boat arrangement of a direct linkage to a servo.



HMS Dreadnought, the full-size warship, was fitted with a linear motion method of steering, each rudder being controlled by a combined right and left handed screw mechanism





The first attempt with a geared MFA motor, **Photo 1**, was far too fast in its action and controlling
the system was difficult, so the motor was changed
to a worm drive type, giving just 2rpm which turned
out to be far too slow and in fact one could not
now see the rudders moving at all. As always,
mathematics then came to the rescue with some
fresh calculations

conventional linkage would have been simpler....

The linear shaft had a pitch of 40tpi, meaning it would take 40 revolutions to move one inch. If the shaft is turned at 2rpm then it would take 20 minutes



HMS Dreadnought, the full-size warship, was fitted with a linear motion method of steering, each rudder being controlled by a combined right and left handed screw mechanism, so it was decided to follow suit, but use a simplified version and why? Well it was another challenge in the construction of this metal model.

The rudder posts are supported by upper and



Photo 1. The first arrangement of the geared MFA steering motor which was later changed to a worm geared item. The pulleys are for the steering indicator mechanism.

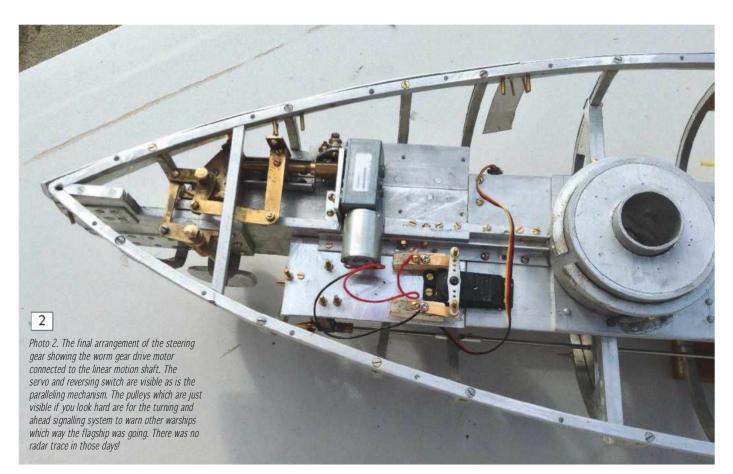






Photo 3. The components of a rudder showing its central core with an 1/8 inch slot which accommodates a corresponding tongue on the rudder post.

Photo 4. A rudder blade showing the slot, the rudder post tongue and 10BA fixing screw

to travel an inch, so no wonder one couldn't see it move. A new worm drive motor unit working at about 100rpm was obtained, so now moving an inch would take about 30 seconds and that unit can be seen in Photo 2. Whilst constructing the mechanism it dawned on me that it would be difficult to tell when it was amidships as the system was not self-centring. HMS Dreadnought had a system of a green ball and a red flag which were attached to the main mast starfish. When travelling ahead they were at the same level. When turning one way the ball would be raised and the flag lowered and when turning the other way the appearance was reversed, thus the fleet could follow the flagship's manoeuvres. The system worked by utilising a continuous loop connected to the steering gear by a number of pulleys and the thought occurred that it might be possible to replicate that system in miniature.

In this model, a continuous line will be connected to the die block and via a series of pulleys be joined to the mainmast starfish. As the die block moves one way or another the ball and flag are moved accordingly, and so it should be possible to follow their movements from the pondside and be able to tell the position of the rudder, just like on the full-size warship and be truly pro-typical.

Rudders

These are made from a sandwich of aluminium plates. There is a central 1/8 inch plate surrounded by two 1/16 inch plates, **Photo 3.** The central core has a 1/8 inch slot to match a 1/8 inch tongue filed on the end of each rudder shaft, **Photo 4.** On completion, a rudder is gently pressed on to the shaft and is secured by a 10BA cross screw, and no need to say, 'keep 'em parallel'!

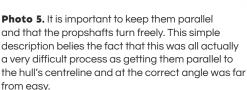
It was, and is, important to make them removable as it may be necessary to withdraw the inner propeller shafts and that may only be done if the rudder blades can be removed. Once completed, unrestricted movement of the steering gear is essential and in practice, a maximum of about 90 degrees total lateral movement should be more than adequate. As with many model boats, it is important that everything is firm and secure, since when completed this will all be covered by the quarterdeck (albeit removable with some effort), and the interior will not be easily accessible.

Propellers and their shafts

HMS Dreadnought had four of them and they were quite small, this being because the warship did not have reduction gearboxes, having Parsons direct drive steam turbines. On the model, the propellers are commercial products and are small. Looking from the stern forwards, the port pair are left handed and the starboard pair are right handed which makes for a stable arrangement, but made installing the turbine motors later a bit tricky, but more of that in another article. The propshaft bearings and supports are fabricated from brass turnings and strip material which have been silver soldered together as they have to resist quite a lot of lateral energy. They are all firmly anchored into the hull's framework as per the original vessel,







Some of the hull frames had to be filed to give adequate clearance for the propshafts and initially the thought was that an error had been made, but when studying HMS Dreadnought's full-size arrangement, the propshafts are indeed slightly recessed into the hull, which cheered me up no end, as it showed that things were pretty much on course.

Main turrets

How would the turrets rotate? Could they all be linked or should they be moved independently?



In the end, as always, a compromise was the conclusion. The port and starboard beam turrets would be left fixed as it would be very difficult to get them to move synchronised with the forward and aft centreline turrets, and in the end only A, X and Y turrets traverse. The decision was also reluctantly made not to make the gun barrels elevate, as this would also be difficult to arrange. Power for the traversing turrets comes from the same type of worm drive motor that powers the steering gear, but here the 2rpm output motors seemed to be ideal, so the investment was not wasted, **Photo 6.** The three motors are controlled by a single servo activating the same type of reversing switch as for the steering mechanism, Photo 7. The motors are wired so that the fore and aft turrets all train in the same direction when firing a broadside and this was another problem solved.

Photo 5. This view from starboard shows how small the scale propellers actually are and how the propshafts are indented into the frames.

Photo 6. A 2rpm worm geared motor is attached to the underside of the fore deck and provides traversing movement for A turret. There is a similar arrangement for X & Y turrets.

Photo 7. The aft gun deck showing the servos and switches that operate;

- 1: The turrets
- 2: The steam regulator.



10



Photo 8. The first stage in condenser construction was the opening up and flattening of the copper tube. This was matched to the shape of the end

Photo 9. The component parts of the condenser before final assembly and silver soldering.

Photo 10. Further stages in construction of the condenser. The central section with the cooling tubes has now been silver soldered into place.



up to the job and will inevitably fail. Always use the

Photo 11. The flat top of the condenser has four fixing lugs that are used to hold it to the underside of the aft deck.

Photo 12. The completed condenser after final silver soldering; this shows the collection trap and discharge for the steam condensate. Yes, it looks a bit messy, but it still has to be 'pickled'.

Pressure vessels

12

HMS Dreadnought was starting to become technically ever more interesting now as the steam plant would need a number of containers for the condenser, compressed air, feed water and gas tank, or possibly for paraffin, as I hadn't made up my mind at this time as regards the fuel to be used. They are all made from various diameters of copper tubing, their individual parts being silver soldered together as they would be subjected to heat and pressure, the exception being the feed water tank as this has neither. A note of caution here when using copper tubing for pressure vessels. Under no circumstance use any old piece of copper, such as commercial plumbing copper tube, as it is not

correct grade of copper that is available from the usual established and well-known model engineer suppliers.

The condenser

This is of the surface variety and has previously been described as a simple keel condenser in an earlier model of the Japanese aircraft carrier Shinano, but something a little more realistic was required for HMS Dreadnought. It is constructed from copper tube, the main body being turned into a D shape as shown in **Photo 8**, this being necessary as it was the only way it could be fitted into the space immediately beneath the aft deck above the propshafts.

It is divided into three compartments and Photo 9 shows the main parts of it and there is a small void either side of the centre tubed part as in Photo 10, which is of one end. The exhaust condensate passes into the central section and is condensed by cold water being pumped through the smaller copper tubes. This cooling water is pumped from the pond and is eventually discharged to the outside as it is uncontaminated by oil. The condensate though is pumped back to the feedwater hot well to be reused.



Photo 13. Testing the three pumps and all seem to be pumping furiously!

Photo 14. The pump sub-assembly. The red pump is the high pressure force feed pump and the remaining two are the circulatory pumps. They are all powered by an electric motor driving a single eccentric as shown.



The condenser has its flat side of the 'D' secured beneath the deck and four fixing lugs were added for this purpose. **Photo 11 and Photo 12** are of the completed unit, again looking a bit messy as it was awaiting 'pickling'.

Pumps

To work the power plant system, three pumps are required and all are driven by a single eccentric from a single geared electric motor. The first is a high pressure water pump to provide feed water to the boiler and which can pump at over 80psi, it actually being a converted hand pump from a previous abandoned project, the moral being to never throw anything away. The two remaining pumps cater for the condenser and are commercial air pumps that are usually used to provide an air supply to aquarium tanks. They can pump a vacuum, which is ideal to drain the exhaust steam and can also pump water as well, which is ideal for the cooling side of the condenser. Photo 13 is of the three pumps doing what they are supposed to do and Photo 14 is a view of the pump unit at rest. You can also see that the earlier unwanted MFA geared motor has not been wasted, but I have to be honest as I had never used these pumps before and keenly waited to see how they would perform.

Compressed air reservoir

This provides air for the firing main guns and is part of a system that has been tried and tested on HMCS Snowberry and IJN Yamato, but the concern was whether or not it could provide enough air for the six firing gun barrels, the two wing turrets with their four guns not functioning.

The reservoir tank was fabricated in much the same way as a gas tank and pressure checked, **Photo 15.** It is positioned beneath the forward deck and has two connections, one incoming from a Schrader valve and the other to the guns. The Schrader valve is adapted from a standard car tyre valve and its outer rubber casing was stripped away leaving the brass central core which was then cleaned and connected to the inlet tube. For an On/Off valve, aquarium supplies once again provided the source. A valve that provided



Photo 15. The air reservoir is of a simple construction from silver soldered copper. The two fittings act as the inlet and outlet and also as supports holding it beneath the deck.

Photo 16. One of the nice little aquarium stop cocks that were used in the compressed air system.

Photo 17. Close-up of the completed air reservoir manifold.

immediate full opening was needed, basically a 'plug' sort of valve, that would release the pressure in one mass rather than it slowly bleeding out of the tank. You can get them from model engineering suppliers, but they are horrendously expensive. Anyway, some were discovered that are used as stop valves in aquarium tank air lines, Photo 16, and a batch of 10 could be had for next to nothing - thank goodness for the Internet. How airtight they would be was not known, but on testing they actually proved to be 100% sound. One was used as the main On/Off supply and three to supply each turret, the manifold being shown in **Photo 17.** This means that depending on how much air is needed, the supply can be diverted



20



Photo 18. Early stage of the water tank construction showing the central semi-divider which acts as an oil separator.

Photo 19. The two water tank end caps are held together here by a brass spacer ready to be inserted and soldered to the tank's outer wrapper.

Photo 20. End cap in place ready for final silver soldering. The threaded holes are for the various

Photo 21. This shows the base of the tripod main mast - there is nothing exceptional about it, the tripod being formed from aluminium tube. This mast is the smaller of the two on HMS Dreadnought.

Photo 22. At the forward tripod top, the foremast struts are held in place by the small searchlight platform They are held slightly away from the central mast.



as necessary.

This is a simple affair fitted beneath the deck and it includes a mid-line semi-partition which acts as an oil separator, Photo 18 showing this whilst under construction. Photo 19 is of the two endplates and **Photo 20** is the complete unit awaiting final silver soldering and testing. Basically, the returned condensate water is directed to one side of it and any oil floats to the surface to be discharged through an overflow into the receptacle and the partition keeps this oil separated from the clean water. The main water take-off is on the other side, which is oil-free, all very simple but effective. Whilst working on all these systems I started on some of the superstructure as working out the various operating functions made my brain ache(!) and a little distraction was needed.

