

**FREE
PLAN**

& build guide for the
lovely Lysander



model Boats

www.modelboats.co.uk
September 2025
Vol. 75 No. 898



**Readers' own
brilliant builds**
Your inspirational
work showcased



**Speed
Swedes**

**CB90 H and CB90 HSM
fast assault boats tackled**



Water Faireys
The charming classics &
lesser-known variants

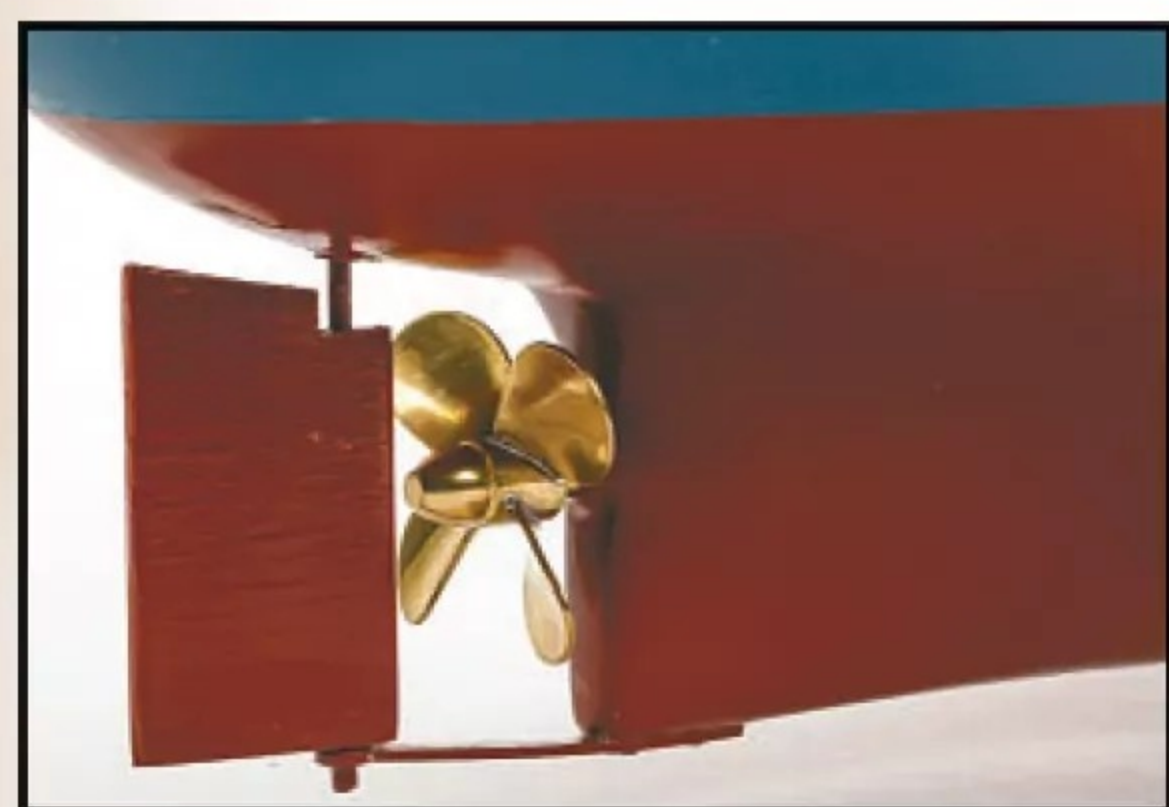


Navatek
An experimental military
paddle boat project



African Queen
Fitting a realistic-looking
electric steam plant

Additional Photo manual



424 MERCANTIC

Wodden Hull 1:50
L. 96 W.18 H. 36cm

Updated lasercut construction

- Added deck for RC equipment
- Improved
- Photomanual with detailed photos

M/S M/S Mercantic (build no.84) was built in 1964 by H. C. Christensens Staalskibsværft, Marstal, Denmark, ordered by Per Henriksen and was the Mercandia shipping lines first ship. LOA 48,01m, Beam 9,10 Draft 3,33 m. Brt. 299 Nrt. 200 Tdw 625. Call signal OZHA. Main engine B&W/Alpha 405-24VO. HK: 425 bhk. KW: 313. Speed 10 knots. M/S Mercantic was a traditional freighter and her kind was very common in the 1960's up to the 1990's. M/S Mercantic was sold and renamed several times. In 2004 she was sold to Wade Group, Portsmouth, Dominican republic and renamed to "Love Divine". Run aground on August 22th 2012, West Indies and declared CTL.

TAKE A LOOK AT OUR 70 KITS AT BILLINGBOATS.COM



No retail sale
Join our facebook group with 7000 modelbuilders
[facebook.com/groups/billingboats](https://www.facebook.com/groups/billingboats)
Contact us at service@BillingBoats.com



Dealer list here:
BillingBoats.com/distributors

www.mobilemarinemodels.com

Just a Few products from our Vast Range



Tugging Ahead..... with

MOBILE MARINE MODELS

Model Tugology..... the driving force

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



Phone - Visit our Website

Full Colour Catalogue £8-50

Factory Visitors Welcome



DEANS MARINE
CONQUEST DROVE, FARCET.
PETERBOROUGH, PE7 3DH
01733 244166
www.deansmarine.co.uk

2025 colour catalogues
Deans Marine £6.75
Raboesch £4.00
RB Fittings £2.00
Albion alloys £1.50
£4.00 postage each
Or all 4 for £13.50 incl p&p u k

**Visit the NEW OUTLET CENTRE /
SHOWROOM FOR KITS & ACCESSORIES**
The only model boat shop, showroom, and a
test pond.



COUPLINGS



M.Y. MUSICIAN 1/24



OUTLET CENTRE

20% PRICE CUT FROM KITS & 1mt PROFILES PURCHASED ON THE OPEN DAYS



PROPSHAFTS



RUDDERS



A NEW RANGE OF 3D PRINTED PARTS AND ACCESSORIES NOW IN KITS



FULL RANGE OF 1mt
LENGTH PROFILES

DEANS MARINE OPEN DAYS 5th +6th Sept 2025

EDITORIAL

Editor: Lindsey Amrani

Illustrator: Grahame Chambers

Publisher: Tim Hartley

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

CUSTOMER SERVICES

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

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

ADVERTISING

Advertising Sales Executive:
Fiona Leak
fleak@mortons.co.uk
Tel: 01507 529573

Sue Keily
skeily@mortons.co.uk
01507 529 361

By post: Model Boats Advertising, Kelsey Media
Limited, Media Centre, Morton Way, Horncastle,
Lincs, LNP 6JR

PUBLISHING

Sales and Distribution Manager: Carl Smith
Head of Marketing: Charlotte Park
Commercial Director: Nigel Hole
Publishing Director: Dan Savage
Published by: Kelsey Media Group Ltd, The Granary,
Downs Court, Yalding Hill, Yalding, Maidstone. Kent.
ME18 6AL

SUBSCRIPTIONS

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

NEWSAGENT RESERVATION (SEE PAGE 82)
Can't find Model Boats in your local shop? Then JUST
ASK your local newsagent to order a copy for you.



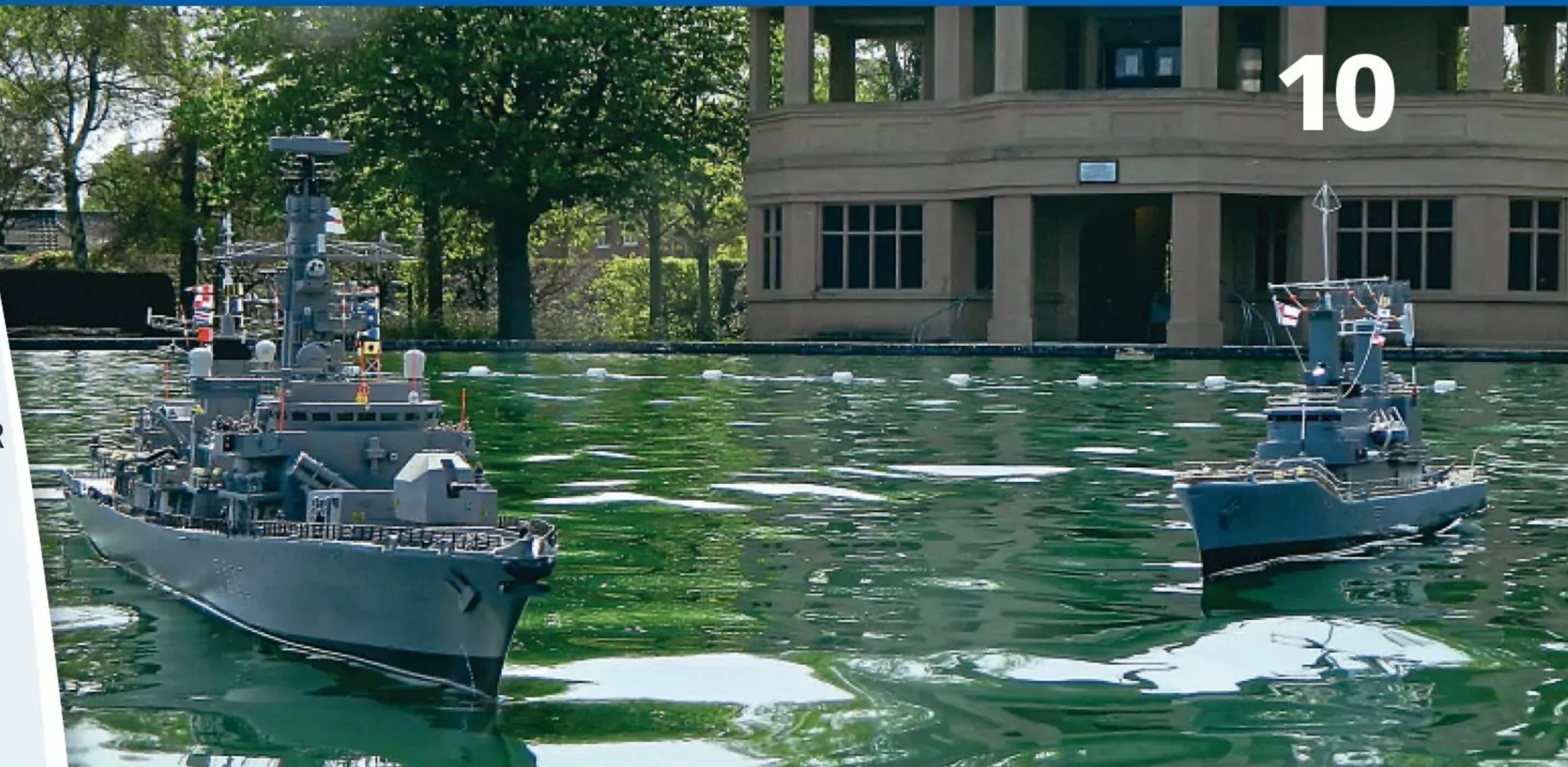
PRINT AND DISTRIBUTIONS

Printed by: Acorn Web Offset Ltd,
Normanton, West Yorkshire.
Distribution by: Seymour Distribution Ltd, 2 East
Poultry Avenue, London, EC1A 9PT.

© Kelsey Media Ltd
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 by Kelsey Media Group
Ltd, The Granary, Downs Court, Yalding Hill, Yalding, Maidstone. Kent. ME18
6AL. The US annual subscription price is 89USD. Airfreight and mailing in the
USA by agent named WN Shipping USA, 156-15, 146th Avenue, 2nd Floor,
Jamaica, NY 11434, USA. Periodicals postage paid at Brooklyn, NY 11256.
US Postmaster: Send address changes to Model Boats, WN Shipping USA,
156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Subscription
records are maintained at DSB.net Ltd, 3 Queensbridge, The Lakes,
Northampton, NN4 5DT. Air Business Ltd is acting as our mailing agent.



contents

10 Compass 360

This month's hobby-related news
round-up

12 SPEED Swedes

Dave Wooley and pals tackle the
CB90H and CB90 HSM (Next
Generation) fast assault boats in
model form...

22 Water Faireys

Chris Fellows charms with us
the Fairey Marine pleasure boat
model options, which include not
just the well-known classics but
some interesting variants too...

30 Plastic magic: Hermann Marwede

Phil Button tests out an innovative
new drive train to power Revell's
1:72 scale German lifeboat kit

36 Navatek

Roger Suiters explains how
he managed to capture this

experimental ultra heavy-lift
amphibious paddler in miniature

42 FREE PLAN for the lovely Lysander

PLUS, Ray Wood's show & tell guide
to the build

52 Save money with a subscription

Check out the latest deals and get
your favourite magazine for less,
delivered directly to your own
front door

54 Electric Queen

Roger Bunce validates the
philosophy "Nothin' a man can't do
if he sets his mind to it" by fitting a
realistic-looking electric steam plant
to his delightful build of the iconic
African Queen...

58 Flotsam & Jetsam: Building the Biber

John Parker looks at the options
open to the modeller when it comes



WELCOME TO THE SEPTEMBER 2025 ISSUE OF MODEL BOATS

I must start my column this month with a salute to contributor Ray Wood, as this summer marks 20 years since one of his splendid designs was first published in *Model Boats*. Ray's Norfolk Broads cabin cruiser *Margoletta* (named after the fictional vessel in Arthur Ransom's book *Coot Club*) was included as a free pull-out in the June 2005 issue of the mag (see photo at the bottom of this column). While I appreciate that was many moons ago now, I'd very much like to hear from anyone who took up the challenge of building his/her own model from that plan back then, or indeed anyone who has since, and who is able supply some pics for the Your Models section of the magazine.

Two decades on and numerous contributions later, we now present you with Ray's latest plan – and some of you may be relieved to learn from the accompanying build guide that a commercially available keel can be incorporated into the construction of the lovely *Lysander*.

Interestingly, flagging this free plan up on the Next Month page of the last edition prompted one reader, Peter Shaw, to send in some shots of his own superb scaled down version, a model he built onboard ship while serving the Merchant Navy back in 1982, based on based a full-size *Lysander* he used to sail on the river Ouse. You can see Peter's photos for yourself in the Your Models section. Once again, these pages are packed with brilliant builds (including Stuart Deacon's beautifully constructed and detailed *Maid of Sker* model featured on our front cover).

The Your Letters pages are also buzzing (thank you!) and feature some lovely shots taken at recent club-organised events.

Despite the torrential periods of rain that have punctuated a summer that started particularly early here in the UK, hopefully we'll see some more glorious weather between now and the end of September and the sun will shine down on all the shows, open days and regattas still to come – some of which you'll find details of in our Compass 360 news section. Knowing how much time and effort goes into preparing for such occasions, we'd love to be able to promote more of them in the mag. So, to those of you involved in their organisation who are not already doing so, please send in dates and details as far in advance as possible (bearing in mind that we are a monthly publication).

In the meantime, enjoy your read!
Lindsey



30



to this German World War II one-man midget submarine

63 Boiler Room

This month, Richard Simpson makes cuts and burns bridges!

69 Memory Lane

Dave Wiggins reflects on the first British-built Sprengbrook radios

72 Your Models

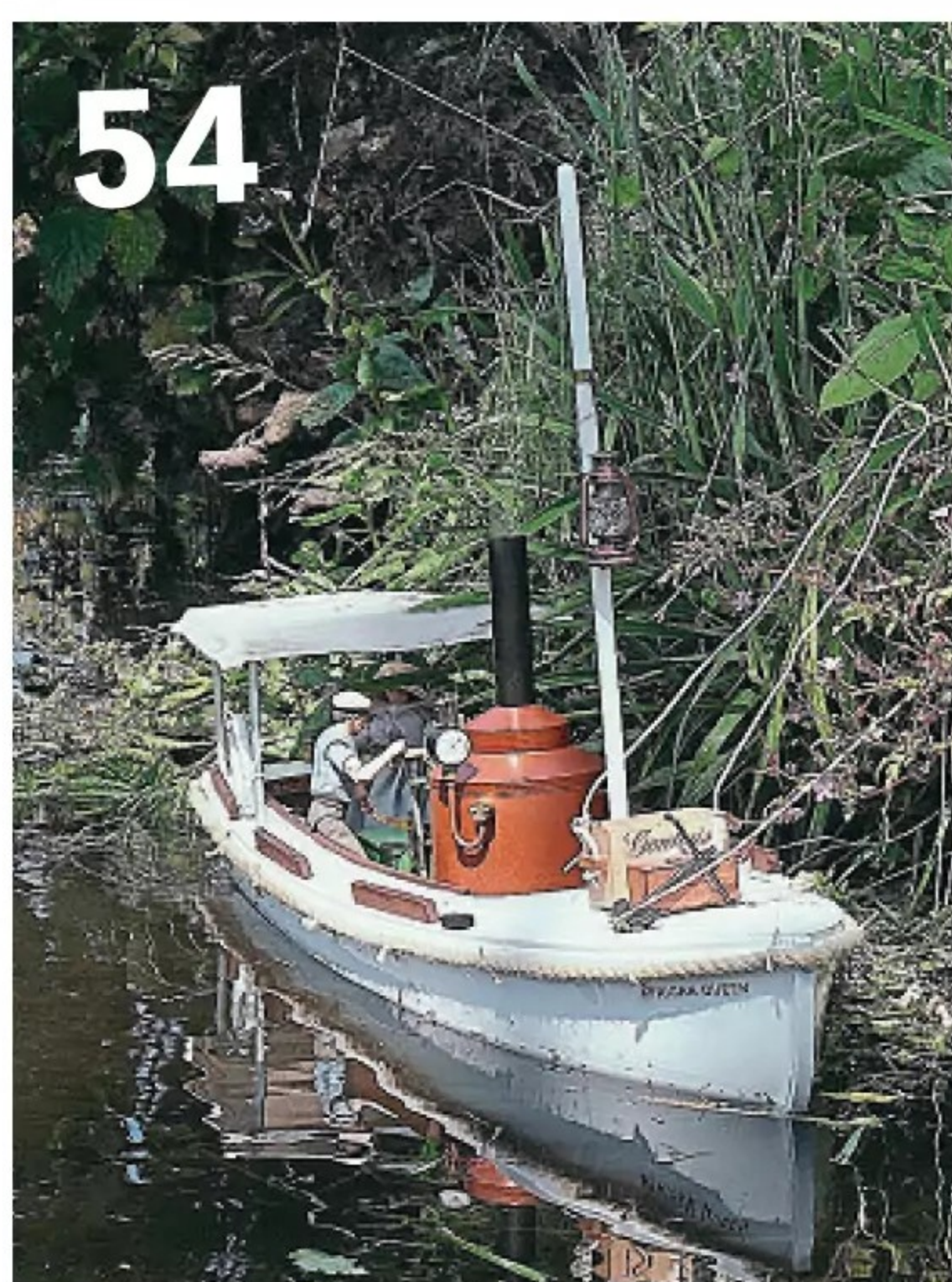
Readers' own brilliant work showcased

78 Your Letters

Open forum for all matters model boat related

82 Next month...

Just three of the reasons you won't want to miss the October 2025 issue of *Model Boats*



HI-ENERGY

NEW RANGE!