Start of superstructure

It was surprisingly difficult to work out the exact arrangement of the superstructure as the drawings were difficult to interpret and computerised drawings were relied on heavily, the problem being though that they were not dimensioned. The deck

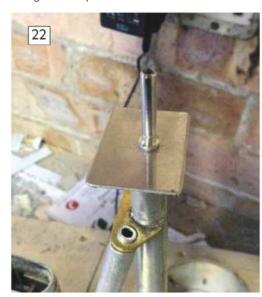








Photo 23. The larger second funnel under initial construction showing the central tubes held by aluminium spacers. These tubes will carry exhaust gases away from the boiler room and allow fresh air to enter.

Photo 24. The funnel's outer wrappers have been formed from aluminium sheet.

Photo 25. The funnel's top bonnets are fabricated from aluminium sheet and this one is now ready to be attached to the top of one of them.



is created from a number of sections, screwed to the main hull frames. They can all can be removed, albeit with difficulty, except for the centre section which is easily removed for access to the machinery.

HMS Dreadnought had two tripod masts, a very prominent fore mast and a much smaller main mast. They are constructed using a similar method, their principle sections being from aluminium tube,

Photo 21, this picture also showing the part completed forward funnel (far left). On the fore mast at its top, they are joined by the searchlight platform which keeps the support struts separate from the main central unit, Photo 22. The main mast is slightly different in that the support struts are dovetailed into the central unit and held in position by 10BA screws. Both tripod masts are securely attached to the hull using support sockets. They are quite large and vulnerable to an errant or rogue elbow and so have to be robustly constructed.

The funnels are/were more of a challenge and are very distinctive in warships of this era, and HMS Dreadnought was no exception. She had two of them, a smaller forward one and a larger one aft. Like the tripod masts, once broken down to

constituent parts, the task of creating them was not too difficult. They are both constructed around two central tubes, **Photo 23**, that support an outer casing. This is the aft larger funnel and has copper tubes, one for discharge of waste gases and the other as an inlet for air to the boiler space. The funnel's outer shells are fabricated from rolled and worked aluminium sheet as in

Photo 24.

There are quite prominent bonnets and flared bases on both funnels which proved awkward to fabricate, but in the end they were made from aluminium sheet that was flanged to the required profile, **Photo 25.** At this stage they were just basic funnels, and there is still much detail work required, but if you refer back to Photo 21 you can see how the forward funnel was shaping-up. This forward (smaller) funnel is a dummy and actually has aluminium tubes inside it, but the aft and much larger funnel is fully functional with the two

Photo 26. Close-up of the fuel and water tanks with the pump drive motor between them.



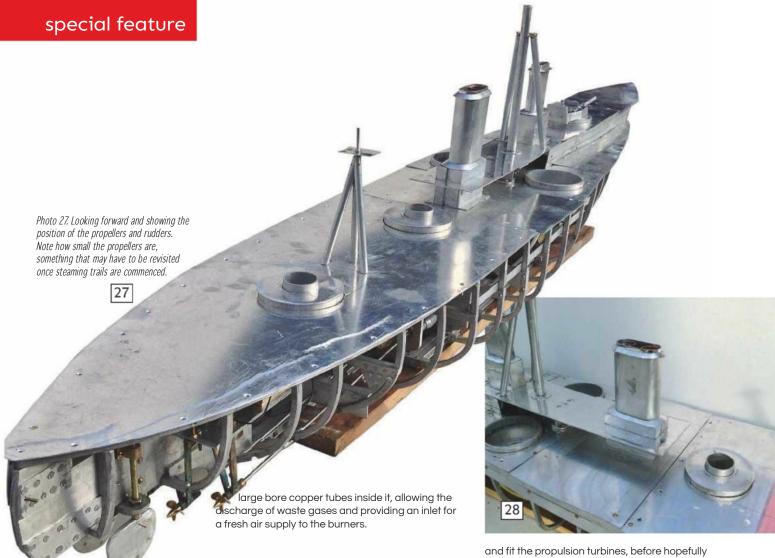


Photo 28. An amidships view of HMS Dreadnought. The large funnel will function, but the forward smaller version is a dummy.

Photo 29. An overall view of the model with the start of work on the forward turret. The warship had noticeably a finer forward part, with the bulk of the hull around the machinery and wing turret area.

ConclusionThis article was drafted in March 2016 and so far construction had taken four months. Would I be able to complete this HMS Dreadnought model in a year? The last month of work had been a hard slog as a number of parts had to be machined and/or fabricated which was time consuming, but now that these are chiefly behind me I hope that progress will accelerate, but there is still a long way to go. Photo 26 (on Page 51) is of the forward section of

tanks, plus the pump drive motor and all a bit of a squeeze it has to be said. Looking from aft is **Photo 27** and **Photo 28** is a view amidships. Finally to complete this sequence is Photo 29, a general view of progress thus far and

the hull from underneath with the fuel and water

the initial work on the forward 'A' turret. Next on the schedule is to build the two boilers plating the hull and I have been experimenting a little with this to find the best way of doing it. It would not be impossible to fit out HMS Dreadnought if the $\dot{\rm hull}$ had been plated earlier during this project, but it is much easier to fit into a hull the major internal components if you have a clear view though its framework.

The muscle of a warship is of course the main armament and a start on this is next on the agenda, the 'how to have at least some of it working' plan already fermenting in my mind. In the next instalment I hope, and I stress the word 'hope', this HMS Dreadnought model will be on the water, at least so that it can be checked for leaks and trim adjustments, but will it actually float? You will have to wait and see!

Enjoy your hobby - Marcus Rooks









Seaforth Publishing

BOOKS FOR ALL THOSE PASSIONATE ABOUT SHIPS AND THE SE

BRITISH BATTLESHIPS OF WORLD WAR ONE RABURT

This superb reference book achieved the status of 'classic' soon after its first publication in 1986; it was soon out of print and is now one of the most sought-after naval reference books on the second-hand market. It presents, in one superb volume,



the complete technical history of British capital ship design and construction during the dreadnought era. Fully detailed data tables are included for every class, and more than 500 photographs and line drawings illustrate the text.



HMS TRINCOMALEE 1817, FRIGATE

WYNFORD DAVIES & MAX MUDIE

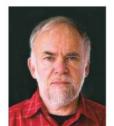
HMS Trincomalee belonged to a class of 38-gun Fifth Rates which can claim to have been the Royal navy's standard frigate type for the whole of the Napoleonic Wars. Built in India of teak, she is now beautifully

restored at Hartlepool, and can justly claim to be the last of Nelson's frigates. As is the case for many historic ships, however, there is a surprising shortage of informative and well illustrated guides, for reference during a visit or for research by enthusiasts - ship modellers, naval buffs, historians or students. This new series redresses the gap.

ISBN: 9781848322219 • 128 PAGES • PAPERBACK • £14.99 £11.99

Buy your books online today at: www.seaforthpublishing.com
Or telephone: 01226 734222 (Quote: MB1015)
Also available in Waterstones and many other high street bookshops
Maritime book proposals are always welcome:
Info@seaforthpublishing.com

Flotsam & Jetsam



John Parker delves into the archives

42: Shipping Wonders of the World

he concept of a multi-part magazine series on a single subject is often thought of as a modern one, but the idea goes back much further than this. In 1935 and 1936, Railway Wonders of the World was published by Amalgamated Press Limited and told the story of the development of railways in 50 weekly installments. Its success led to our subject, the series 'Shipping Wonders of the World' which immediately followed it into print, the first instalment appearing on Friday 31st January 1936, price 7d (seven pence, pre-decimal).

Over 55 weekly instalments through to 23rd February 1937, Shipping Wonders of the World, told 'The Romance of the Seven Seas, in Story and Picture'. It was an epic publication that built into a 1764 page reference work with over 2000 illustrations including 108 in photogravure (high quality reproduction) and 28 in full colour, edited by Clarence Winchester. There were some 32 pages to each magazine, which adopted a large format approximately 207mm x 278mm. Readers could, once they had collected the whole set, send them off to be permanently bound in two blue-coloured volumes for the reference library. This is the form in which most survive today, though it is still possible to collect the individual magazines which retain their colourised photographic covers (except for Part One, which featured an artist's impression of the RMS Queen Mary). In addition, there was a rarer deluxe edition by the Waverley Book Co Ltd, an associate company of the Amalgamated Press, which was printed in four volumes of a more manageable individual weight, and this is the edition became Assistant Chief Editor at Cassell & Co. for 1925 to 1927 and then became Chief Editor of the Amalgamated Press where he was responsible for these various Part Works as well as having involvement in many other magazines. He was aided in all this by two consulting editors, Frank Bowen and A C Hardy, as well as a dozen or more authors on specialist subjects and illustrators. The content of Shipping Wonders of the World was organised into several themes which ran throughout the work, providing a variety of material for readers of the weekly magazine. The themes included, for example:

The World's Largest Ships, Epics of Exploration, Merchant Ship Types, The Navy Goes to Work, Marine Engines and Great Ports of the World; these were supplemented by articles on specific topics such as Fishery Protection, Cable Laying, Ship's Guns and Signalling, to name just a few out of a hundred or more. Photographs and illustrations were well chosen to support the text as much as possible.

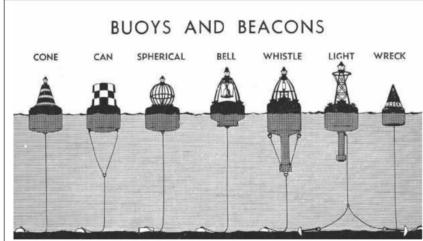
The work portrays the very different era of just eighty years ago. Though in 1936 re-armament was underway for a war that many saw inevitable and the effects of The Great Depression were still being felt, the shipping world as glimpsed by the magazine is an altogether more idyllic one. Britain still had about a third of the world's merchant fleet, trading throughout its Empire and the world, all kept safe by the Royal Navy. One in three new ships came from British shipyards and there was rivalry between seafaring nations for the fastest or most luxurious ocean liner; epic voyages were being made by tiny craft; merchant ships of recognisable types proudly carried the colours of their owners; vast port engineering projects were planned without the bother of environmental impact statements, and it was possible to write of the 'romance of the trade routes' without a trace of irony.