LIPO BATTERIES:

7.4v 650mah - £7.50
7.4v 850mah - £9.50
7.4v 1300mah - £12.99
7.4v 1800mah - £14.99
7.4v 3200mah - £24.99
11.1v 1300mah - £15.99
11.1v 1800mah - £16.99
11.1v 2200mah - £16.99
11.1v 2800mah - £29.99



HOWES MODELS

01865 848000

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

MICROZONE SUPER SPECIAL OFFER!

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



Additional Receivers Available!

8 CHANNEL RADIO
NEW MODEL JUST RELEASED!
COMPUTER RADIO WITH COLOUR SCREEN
- INCLUDES RECEIVER
OUR PRICE £59.99!



LARGE RANGE OFF HIGH QUALITY
7.2 VOLT BATTERY PACKS

2000MAH - £11.99
3000MAH - £15.50
3300MAH - £15.99
3800MAH - £19.99
4000MAH - £24.99
5000MAH - £26.99

Lead Acid Batteries

6 VOLT 1.0 AMP - £4.99
6 VOLT 1.3AMP - £4.99
6 VOLT 3.4 AMP - £6.50
6 VOLT 4.5 AMP - £5.99
6 VOLT 7 AMP - £7.99
6 VOLT 12 AMP - £12.99
12 VOLT 2.3 AMP - £8.99
12 VOLT 3.2 AMP - £9.99
12 VOLT 4.5 AMP - £9.99
12 VOLT 7 AMP - £12.99
6V JELLY CHARGER - £9.99
12V JELLY CHARGER - £9.99

NEW ABSIMA SR4S 4 CHANNEL RADIO!

ABSIMA 4 Channel 2.4GHz Combo
Transmitter & Receiver!
Adjustable Travel Volume On Rudder
Servo.

OUR PRICE ONLY
£39.99!



Additional Receivers Available

Kingmax Sail Winch Servo's

Dimensions 40x19x38mm
1.5 Turn Standard Size Servo Speed:
0.9/360 Torque: 6.1kg - Only £10.99
2.0 Turn Standard Size Servo Speed:
0.9/360 Torque: 6.1kg - Only £10.99
4.0 Turn Standard Size Servo Speed:
0.9/360 Torque: 6.1kg - Only £10.99
4.0 Turn Standard Size Metal Gears
Speed: 0.9/360 Torque: 12kg - Only £15.99
6.0 Turn Standard Size Servo Speed:
0.9/360 Torque: 6.1kg - Only £10.99
6.0 Turn Standard Size Metal Gears
Speed: 0.9/360 Torque: 12kg - Only £15.99



Standard
Size

KING MAX
MAX KINGMAX HOBBY CO., LTD



NEW HORIZON 30 INCH HARBOUR TUG BOAT RTR

COMES READY TO RUN WITH
ELECTRONICS AND RADIO GEAR
HAS A OPERATIONAL WATER PUMP!
REQUIRES 11.1V BATTERY & CHARGER
RRP £509.99

OUR PRICE £479.99



FUTABA T6L
2.4GHz 6 CHANNEL
RADIO INCLUDES
R3106GF RECEIVER
OUR PRICE
£94.99!



FLYSKY FS-14X
4 Channel radio set from
Flysky. Great value and
Includes receiver
Only £39.99!
Additional RX £14.99



FLYSKY FS-16
6 Channel Computer
radio with a ton of
features and setting
adjustments!
Includes receiver
Only £54.99!
Additional RX £16.99



SHARK BRUSHLESS ESC'S

NEW RANGE OF BRUSHLESS ESC'S. DIFFERENT
AMPS AVAILABLE FOR MOST MOTORS
20AMP - £19.99 30AMP - £21.99
40AMP - £24.99 50AMP - £56.99
60AMP - £43.99 80AMP - £55.99

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

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



Waterproof

Waterproof

Marine Speed Controllers

NEW RANGE WITH LOW PRICES!

10A 4.8-12v ONLY £34.99
15A 6-12 V ONLY £34.99
15A PLUG N PLAY 6 -12v - £34.99
15A 12-24 V ONLY £41.99
25A 6-12 V ONLY £41.99
25A PLUG N PLAY -12v - £47.99
40A 6-12 V ONLY £52.99
RADIO LINK 90A ESC
(NIMH & LIPO!) ONLY £29.99!
HOBBYWING 60A 1060 ESC - £22.40

BRUSHLESS SPEED CONTROLS

MTRONIKS G2 HYDRA 15A BRUSHLESS
RRP £55.99 - NOW £49.99
MTRONIKS G2 HYDRA 30A BRUSHLESS
RRP £69.99 - NOW £62.99
MTRONIKS G2 HYDRA 50A BRUSHLESS
RRP £95.99 - NOW £85.99
MTRONIKS MICRO SWITCHER - £19.99

SPECIAL OFFER!

FUTABA 4YF RADIO SET
4 CHANNEL SET IDEAL FOR MODEL
BOATS. TX & RX - RRP £159.99
OUR PRICE - £84.99!

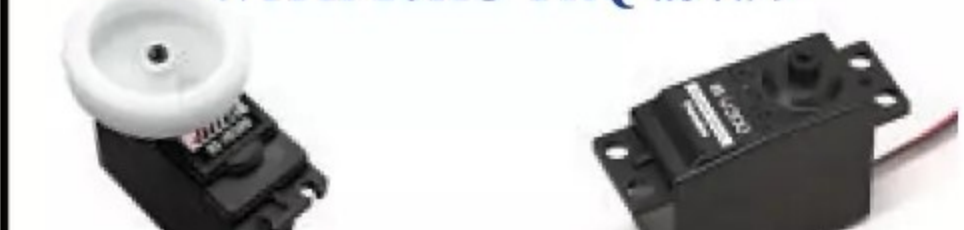


Li-Po Batteries at Great Prices

7.4v 1000mah - £11.60
7.4v 1300mah - £12.99
7.4v 1600mah - £14.99
7.4v 2200mah - £15.50
7.4v 3900mah - £29.99
11.1v 1000mah - £15.50
11.1v 1300mah - £18.50
11.1v 1600mah - £19.99
11.1v 2200mah - £17.99
11.1v 3900mah £43.99
11.1v 5000mah - £48.99

SERVOS

POWER 3KG STANDARD - £4.99
OR SPECIAL OFFER 2 for £8.00!
NEW! FUTABA SU300 DIGITAL - £14.99
RADIENT 5KG BB WATER RES - £10.99
FUTABA SU400 4.5KG S-BUS - £32.50
FUTABA SU301 S-BUS - £19.99
HITEC 325 BALLRACE - £19.99
POWER HD 9g Micro £3.50
OR 4 For £13.50
HOWES 15KG MG SERVO £9.99
(2 FOR £14.00!)
MICRO METAL GEARED £4.99
MINI SERVO ONLY £4.00 (4 for £15.00)
HIGH POWERED BALLRACED £7.99
**SAIL ARM, WINCH &
SPECIALIST SERVOS**
HITEC 785 HB SAIL WINCH
WITH FULL ROTATION DRUM
OUR SPECIAL PRICE £36.99
HITEC 765BB SAIL ARM
WITH 12 CM LONG ARM
OUR SPECIAL PRICE £36.99
FUTABA HIGH VOLTAGE DIGITAL
S-BUS SERVO SU400 - £34.99
HITEC HS 805BB SAIL ARM HUGE
WITH 20KG TRQ £37.99



HOBBYWING

NEW RANGE OF ESCS

1060 60A FOR BRUSHED MOTORS. NIMH & LI-
PO COMATIBLE! - £22.49
BRUSHLESS ESCS
SEAKING 30A - £27.99
SEAKING 60A - £51.99
PROGRAM CARD - £9.99



SUPER SERVO SPECIAL!

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

ONLY £9.99!
OR 2 FOR £14.00!



NEW HENG LONG 686 RTR TUG BOAT

MODEL COMES WITH 2.4GHz
HANDSET, BATTERY AND
CHARGER! LENGTH - 28CM
AVAILABLE IN GREEN OR
BLACK! RRP £39.99

OUR PRICE - £34.99!



JOYSWAY DRAGON FORCE V7

Length 650mm Height 1338mm
VERY POPULAR RC YACHT!
Now with improved winch servo.
Ready to Run with 2.4GHz radio

RRP £284.99

ONLY £249.99

ARTR VERSION (NO RADIO)

ONLY £209.99

NEW HENG LONG
SEA GOD 6 KARTING
BRUSHLESS SPEED BOAT
LENGTH 24CM - GREAT FUN!



Only £44.99!

HANDSET, BATTERY & CHARGER INCLUDED

NEW DEALS ADDED DAILY ON WEBSITE!

01865 848000 WWW.HOWESMODELS.CO.UK

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

NEW RADIO LINK ESC!

90A WATERPROOF ESC!
WORKS WITH NI-MH AND
LI-PO BATTERIES!



OUR SPECIAL
INTRODUCTIONARY PRICE
ONLY £29.99!

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

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

Motor Speciation

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

Diameter: 28mm - Length: 38mm

Hydra 15A Combo - Only £69.99

Hydra 30A Combo - Only £80.99

Ideal Replacement for 380 - 400 Motors

Hydra 50A Combo - Only £143.99

MTRONIKS TIO LI-PO SAFE ESCS

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

15A - RRP £44.99 OUR PRICE **£39.99**

30A - RRP £59.99 OUR PRICE **£53.99**

50A - RRP £77.99 OUR PRICE **£69.99**



SUPER SERVO SPECIAL!

HOWES STANDARD SERVO

4KG TORQUE - INCLUDES FITTINGS

SIZE - 40.3 X 19.8 X 38.6MM

ONLY £4.99 EACH!

OR 2 FOR

£8.00!

Receiver & Transmitter Batteries

4.8 VOLT PACKS

1200MAH FLAT OR SQUARE - £6.99

2400MAH FLAT OR SQUARE £9.99

6 VOLT PACKS

1200MAH FLAT OR TRIANGLE - £8.99

1600MAH FLAT OR TRIANGLE CELLS - £11.99

£2400MAH FLAT OR TRI - £11.99

9.6 VOLT TRANSMITTER PACKS

1200 MAH FLAT - £15.00

2000 MAH SQUARE - £19.99

2400MAH FLAT £22.99

AAA RECEIVER PACKS!

4.8V 800MAH FLAT OR SQUARE - £14.99

6V 800MAH FLAT OR TRIANGLE - £17.50

2/3RDS AA BATTERIES, FLAT OR SQUARE

4.8V 600MAH - £6.50

SUMMER SPECIAL!

SEAPORT WORK BOAT TUG WITH
WORKING WATER CANNON!

READY TO RUN BOAT NOW WITH

2.4GHz RADIO GEAR

& LITHIUM BATTERY

LENGTH - 60CM

RRP £99.99

OUR PRICE

£84.99!



Electric Motors

385 5-POLE £3.99 each

400 3-POLE £6.99

540 3-POLE £3.99

545 5-POLE £3.99

683 5-POLE £4.00

MFA RE 140 (3-6v) £2.75

MFA RE 170 (1.5-3v) £3.75

MFA RE 360 (6-15v) £4.99

MFA 380 (3-7.2v) £5.75

MFA 385 (4.5-15v) £5.75

MFA RE 540 (4.5-15v) 3 POLE £7.50

MFA TORPEDO 800 £25.99

MFA TORPEDO 850 £25.99



NEW! VOLATEX ARROBOLT

SELF RIGHTING BRUSHLESS SPEED
BOAT! READY TO RUN FROM THE BOX,
INCLUDES 2 BATTERIES!

AVAILABLE IN GREEN OR BLUE AND YOU
CAN RACE MORE THAN ONE TOGETHER!

CAPPABLE OF SPEEDS OF 30KM/H!

40CM LENGTH -

ONLY £99.99



BINARY CATAMA- RAN YACHT

READY TO RUN FROM
THE BOX, GREAT FUN
FOR BEGINNERS.

AVAILABLE IN BLUE
OR RED. LENGTH -
400mm

RRP £99.99

ONLY

£89.99



WANTED

WE BUY SECOND HAND
RADIO CONTROL
MODELS

FROM SMALL ITEMS TO
COMPLETE
COLLECTIONS

CAN BE COLLECTED

PLEASE CALL US
ON 01865 848000
AND ASK FOR NICK



FANTASTIC NEW RANGE OF BRUSHLESS MOTORS!

IDEAL UPGRADES FOR 385 AND
540 SIZED BRUSHED MOTORS!

FROM 2300KV TO 6100KV!

PRICES FROM £13.99!

ALSO AVAILABLE WITH ESC'S AS
COMBOS! CHECK WEBSITE FOR BEST
DEALS AND PRICES!

PROPS, SHAFTS ETC

LARGE RANGE OF THE
FOLLOWING

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



Extension Leads

FOR ALL SERVOS!

SERVO LEADS 200mm £0.85

EXTN LEADS: 100mm - £0.70

150mm - £0.75 200mm - £0.80

300mm - £0.85 500mm - £0.99

1 Meter - £1.60

Y LEAD £1.75 each

BEC/JST RED BOTH ENDS £0.90

SWITCH HARNESS £3.99



NEW FTX GLADER TURBOJET

READY TO RUN SPEED BOAT

WITH SELF RIGHTING!

AVAILABLE IN 2 COLOURS!

GREAT FUN! BATTERY POWERED

LENGTH - 34CM - WIDTH - 10CM



RRP £54.99

OUR PRICE ONLY £49.99!

SALINA SPEED BOAT

LARGE READY TO RUN CRUISER BOAT
BY HENG LONG LENGTH OVER 70CM!



INCLUDES HANDSET, POWERFULL 8.4V
BATTERY & CHARGER.

JUST ADD 4 X AA BATTERIES FOR HANDSET

ONLY £84.99!

MODEL BOAT BUILDER

Find us on Facebook

PLANS / MOULDINGS / WOODPACKS / TOOLS / ACCESSORIES / DVDs / BOOKS
The World's biggest selection of Radio Controlled Aircraft, Boat & Model Engineering plans & parts

sarik hobbies

www.sarikhobbies.com

01684 311682

The store for the model boat builder

Marguerite Bristol Channel Pilot Cutter

Plan DAP008 £14.50
GRP Hull DAH008 £121.00

SAVE: Plan & Hull Set
DASET008 £121.95

SHORT KITS

Barb's Boat SET3550 £99.00
Chouette SET2560 £141.00
Etoile Jet Bikel SET2324 £103.00
Fairey Huntress 23 SETMB2131 £68.00
Fairey Huntsman SETMM680 £82.00
Fairey Huntsman 31 SETMM2111 £68.00
Fishing Boat Orca (from 'Jaws') SET2463 £114.00
Higgins Hellcat Torpedo Boat SETMM2056 £82.00
HMS Crane SET3524 £38.00
HMS Embling SETMM2055 £66.00
HMS Temerity SETMM2094 £76.00
Mariner US 80' Tow Boat SET3532 £94.00
Meteor SET2407 £47.00
Nimbus Mk3 SET3133 £99.00
Invictus of Allington SETMM2117 £87.00
Pilot Boat SET3062 £94.00
Riva Aquarama 1:12 SET2552/LG £135.00
Riva Aquarama 1:24 SET2552/SM £36.00
SG&K 22" Gentlemen's Runabout SET3509 £46.00
SS Noggund Steamship SETMM2057 £39.00
Star Baby SET3295 £116.00
Strathclyde 70 Wee Nip SET2966 £60.00
SV Sunbeam Solar Ferry SETMB2141 £82.00
UTE Workboat SETMM2079/UTE £62.00
Thames Barge Veronica SET3584 £171.00
Thames Lighter SET3552 £42.00
Tid Tug (T.I.D. Class Tug) SET2447 £118.00
USS Bodega Bay SETMAGM2010 £162.00
Vosper MTB SETMM2062 £75.00
Vosper MTB379 SET3505 £128.00
Vosper RTTL SETMM530 £91.00
Wild Duck SETMM2127 £126.00

PLAN & HULL SETS

Baikal FG SETMM1331 £98.55
Bluebird Of Chelsea ABS SETBM1449 £48.60
Brave Borderer FG SETMM609 £97.20
Breeze (Pilot Cutter) FG DASET006 £135.00
Britannia Paddle Ship FG SETMM1336 £98.55
Buruu & Bajima Tug ABS SETMM1339 £47.70
Celia May Steam Launch ABS SETMM1429 £48.15
Cormorant V112 ABS SETV112 £43.65
Egret Pusher Tug ABS SETMM1417 £48.15
Forceful Tug FG SETMM1292&3 £115.20
Galway Hooker FG SETSH2022B £126.90
Grand Banks Schooner SETMM962 £99.45
Guardsman ABS SETMM1330 £42.30
Harbour Defence Motor Launch ABS SETMM1356 £47.25
Havendienst IV Tug ABS SETMM1440 £46.35
HMS Embling WOOD SETMM2055 £66.00
Ibex (Brixham Trawler) FG DASET004 £132.50
Katie (Gaff Rig Pilot Cutter) FG DASET001 £106.20
Keenoma Tug ABS SETMM1322 £98.55
Kingfisher Fishing Cruiser FG SETMM1458 £100.35
Lady Ma FG DASET002 £77.40
Liverpool Lifeboat SETMM1448 £98.55
Manx Nobby GRP DASET005 £137.70
Marguerite FG DASET008 £121.95
Moorcock 1:24 FG SETSH2023B £149.40
Neptune 36 Trawler Yacht FG SETMM1436 £100.35
Paddle Tug Lulunga ABS SETMM1465 £53.10
Pilot 40 ABS SETMM1444 £52.20
Pilot Cutter 'Hilda 2' FG DASET003 £142.20
Revive Static Sail FG SETMM1275 £95.85
Shirley Ann ABS SETMM1422 £48.15
Smit Nederland Tug ABS SETMM1409 £48.15
St Cervia Thames Tug FG SETMM567 £92.70
St Louis Belle Paddle Ship FG SETMM826 £87.30
Submersible Submarine ABS SETBM1426 £31.05
Thames River Tug Plaudit ABS SETMM1453 £55.80
Topsail Schooner FG SETMM909 £86.40
Tyne Lifeboat ABS SETMM1390 £52.20
Victoria Steam Launch SETMM1368 £40.95

(THEY ARE ALSO AVAILABLE INDIVIDUALLY)

INCLUDES PLAN & FG OR ABS HULL

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

SECURE ONLINE ORDERING

1000s OF MODEL PLAN DESIGNS

EXTENSIVE RANGE

Model boat plans to keep any builder busy
Scale Boats & Ships
Sailing Boats & Yachts
Easy to Build Boats
Engineering
Competition Boats
Hovercrafts

WOOD RANGE



BALSA, PLY & SPRUCE

FREE UK DELIVERY
on orders over £150



RC & Static
Kits available



Model Aircraft & Boat books
and DVDs also available!



FORCEFUL TUG

Plan MM1292 £19.00
Working Drawings MM1293 £14.00
FG Hull HULMM1292 £95.00

SAVE: Buy the plan, drawings & hull together
Short Kit (Set) SETMM1292&3 £115.20



BLUEBIRD OF CHELSEA

Plan BM1449 £15.00
ABS Hull HULBM1449 £39.00

SAVE: Buy the plan & hull together
Short Kit (Set) SETBM1449 £48.60



TYNE DAS LIFEBOAT

Plan MM1390 £16.00
ABS Hull HULMM1390 £42.00

SAVE: Buy the plan & hull together
Short Kit (Set) SETMM1390 £52.20



'HILDA 2' PILOT CUTTER

Plan DAP003 £22.00
FG Hull DAH003 £136.00

SAVE: Buy the plan & hull together
Short Kit (Set) DASET003 £142.20

TOOLS, ACCESSORIES & SUPPLIES

We also stock screwdrivers, hand files, sanding blocks, tools & clamps, epoxy, aerosols & more



VISA

MasterCard

PayPal

Find us on Facebook

www.sarikhobbies.com

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

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



Miniature Steam Pty Ltd

Specialist Producer of Model Marine Steam Plants

FREE Postage During 2022/3



MSM 3" Boiler/Clyde Oscillator Steam Plants

Vertical Boiler

Tray size 85 x 205mm



Capable of powering
model boats up to 1.1
meters long.

Comes complete with
refillable gas tank, oil
trap and all piping

-ready to run!

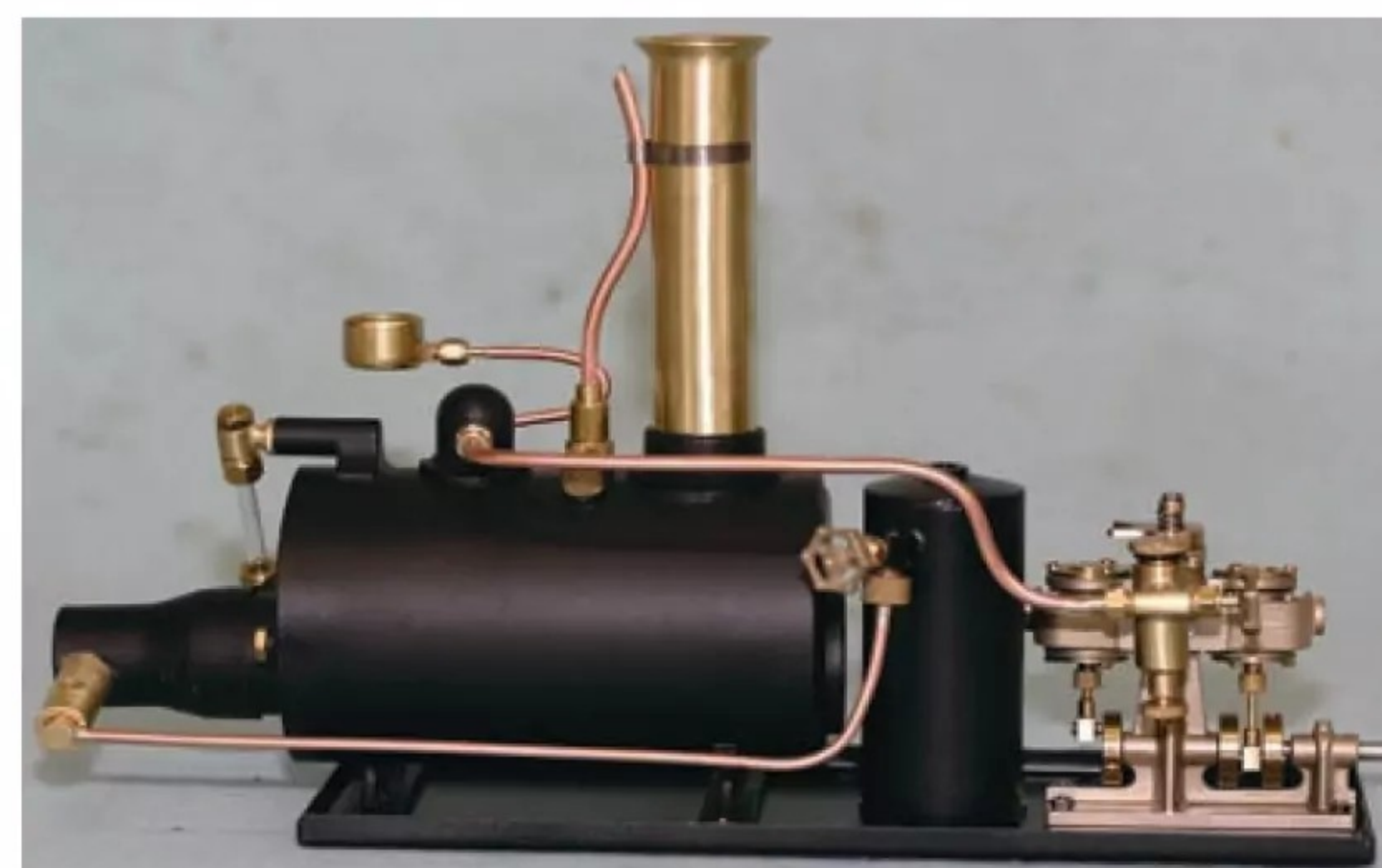
**Every item required is
included.**

Just fill the boiler, the
gas tank & the displace-
ment lubricator and fire
up the boiler.

Approx. 20 mins run
time per boiler fill.

Horizontal Boiler

Tray Size 100 x 255mm



Our website: www.miniaturesteammodels.com

Our email: info@miniaturesteammodels.com

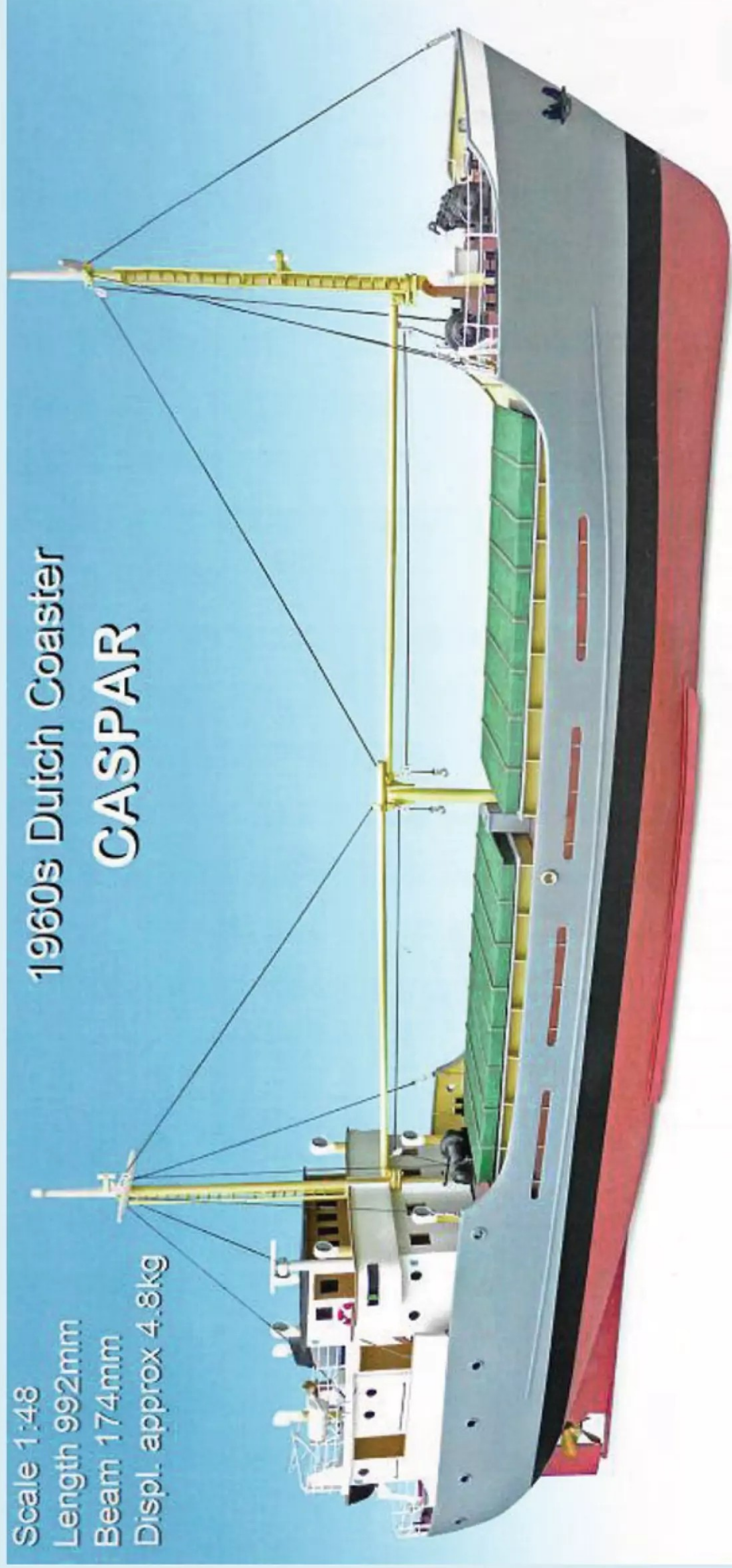
Scale 1:48

Length 992mm

Beam 174mm

Displ. approx 4.8kg

1960s Dutch Coaster CASPAR



This attractive model is a representation of a 512ton general cargo motor vessel built in the Netherlands in the early 1960s. There have been many vessels built to this basic design so you can invent your own colour scheme.



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

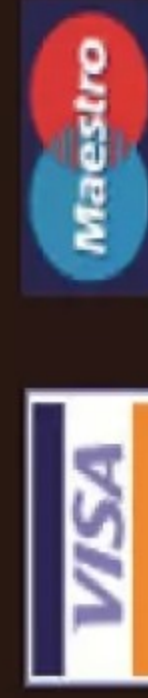
MOUNTFLEET MODELS



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

www.mountfleetmodels.co.uk

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



Buy on-line or
phone/post
your order

Compass 360

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

OUT AND ABOUT

Glasgow Richmond MBC Regatta

From 11am to 4pm on **August 17**, the Glasgow Richmond Model Boat Club will be holding an Open Day Regatta in Richmond Park, G5 0BJ. Attractions will include a free to sign up to Steering & Docking Competition, awards for Best Model Overall, Best Kit-Built Model, and more, plus an 'Old School' Boat display. Visit the club's Facebook page, listed under Richard Glasgow Model Boat Club for more info.

If you are within striking distance, please do try and get along and show your support as, sadly, after an enormous amount of hard work and planning, the club's July 20 Warship Open Day event had to be called off due for safety reasons due to weather warnings and torrential rain that weekend.



GLASGOW RICHMOND MODEL BOAT CLUB
GLASGOW, RICHMOND PARK, G5 0BJ

JOIN US IN OUR REGATTA OPEN DAY!

17 AUGUST 2025 11.00-16.00

Our popular Steering & Docking Competition is back – open to everyone with FREE sign-up on the day!

Show off your skills or cheer from the shore!

And that's not all... there will be more competitions too: Best Model Overall, Best Kit-Built Model, and more!

Come and be part of the fun!

We're giving something new a go this year – a "Old School" Boat Display. Let's see how it turns out!

If you'd like to showcase an old school boat or memorabilia connected to someone special – or if it's yours – now's your chance! Let us know – we'll have space ready.

Contact: secretary.grbmc@gmail.com

Scan here to follow us on Facebook and stay connected!

Barry MBC Open Day



BARRY MODEL BOAT CLUB

FAMILY SUNDAY

Sunday 7th September
KNAP LAKE, BARRY
9.30am – 4pm

JOIN US FOR

SELECTION OF MODEL BOATS
DISPLAYS & RACING
MODEL TRADERS
FOOD STALL/VANS
KNOWLEDGE & SKILL SHARING
RAFFLE & PROGRAMME SALES

Fun for all ages

Proceeds to the Alzheimer's Society

Traders/Public enquiries
Email: barrymodelboatclub@yahoo.com
Facebook: [barry model boat club](https://www.facebook.com/barrymodelboatclub)

From 10.30am to 4pm on Sunday, **September 7**, the Barry Model Boat Club will be hosting a charity event at Knap Lake, Barry, in aid of the Alzheimer's Society. Visitors to this family friendly event be able to enjoy static model boat displays, demos and racing on the water, knowledge and skill sharing, trade stands, onsite refreshments and a raffle.

For more details and updates, visit www.barrymodelboatclub.co.uk/events-calendar.

Deans Marine Open Weekend



From 10am to 4pm on **Friday, September 5 and Saturday, September 6**, Deans Marine will be holding an open event at its premises in Conquest Drove, Farcet Fen, Peterborough PE7 3DH. There will be over 200 models, including new and forthcoming releases, on display in the showroom, and the shop will be open for all the parts, fittings and modeling accessories you may need, with lots of



special offers on both kits and 1mt long styrene profiles.

As well as being able to watch demonstrations on the venue's test pond, visitors will also be welcome to bring along their own models to sail – and being a built-up facility, the pond provides easy and safe access to the water for all, including those with disabilities.

Plus, there will be model building demonstrations, tours of the



workshops providing insights into kit design and production, numerous club and trade stands to browse and the café will be open on both days.

All proceeds raised at this event will be donated to local charities and while there is no charge for admission, contributions via a box at the entrance will be gratefully received.

If you are intending to make a weekend of it, reserving a space in the >



camping and caravanning area in the paddock adjacent to the workshops is a must, as space will be limited and priority given to traders and club members who are setting up stalls at the event. Likewise, for those wishing to attend the annual

Saturday evening gathering/barbeque, pre-booking is essential. Please, therefore, contact the team at Deans Marine either by telephone (01733 244166) or via the website (www.deansmarine.co.uk) to avoid disappointment.

Norwich MBC Tug & Steam Day



From around 8am to 4pm on **September 7**, Norwich MBC will be hosting a Tug & Steam Day at its home base, the boating pond (constructed in 1928 and considered one of the finest in Europe) located in Norwich's beautiful Eaton Park.

The club, whose members meet on Saturday mornings for yachting regattas, on Sundays for general sailing and on Wednesday afternoons for fast electric racing, hosts no less than ten differently themed open to the public events each year (visit <https://www.norwichmodelboatclub.co.uk/calendars/home-events> for full details). It also attends various shows, taking along a mobile pool for demos and a marquee in which to statically display.



The BIG St Albans Model Show

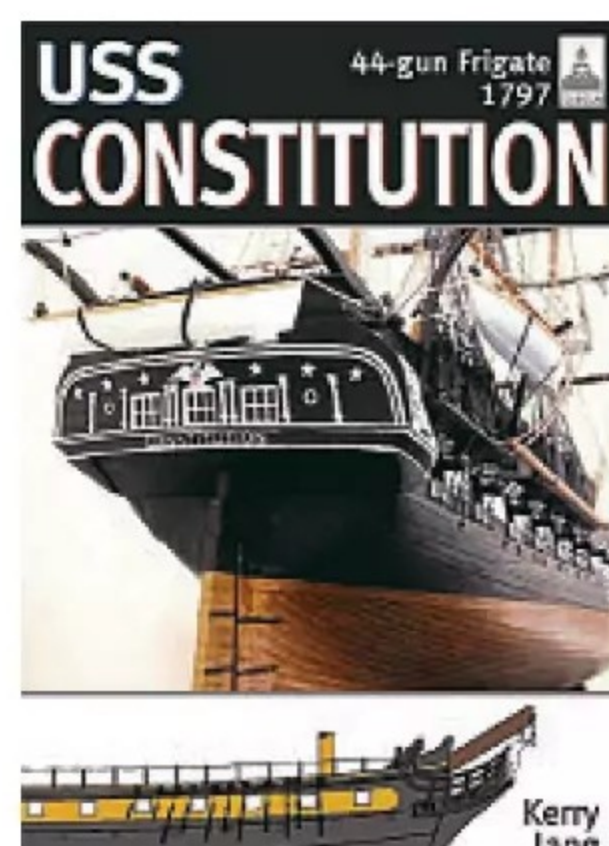


This popular annual event, organized by the St Albans & District Model Engineering Society, will be returning to Townsend Church of England School at High Oaks in St Albans (AL3 6DR) over the weekend of **September 27/28**. Visitors to the show, which embraces all types of 'Models That Move' – including model boats, will be able to enjoy free onsite parking, and refreshments will be available to purchase throughout the day.

For further details, visit <https://stalbansmes.com>

BUY THE BOOK

USS Constitution, 44-gun frigate, 1799



The latest title in the Shipcraft series, penned by author Kerry Jang, serves as a very useful and reliable point of reference for those wishing to accurately portray the USS Constitution in model form.

The book documents, as accurately as evidence allows, the numerous changes made to the ship's appearance over the course of her long service, as well as the colour schemes she most likely carried at the most significant stages of her career.