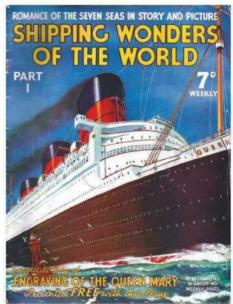
BELOW: Announcement of Shipping Wonders of the World as Railway Wonders of the World finished

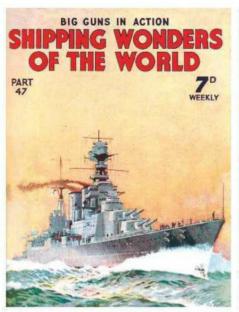
RAILWAY WONDERS OF THE WORLD CHARLES OF THE

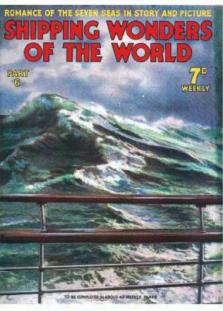
Clarence Winchester

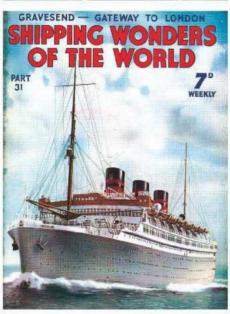
Clarence Winchester wrote on aviation developments for the Daily Mail (he learnt to fly in 1913),

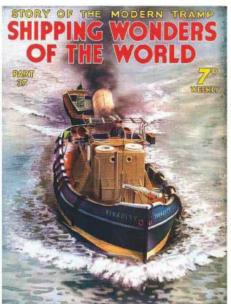


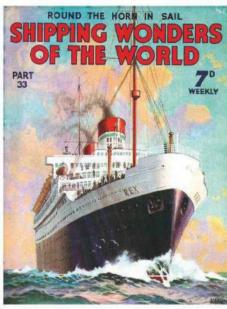








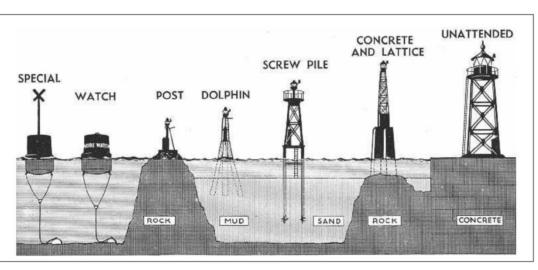




Famous liners

This was the era of the great Atlantic liners and the national pride and rivalry that accompanied them. Part One includes an account of the building of the RMS Queen Mary, then just entering service and soon to capture the Blue Riband for the fastest Atlantic crossing averaging 30.38 knots. The RMS Orion had been launched just over a year before

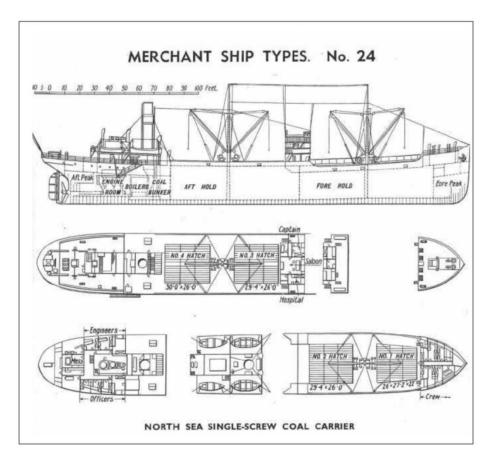
for the Australian service, the largest and newest Orient liner and symbolised incremental evolution in ship design. Eschewing the visible excesses of streamlining and the glamour of Elizabethan smoking rooms, she was a no-nonsense, efficient ship that nevertheless incorporated a number of innovative features, the most controversial being that she had only one funnel, because 'she needed



ABOVE: Some typical covers.

This was the era of the great Atlantic liners and the national pride and rivalry that accompanied them

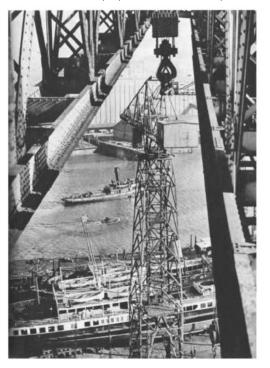
LEFT: Buoys and beacons illustration.



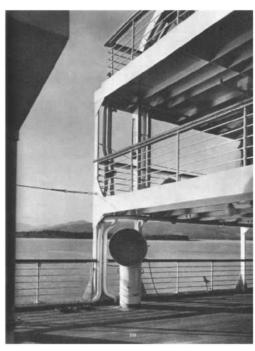
ABOVE: Drawing of a typical coal carrier.

only one funnel'. We learn that two sets of Parsons turbines turn at 1715rpm to provide 24000 shaft horsepower and a speed of 21 knots; each turbine blade was 8 feet long, and weighed 3.5 tons.

This was all in stark contrast to another liner, the ill-fated Normandie built for the trans-Atlantic service of CGT, the French Line. Every aspect of the design made her a showpiece of the French nation, from the all-electric propulsion to the hull shape and



RIGHT: A Clyde dock yard scene.



ABOVE: On the main deck of the Orion.

the opulence of its dining rooms. In an attempt to avoid the vibration caused by reduction gearing and enable the power plant to be spread over the base of the ship, four turbines drove generators totalling 133600kW, which in turn drove four electric motors totalling 160000 horsepower for a normal service speed of 28 knots. To allow a cleaner and sleeker design, all the usual deck clutter of ventilators, fans, winches and so on, was hidden by the superstructure. In 1937 she was to briefly capture the Blue Riband from the Queen Mary, averaging 30.58 knots.

The Normandie had three funnels, but the third one was a dummy. It housed mainly dog kennels, perpetuating a tradition of dummy funnels in ship design and providing a surprising example of form not following function. Perhaps the barking of the dogs was funnelled up and away? The article tells us that 'all the wood panelling is asbestos lined, and all the furniture is fireproof', but sadly this did not prevent this magnificent vessel catching fire and being destroyed during conversion to a troop ship at New York in February 1942.

A fine reference work

If you've ever wondered about dredger design, the difference between trawling, drifting or seine fishing, how to signal 'Expect to arrive Liverpool Tuesday', how mines are laid, the Suez Canal was built, a battleship salvaged or its gun barrels made, you'll find the answer within the pages of Shipping Wonders of the World. It is fully indexed and has a glossary of sea terms. However, more likely you will find yourself just browsing until you find an item of interest from this snapshot of the 1930's shipping world, and perhaps a source of reference material if you are building a model of this era.

Shipping Wonders of the World was followed by the 53-part Wonders of World Engineering in 1937-1938, and the 40-part Wonders of World Aviation in 1938, all to the same successful format, but by then the world was on the brink of a war that would see over 6000 ships sent to the bottom and countless loss of life, and for some time it was difficult to speak of the romance of the seven seas.



2016 Metropolitan and Southern District Marblehead Championship

Roger Stollery reports

hanging winds was the story of the day at Guildford's Abbey Meads Lake on 5th June 2016, causing the control area to be moved halfway through to match the northerly and then easterly wind directions. There was keen competitive racing throughout the fleet, with many close finishes. Eleven entries from eight clubs enjoyed some really close racing in which there were eight different winners in the 17 races sailed. The initial light to moderate A Rig northerly winds provided good racing over a long windward leeward course parallel to the west bank control area.

The racing

In the morning session the two most successful skippers were Dick Jobbins, sailing a Martin Houlton designed CONSTELLATION II and John Smith sailing a QUARK, with two wins each. Other winners included John Shorrock also sailing a QUARK in Race 2, John Cleave sailing his SKALPEL 14 in Race 6, Les Thorn sailing a PARADOX in Race 7 and Martin Crysell sailing a PRIME NUMBER in Race 8. John Smith was at the top of the lunchtime leaderboard with 28 points, closely followed by John Shorrock with 29 and Martin Crysell with 30 points.

During the lunch break, the wind became much more easterly and in Race 9 in the afternoon session there were lots of holes and swirling winds making the north-south course unacceptable. However, Dick Jobbins skillfully picked out the wind shifts in that race to get his third win.

The Race Officer, Roger Stollery, then moved the whole operation to the south bank control area and re-laid the course to suit the developing east north-easterly wind direction. Alan Viney sailing a PRIME NUMBER made the best start and won Race 10, whilst John Cleave was getting some consistent results and in Race 11 scored his second win. The next two races were won by John Shorrock, but not





ABOVE: The fleet is racing!

RIGHT: The 2016 M&S Marblehead Champion, John Shorrock (right with Roger Stollery, left) the best start in clear air

by much because in Race 13 the chasing pack of 7 boats crossed the finishing line within a couple of seconds. John Smith kept up the pressure by winning two of the last three races, only interrupted by Alan Viney scoring his second win in Race 15.

However the Manor Park skipper's four wins was not enough to overtake John Shorrock who was very consistent, not dropping below fifth in any of his counting races and so becoming the M&S District Marblehead Champion. The final race was won by John Bennett sailing his modified and upgraded PARADOX.

At the prize-giving, the Race Officer thanked the competitors for their co-operation in moving all their gear to the other bank and for their sportsmanlike behaviour on the water. In turn, competitors thanked Roger and assistant race officer Keith Parrott, for putting together a good championship and despite the difficult conditions they said that they enjoyed the racing.

LEFT: Tacking off the bank at Abbey Meads Lake. RIGHT: Dick Jobbins No. 86 makes the best start in clear air.





Results			
Position	Name	Club	Boat
1st	John Shorrock	Datchet Water	QUARK
2nd	John Smith	Manor Park	QUARK
3rd	Martin Crysell	Guildford	PRIME NUMBER
4th	John Cleave	Ryde	SKALPEL
5th	Dick Jobbins	Solent	CONSTELLATION II
6th	John Bennett	Eastleigh	PARADOX
7th	Alan Viney	Guildford	PRIME NUMBER
8th	Les Thorn	Hawley Lake	PARADOX
9th	John Townsend	Guildford	UPROAR
10th	Colin Walton	Manor Park	STARKERS
11th	Peter Popham	Three Rivers	CREAM CRACKERED



The Lisbon Maritime



Anthony Addams visits this classic museum and examines Portuguese traditional craft

istorically, Portugal looked to the sea for exploration, trading across the oceans as well as coastal fishing and local transportation. Having frequently travelled around Portugal, I have been fascinated by the colourful and imaginative designs of the traditional craft that can still be seen afloat around its coast, as well as the boats preserved in museums, or seen as models at various museums.

Lisbon Maritime Museum

The magnificent Jerónimos Monastery (or Hieronymites Monastery) was completed in 1601, **Photo 1**, and is the current home for this museum, where great vaulted rooms set off a super collection of beautifully displayed models, as well as other maritime artefacts. It is a real pleasure to see the models displayed in new large glass cases with comprehensive descriptive text and frequently with associated pictures or paintings. The museum celebrates Portuguese discoveries and commemorates Henry the Navigator, famous for his navigation school from 1420 and for their ship

design as well as the mapping of South America and beyond Cape Horn to India and Japan. You can read more about Portuguese discoveries on Wikipedia to appreciate how they were pioneers of the opening up of trade to the Far East and to South America.

There is an entry charge to the museum which has a nice shop and café, whilst outside are gardens leading down to the River Tagus and other attractions. Lisbon itself is a lovely city with much to offer to visitors. The Lisbon Maritime Museum itself is a really good museum, thoughtfully laid out and well worth a visit and I hope the following photographs of it and the surrounding area give you a taster of what is on offer.

Website

There is a fabulous set of pictures of some of the models and full-size craft at this museum on the world wide web:

www.wefalck.eu/mm/maritime/lisboa/ MuseuMarinha-Navy.html





special feature

Gunboat Chaimite, Photo 2.

Built Lisbon in 1898 by Parry & Sons, this ship was 41 metres long, displacing 341 tons with two steam engines giving a speed of 11 knots and two Hotchkiss guns.

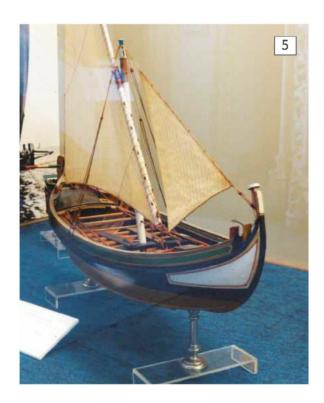
Square rigged caravel, 16th Century, Photo 3.

The lateen rig was perfected by the Berbers of North Africa with their splendid xebecs. Henry the Navigator perfected the caravel with the lateen rig to sail faster and closer to the wind. Here, In this later Portuguese ship, you can see the lateen rig on three masts with the further development of an added square rig sail on the foremast, to give greater speed on the long voyages to the East, during which winds blow more constantly from astern.

Large landing craft Bacamarte LDG 203, Photo 4.

Built in 1985, this warship has seen military service in combat support, pollution cleaning and diving services.

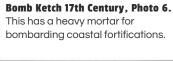
Museum





A Cule type boat, Photo 5.

This was a small Varino used in the Upper Tagus River for the transport of salt and other goods.

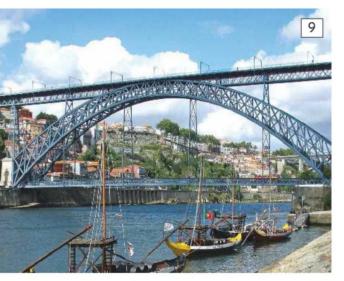




special feature



Moliceiro, Photo 8. These commodious, flat bottomed, shallow draught, double ended vessels had an accentuated curvature at their bows and sterns. A square sail was the only source of power, apart from using a punt pole. They were used for the gathering and transport of submerged vegetation in the vast inland lagoon at Aviero, 150 miles north of Lisbon. Salt and general cargo were also transported on these craft. The bows and sterns were decorated with pictures relating to family life.