The author also reviews the strengths and weakness of the various kits available, provides hints and tips on modifying and improving them, including tackling the complexities of rigging, and lists the commercial accessory sets for super-detailing that can be purchased.

This is followed by an extensive photographic gallery of selected high-quality models in a variety of scales, before coverage concludes with a section on further research references, such as books, monographs, large-scale plans and relevant websites.

Published in paperback format, the title carries an RRP (Recommended Retail Price) of £16.99 and orders can be placed either via www.pen-and-sword.co.uk or at all good bookstores when quoting ISBN 978103 611 8631.

Cumrae Charity Sail

On June 21, Graham Davis and his team, supported by the Largs Model Boat Club, made a valiant attempt to sail a small fleet of Minifolkboats around Cumrae Island in the lower Firth of the Clyde in western Scotland. Sadly, however, after 8 miles of open water sailing, the weather turned, the wind strength

reached 18 knots and conditions at sea simply became too rough to continue.

That's the bad news... The good news is that the venture still managed to raise over £1,000 for its two chosen charities, Macmillan Cancer Carers and the Ocean Youth Trust, Scotland. So, bravo to all involved!





The Swedish Navy CB90 H at speed. Image sourced from Wikipedia.

SPEED Swedes

Dave Wooley and friends tackle the CB90 H and CB90 HSM (Next Generation) in model form...

To complement its successful CB90 H LCP (Landing Craft Personnel) fast assault boats, first introduced in 1990, in 2019 the Swedish Navy added the CB90 HSM, also known as the CB 90 Next Generation, to its fleet.

Measuring in at 16.3m in length by 3.80m in beam, with a hull weighing 18 tons and powered by Scania 900hp diesel V8, drive is provided by two water jet units. These boats can reach a maximum speed of 45kts, with a 30kts cruise speed, even in moderately choppy conditions. Although the design was originally intended for patrolling the coastal waters of Sweden and its numerous islands and inlets, the CB90 HSM features improved seakeeping, weapons (a Trackfire

remote gun system), sensor systems and updated ergonomics for the crew of three and twelve troops.

Currently, more than 250 CB90 Hs are in operation worldwide, and the Swedish Navy has taken delivery of 18 HSMs.

Developing the CB90 H and CB90 HSM in 1:16 scale

After completing the Royal Navy LCVP 5, I found myself looking around for another type of water jet powered model; one that serves a similar role but is visually different from the LCVP. When Dave Howard, a friend well versed in water jet drives and camouflage schemes, mentioned the CB90 H, therefore, he immediately

piqued my interest. There was, however, no commercially available hull, or indeed any modellers' draughts to work from, so the only option was going to be starting from absolute scratch.

It was at this point that I approached Mark Hawkins, who is probably best known for his 3D skills but is also a very accomplished scratch builder himself. Our conversation resulted in a 3D-generated 1:16 scale GRP hull moulding, with the forward deck, cab, and fittings also created in 3D.

After seeing several images of the 'Next Generation' CB90, though, I then asked Mark if the difference between the H and HSM could be reconciled with his GRP CB90 H hull design. The answer was yes. Thus, it

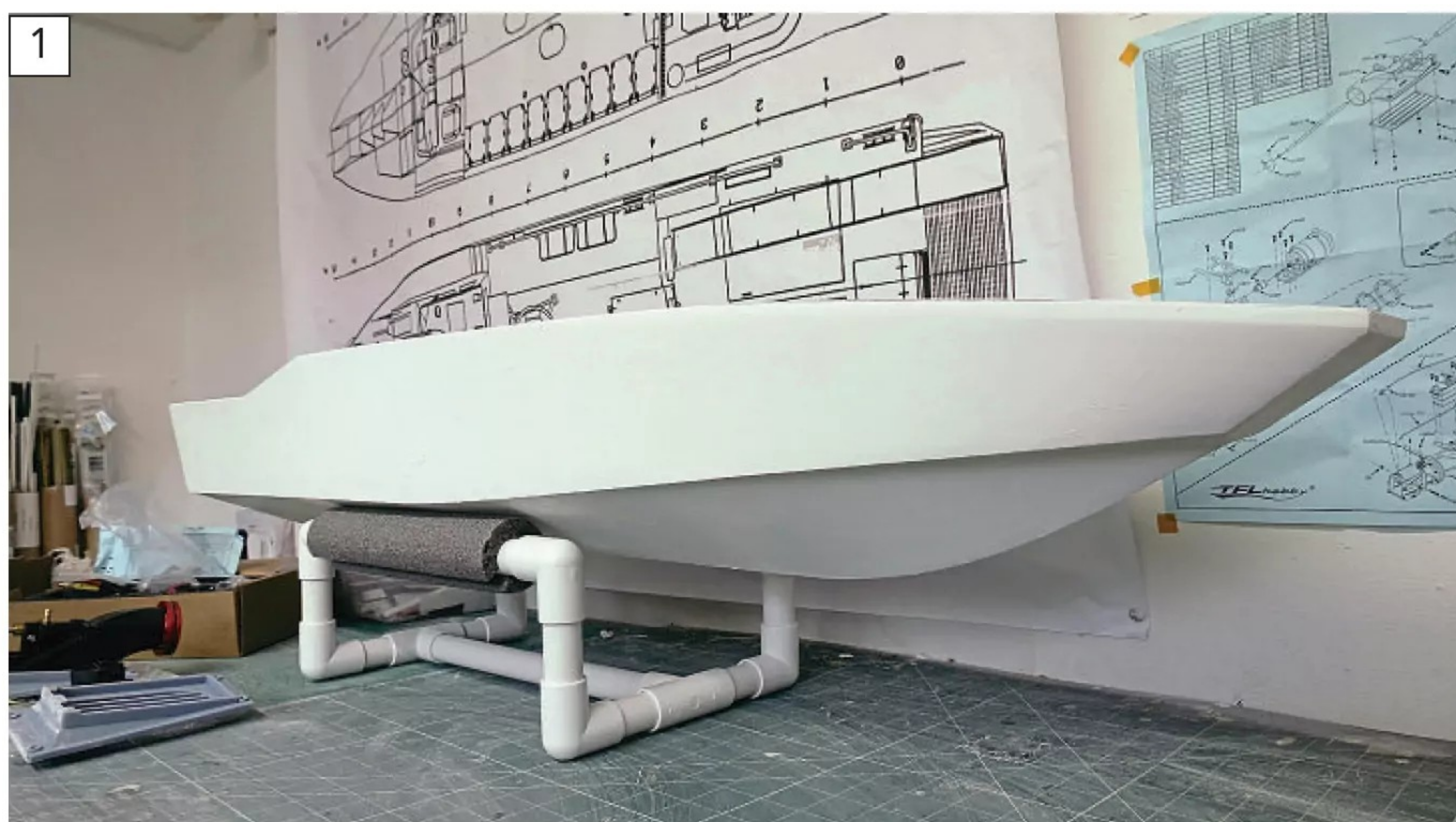


“It was decided Mark (Hawkins) and Dave (Howard) would complete the H design, while I would build the HSM configuration. The differences should become apparent as we progress through this article”

was decided Mark and Dave would complete the H design, while I would build the HSM configuration. The differences should become apparent as we progress through this article.

Construction and installation

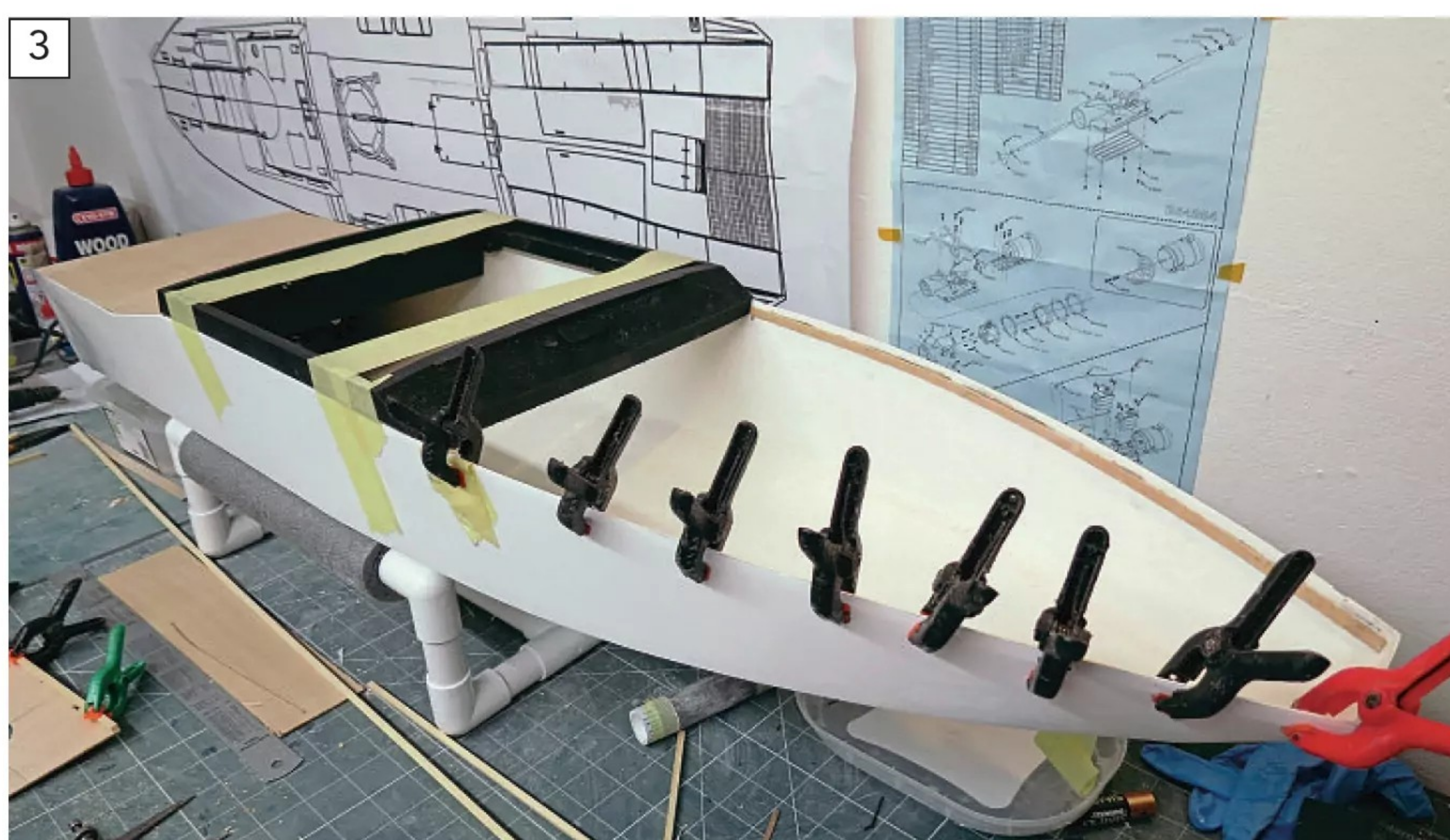
Now we had a GRP hull (see **Photo 1**), the next step was to source a suitable water jet drive. These are produced by various manufacturers in Germany and the Far East, but essentially there are only two types, i.e., those fitted with the Kamewa slat or with the bucket. While both operate differently, they



One of three GRP hulls formed using a 3D plug.



One of two TFL R/C water jet drives.



Forming the inboard stringers that will help when locating the 3D made foredeck.

essentially produce the same drive astern results. The technical differences were discussed in a previous series of articles relating to the build of the Finnish missile boat *Tornio* (see the November/December 2022 issues of *Model Boats*).

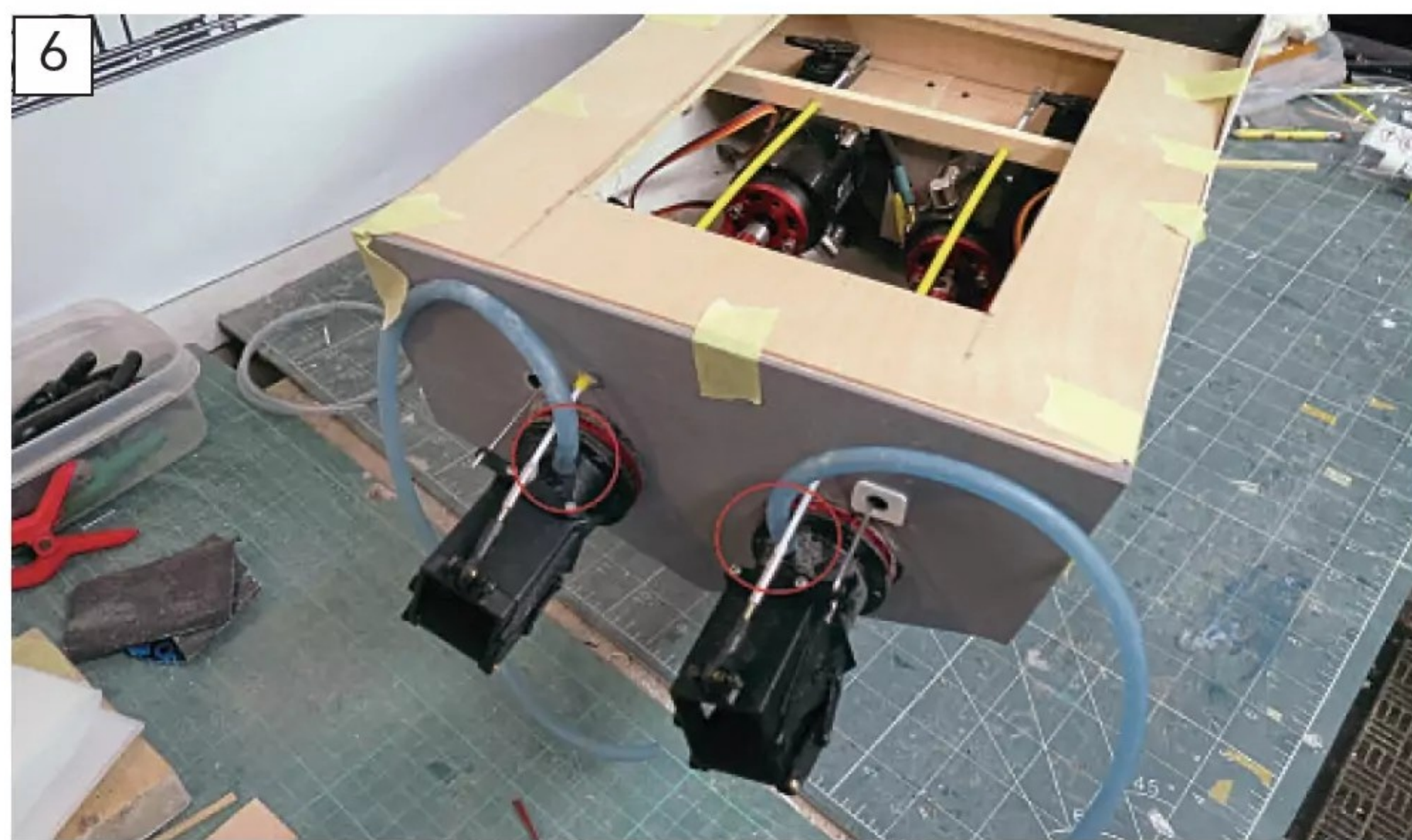
There are a number of manufacturers that list their jet drives according to the diameter of the outlet, for example, 15mm, 24mm, 28mm, and so on. The ones chosen for the CB90 were two 28mm from TFL R/C (see the Sourcing References box at the end of this



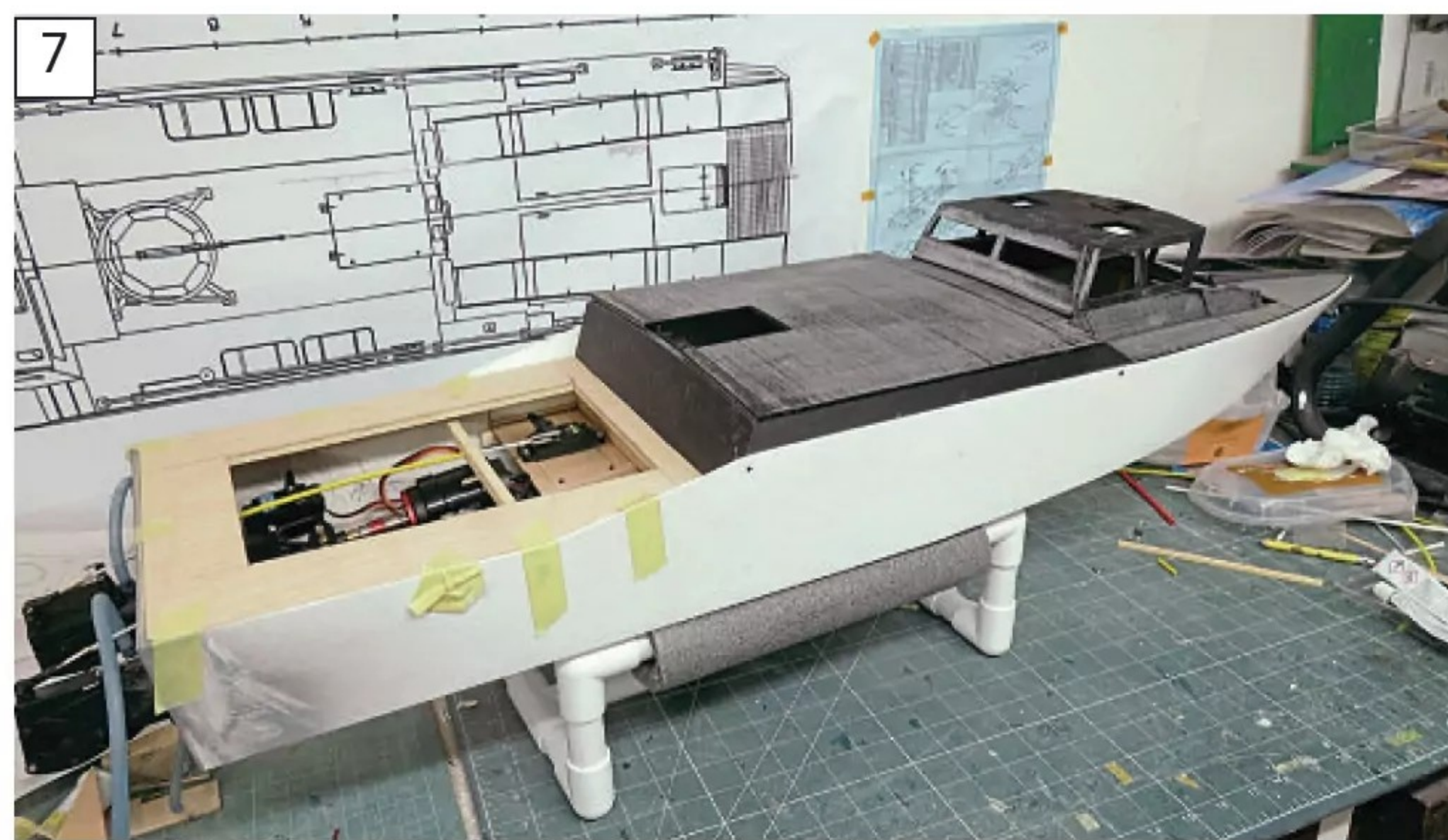
The rear deck formed from 2mm marine ply.



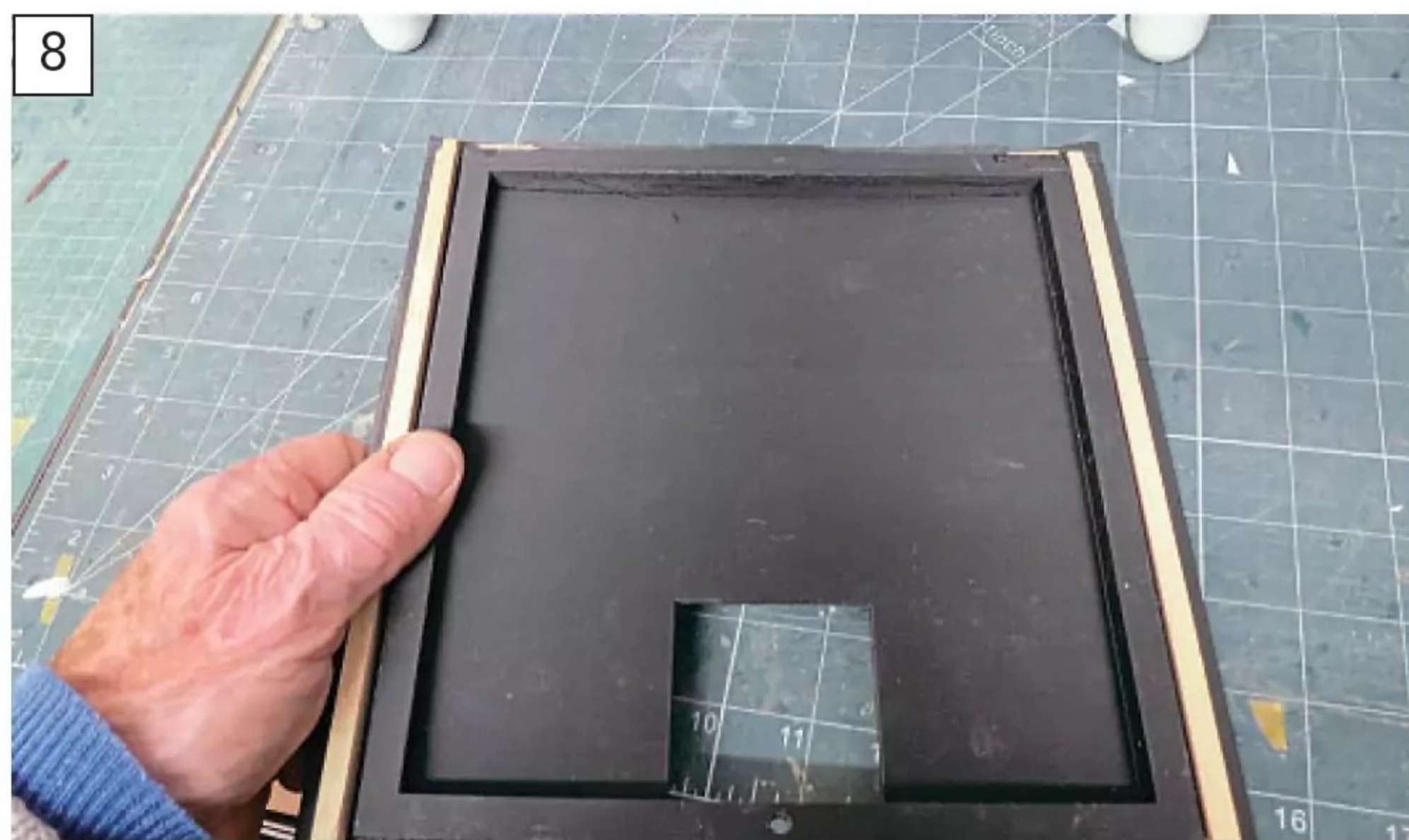
Water jet drives, and servos for the reverse thrust mounted unlike the steering nozzles on a dedicated platform.



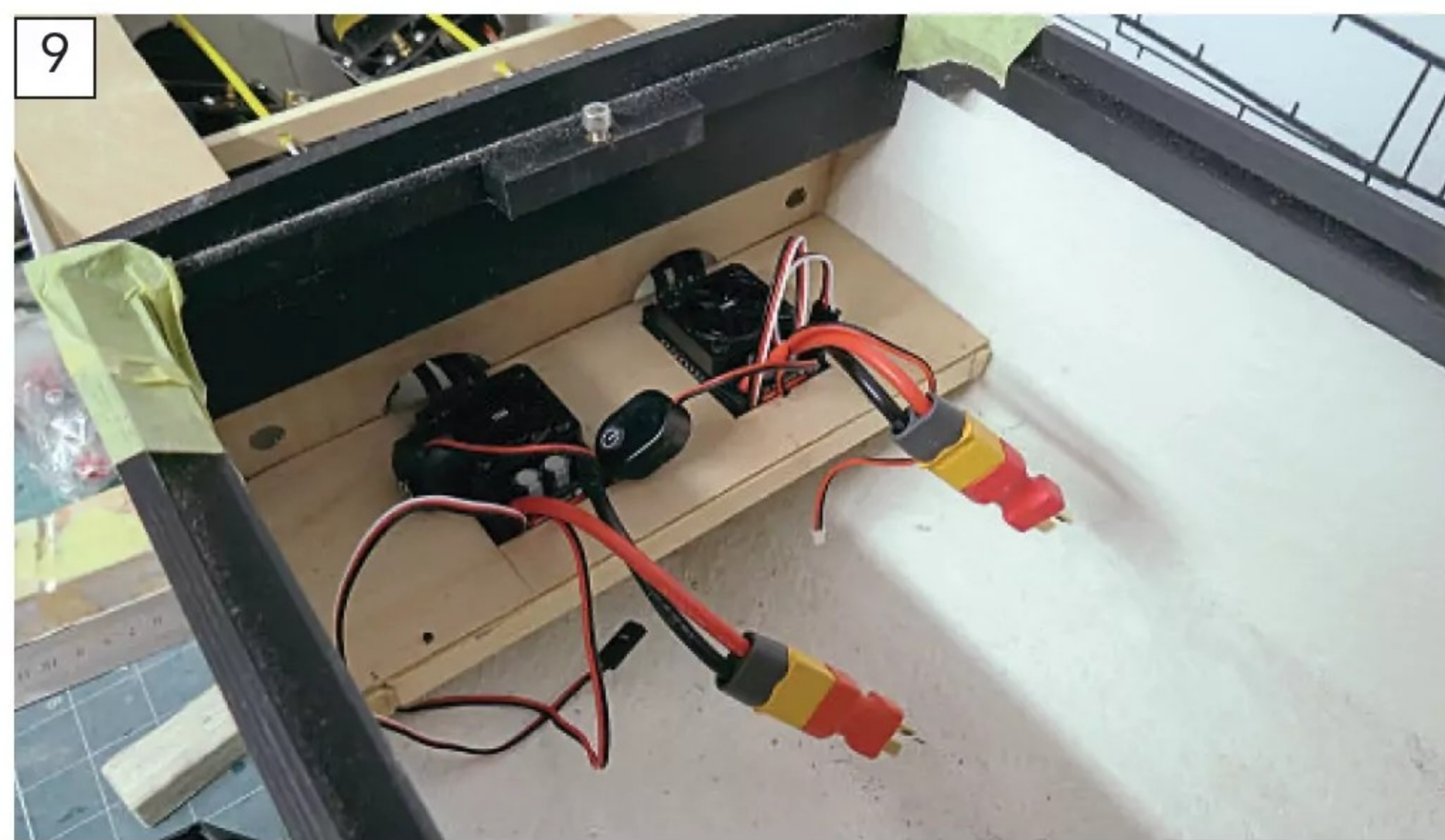
Locating the motor cooling tubes from the pick-up (circled in red).



Positioning the 3D printed deck amidships, wheelhouse and foredeck on the hull.



The 3D printed amidships deck and access hatch.



Positioning of the two fan-cooled ESCs on a dedicated platform.

“While many of the superstructure components, such as the wheelhouse and foredeck, were 3D printed, the use of some traditional techniques was necessary”

article); these come with an 3660KV water jacket in-runner brushless motor, plus four mini servos.

While many of the superstructure components, such as the wheelhouse and foredeck, were 3D printed, the use of some traditional techniques was necessary to secure these parts to the hull, as shown in **Photo 3**. The after deck on the CB90 H is

fitted with an array of small mines, which are discharged aft. On the HSM design, only the engine access hatches remain, omitting other features. Consequently, the 3D printed aft section was replaced by a 3mm marine plywood deck with an opening for access to the jet drive (see **Photo 4**).

Water jet installation and electrics

This subject has already been covered in some detail in my articles on both the Tornio and LCVP 5. However, in the latter case, the jet units were mounted on a flat surface. With the CB90, the underside to the transom is in V form. To make the

installation easier, therefore, Mark Hawkins provided a bespoke 3D printed mounting and grill onto which the water jet body could be bolted. This combination was fitted in place above the water intake, providing the accurate alignment required for the linkages through the transom to the reverse bucket and steering nozzle (see **Photo 5 and 6**).

To ensure that the hull remains ridged, the midsection surround was fitted to the deck edge and fixed into place using CT1 adhesive. With the top off, you can see the midsection's internal setup: two 60 amp rated air-cooled ESCs and two breaker switches (see **Photos 7 to 10**). At this stage of the build cycle the 3D



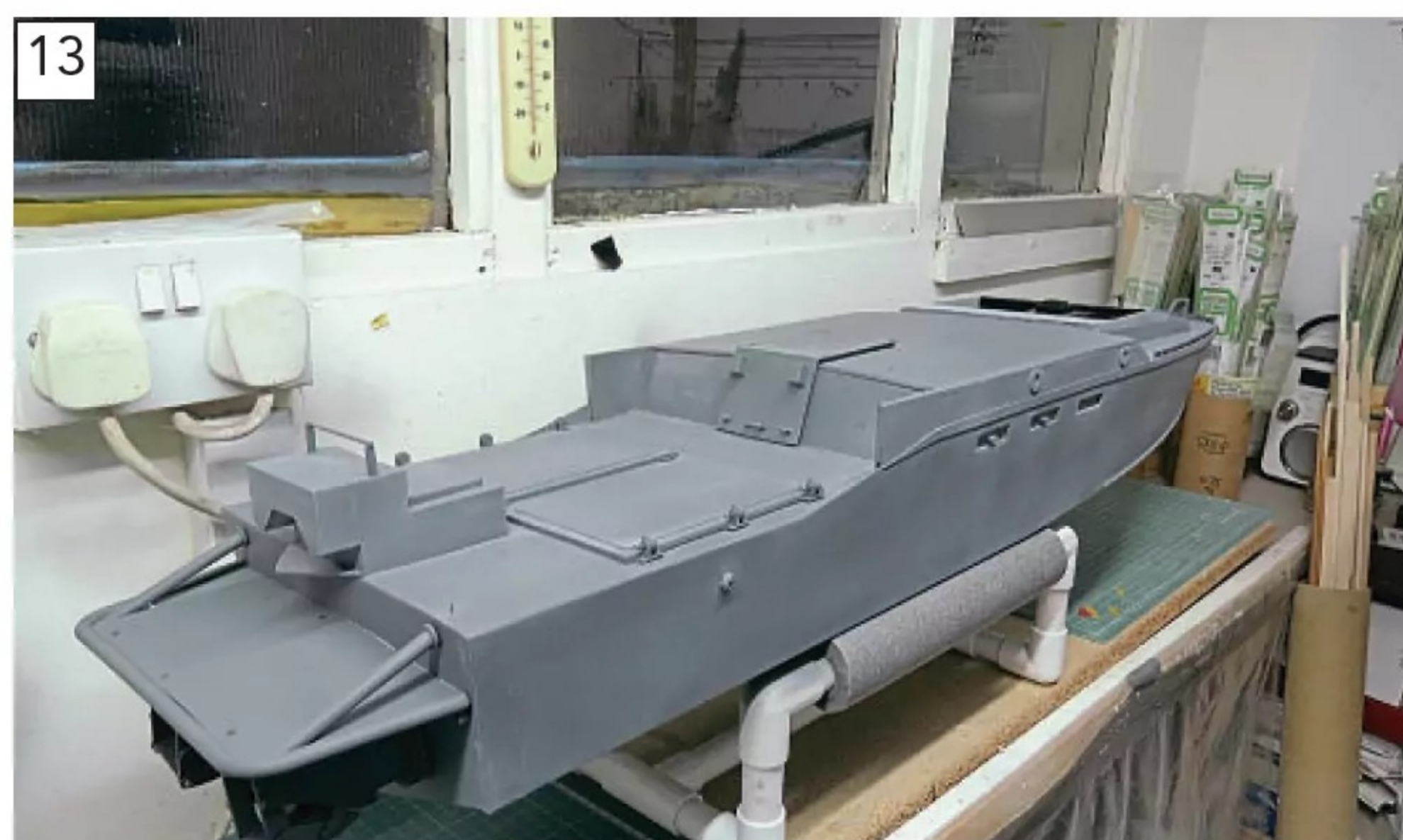
The breaker switch harness protecting the ESC.



The transom platform and jet assembly protection.



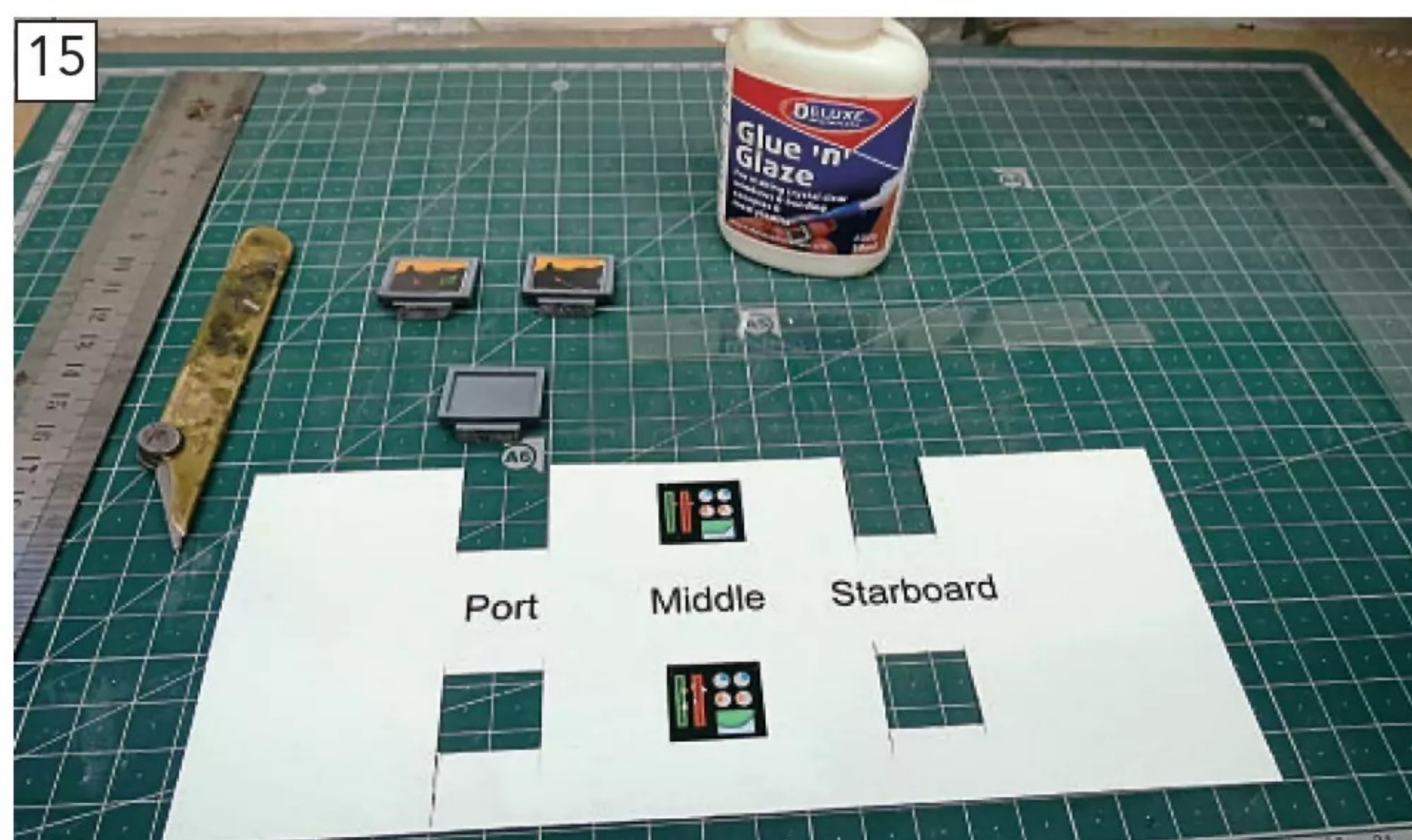
80% of the 3D printed parts in place.



Surface preparation and primer coat.



There are three windows along the side amidships; on each side these have been glazed and covered over.