10

The Big Barge, Photo 10. Seen here in the Modern Barge Pavilion of the museum is The Big Barge, built in 1728 for King Joan V. She is the oldest Portuguese preserved boat and was crewed by 80 oarsmen. In 1957, Queen Elizabeth II was transported across the River Tagus on this barge, the last time it was used afloat.



Madre de Deus (Mother of God), Photo 7.

This ship was a 'Nau' built in Lisbon in 1589 and employed carrying cargo from the Far East Colonies. Unfortunately for the Portuguese, in 1592 Sir Walter Raleigh intercepted the ship off the Azores, using three vessels to capture it and sail her back to Dartmouth. The value of the fabulous cargo on board at the time was equal to half of all the Crown's Treasury Reserves then held in London. This vessel was very large and advanced for the time, having a length of 165ft, 32 guns, 7 decks, a main yard over 100 feet long and stowing up to 900 tons of cargo, which included jewels, pearls, gold, silver, fine cloth, 45 tons of cloves, 425 tons of pepper, 35 tons of cinnamon, 15 tons of ebony and much more.

So, as you have guessed, this was probably the greatest value ever of captured cargo. It seems that the English had not realised the source of the great wealth the Portuguese were bringing back from India and beyond until this ship was captured. As a result, this set off the desire of the English to trade in the Far East and to set up the East India Company. Amongst the captured cargo were also secret papers about the sources of the valuable trade and the relevant human contacts. Please bear in mind that at that time, maps and charts of distant places were valuable state secrets and normally kept well secured, so these were an added bonus for the English. For comparison, Raleigh's ship Ark Royal was 103 ft. long, gross tonnage of 800, with a crew of 400 and that is about the same size as the Mary Rose, if you have visited that preserved ship in Portsmouth.

Preserved Wine House boats. Photo 9.

Today, the Port Wine Houses (such as Sandeman's Port), retain a boat for display and tourist trips and these preserved craft are moored on the south bank of The Douro. Cafés add to the attraction of the quayside where a visit to a port wine warehouse for a sampling exercise can be a good choice! Transport of port wine nowadays though, is by road or rail.





Bute do Rio Tejo, Photos 11 and 11A.

This is a typical Tagus River working vessel used for the transport of general cargo and passengers. The Tagus River rises far away in central Spain and just before reaching Lisbon, it opens out into an enormous shallow lagoon before narrowing again to enter the Atlantic. Around the lagoon were numerous towns and villages and access on the poor roads from Lisbon to the towns on the south bank was a journey of 100 miles or so, and took a long time before the great bridges were built across the river, and therefore boats were used extensively.

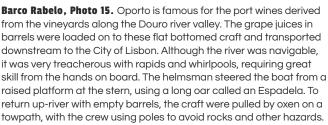
Meia Lua, Photo 12. Meaning 'Half Moon', these colourful craft were launched from sandy beaches on the Atlantic Coast where breaking waves meant the sharp high bow and stern easily parted the waves. These craft varied in size from the small to substantial, with crews from 4 to 20. They were rowed out to sea for the fishing of sardines, tuna and other catches. The larger boats were pulled up the beaches or down to the sea by oxen. The museum has models as well as full-size preserved craft.





Muleta de Tagus, Photo 13. This is a trawl fishing boat from the River Tagus and its use can be traced from the 17th Century right to the 1920's. Although the rig of these craft may look absurd, the main sail is a lateen rig for close sailing to the wind. The various added sails allowed fine trimming of the speed of the boat through the water to suit the ideal conditions required for the trawl net. The curious spiked bow is a purely decorative feature.







Fishing boat at Alvor, Photo 16.

To illustrate the colourful boats still to be seen today in Portugal, this is a lovely example of the type.



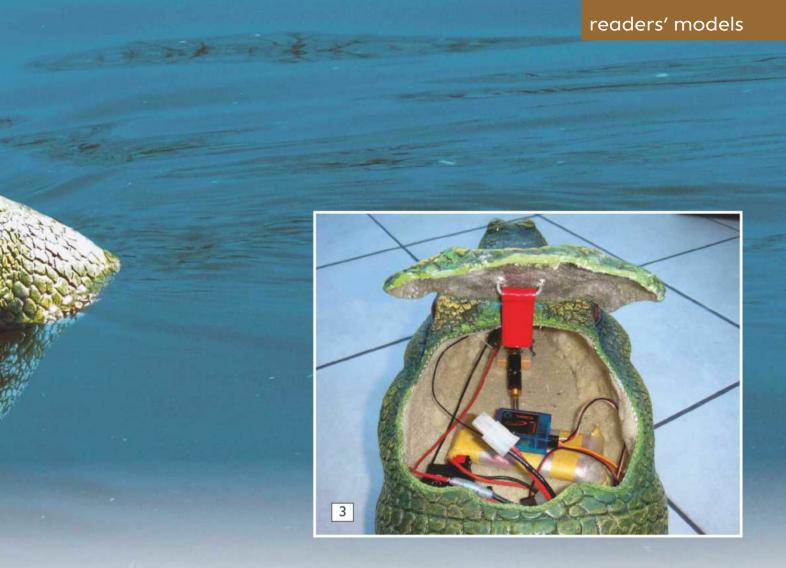
Preserved afloat Moliceiro, Photo 14.

Here we see some typical decoration on preserved full-size craft. In an April 2007 MB article, I described making a model of a Moliceiro and setting it within a diorama.



Nazaré boat, Photo 17. I have a soft spot for this unusual small open boat as on visits to Nazaré I have observed these traditional wooden craft often just rotting away and uncared for. Their high bow parted the Atlantic breakers as they were launched from the sandy beach. Nazaré itself is famous for the 2015 record of surfing a wave 108 feet high, so you can why the boats have been designed as they are.





Two holes, one for a short propshaft and another for the rudder, **Photo 2**, were the only invasive procedures needed to fit into Big Al's skull a 400 type of brushed motor, 7.2v battery, esc and a 2.4Ghz receiver, this being the obvious choice for control as it does not require an external and visible aerial.

A simple hinge enabled the cut-out piece of the skull to be re-fitted to open and close, before gluing a short section of nylon cord around the opening which nicely filled the gap created by the cutting-out process. This cord was then painted green to match the pre-painted scaly skin and it does hide the joint nicely, **Photo 3.**

On the water?

The alligator head suffers no water ingress, as Big Al sits surprisingly high in the water, not surprising really as it was designed to float anyway. He, well I call Big Al a 'he', looks great thanks to its realistic moulding and semi-gloss finish for that 'just been wet' look and an extra coat of gloss varnish on his





eyes enhances the glassy stare, Photos 4 and 5.

Big Al has a surprising turn of speed and direction on the water due to its flat hull-like form and is particularly effective in murky pond water where the lack of a body doesn't show. I love the fact he looks great when cruising slowly pushing a small bow wave just like the real thing, but is equally menacing if completely stationery awaiting his prey.

And as for warding off the ducks? Big Al is I am sorry to say, completely useless for this, as for some reason the ducks in Derbyshire don't appear to have seen an alligator before and completely ignore him.

Enjoy your hobby - Andy Cope.



Fantail Launch

Kenneth Ruxton's scratch built launch

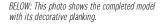
fter work one day 20 years' ago, my older brother decided to build a model of a fantail river steam launch with a working steam engine from the Heritage Steam Engine Co. and when he showed me the article in the magazine from which it was going to be derived, I knew it was going to turn out to be fantastic, and so it was. However, while he was building his Fantail launch I was building a tug and was going to use the same size Heritage Steam engine, and so this became a bit of a challenge, the aim being to build both models and race them on our local Van Cortland Park pond.

My brother built his Fantail boat so well one would feel bad putting it on the water and never mind running the steam engine, but the race was on which in the end I won for some reason or other. It is possible that the flat back underside of his fantail boat caused it to drag slightly in the water, but nevertheless the 'displacement' tug was the winner by a boat's length. Anyway, this was the motivation to build a Fantail launch for myself, and so I have, albeit it 20 year's later, but the wait has been worth it.

This model

The overall length and beam of my brother's model was 20 x 8.5 inches and those are the overall dimensions of this model, but the rest is guess work and the model construction is also different.

First, two 3 inch wide balsawood sheet boards were held together along their narrow edges with Sellotape (just like book pages) and then after folding the two boards together, a round tin was







ABOVE LEFT: This shows the Heritage Steam Engine, non-functioning in this example.

ABOVE: A bow view showing the decorative sun symbol on the foredeck.

used as a template to draw a semicircle for the back curve of the fantail boat and a smaller curve for the bows. Once opened out, the two boards now had the full shape of the fantail from a vertical upwards underneath view. By simply repeating this process, the top of the hull was also created, having the same length and width of the bottom section, but with an opening cut in it. Two ribs were then cut to size, having a slight vee shape on their lower edges and a curve on their tops, but overall matching the width of the upper and lower pieces. Two strips of cut balsawood front to back helped keep the top and bottom pieces apart and at the right inclination and this whole framework was held together by tape before being permanently bonded together with Superglue. This main structure of the hull, without the keel, took about as long as it has taken to write this paragraph.

The outer vertical sides were then planked from stern to bows with a light pinstripe wood alternating with wider dark wood strips, also it has to be said, all completed in a very short time. The bottom of the hull was planked with dark wood strips, although admittedly it did all look now a bit like a Chinese Junk, so a 'sun' effect was created on the foredeck deck using light and dark wood veneers.

This basic hull was sanded to a smooth finish before the rear keel was added using an upper and lower long plank of solid wood but filled in between these pieces with vertical coloured planks as the photos show. An internal balsawood coaming & bulkhead was made around the inside of the top cutout and then laminated with a hard wood veneer, which was then varnished and painting the flat bottom of the hull white gave some external contrast.

The canopy is from an unbuilt African Queen kit and the running gear, railings and anchor are from an equally unbuilt American Coast Guard Cutter model. The four, somewhat spindly tyres are from a diecast model car, sprayed white. The entire model has been generously sprayed with clear varnish to complete the overall finish.

The Heritage Steam Engine looks great, but is not fully assembled as this has been intended to be a static model, but yes, it does float. Total time to build, paint and varnish was 14 day's worth of evening spare time, and it does make for a nice display model that is a bit different.

Enjoy your hobby - Kenneth Ruxton



you to build including: Scale 1:200 - Full Hull HMS Lion..... HMS Good Hope..... .£33.95 HMS Prince of Wales...£51.95 HMS Matabele.....£25.95 USS Missouri £59 95 SMS Moltke. Tirpitz. £58.95

Admiral Hipper..... Scale 1:400 - Waterline HMS King George V....£12.95 HMS Dreadnought.....£10.95 £11.95 HMS Exeter.. HMS Ajax..... HMS Sheffield ..£11.95 ..£10.95 HMS Belfast £11.95 HMS Cossack & Lance £10.95 £11 95 RMS Queen Mary RMS Mauretania... £25 95

Gneisenau Raider Atlantis £18.95 Send your order with cheque/PO/credit card details to Marcle Models (MB7), Turnagain, Finch Lane, Amersham, Bucks. HP7 9NE, England Tel/fax 01494-765910 (24 hrs.) www.marcle.co.uk Prices include UK P&P - overseas surcharge per order: Europe £5, ROW £9. Send £4.50 (Europe £6.50, ROW £8.00) for our illustrated catalogue.