The VDU (Visual Display Unit) decals to be set into place.

transom platform was fitted (see **Photo 11**). The remaining 3D parts were then also fitted into place. I should, however, point out that the foredeck, which included exit doors, ramp hatches and deck fittings, was affixed to the deck while it still remained loosely fitted to the hull; this ensured the wheelhouse well could be located on the underside of the deck. Equally, the cab roof surround also remained a loose fit until I had completed the glazing (see **Photo 12**).

Primer spray and cab installation

With the wheelhouse well fixed to the underside of the deck, the latter could be fixed into place, and the

build thus far could be given several coats of Hycote plastic primer (grey), which also serves as a filler. NB, depending on the type of 3D prints used, preparation of some of the larger 3D surfaces may require additional paste fillers, such as P38 (see **Photos 13 and 14**).

The wheelhouse cab

The cab well, ringed in red in **Photo 14**, I kitted out with visual display screens corresponding to the full-size vessel. The images on these screens (system instrumentation and navigation) were cut from a prepared decal sheet and added to the visual displays. These visual displays, along with two fully kitted crew figures, were fitted into the cab well (see **Photos 15 and 16**).

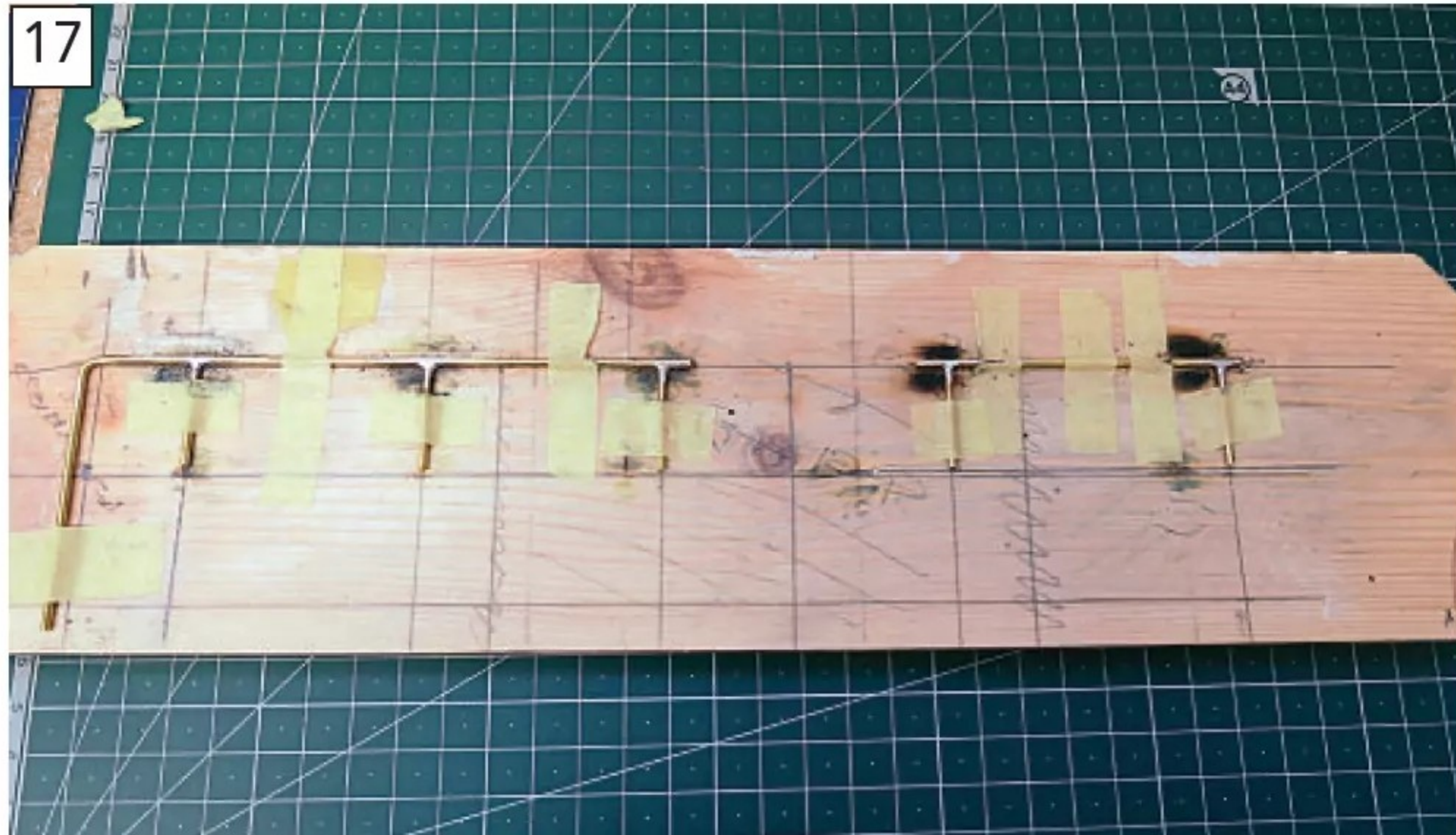


The internal display screens and crew temporarily in position.

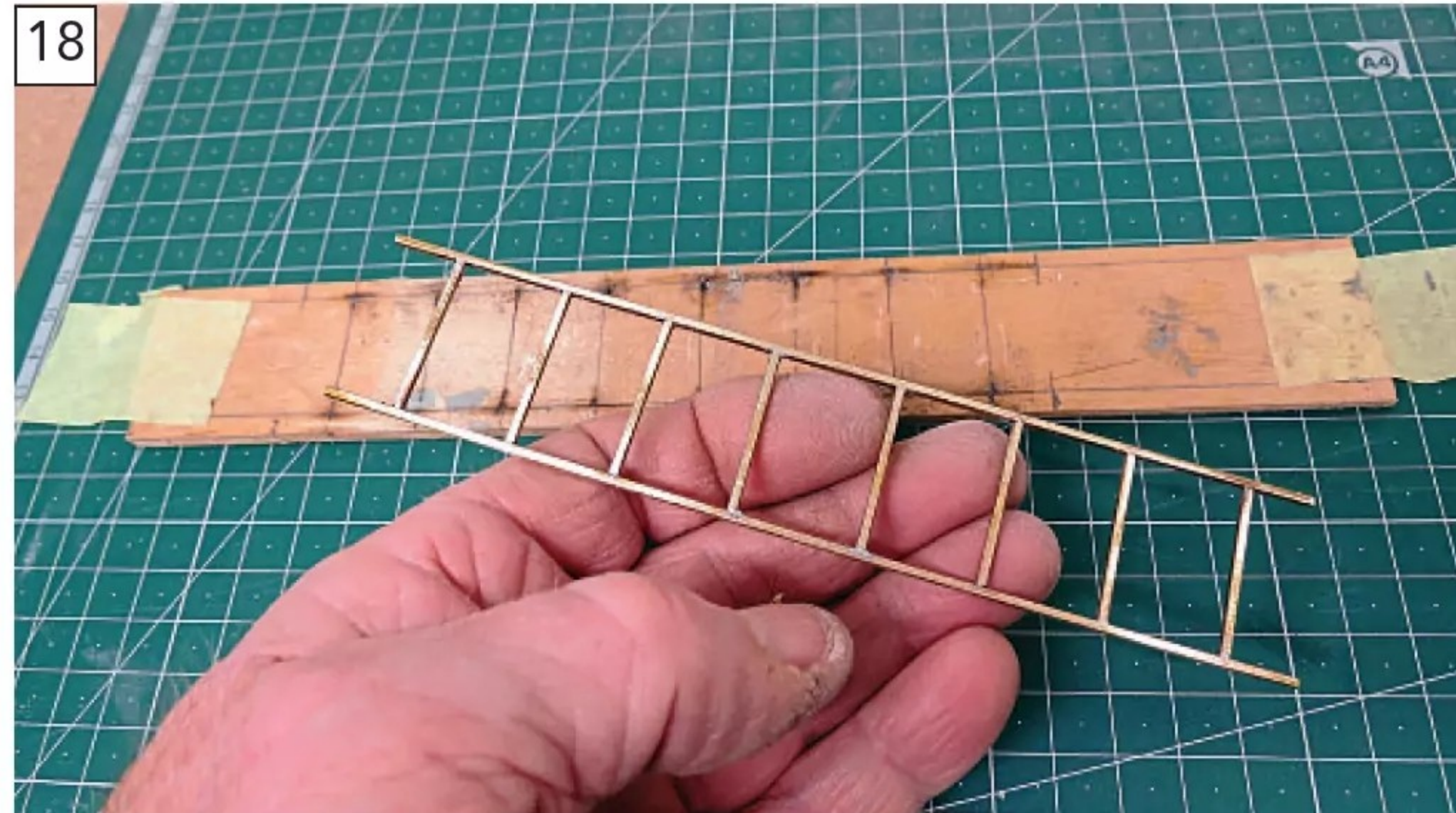
Having reached this point, all that was required was the airbrushing.

Stanchions, rails and ladders

For the CB90 H Mark had developed 3D-designed combined stanchions/ rails and ladders. For the HSM variant,



Soldering the brass amidships rails arrangement.



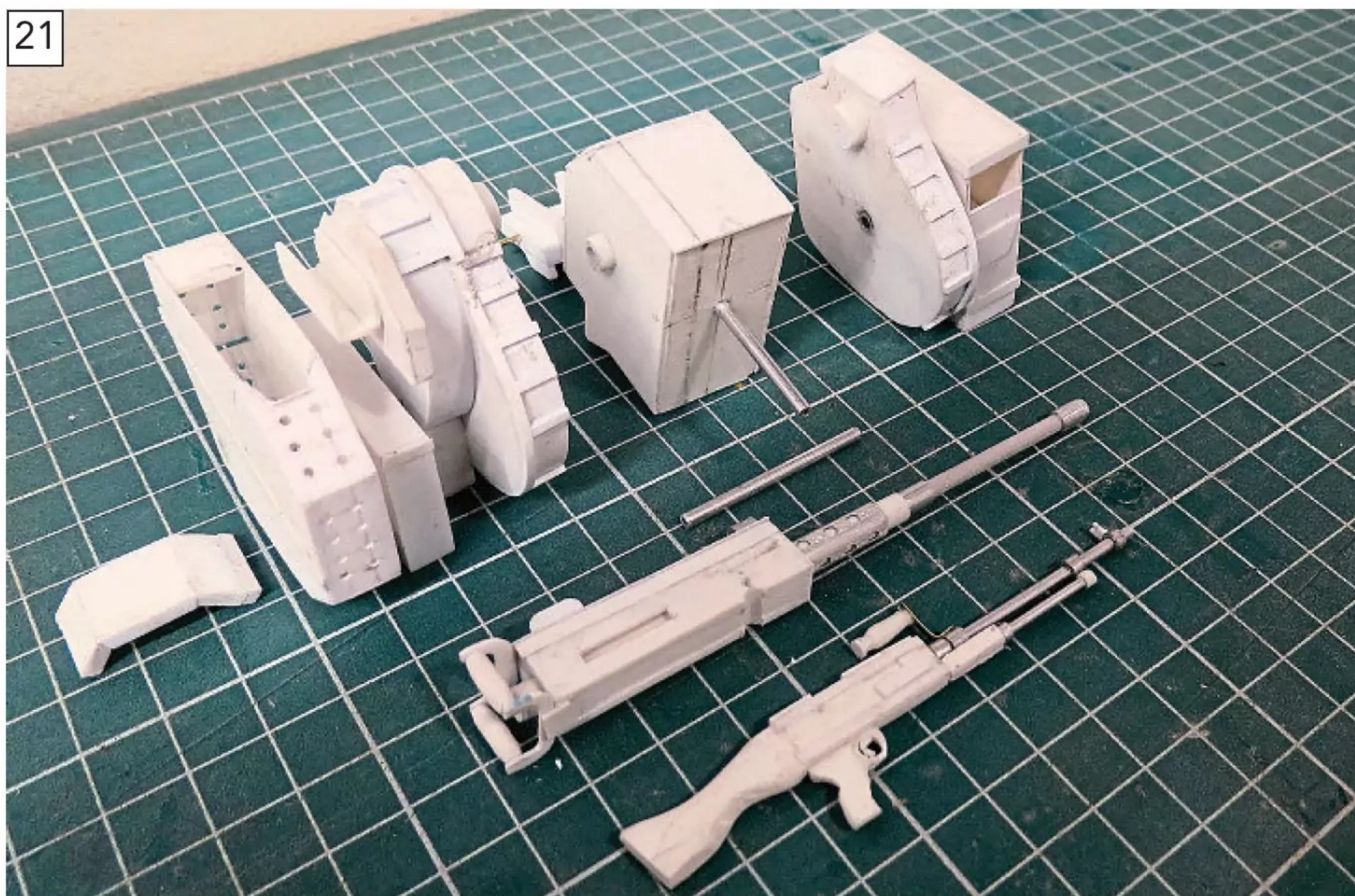
Fitted either side, secured to the rails amidships, are box section ladders, seen here after soldering.



Colour Forge paints come highly recommended, either in a spray can or as supplied in a small bottle for airbrushing.



The results of the first finishing coat in Governor Green, sprayed directly on from the can.



Dave made a reasonable but over scale attempt to scratch build the Trackfire remote gun system using styrene and aluminium tube, but this was ultimately discarded in favour of a 3D printed version.

however, these were made from brass due to different positioning. I then coated them with Halfords' etch primer in grey (see **Photos 17 and 18**).

Finishing coats

Having seen images of the CB90 HSM on the Thames in evaluation trials for the Royal Navy, I'd been quite taken by the attractive dark green scheme carried. So, after much thought, I

"The result, straight out of the can, was as good as if I'd used my airbrush; the finish, even prior to lacquering, looking excellent"

consulted airbrushing aficionado Dave Howard, who suggested Colour Forge's new Governor Green shade of acrylic for my model. This product

is sold in 500ml spray cans, enough for the application of several coats (the manufacturer also offers an exact match in small jars for use with an airbrush).

After applying 400 grade wet and dry to the primer surface therefore, on a windless day I took the model outdoors and set about applying the Governor Green. The result, straight out of the can, was as good as if I'd used my airbrush; the finish, even prior to lacquering, looking excellent (see **Photo 19 and 20**). Highly recommended!

The Trackfire & 5 x 50cal MGs

As mentioned above, the Trackfire gun system as fitted to the Next Generation is controlled and fired from within the boat. I initially scratch built the gun and mounting (see **Photo 21**); however, it was apparent to me at least, that the scale had not been accurately assessed. So, to avoid repeating the lengthy process, I asked Mark if he could 3D the gun and mounting, which he kindly did at the correct scale, saving the day! Following this, all the parts involved were carefully removed from the sprue, primed, assembled and airbrushed in short order (see **Photos 22 and 23**).

With the CB90 Next Generation also having five 50 calibre MGs sited amidships and aft, I decided, after seeing Mark's Trackfire 50 calibre, there was no

22



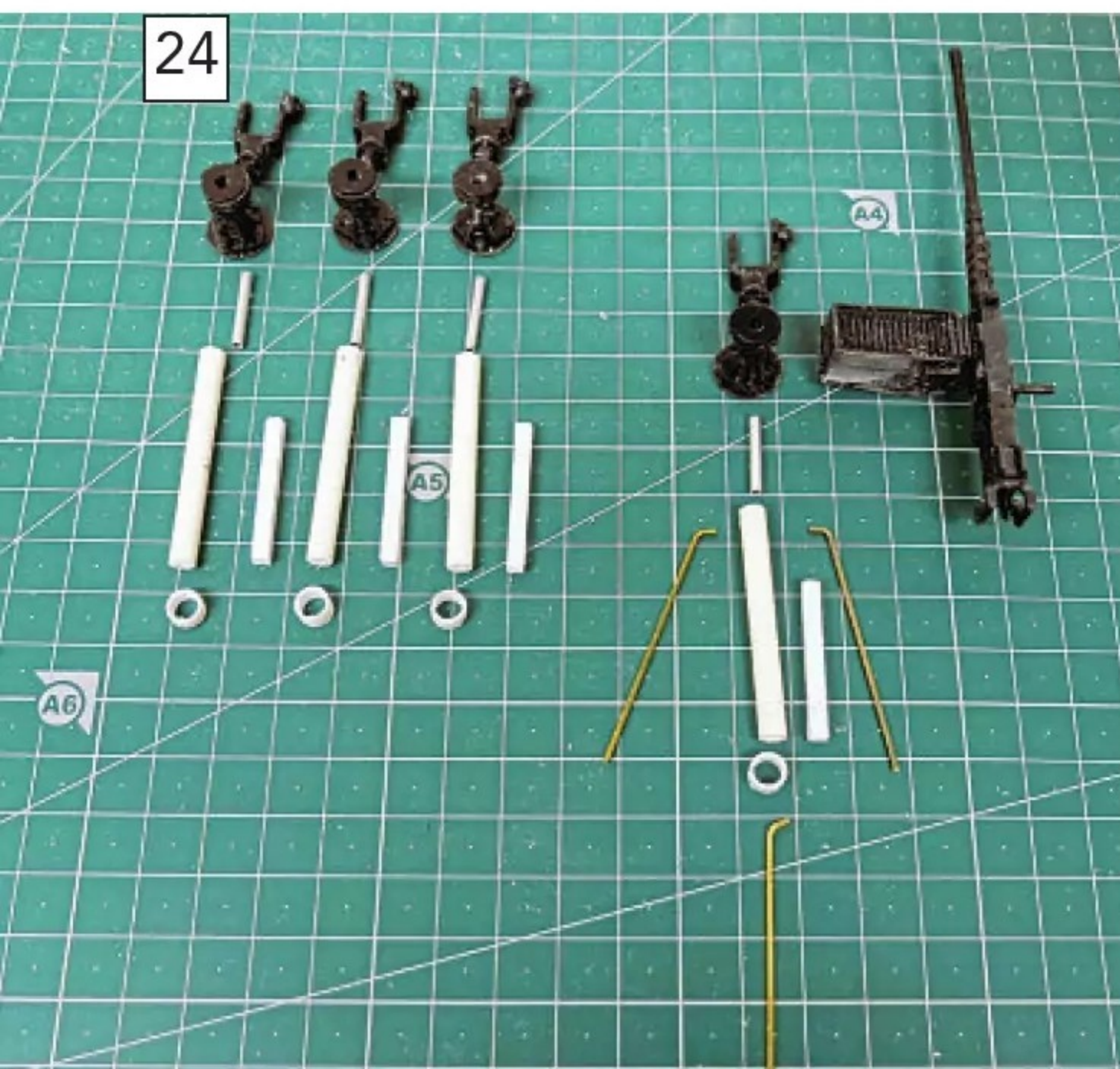
The 3D printed Trackfire gun, plus mounting and wheelhouse onto which the Trackfire mounting fits, added to the model.