*14-day "NO QUIBBLE" MONEY-BACK GUARAN-TEE (*if returned in a saleable condition)

Book "Card Modelling -Basic & Advanced Tech-niques" - £17.95 UK, Europe £22.95, ROW £25.95







DEANS MARINE OPEN DAYS

9-10-11th SEPTEMBER 10am—5 pm

DEANS MARINE & PETERBOROUGH AREA MODEL BOAT CLUB will be holding open days at the DEANS workshop to raise funds for local charities. This is NOT an exclusive DEANS MARINE event All model boats and boaters are welcome

Please come along and see what we do, what we make, study of our model boats, try them out, talk to the modellers, watch the demos, ask lots of questions, have some fun, and help raise funds for local charities

EVERTHING YOU WANTED TO KNOW ABOUT MODEL BOATS. BUT DID NOT KNOW WHO TO ASK

TRADE STANDS

MODEL BUILDING DEMONSTRATIONS

BOATING POND

MANUFACTURERS DEMO,S

REFRESHMENTS

CLUB STANDS

PLANT STALL

See our website for Details

01733 244166 www.deansmarine.co.uk

MOUNTFLEET MODELS

Rock House, Bankwood Road, Womersley, Doncaster, DN6 9AX 01977 620386

www.mountfleetmodels.co.uk

email: sales@mountfleetmodels.co.uk







Our range currently consists of 17 superb models kits of varied types to suit all tastes.

The 7 Darnell hull moulds and the 2 new semi kits.







Plus various naval hulls & plans.

Working Plans for **Model Construction**

The Entire Sailing Ship & Power Craft Series of Authoritative Drawings By Harold A Underhill, AMIES

PUBLICATIONS FOR MAKING MODELS

- Plank -on-Frame, Vol I
- Plank -on-Frame, Vol II
- Masting and Rigging
- Deep Water Sail
- Sailing Ships Rigs and Rigging
- Sail Training and Cadet Ships

Illustrated list of 70 Sailing Ship Designs £4.00 Illustrated list of 35 Power Craft £4.00



Please write for further information and catalogue to:

Brown, Son & Ferguson, Ltd

Unit 1A, 426 Drumoyne Road, Glasgow, G51 4DA Tel: +44 (0) 141 883 0141

Email: info@skipper.co.uk Website: www.skipper.co.uk

Model Boat Smoke Effect Unit ONLY USES WATER! £45.00+Postage - Instant and odourless 'smoke effect' - Lightweight with no heat generated - Only uses water (so no repeat purchase of oil / smoke fluid) - Supplied with power converter and instructions - General operation 30 minutes before refill required ebay.co.uk search - model boat smoke effect

Coalville Model Boat

Anthony Addams reports



in April 2016, potentially creating much disappointment, but lain
Lewis of The Component Shop together with Natasha, both encouraged by Dave Jones, stepped into the breech with headline sponsorship to enable the

event to happen. This all occurred within a month or so of the planned weekend of the show at the Hermitage Leisure Centre in Coalville, so it is a great credit to all the clubs and traders that the event was set up, organised and run as intended.

Competition

As usual, informal judging of the models takes place and Best in Show was Agnes, a Scillonian Pilot Cutter of 1842 to 1902, built by Tom Brooke. Interestingly a modern full-size modern copy exists, providing sailing holidays and on the water experiences. Moonbeam (from the Metcalf Mouldings kit), built by Mike Waterhouse won the Model Yacht prize. Other award winners were Eric Plants, Tony Olliff, Keith Brown, Tim Brooks, Dave Jones, Dennis Hubble and Mr. Turton. The Best Club Stand was judged to be that of the Kingsbury Water Park MBC, with an outstanding selection of models on display including the steam yacht Komet to 1:48 scale by Bernard Law.

Models

The show stopper was a 12ft long US Gato class submarine, scratch built by John Robinson. It has every conceivable electronic control, all recently updated, and weighs in at 500lbs (227kg). It can be navigated around an island underwater as it forwards maps of the lake bed to the operator whilst under GPS control. It won a Gold Medal at a Model Engineering Exhibition in 1993. It was worth going to Coalville just to see this remarkable model, but there were numerous other top class models on the club stands, so a good turnout all round.

Traders

Despite the late arrangements, Component Shop, Macs Mouldings, Model Boat Bits, Adrian's Marine Figures and several others enhanced the event with a wide range of products. A new stand was that of David Pledge, trading as Madhouse Marine Models. He specialises in designing very fast and tiny models that bring a smile to faces at the pond. Some are available as kits, with the choice of with or without electronics for r/c use or just display, as desired.

The Bring and Buy stall, a feature of many similar events is always popular and this was so here at Coalville and for some it may be the most compelling part of their visit to a show.

Conclusion

Despite the late confirmation of the event taking place and the consequent lack of advertising, everyone made a great effort. Component Shop are now the Headline Sponsor for the Blackpool Model Boat Show on 22/23rd October 2016, and with rather more time to prepare, that event promises to be a success.



ABOVE: Swan is a Fifie fishing boat that is totally scratch built by Mick Hill with a Birch plywood plank on frame hull and removable keel for r/c sailing.

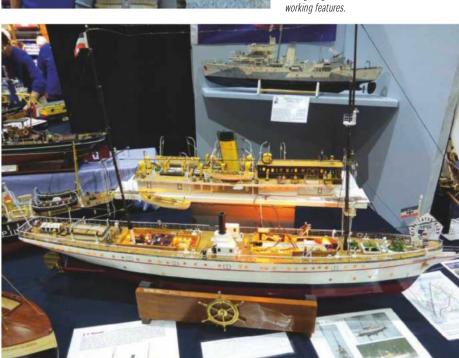
Coalville Model Boat Show.

RIGHT:: Kingsbury Water Park MBC was the well-deserved Best Club Stand.

BELOW: lain Lewis, Natasha and Dave Jones (Stavros), the organisers of the



BELOW; This lovely steam yacht Komet had lighting and numerous other





Show - 2016





ABOVE: This Moonbeam was the winner of the Model Yacht Trophy.

BELOW: Agnes, a Scillonian Pilot Cutter of 1842 to 1902, built by Tom Brooke.



ABOVE: If your interest is working model hovercraft, then talk to Roy Smart of the Daventry MBC, as this is one of his super models.



BELOW: Awards for the best model in a variety of categories have always been a feature of this event and here at the prize giving, lain Lewis of the Component Shop is on the right doing the honours.



RIGHT: This huge fully functioning Gato class submarine was the 'show stopper'.



News from the Airbrush Company

New Iwata and Sparmax products

hese two well known manufacturers have an increasing range of useful tools for airbrush painting enthusiasts.

lwata

The Smart Jet is an addition to the Iwata range of compressors.

It can be bought alone or combined with an airbrush as the Iwata Scale Modeller Kit. Price for the compressor on its own is £230 inc. VAT or for the airbrush package is from £330 inc. VAT.

Sparmax

The ARISM Viz compressor is

mains powered, but can also be run from a battery pack so is portable if one has to do spray painting in the shed at the end of the garden! It is supplied with all the usual fittings. Price is £180 inc. VAT, but the optional battery and charger is extra.

These products may all be obtained from selected retailers and 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. The website includes more detailed information about these products and their proper use: www.airbrushes.com Review by Paul Freshney

Boats





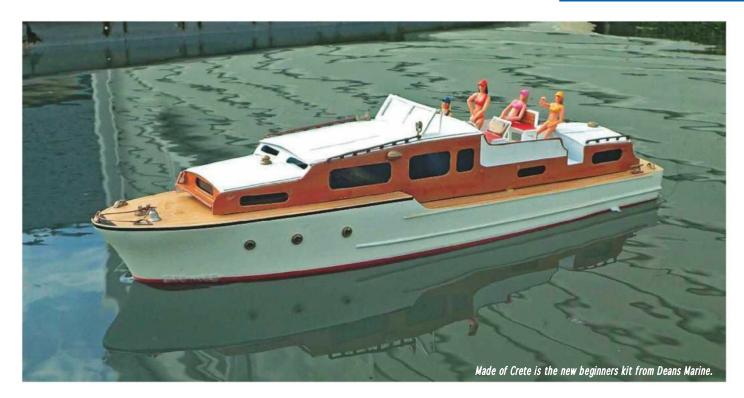


BECOME PART OF THE ONLINE COMMUNITY FOR MODEL BOATS MAGAZINE

- Get access to exclusive competitions and giveaways
- ▶ Exclusive articles and advice from professionals
- ▶ Join our forum and make your views count
- ▶ Sign up to receive our monthly newsletter
- ► Subscribe and get additional content including Online Archives dating back to 2007*
- ► Register for free today and join our friendly community!

WWW.MODELBOATS.CO.UK

*only available with digital or print + digital subscriptions



News from Deans Marine

his well-known and long established UK manufacturer has recently introduced another new kit.

Made of Crete

This new kit is to a scale of 1:32, length 440mm x 105mm, £82.50 rrp.

The model is a beginners kit comprising a vac-formed plastic hull, laser cut plastic superstructure, metal & resin fittings, full-size plan, propeller & propshaft, plus a comprehensive instruction book including details on powering this diminutive model.

In the 1950's and 1960's, before glassfibre made its presence in the world of small boats, the only way to obtain a medium sized cabin cruiser was from one of the commercial yacht builders, with the attendant high cost involved with its timber or steel construction. A design method was developed using a waterproof cement, produced by Seacrete, built over timber and a galvanised steel wire mesh. This kit represents one of these craft and the name is genuine, but it has been designed from fond youthful recollections.

Model boat accessories

Deans Marine have been further developing their retail business and new propshafts, fittings, model cranes and containers, couplings, brass propellers for modern warships etc. have recently been added to their range.

Further information on Made of Crete and the new accessories from: Deans Marine, Conquest Drove, Farcet Fen, Peterborough, PE7 3DH, England.

Tel: +44 (0)1733 244166, website: www.deansmarine.co.uk. *Paul Freshney - July 2016*

Dreadnought Battleship - Haynes Owners' Workshop Manual

Written by Chis McNab, hardback, 156 pages, 277 x 215mm, with over 230 photographs, diagrams, line drawings and plans in black & white and colour. ISBN: 9781785210686. Published by Haynes Publishing Ltd. Sparkford, Yeovil, Somerset BA22 7JJ UK.

Tel: 01963 440635, website: www.haynes.co.uk. Price (RRP) £25.00. Available direct from the publisher or through the usual retail outlets.

This book has a sub-title of Dreadnought and super Dreadnought (1906-16) since it does not just cover HMS Dreadnought. When the battleship was commissioned in 1906, this revolutionary new all-big-gun warship immediately changed the international balance of sea power as the the

vessel was like no other currently on the high seas.

Such was the shock of HMS
Dreadnought, that there was a
scramble among world powers
to emulate and improve on
the design, creating a class
of ships we know today as
'Dreadnoughts'. For the next
three decades, these battleships
and their successors the 'super
dreadnoughts' dominated the
waves, with Germany, the United
States, Japan, Russia and other
nations vying to build their own
equivalents.

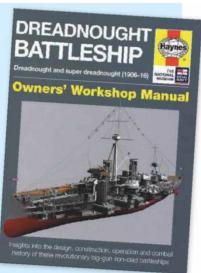
They came to blows in earnest during the First World War and the Battle of Jutland in particular saw the greatest clash of naval firepower in history, with dreadnought pitched against dreadnought, when the Royal Navy and the Kaiser's Imperial German Navy confronted each

other in the North Sea off the coast of Denmark in May 1916.

With the full co-operation of the National Museum of the Royal Navy, the author Chris McNab, gives a detailed insight into the design, operation and combat history of these vessels and commemoration to this great naval era, the book also includes a chapter on the restoration in Belfast of the light cruiser HMS Caroline, the only surviving Jutland warship, and still afloat.

Illustrated with more than 230 photographs, plans and technical drawings, the Haynes Dreadnought Battleship Manual paints a compelling picture of these warships and is a useful reference book for ship modellers, enthusiasts and naval historians

Book Review by John Deamer



(Editor's note: A very high quality and unique limited edition kit of HMS Caroline is due to be released in the near future. More information will follow)





Http://www.westbourne-model.co.uk

Email: saleswestbourne@btconnect.com Tel 01202 763480

Ferrar Dorad

The S Rainb

Enter

Range

Pirate Ship 1:60 .780mm

Model Slipway R/c

Assurance: WWII Tug 1/43rd 1108mm	£315.00
Tamar Class Lifeboat: 1/16th 1000mm	£367.00
Shamrock: M160 Fast Patrol Boat 1/24th 685mm	£119.00
Sentinel: 34m Island Class cutter 1/40th 940mm	£213.00
Drumbeat of Devon: Fisheries Protection 1/24th 915mm	£219.00
Maggie M: Shelter Deck Trawler, 1/32nd 850mm	£239.00
Tsekoa II: Buoy Maintenance vessel 1/32nd 845mm	£199.00
10 Hatch Coaster: Europa-type coaster 1:50th 1005mm.	£254.00
4 Hatch Coaster: Europa-type coaster 1:50th 1005mm	£254.00
Wyeforce: Harbour Tug1/24th scale 840mm	£219.00
Dutch Courage: General Tug 1/32, 870mm	£249 00
Vielstroom: Buoy-Layer:1:40th 960mm	£233.00
Post War Envoy: Envoy Class Tug 1:48th 1108 mm	£315.00
Admiralty: Envoy: Class Tug 1:48th 1108 mm	£366.00
Aziz: Anchor Handling Tug 1:50th 1105mm	£284.00
Our Lass II 21.5m twin-rig trawler	£274.73

Calda Craft R/e

Children Co. Mil. 10 C	
Joffre: Tyne Tug 1:48th 775mm	£232.23
North Light: Weston isle coaster 1:32nd 660mm	£232.39
Marie Felling: Crown Colony Tug 1:32nd 1105mm	£368.34
S.S Talacre: Single Hatch Coaster 1:48th 863mm	£232.36
Cumbrae :Clyde Pilot 1:32nd 864mm	£247.96
Sir Kay: Table Class minesweeper 1:48th 933mm	£266.36
Imara :Tug Crown Colony Tug 1:32nd 1105mm	£431.91
Brannaren: Coastal tanker 1:48th: 1067mm	£277.36
Milford Star: Steam Trawler 1:48th 933mm	£212.57
Alte Liebe: Harbour tug 1:25: 984mm	£260.81
Schaarhorn: Steam yacht 1:35 Length: 1140mm	£311.55
Resolve: Salvage Tug 1:48th 1165mm	£472.00
Amaranth: Herring Drifter: 1:40th 600mm	£101.79
Thunder Tiger Sea Dragon Racing Yacht 993mm	£179.00
Laser: 1/4 Scale Laser Yacht Inc with bag & radio	£413.00
Graupner True Blue: Bermudian Rig	£144.99

R/C Yachts

Robbe Atlantis, Wishbone Schooner, 1:20, 1730mm	£439.00
Robbe Windstar, 1Mt class inc Std Rig (Sail)	£338.99
Aquacraft Vela One Meter sailboat	£410.39
Thunder Tiger Vouger II 1Mt	£149.99
ProBoat Westward RTS Return to base motor 69Cm	£139.60
ProBoat Sevenity 1Mt En RTR 914 mm	£245.00

We are one of the largest model boat stockist shops in England and currently have on display some 300 to 400 model boats!

Split between static 'Plank on Frame and Radio Control kits From Companies like Robbe , Graupner , Aero Naut , Deans Marine , Marten Howes & Baylis ,Billing Model Slipway. Along with the static manufactures Calder Craft ,Victory Models , Amati , Mantua , Corel .

In addition to this we stock a wide range of model Boat fittings, Radios Control Systems, Electric motors, and Steam plants, plus many other accessories for model boats.

WP Rhode Island Formula 1 Catamaran Artr

Information: ARTR (Almost Ready To Run) Controlled via 2 functions. With 1 brushless outboard motor.



Description: ARTR (Almost Ready To Run) model, GRP hull, Built-in brushless outboard motor, Built-in controller, Built-in servo. Simple installation of the RC components. Price: £255.60

Westbourne Model Centre

No.6 The Coach House, Robert Louis Stevenson Rd, Westbourne, Bournemouth BH4 8ED. Tel/Fax: 01202 763480

Opening Hrs: 9.15am - 5.00pm • Mon-Sat • Half Day Wed.

TitanicScale 1:250 .1070mm.	£375.00	
ri Arno X1 RacerScale 1:8 . 790mm	£332.00	
de modern yacht. Scale 1:20 . 856mm	£276.98	
schooner Endeavour POF 1:80 .480mm	£9.99	
schooner Endeavour Pre Made Hull 1:80, 480mm	£89.99	
oow Pre Built Hull Version 1:80 , 480mm	£89.99	
ow Plank on Frame Kit 1:80 . 480mm	£89.99	
prise America's Cup 1930 1:80 . 460 mm	£89.99	
rock V 1:80 . 440mm	£89.99	
er America's Cup Defender 1:80 . 470mm	£89.99	

Columbia 1958 Us Cup 12 Mt Class 1:35 . 68mm...
Constellation 1946 Us Cup 12 Mt Class 1:35 . 68mm...
Schooner Endeavour America's Cup1:35 . 1150mm...
Robert E. Lee 1:50 . 600mm...
H.M.S. Bounty 1:60th . 720mm...
New Bedford whaleboat 1:16th .550mm...
Bluenose 1:100 .540mm...

Tipo Riva Aquarama 1970 1:10th . 850mm ..

Mayflower 1:60 .650mm. £165.36

VICTORY MODELS Static

£270.00

£266.99 £225.99

£128 99

£88.04

Sciabecco 1:60 .720mm	£133.06
Chinese Pirate Junk 1:100 400mm	£81.19
Viking Long Boat Oseberg 1:50 440mm	£106.99
H.M.S Pegasus 1776 Sixth Rate Swan Class 1:64th	£349.00
HMS Vanguard Ship Of The Line 1/64th 1171mm	£694.00
HM Cutter Lady Nelson 1:64, 530mm, 1/19c 10 gun	£124.95
HM Bomb Vessel Granada, 1:64, 800mm	£268.90
HMS Fly, 6th rate Swan Class Sloop, 1:64th 810mm	£291.00

CALDERCRAFT (Nelson's Navy) Static

H.M.S Victory: Ship Of The Line 1:72 1385mm	£709.00
HM Brig Badger: Brig 1:64 600mm	£161.00
H.M.A.V. Bounty: 1:64 660mm	£157.99
HM Revenue Cutter Sherbourne, 1:64, 500mm	£72.61
HMS Mars: 1781 Armed Brig, 1:64, 790mm	£183.68
HM Mortar Vessel Convulsion: 1:64, 600mm	£91.00
HMS Agamemnon, 1781 3rd Rate, 64 gun, 1:64 52"	£615.00
HM Brig Supply, 1759, 675mm, 1:64 sc	£135.50
HMS Cruiser, 1797, 18 gun brig. 1:64, 850mm	£193.57
HMS Snake, 1797, 18 gun Sloop, 1:64, 910mm	£194.57
HMS Diana, 38 gun heavy frigate, 1180mm	£442.19
Mary Rose, 1545, 1:80, 730mm	£241.17
HM Bark Endeavour, (Cooks) 1:64, 725 x 275mm	£208.06
HMS Jalouse, 1794 ex French 18 gun brig 1:64 815mm	£204.99

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

GRAUPNER HMS PRINCE OF WALES ARTR MODEL. 1500mm long, scale 1:150, no electrics & never been on the water. As new. £600. William Barratclough, tel: 01915 147173 (Grangetown, Sunderland).

SHAMROCK. Cornish sailing barge, 54ins long. Accurate scale model of original moored at N.T. Cotehele House, Cornwall. No r/c or internal fittings, never put in water, £250. Buyer collects. Colin Davis, tel: 01395 579905 (Exeter).

IMARA TUG. New motor, was steam, high standard, £200. Also: Lady Woos tug, twin propshafts, lights, sound, steering mixer, 2.4GHz 7 channel r/c, high standard, £500. G. W. Crisp, tel: 01582 882151 (Hitchin, Hertfordshire).

S CLASS SUBMARINE S1 HMS

OLYMPUS, Darnell static dive system, 68 inches long with 6ch Futaba Challenger r/c, £420. Buyer collects, photos available. Brian Winstanley, email: janet_winstanley@ hotmail.co.uk or tel: 01617 898185 (Eccles, Manchester).

FLYING FULMER TUG, scratch built, 33ins long with working lights, radar & water cannons, £225. Also, Graupner Glasgow paddle tug with Wilesco steam plant, test sailed only, £425 and 20+ other boats for sale due to clear out. Call Kevin Winward for list, tel: 07803 975089 (Rochdale, Lanc's).

OFFSHORE POWER BOAT.

Deep vee hull, 1120mm, Picco 60 engine, Digifleet 4 channel r/c, 2 servos & stand, £190. Delivery by agreement. Photos available. Mike Sant, tel: 01270 876489 or email: mike_a4@ talktalk.net. (Cheshire).

MM1448: Liverpool lifeboat

MM1482: Kingston Peridot

Grand Banks Schooner

Wants

BILLINGS 3 HOLE RAIL STANCHIONS BF0030. 20mm full height, 18mm to deck. Unable to find stock anywhere. If you can help, please call Bill Wrench, tel: 01395 568503 (Devon).

BILLINGS SMIT ROTTERDAM PLANS. 1:75 scale please. Will pay all costs. Graham Tester, tel: 01273 813732 (Ringmer, East Sussex).

THUNDER TIGER VICTORIA II.

Tx & Rx not required. If you have this model yacht available and unwanted, please contact Mike Richardson, tel: 01242 321864 (Cheltenham).

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

GRP hulls suitable for the plans listed below are available once again:

MM962:

MM1275: Revive MM609: Brave Borderer MM826: St Louis Belle MM567: Cervia MM909: Top Sail Schooner

Our plans, hulls, and material packs are available to order online: www.myhobbystore.com

Or by phone UK: +44 (0)844 848 8822 US: 1-(877)230 2998 10am to 4pm - Monday to Friday

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

WA	NT	ED

* 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:	
Address	
	Postcode:
Telephone:	
Signature:	Date:
JIGHTOLOI C	Date

^{*} If you don't wish to spoil your magazine, then please photocopy this coupon. mytime media MB Vol 66 No 790



Craig Dickson reports from Branston Water Park.



ur return to Branston Water Park at Burton upon Trent coincided with a heavy rain forecast for the day, so most of us had our wet weather gear to hand anticipating a bit of a soaking. As it so happened, it wasn't needed as the rain clouds kept far enough away enabling another great racing session.

Mark Wild once again kindly volunteered to run the race as OOD, managing the race entries and the actual events on the day. We ended up with 33 boats ready to race across all classes which although not a massive turnout, was nonetheless plenty enough for some great competition and good fun. It was great to meet Terry Lucas, another new member racing with us and who turned up with an extremely sleek and well presented Sigma to race in the D Class.

Once the members had arrived and unloaded their vehicles, the usual driver's meeting took place.

BELOW: The competitors enjoying a bit of fun banter between race heats.



Mark had (only for the second time) decided to have a triangular course instead of the normal four buoy rectangular course. The layout was what one might best describe as a 'skinny' triangle, in that Buoy 3 (on the right of the course) was a substantial distance from Buoys 1 and 2. This resulted in two good long straights in which the more powerful boats could demonstrate and use their power when going flat out. It also meant though that a near 180 degree turn was needed at Buoy 3, which as we will see resulted in a few problems for some of the competitors. Once Mark had completed the usual briefing, emphasising the health and safety aspects of the day, questions were taken and it was then time to prepare for the first race and get the event movina

AA Class

This class features the smallest nitro (glow) engine mono hulls and had six boats entered. David Hough's Go 28 powered Pursuit had a faultless race, his 77 lap total comfortably earning him first place. David's Pursuit was probably (in terms of physical size), one of the smallest boats of the day and yet its performance and handling when it got choppy was very impressive. Smaller hulls can be tricky to fine-tune in terms of getting the settings and balance correct, as small adjustments can make a comparatively large impact on their handling. David definitely had his boat set up correctly and was on top form.