23



Thanks to Mark Hawkins and his 3D skills, an accurate reproduction in both detail and scale was produced, this including the ammunition feed for the 50 calibre MG.

24



Additionally, five more 50 calibre MG and swivels mountings were 3D generated.

25

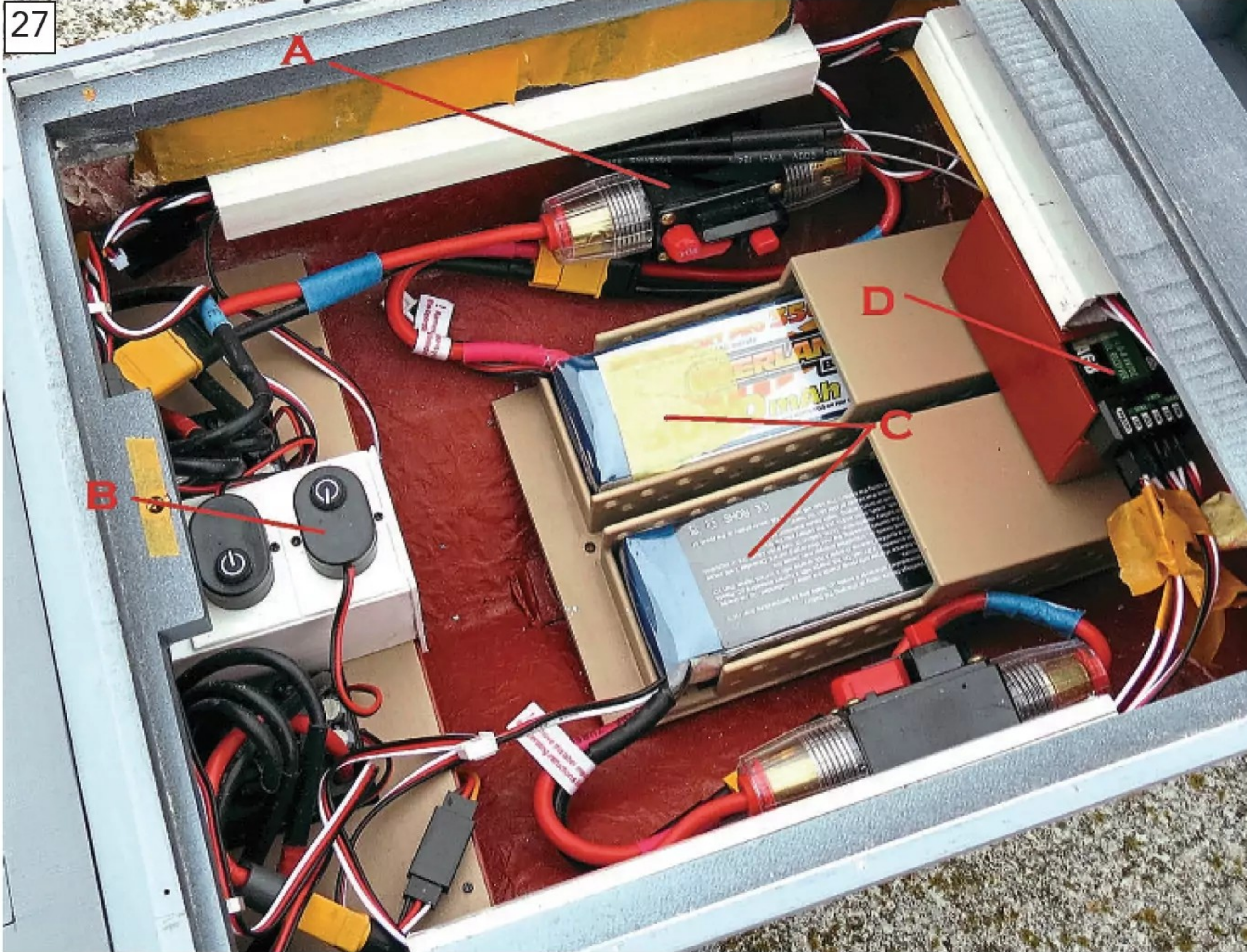


Just visible in the cabin here are the driver and co-driver figures.

26



The fully completed CB90 Next Generation model.



Installing the 2S Lipo batteries in 3D printed purpose made holders.

contest – these had to be 3D designed and printed. I did, however, scratch build the mounting (see **Photo 24**).

Ahead of water trials, the last tasks were to install and secure the wheelhouse/cab and glaze the windows before fixing it in place (see **Photo 25**). Mark had helpfully created bespoke articulated stand legs, and these helped ensure a perfect fit to the underside of the hull (see **Photo 26**).

On the water trials

As the motors selected for my jet drives were brushless, the corresponding batteries used were 2 x 2S 7.4v 5000MHA, these being well secured. Access to both the motor, jet drive compartment and battery compartment were fully optimised (see **Photo 27: A - Two breaker switches; B - Rx on/off switches; C - 2 x 2S Lipo battery packs; D - 10ch Flysky Rx**).

Following routine system checks, we proceeded to the water. Earlier test runs had indicated that this type



Having the CB90 HSM on the water for the first time provided a real adrenalin rush.

29



The performance of the twin jet drives proved faultless, with a performance that surpassed all Dave's expectations.

30



Three of the different variants of the original CB90 in model form.



The model development of the 120mm mortar/turret CB90 HS experimental variant captured by Mark Hawkins.

“As scale boats go, the CB 90, in all its variants, gives a sparkling performance. And it’s not just fast – its design is very pleasing to the eye”

of drive and hull combination was going to be quick, and so it was, along with excellent handling (see **Photos 28 and 29**).

Three for all

In June of this year, Mark, Dave and I then took great delight in bringing our three high-performing CB90s models together at Bourneville Model Boat Club’s Warship Day.

This proved a great opportunity to show off how, collectively, they celebrate the development of this



The completed CB90 HS at Bourneville Model Warship Day in June of this year.



The CB90 HS with twin 50 calibre MGs mounted forward, as modelled by Mark Hawkins.

amazingly successful assault boat design. It also allowed spectators to take in the different features sported by each individual boat, such as the experimental twin-barrel turreted mortar system modelled by Mark and the highly unusual experimental pixelated colour scheme developed by Dave, to really be

appreciated (see **Photos 30 to 34**).

Conclusion

As scale boats go, the CB 90, in all its variants, gives a sparkling performance, and even an adrenalin rush when the throttle is fully open. And it's not just fast, its design is very pleasing to the eye. ●

Acknowledgements

With thanks to:

- * **Mark Hawkins** – for developing a hull design that could be used in model form and for his exacting work in producing the superstructures and fittings.
- * **Dave Howard** – for his meticulous selection of suitable paints and his amazing insight into modern camouflage designs.
- * **The Bournville Model Boat Club** – for providing such a superb stretch of water at its Warship Day on which to show the potential of these unusual assault boats off.

Sourcing reference

- * **Water jet drives** -TFL-Hobby (www.tfl-hobby.de)
- * **R/C scale parts and accessories:** Ocean Works (<https://www.oceanworkscale.com/>)
- * **Batteries:** Overlander Batteries (<https://overlander.co.uk/>)



Also gracing the water at the Bournville MBC Warship Day was Dave Howard's CB90 H, in its striking pixelated camouflage scheme.

The Water Faireys

Chris Fellows catalogues the Fairey Marine boats model plans and kits along with some of his own builds, which include not just the well known classics but some interesting variants too...

As some background before getting into this article, I got interested in radio-control model boats around eight years ago as I was coming up to retirement. I wanted a hobby that would occupy me during the winter months, well, the building part anyway! It was an easy choice as I'd been interested in boats for most of my life, I was fairly handy with DIY, which I thought would help, and there was a technical aspect with the R/C side, etc. Also, I was able to utilise the small bedroom which had previously housed the drawing board I'd used to produce architectural drawings – this providing a nice, cosy space from which to work during winter, perfect!

Fairey tale

Fairey Marine models are well known amongst those in our community, with many building and/or owning one themselves or knowing someone with one. Decades after being first introduced, they remain as popular as ever, due to their attractive classic design and good performance – plus, of course, the continuing availability of some of the kits.

Fairey Marine, as the name suggests, was an offshoot of Fairey Aviation, which was founded in 1915. The company started building boats in 1946, utilising spare capacity after the war. Production began with sailing dinghies and then progressed through canoes, yachts, speed boats and sports cruisers to commercial vessels, but the brand is predominantly known for its sports cruisers because of the drawings and kits based on these.

The first boats were of hot moulded laminated timber construction, which is my own area of interest, before moving onto glass-fibre, etc, manufacture, as was the trend of most manufacturers if they wanted to be competitive price wise.

Fairey Marine continued building pleasure boats from its yard at Hamble Point, midway between Southampton and Portsmouth, right up to 1975, after which other companies occasionally resurrected and modernised its designs, with varying success.

Away with the Faireys...

When beginning the hobby, my first action was to buy a pre-built 47-inch Precedent Huntsman 31, sight unseen. Not long after, I bought one of Dave Milbourn's two prototypes for the Huntress 23 at a scale of 1:12, which he'd built for testing his drawings. While this Huntsman was well built and a lovely model, I soon realised my mistake in buying it, as I personally found it rather big and cumbersome to move around the house, never mind launch and recover! The 34-inch version would have been a better proposition for me, but you live and learn!

The thing is, though, Faireys had well and truly cast their spell on me, and so I soon decided to start building my own, all to 1:12, which I found more manageable. This also allowed me to appreciate the comparable sizes of all the different vessels in Fairey Marine's pleasure boat range. As is my want (or affliction/OCD as family members and friends call it!), I threw myself into all things Fairey, buying books, reading all the build reviews I could find on the forums, and sourcing back issues of magazines, drawings, and plans/instruction manuals from kits, etc, for reference purposes – more on this later.

As well as those that follow, I also sourced copies of the original Fairey Marine drawings from the Fairey Owners Club. I must thank Charles Lawrence, the club's archivist, for supplying these, along with various photographs. As you'd expect, Charles is an expert on Fairey Marine and has written a number of books, etc, on the subject.

Having collected all this information, I thought that others might find it interesting and informative as regards what has been and is still available for building Fairey models.

SCALE & NEAR SCALE

The Huntress 23

This is the first of the Fairey Marine sports cruisers. Manufacture started in 1959, with the first boat being delivered to Sir Max Aitken, the chairman of Express Newspapers and a keen yachtsman and power boatsman.

The late Dave Milbourn produced the drawings for a 23-inch, 1:12 scale model



“Decades after being first introduced, they remain as popular as ever, due to their attractive classic design and good performance”

in 2017. These drawings were featured in the Model Boats 2017 Winter Special (see **Photo 1**) as Plan No. MM 2131). Today, this plan can be purchased from Sarik Hobbies, as can laser cut wood packs for the model. It's an ideal project for a beginner as it's built upside down on a flat deck and results in a lovely model.

Dave also designed a 34-inch, 1:8 scale Huntress kit, which is still available from SLEC, etc.

The Huntsman 28

The second of the Fairey Marine sports cruisers was basically a stretched version of the Huntress 23, with manufacture starting in 1960.

Drawings for a 42-inch, 1:8 scale model (artwork for which featured on the front cover of the February 1962 issue of *Model Maker & Cars* magazine – see **Photo 2**) were produced by the late Vic Smeed for the Model Maker Plans Service. These are still available today from Sarik Hobbies as Plan MM 680.

A kit at the same size, that came with a full-size drawing but no frames, was also released by Veron, although today examples (whether in the form of unbuilt kits or completed models) rarely come to market.

This model tends to be overlooked now, as you don't see that many around, partly due to the lack of a current kit but also with many preferring the sleeker-hulled Huntsman 31.

The Huntsman 31

This was the last of the timber-hulled sports cruisers, and manufacture began in 1967.

This hull in Sport guise, with no aft cabin, and only produced in a very small number for racing, looks very nice indeed. No drawings or kit were ever produced, but it is quite easy for the more experienced builder to modify the design, as some have already done.

However, the Huntsman 31 with aft cabin is, I would say, the most popular of the Fairey models, due in a large part to the continued availability of kits from the 1970s through to today.

Before I get onto that though, drawings were produced by Vic Smeed for the Model Maker Plans Service, as MM 1061. Designed from which to build a 31-inch, 1:12 scale model, they featured in the June 1970 issue of Model Boats (see **Photo 3**) but can still be purchased from Sarik Hobbies.

Dave Milbourn also produced drawings for a 24-inch, scale 1:16 model, as featured in Model Boats' January (see **Photo 4**) and February 2016 issues. This plan (MB 2111) can also be acquired from Sarik Hobbies, as can wood packs for the build and a short kit.

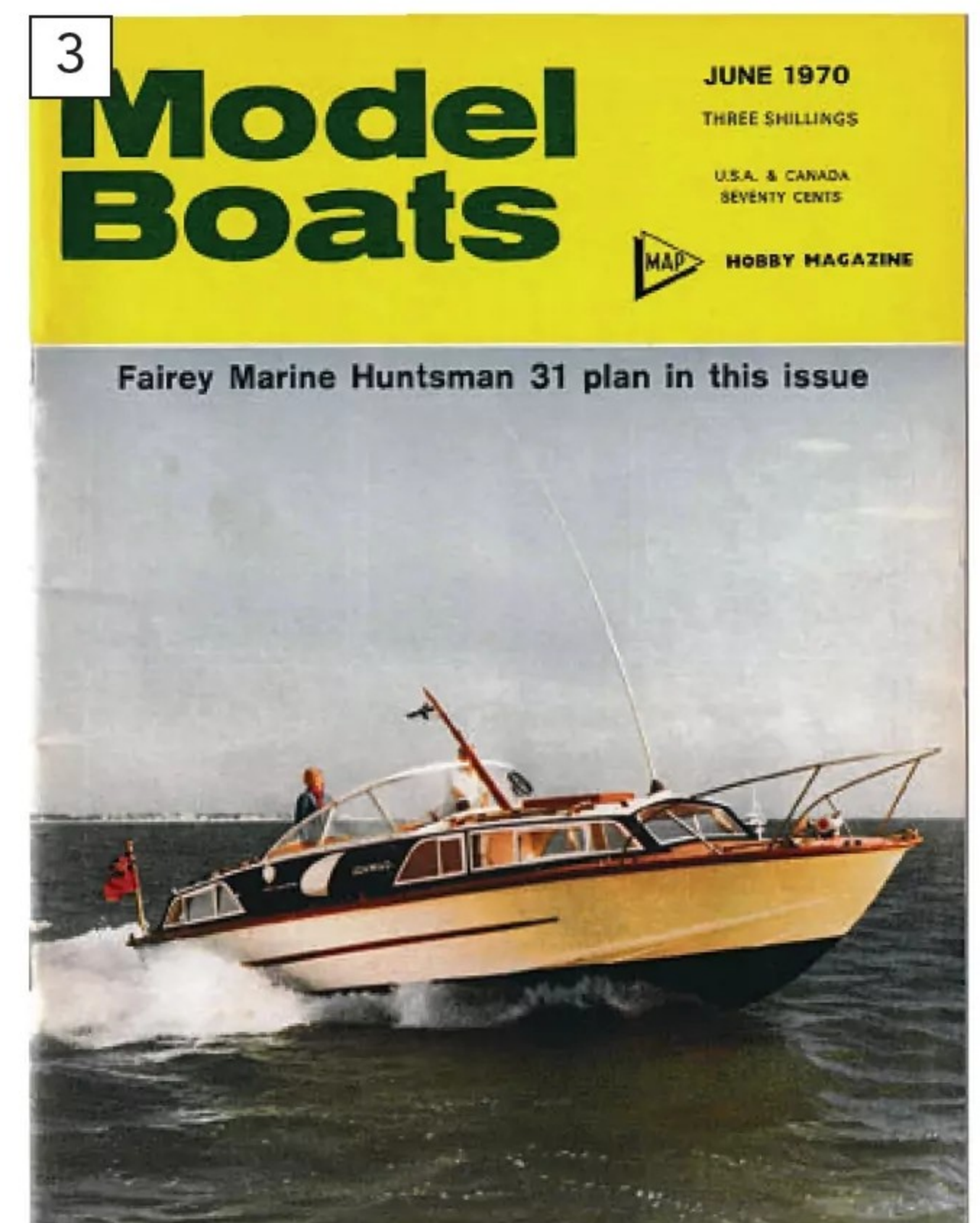
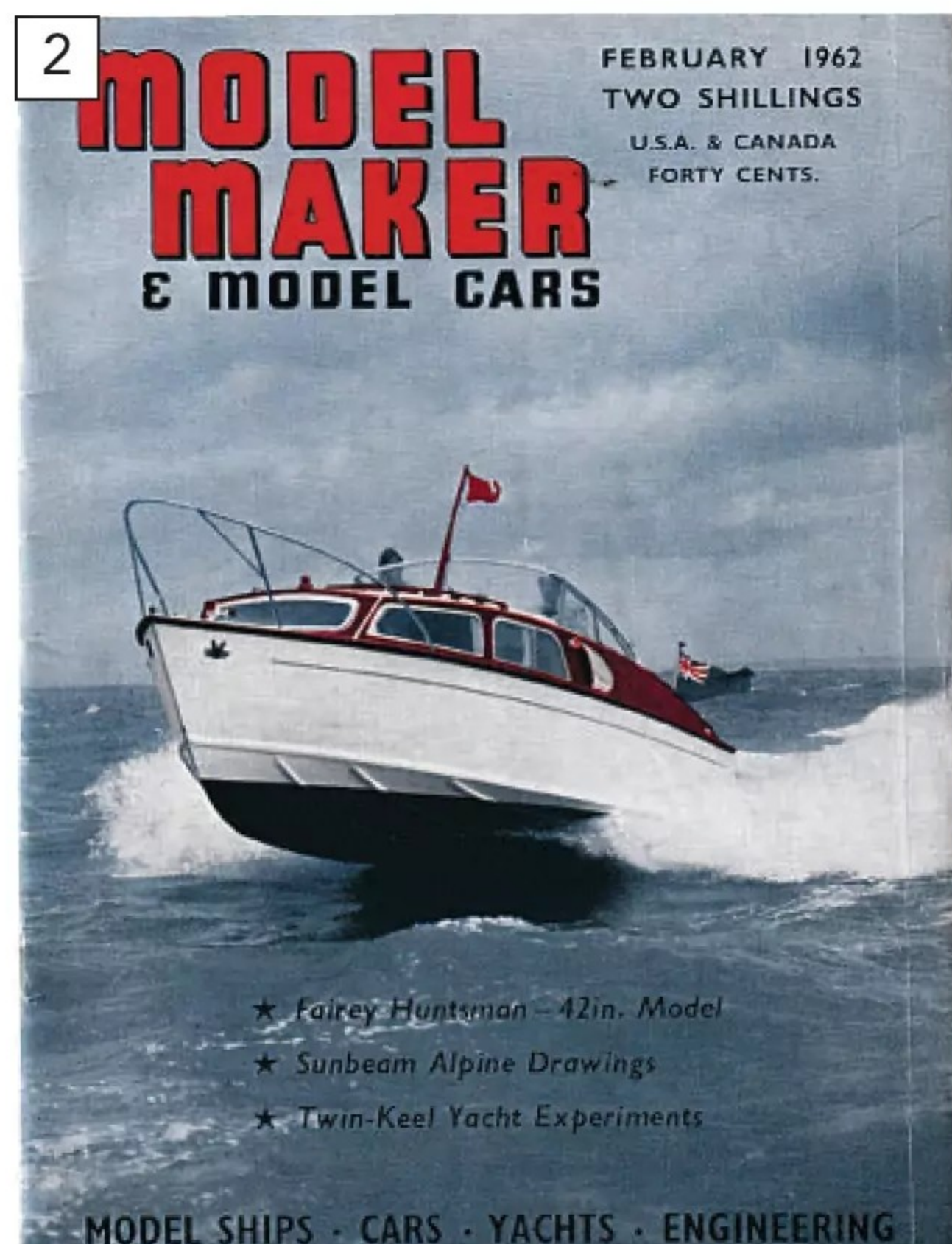
In 2019, Dave also designed a full kit of the same size, which is still available. This SLEC kit was reviewed in Model Boats Winter Special November 2018 (see **Photos 5 & 5a** – the latter coming courtesy of Colin Bishop).