Garry Dickson's West 28 powered Magnet also enjoyed an excellent run, achieving a 70 lap total for second place with two clear heats and no stops. Garry was throttling back quite a lot, as the choppy water conditions made his boat 'very hairy' and he didn't want to end up needing for it to be rescued. It was great to see Mark Beesley racing in this class again as his regular Cavalier boat had been out of action for some time, awaiting spares for its



LEFT: Malcolm Pratt's yellow Warhawk chasing boat B44 in the B Class.

propwash

LEFT: Superb race action in the big T2 Catamaran class. These two are just powering out of the sharp turn around Buoy 3.

BELOW: D4 & D9 enjoying head to head racing took second and third places respectively in the D Class.



BELOW: C36: Mike Gelson's Stratos which won the C Class.





ABOVE: Craig Dickson launching his brother Garry's Mercury Catamaran from the lake bed. Wellies came in handy on this day.

miniature outboard nitro motor. With this engine now rebuilt, Mark enjoyed consistent runs in both heats giving him a 53 lap total for the third place.

Kian Searle was 'pitted' by his dad Ian, and the Picco engine in his Challenger simply refused to start and run in the first heat, despite them frantically searching for the problem and what was it? Only when the first heat was nearly over did Ian realise that he had been spinning over the engine with the electric starter, backwards! Sometimes the simplest of mistakes can be the cause of so much frustration.

My West 28 powered Magnet got off to a great start but after 15 laps the engine's con' rod snapped which promptly ended its race. Graham Stanley's OS 21 powered Cavalier appeared not to want to run well at all, and he only achieved 8 laps leaving him in sixth place.

A Class

Only three competitors entered this class, but the standard of driving and the performance of their boats was superb. All three were powered by the popular ASP 46 engine and all of them scored 80+

laps, making it a very closely fought race.

Kian Searle enjoyed a fantastic race with his Crusader 3 taking first place with 85 laps in total. Kian had Mike Barnes's Challenger chasing him for a lot of the race, but Kian's excellent driving ensured that he retained the lead. Mike Barnes ended up in second, with 81 laps in total, as in the second heat the boat, when trying to overtake Kian's, spun out stalling its engine and needed rescuing.

Luke Bramwell's Challenger came third, only one lap behind Mike. This boat was driven faultlessly and achieved near perfect consistency in both the morning and afternoon heats.

B Class

With only two entries in this, and the larger C Class, all four boats were run in the same heats, but scored independently, which makes a lot of sense as it saves time during the day and makes their racing more exciting.

Malcolm Pratt's CMB 67 powered Warhawk again powered its way to victory in this class with 83 laps in total and he is proving very difficult to beat

BELOW: The rescue boat crew had on several occasions to replace buoys that had been holed. (Photo courtesy of Judith Beesley)



propwash



ABOVE: AAI.76: Mark Beesley's Cavalier is the only boat currently raced with an i.c. outboard motor unit. (Photo courtesy of Judith Beesley)

RIGHT: Terry Lucas's blue Sigma (to the left of the photo), looks is going the wrong side of Buoy 3 which loses him that lap, but D176 has correctly gone outside of the buoy.





ABOVE: Paul Edgecombe's D95 Patriot being chased by Garry Dickson's Saturn.



nowadays with this boat.

Garry Dickson's smaller West 52 powered Challenger ran impressively quickly, and was driven tight to the buoys meaning that it took Malcolm several laps of following him before he (Malcolm) managed to overtake. In Heat One though, Garry exceeded the limits of the hull with the near 180 degree sharp turn needed at Buoy 3, because the boat overturned and needed rescuing resulting in only 77 laps and second place.

C Class

It was a little disappointing that this class (and the B Class), had only two entries. There seems to be a bit of a lull in terms of popularity of the mid to larger sized nitro engine classes and that that is perhaps due to the big surge in the popularity of the S.I. (Spark Ignition - petrol engine) powered boats. Anyway, the two entrants in this class achieved lap scores that were well below those normally expected of them.

Mike Gelson's Stratos was slow getting away in the first heat, and when underway it stopped as the glow plug in its geared CMB engine failed. In the second heat, Mike was really quick to get his boat launched, but soon in to the race it bounced off a



ABOVE: Mark Beesley's badly split front starboard sponson, from the collision with Malcolm Pratt's catamaran.

wave and nose-dived, stopping dead at Buoy 2. All in all though, on this occasion, his 41 laps were still sufficient for first place as Ian Searle's CMB 90 powered Makara ran well, but only for short bursts and fared even worse overall. The mount for the remote fuel control needle broke and despite a lakeside temporary fix, vibration caused the needle to unscrew when the boat was on the water, a recipe for a rough-running engine. A blown glow plug added to Ian's problems and he could only manage a 25 lap total.

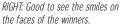
D Class

At the driver's meeting, Mark had wisely announced that this class would be split into two heats of five boats each, as ten of these large power boats in one heat would be a recipe for carnage, sooner or later. The racing was fantastic to watch, especially seeing these large boats negotiating the tight turn around Buoy 3. Some took it steady and reduced speed, some went wide to give a more gentle turn and others hit the rudder control hard inducing a sharp turn, sometimes with some spectacular overturns.

Garry Dickson employed the more cautious tactic in this sharp turn and it paid dividends. His MPM 31 powered Saturn achieved a whopping 100 laps in total for a well deserved first place. Keeping out of trouble with no stops or incidents was for him a winning solution and the boat ran extremely well.

The Zenoah powered Patriot of Mike Barnes, was only three laps behind Garry, the 97 laps giving him second place. Mike is a master of driving fast





BELOW: D44: Garry Dickson's superbly presented Saturn, the winner of the D Class.





and drove really close to the buoys, but on one occasion he misjudged Buoy 1 hitting it full on, but miraculously he kept the boat going until it stalled a little later requiring rescue. Malcolm Pratt's Tiger King powered Patriot achieved 85 laps for third place. He was only two laps behind the leading boat at the halfway point after the morning's heats, but stoppages cost him valuable laps in the afternoon's race, and what about some of those that didn't make the top three places?

Andy Uttley's Tiger King engine powered Arrow got away to a good start, but it didn't last for long. Just six laps into the first heat, he had to retire as the engine had substantially overheated. Hopefully it will have suffered minimal damage once inspected back home.

Mark Beesley's Apache did well to achieve fifth place with 73 laps, as the main carburettor mixture needle of the engine kept unscrewing itself, making it run far too rich, and therefore slowly.

Terry Lucas our new member achieved a very respectable 55 laps with his Sigma for seventh place. A misjudgment at Buoy 3 though, left the bow of the boat embedded in the buoy with no other option than to await rescue. We got through a few buoys on this day, but thankfully they are only recycled empty plastic containers.

In tenth place, Ian Searle's Phantom only

BMPRS Branston - Two: Results 22nd May 2016						
Position	Name	Hull	Engine	Heat 1	Heat 2	Total
AA Class						
1	David Hough	Pursuit	Go 28	40	37	77
2	Garry Dickson	Magnet	West 28	37	33	70
3	Mark Beesley	Cavalier	OS21 OB	30	23	53
4	Kian Searle	Challenger 43	Picco	2	28	30
5	Craig Dickson	Magnet	West 28	15	0	15
6	Graham Stanley	Cavalier	OS 21	1	7	8
A Class						
1	Kian Searle	Crusader 3 1	ASP 46	44	41	85
2	Mike Barnes	Challenger 43	ASP 46	46	35	81
3	Luke Bramwell	Challenger 43	ASP 46	41	39	80
B Class						
1	Malcolm Pratt	Warhawk	CMB 67	44	39	83
2	Garry Dickson	Challenger 48	West 52	33	44	77
C Class						
1	Mike Gelson	Stratos	CMB 91RS Evo	19	22	41
2	lan Searle	Makara	CMB 91K3 EVO	15	10	25
-	Idii Sedile	Makala	CIVID 30	13	10	
D Class	Compiler.	Color	MDM 01	F.0	40	100
1	Garry Dickson	Saturn	MPM 31	52	48	100
2	Mike Barnes	Patriot	Zen 28.5	46	51	97
3	Malcolm Pratt	Patriot	Tiger King	50	35	85
4	Kevin Alcock	Patriot	Gizmo 30	52	26	78
5	Graham Stanley	Phantom	Zen 30	37	36	73
5	Mark Beesley	Waverider Apache	Zen 26	31	42	73
7	Terry Lucas	Sigma	Zen 28.5	30	25	55
8	Paul Edgecombe	Patriot Evo	RCMK 30S	20	34	54
9	Andy Uttley	Arrow	Tiger King	0	0	6
10	lan Searle	Phantom	RCMK	0	4	4
T1 Catamo						
1	Mike Barnes	X-Cat 38	ASP 46	43	40	83
2	Luke Bramwell	X-Cat 38	ASP 46	16	35	51
T2 Catamo	aran Class					
1	Mike Barnes	Thunderbolt	Zen 26	51	51	102
2	Garry Dickson	PMC Mercury	MPM 31	49	47	96
3	Malcolm Pratt	Aeromarine	CMB 91 RS	38	42	80
4	Graham Stanley	F1 1320 GP	RCMK K30	40	39	79
5	Mike Proudman	Cyclone	Zen 28.5	36	39	75
6	Kevin Alcock	Conquest	RCMK	41	46	
7	Paul Edgecombe	X-Cat 48	Tiger King 27 Evo	42	0	42
8	Mark Beesley	Conquest	RCMK 26	17	0	17



ABOVE: Graham Stanley's catamaran ran over Malcolm Pratt's yellow Aeromarine boat. (Photo courtesy of Judith Beesley)

managed four laps (all achieved in the afternoon heat), so perhaps not his best day at the races. He had inadvertently left the transmitter for his boat at Nottingham during the previous race and although Mark Wild kindly loaned him a suitable replacement, things did not go well in Heat One. The rudder servo control was reversed and worse, the splines on its output shaft had stripped. He managed to fix these problems for the afternoon session, but driveline difficulties then arose, so not a good day.

Catamaran T1 Class

With only two boats entered in this smaller class of catamaran, Mark decided that these would be run alongside the AA Class boats again, to make racing more exciting and save time during the day. This arrangement worked well again and didn't cause any concerns or problems for the drivers. Mike Barnes's ASP 46 powered X-Cat had a superb, consistent, and quick race, comfortably winning the class with 83 laps. Luke Bramwell's X-Cat didn't run to form in the first heat leaving it off the water for a while, which cost him a lot of laps. He had a much better run in the second heat though, achieving 51 laps in total for second place.

Catamaran T2 Class

Eight cat's were entered in this class, all spark ignition powered, except for Malcolm Pratt's Aeromarine which is nitro (glow) engine powered. The race action was frenetic to say the least in both heats, with lots of near misses and several collisions. Buoy 3 yet again proving particularly challenging, and it was here where most of the collisions occurred. The key to doing well, was to keep out of trouble at all costs and keep going.

In this class, in both morning and afternoon heats, unusually there was a slight shortage of available people to launch the boats. To overcome this, Mark Wild announced a rolling start which meant that all boats had to be on the water and underway, before the race was started, therefore not disadvantaging

BELOW: Terry Lucas's blue Sigma in dramatic style.



BELOW: C36: Mike Gelson's Stratos taking a bit of a dunking here, but it throttled down okay to then recover. (Photo courtesy of Judith Beesley)



those whose boats were launched last. Under normal circumstances we use what we call a 'Mill Start', when at the sound of the first horn, engines can be started and boats launched. At a prespecified interval after that first sound (usually 60 seconds) the race starts with laps being recorded from that instant.

In this class, Mike Barnes achieved his second victory of the day, and was definitely 'King of the Cats'. His Zenoah powered Thunderbolt achieved a massive 102 laps in total, the highest lap total of the day across all classes as well as in this group. Garry Dickson drove his Mercury quite cautiously being determined to keep out of trouble. This strategy paid off because although not winning, the 96 lap total was good enough for second place, in the face of stiff competition.

Malcolm Pratt's CMB 91RS (nitro) powered
Aeromarine took third place with 80 laps in total. In
the morning heat, his boat had a couple hiccups
that he got away with. First, his boat clouted Buoy 3
really hard, but luckily bounced straight over the top
of it and kept going and then it also was involved in
a substantial collision with Mark Beesley's Conquest.
Mark's boat suffered a split front sponson as a
consequence and was immediately retired, leaving
him with just 17 laps.

Paul Edgecombe's X-Cat 48 was ballistic in the first heat, but when the wind got under the hull on the fast approach to Buoy 3, it went into a spectacular somersault. Paul's boat was subsequently retired, leaving him with just 42 laps for seventh place.

Conclusion

This proved to be another cracking good day, with the lots of fun and excitement for our members, whether racing or not, and spectators alike. Our special thanks went to Madeline Reid who again took care of the lap counting doing a great job and to Peter Dimberline and his colleague Alan from the Burton and District MBC. Not only do they allocate water time to us for the full day, but they supply the essential rescue boat facilities, without which there would be no racing. For any model boaters within travelling distance of Burton upon Trent (Branston Water Park), I highly recommend having a look at what this club offers, which includes model boating of all kinds, be it static, yachts, scale, electric and power. They have the benefit of a superb lake with excellent facilities nearby including toilets and free

Their website is: www.burtonmodelboatclub.org.uk *Cheers for now - Craig*

his month we are featuring another junior member, Kian Searle, who at only 12 years old has achieved some very impressive results on the BMPRS circuit, despite only starting racing in 2013. In that first year, he was runner-up to the Champion in the A Class and then only by a very small margin as he very nearly won it, and in the following two years he moved into the AA Class and T1 Catamaran Class and again ended the 2014 and 2015 seasons well placed within the top four of these classes. Kian is a junior member who is a great asset to our Society, as he has a friendly and helpful attitude and most important, thoroughly enjoys the BMPRS events. I put some questions to Kian in order to gain an insight as to what he most likes about racing within our BMPRS.

When and how did you first get involved?

When I was about nine years old, my dad and I built the first boat for me to race, a Crusader 3 powered by an ASP 46 nitro fuelled engine. That boat gave me such a great opportunity to get vital experience in terms of how things work and are put together, plus the all-important driving experience. This boat is still going strong, though with a bit of battle damage and a few bumps and scrapes. My dad and all of my family have from the onset been very supportive, encouraging me to progress within this hobby. My dad especially has provided such fantastic support, taking me to all of the races and always being on hand to help.

How would your best friend describe you?

It would be that I am enthusiastic, quite generous and will always aim to be there to help out whenever I can. (Note from Craig - I can vouch for this, as when I need fine detail updates essential for updating you for my race reports, I can always rely upon good information from Kian)

What was your most satisfying win so far?

That has to be during my first ever race season, at Telford in May 2013. In Heat One of the A Class, the Crusader was absolutely flying, leaving it 13 laps in the lead at the half way stage, prior to the afternoon's heat. About mid-way into the afternoon session the boat was running just as well, until to my horror, the propshaft unexpectedly snapped and that was that, but when the final total scores were revealed, I still ended up the winner by 3 laps, so an unexpected result following the mechanical breakdown.

What race didn't go so well for you?

For me, the most disappointing race occurred in 2015 at Leicester. My dad let me race his Mantaray in the A Class. Because I had not had much practice at driving this boat prior to the race, I found it a bit difficult to control and ended up clipping a buoy and tipping it over, leading to its radio box taking on water and ending my race. It can be very frustrating on a race day when a major problem arises, and you know that unless resolved within a few minutes it can mean the end of racing with that boat. Pondside repairs and temporary 'fixes' don't always go to plan.



ABOVE: Kian and his dad lan getting ready to launch his A Class Crusader.

Which aspects of race days do you like best?

Most of all I really like the friendliness and welcome that all the members show. The aspect that gives me most enjoyment of the hobby is the building and fixing associated with it all, working out a sequence for everything to go into a boat during its assembly. Racing of course is always great, especially when your boat runs really well.

You have now raced in three different classes -AA, A and Catamaran T1. Which is your favourite?

It has to be the A Class as it has special memories in terms of it being the first class that I raced in ending up second overall in the Championship table in 2013. I also like this Class because it is usually popular and attracts plenty of entries making it exciting to race and providing a great opportunity to develop one's driving skills.

What key tip might you offer to anyone thinking of taking up this hobby?

For those new or starting out in this type of racing, I believe that it is very important to get to know your boat as well as possible, including how it is put together and have plenty of pre-race practice so as to know how it handles in different conditions. I think that this needs to be done in advance of actually entering your first race, as that provides the best chance of being a much more confident racer.

Conclusion

Many thanks to Kian for sharing his experiences with us here. No doubt he will continue to give us older adult members a run for our money when we are racing against him, a future Champion in the making perhaps?



propwash



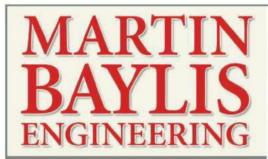






sales(*0*)airbrushes.com





Martin Baylis Engineering produces a high quality range of miniature marine steam engines, boilers and accessories for the model boat enthusiast.



Complete ready to run steam units can also be manufactured to suit a customer's particular application.

For further information please visit:

www.model-steam-engines.co.uk



DRIVES

PROPELLERS











Business Opportunity

Well known ranges of 1/700th scale Royal Navv warships, battleships, battlecruisers and cruisers of WW2 also Royal Navy aircraft carriers, cruisers, destroyers and frigates 1960-2000

All original models by one of the UK's finest model makers.

If you're interested please contact by email: navvmodelsandbooks@vahoo.co.uk







- CNC router - 3D printer

- CNC plotter - Vinyl cutter

All you need to CNC from

- Foam cutter

£1000

Visit our website www.stoneycnc.co.uk and watch the machine in action!

Distributed exclusively in the UK by

TONEY CNC @

Happy to help at all times: +44 (0) 1432 607 908

info@stoneycnc.co.uk www.stoneycnc.co.uk







To advertise your shop here please call Duncan 01689 869 855

LANCASHIRE

SKELMERSDALE

Scale Hobbies Unit 20, Sandy Lane, Skelmersdale, Lancashire WN8 8LQ. Tel/Fax: (01695) 732800 Mon-Sat. 9.30am -5.00pm. Closed Tues & Thurs Mail Order! • Building and Repair Service ALL MAJOR CREDIT CARDS ACCEPTED!

LEICESTERSHIRE

VISA 5

LEICESTER 1idway Models

Tues - Sat: 9.30am-5.30pm

157 St. Leonards Rd, Leicester LE2 3BZ Tel: (0116) 2701609 For boats & fittings. Catalogue: £3.50 UK £5 Overseas

TYNE & WEAR

VISA VISA VISA Gladston's North Shields Model Centre

Tyne and v... NE29 6QJ T: 0191 257 0335 F: 0191 257 4546 W: www.modelkit.c E: sales@modelki Boats, subs, cars, aircraft, helis, static or RC. Materials, tools, accessories, we just about have the lot!

WEB GUIDE

Please call Duncan Armstrong 01689 869 855



pbmodelmaking

Custom 3D Printing Service - Laser Cutting Service Custom Vinyl Cut Letters - Fiberglass, Resin - Molding Milling, Turning, Silver Soldering

www.pbmodelmaking.co.uk

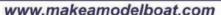


Aerokits plus Aeronaut fittings, Becc accessories, tools paints, props, propshafts, couplings & much more.

Check out the web-site for more details. Commissions and restorations also undertaken.

E-mail: info@maritime-models.co.uk or Telephone: 01432 263 917







Visit our web site for model manual based on designs from the Selway Fisher catalogue of full-size canoe, dayboat, motor boat, steam launch and yacht designs.

Tel/fax: 01225 705074



SHOPPING



ALWAYS IN STOCK:

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

also the home of ModelBearings.co.uk

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

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



Shannon Class Lifeboat

1/16th scale version due before Christmas. early next year! Call: 01455 637658 for more info or email:

speedlinemodels@googlemail.com

HE BEST OF BRITISH STEAM

Manufacturer of Marine Engines, Boilers, Steam oil Separators and Refillable gas Tanks as well as scale Grp kits and all wood construction kits of Formidable, Lady Jane & Chimaera

JOHN HEMMENS STEAM ENGINEER 28 Breighton Road, Bubwith, Selby, North Yorkshire, England YO8 6DQ tel: +44 (0)1757 289 664 • email: enquiries@steamengines.co.uk

www.steamengines.co.uk





Tugs; Workboats; Hulls; Kits; Propulsion Gear Fittings; Winches; Lighting Sets; Budget Boats

Pioneers of the The Budget Building System www.mobilemarinemodels.com



VOSPER 46" CRASH TENDER WOODEN KIT







www.vintagemodelworks.co.uk



Buy Online: www.sy<mark>lmasta.com</mark>

Adhesives, Modelling Materials & Tools

Casting Kit



ONLY £35.40

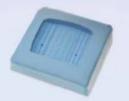
INCLUDES

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

EVERYTHING YOU NEED TO START CASTING









Available in large quantities up to 10kg





For a Perfect Finish





Angled Flexi-Files

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

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



Only £9.90 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 Superglue Bonding Kit £18.00

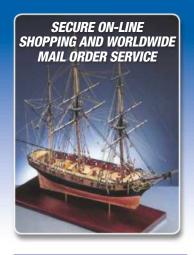
Comprehensive Kit Contains:

Thin: for bonding fine gaps and hairline cracks Medium: general purpose bonding Thick: gap-filling and accurate bonding

Activator: for instant curing



Buy online at www.sylmasta.com or phone +44 (0)1444 831459 Email: sales@sylmasta.com Sylmasta delivers WORLDWIDE



Sportsboat

Diva Cabin Cruiser

Queen Sports Boat

Victoria Motor Yacht

Ramborator Springer Tug

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

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

£54.95

£65 99

£154.99

£74.95

£129.95

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

£286.00
£329.00
£289.00
£508.00
£286.00
£430.00
£254.00
£129.00
£275.00
£557.00
£363.00
£325.00
£275.00

Caldercraft Static Kits	3
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 Se	ries

HMAV Bounty 1789 1w:64 HM Bark Endeavour 1768 1:64 The Mary Rose 1510 Tudor Warship 1:80	£200.00 £242.00 £258.00
Constructo Kits	
Altair 1840 1:67 Scale	£84.95
Cutty Sark	£176.34
Gjoa - Amundsen Expedition Ship	£79.94
LIMO D I	0474.05

Cutty Sark	£1/6.34
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

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

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

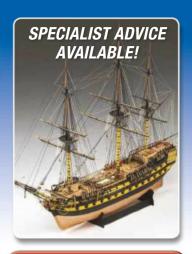
Joysway - Ready to run models	
Blue Mania Brushed RTR	£139.99
Bullet	£145.12
Caribbean Yacht 1:46	£52.00
Explorer Yacht	£148.99
Dragon Force Yacht	£148.99
Force2 60 Catamaran Yacht 2.4GHz	£157.49
Focus 1 Meter Yacht	£218.99
Pirate Yacht RTR	£148.99
Orion Yacht (Red or Blue) 2.4GHz	£89.99

KIICK KIIS	
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

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
- 100	

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



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

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
London Tram Dennis Bus Type B	£104.00 £87.9

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 I	Run
Miss Geico 29 Brushless Catamaran V	2 RTR £324.00
Blackjack 29 Catamaran	£275.99

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 Bomb Vessel Granado	£237.95
HMS Fly	£246.95
HMS Pegasus	£338.00
HMS Vanguard	£621.95
Lady Nelson	£101.95
Mercury Russian Brig	£350.95
Revenge 1577 Elizabethan Navy	£361.94

Plastic models also available in:

Airfix, Revell, Trumpeter and many more!!

All prices correct at time of going to press

Please note that our prices are set to rise with the unstable pound sterling

ALSO:

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





Find us on

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



CONCER CONTRACT



24V VIPER Marine

Brushed speed controller

FROM £29.99

Reverse

15A, 20A, 25A or 40A

No Relays or moving parts!

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

Forwards

Reverse



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



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

> 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



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