Now to the kits that really put the Huntsman 31 on the map...

The first, penned by Dave Milbourn in 1972 and based on the original Fairey Marine drawings (surprisingly, Fairey Marine also produced line drawings for models!) were made available by Modav (Model Avionics) in both 34-inch, scale 1:11, and 47-inch, scale 1:8. As well as build instructions, customers also got a full-size drawing which provided enough information to actually scratch build a model from!

The company then morphed into

“This model tends to be overlooked now, as you don't see that many around”



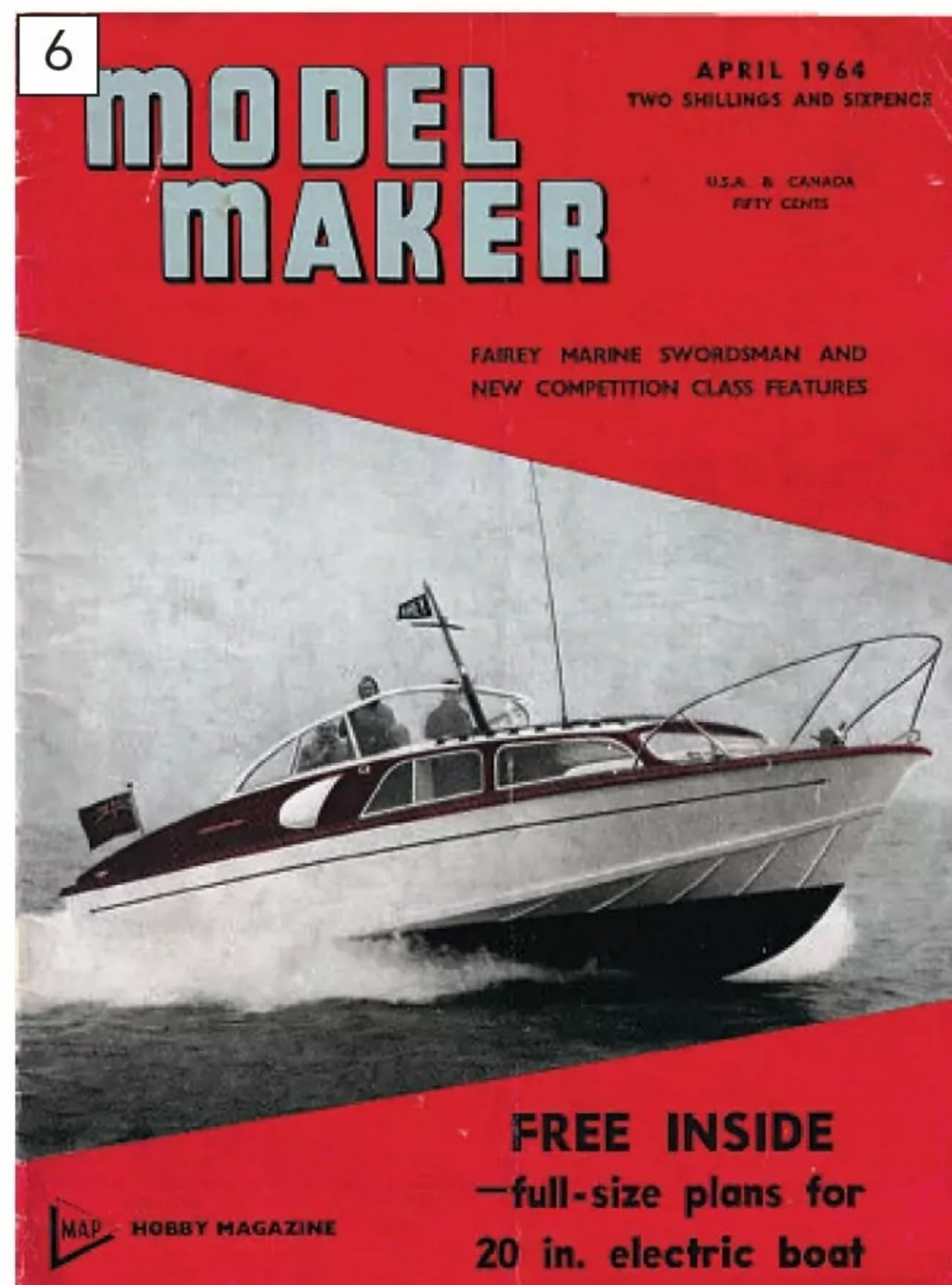
Precedent (Balsacraft International) Ltd, and as well as continuing to manufacture both kits in timber also introduced fibreglass hulls. While 34" ones are fairly common, I've never seen a 47-inch version. Build instructions continued to be supplied, but no drawing. I wonder why!

Precedent effectively ceased trading in 1999 when its MD John Rudd died. The manufacturing rights were then sold to Anglian Model Products, which continued to produce these models in both sizes and hull constructions until it, too, folded.

So, that was the end of the Precedent Huntsman 31 kits. Well, not quite, as in 2000 a modelling

company was set up under the established name of SLEC by Ian Hull (who had also been involved with Modav, bringing things full circle!), and a few years later he reintroduced the 47-inch model, albeit this time around boasting





“The Swordsman 33 was offered in three versions...”

The first drawings were for the aft cabin version with low head room. These were produced by Philip Connolly as a 33-inch, 1:12 scale model for the Model Maker Plans Service and were featured in the April (see **Photo 6**) and May 1964 issues of Model Maker magazine. This plan (MM 791) can still be purchased.

A second set of drawings for the full open cockpit version as a 17-inch, 1:24 scale model was, again, produced by Philip Connolly, and featured in the February 1965 issue of Model Maker & Model Boats. Only made available as a pull-out plan in the magazine, I doubt many examples were ever actually built, as this resulted in quite a small model.

Dave Milbourn then produced drawings for the same version but at an increased size of 24-inch, and with some modifications. The build featured in April (see **Photo 7**)/May 1999 issues of Model Boats. Once again, the drawings are still available as plan MM 2058.

The first kit, produced by Aerokits (see **Photo 8**) was designed by the late Les Rowell. As with the first Philip Connolly drawings, this is based on the lower aft cabin version, and results in a 33-inch, scale 1:12 model. The difference between the two (aside from the fact that one is a drawing and the other a kit!) is that the Aerokits' version has hatches to gain access to the insides of the hull, whereas the drawing features a lift-off superstructure.

Then, in 2019, Dave Milbourn designed a kit for the raised aft cabin version, this



10



laser-cut timber construction, along with a few design changes and a laser-etched planked deck.

The Swordsman 33

This was the most sizeable of the timber-hulled boats and was introduced in 1963. While only 2 feet longer, it was nearly 2 feet wider in beam, so considerably larger than the Huntsman 31, which looks far sleeker and much littler in comparison.

The Swordsman 33 was offered in three versions: a full open cockpit version and two aft cabin versions – one having low headroom, the roof being level with the deck, and the other having the roof just below the coamings, which provided ample headroom. I consider the latter to be the most attractive of the three designs.



resulting in a 25-inch-long model, to a scale of 1:16. This SLEC kit was reviewed in the April 2020 issue of Model Boats (see **Photo 9**) and is still available to purchase (see **Photo 10** – once again, this image coming courtesy of Colin Bishop).

SEMI SCALE/SIMPLIFIED
MFA (Model Flight Accessories-MFA/COMO DRILLS) was a manufacturer/distributor of miniature and subminiature motor gearboxes and miniature drill equipment. Established

“Examples seem to be scarce and rarely surface on the secondary market”

in 1967, it produced a number of semi scale fibreglass kits for Fairey Marineboats over the years. Sadly, however, the company ceased trading in 2024.

Spearfish 30

Spearfish 30 was introduced by Fairey Marine in 1969. This was the first of the company's glassfibre boats, with its hull plug being a hand-me-down from the Huntsman 31. The Spearfish was only ever offered as a fore cabin version, though.

MFA produced Mk 1 kits with access to components, etc, via a removeable cockpit floor, and a Mk 2 which had a lift-off superstructure. These crop up fairly frequently on the secondary market, in both built and unbuilt form, and perform well. The models measure in at 36-inches long, so equate to a scale of 1:10 (see **Photo 11**).

Spear

This kit saw a timber wheelhouse fitted to the Spearfish to create a patrol boat for military, police and customs use, etc. Examples, however, rarely come up for sale, probably due to the kit not being particularly popular when originally released (see **Photo 12**).

Fantome 32

As there was a need for an aft cabin boat to supplement the Spearfish, the Fantome was produced, with 2 feet being added to the length of the hull. This model measures a substantial 47-inches in length, equating to a scale of approximately 1:8. Examples do still come up for sale from time to time (see **Photo 13** – image courtesy of Ashley Needham).

15

atch build



Diana

GLYNN GUEST presents a small launch based on the Fairey Huntsman

History repeats itself
When our current Editor, equally as craving as the previous one, raised the idea of designing a small r/c model, I knew it could be done and for once, a suitable subject immediately came to mind.

The sure choice came of days we had launches built by Fairey Marine has always been a popular subject for modelers. They have tended to concentrate on the larger Huntsman and Huntsman type, which have excellent proportions for a working model. This is unfortunate, as the smaller 23 foot (7 metres) Huntsman, which started the Fairey range of powerboats off in the early 1960's, tends to be overlooked by modelers. My own introduction to these boats came in their short, but exciting part in the James Bond film From Russia with Love. Searching for more information took me to the Fairey Owners Club on the internet. This site has a history of each type of Fairey powerboat along with several photographs of each. This immediately produced one problem with making a model based upon the Huntsman design, namely that no two boats looked the same. Given the hulls would have been identical, given the method by which they were made using a hot moulded wood laminate, but the cabins, windcreens and other details noticeably differed. Some differences could be accounted for by alterations and additions made by the owners over the years, but I suspect that the original purchasers had some latitude in specifying how their boat would be outfitted.

Draft design
The variation in appearance of these boats got me out of any doubts over not making an exact scale model. I was quite happy to build a 'Huntsman' model based on their general appearance which allows you to design a simple but tough hull. Side and deck profiles were drawn to give the desired outline, after which some thought was given to the hull structure and propulsion.

I wanted the model to have performance appropriate to its Huntsman inspiration. The most adequate power which is now demanded is a battery pack of sufficient capacity to give the model a suitable duration. The hull was too small, at least to my eyes, to support the popular

Why back in 1965, John Cusack the then Editor of Model Boats, asked the question as to whether I had ever designed an r/c model small enough to fit on a magazine double page spread in this magazine. I had! and the conversation moved on to other things. Anyone who has ever had to deal with Editors will soon recognise their cunning and this apparently chance comment soon had me thinking about small r/c models.

Nowadays quite small r/c models are commonplace, but 15 years ago the miniature r/c gear that makes them possible was, while not unknown, rare and expensive. The initial challenge was to design a small model that could accommodate standard gear and have reasonable endurance, but still be practical and safe to operate under normal conditions. Something that could only be sailed on or the proverbial calm 'bullpup' was not needed.

With little rooming to match the Editors, it was possible to do this and several successful models were designed, built and published within the pages of this magazine. After proving the practicality of r/c model boats under 15 inches (375mm) in length, the real problem became one of finding something that would not look silly at a small size.

It is not possible to include a Free Plan stitched into the centre of a 100 page special such as this. The Diana profile would fit across two pages, but then the other parts of the plan would have to be spread over a further six pages. The plan is therefore presented in its entirety across a double page spread at a reduced 50% of full size. This enables the reader to either have it photocopied and enlarged to double this size, thus producing a model of just over 14 inches in length, double all the measurements themselves or purchase the plan at full size direct from MyHobbyStore. Plan Number is MM2050, and the price for the single sheet is £5.00 + p.p. The model builder can enlarge the plan further after or else so values and as double they can be someone who, as a challenge, builds Diana at the size as printed here in the magazine, leaving the choice to you. - Editor

Diana - principal dimensions and materials
Length: 14.1 inches
Beam: 3 inches
Materials required:
1/16 inch (1.5mm), 1/8 inch (3mm) and 1/4 inch (6mm) balsa wood
Hardware: 400 22, gearhead motor (propshaft/propeller combination) (Either will be our motor and propshaft as recommended or separate, coupling, propshaft and propeller)
Two channel radio control
Small rubber band
Electronic speed controller (10 Amp is sufficient)
Lightweight or 2/3 volt battery pack
Commercial boat rubber
Glue, paint, dyes, tissue paper
Fittings from scrap box

46

Scale Special Winter 2010



“As far as I’m aware, these are all the drawings and kits produced for the Fairey Marine models, but if I’ve missed any please let me know”

Offshore Racer

This is another small model and, again, is based on the Huntsman. A semi-scale kit for it, containing laser cut liteply parts, is currently available from HA Kits (Hughes Aircraft Kits), with the finished build, at 1:15 scale, measuring in at 18 inches long (see **Photo 16**).

More Huntsman 31 options

For those that prefer to build with styrene, the late Richard Webb produced drawings for an 18 in, 1:20 scale, model, which featured in the August 2007 issue of Model Boats (as far as I know, the only source of these plans). I’ve included the model in this section as although the build is pretty accurate for such a small model it has a pointed rather than rounded bow, which is a feature of the Huntsman 31.

The late David Pledge, who was a chairman of Knightcote Model Boat Club, produced kits for the Huntsman 31 in aft cabin and full open cockpit versions at the small scale of 1:48, which, amazingly, were available in twin motor versions as well as single! The kits were originally supplied by Speedline Models but then by David himself, and consisted of a vac-formed hull, laser-cut timber parts and everything else required to complete the model, except

17

kit review



PROCKET

1:48 scale r/c Fairey Huntsman

Anthony Addams reviews the mini-kit from David Pledge

I have been named 'Procket' because this little 8 inch model fits into a pocket. It is so small and fast that when photographing it, I have so far failed to get a decent picture of Procket at speed, but Photo 3 hopefully shows how detailed it is. This 1:48 scale Fairey Huntsman comes as a kit of one of these famous full-size boats and has been produced to design by David Pledge, Chairman of the Knightcote Model Boat Club who wanted to prove that such a small model boat could be radio controlled and would perform like the original. It is only with speed that such a tiny model can be made to plane realistically like the real

Huntsman. Water, of course is not scaled down, so success is a matter of the model responding to the relative resistance of the water, hence our scale fast models often have to go of highly unscenic speeds to look effective on our ponds.

The kit
The version depicted here came from Speedline Models, but is now sold by David Pledge directly and there are two types: The rear cabin version is seen here, but there is also an open full rear cockpit version and also for each, a single or twin motor pack is available. These packs contain the miniature motors, rudder, speed controllers, wiring, plugs and necessary connectors. A transmitter and receiver, battery, adhesives, paints and your time are the only extras needed, the instructions providing guidance for building both types. The single motor version was selected on the basis of its ease of use, which achieves all the speed and control needed, at least for me, but Photo 3 shows a number of the different versions and a variety of colour schemes.

The kit quality is excellent as seen here in Photo 4, the vac-formed hull being complemented with laser cut wooden components, a pre-formed wrap-around windscreen and all the necessary stringers, wire and decals etc. In all there are over 100 parts, together with a 14 page illustrated A4

24

www.modelboats.co.uk

Model Boats August 2017

for glues and paint. A review of these kits was featured August 2017 issue of Model Boats (see **Photo 17**).

Fairey’s missed?

As far as I’m aware, these are all the drawings and kits produced for the Fairey Marine models, but if I’ve missed any please let me know via the magazine.

My own builds

As mentioned at the start of this article, I collected as many of the available drawings/plans and kit paperwork as I could to serve as reference points for my own builds (although they also prove most interesting in their own right). My mission (or OCD!) was to build all the classic Faireys, i.e., the Huntress, Huntsman 28 and 31 and Swordsman 33. However, while some drawings were/are available at my preferred scale of 1:12, many were not. I also wanted to incorporate certain changes to suit my method of building and so produced my own drawings for each model. One example is my Huntsman 28 for which



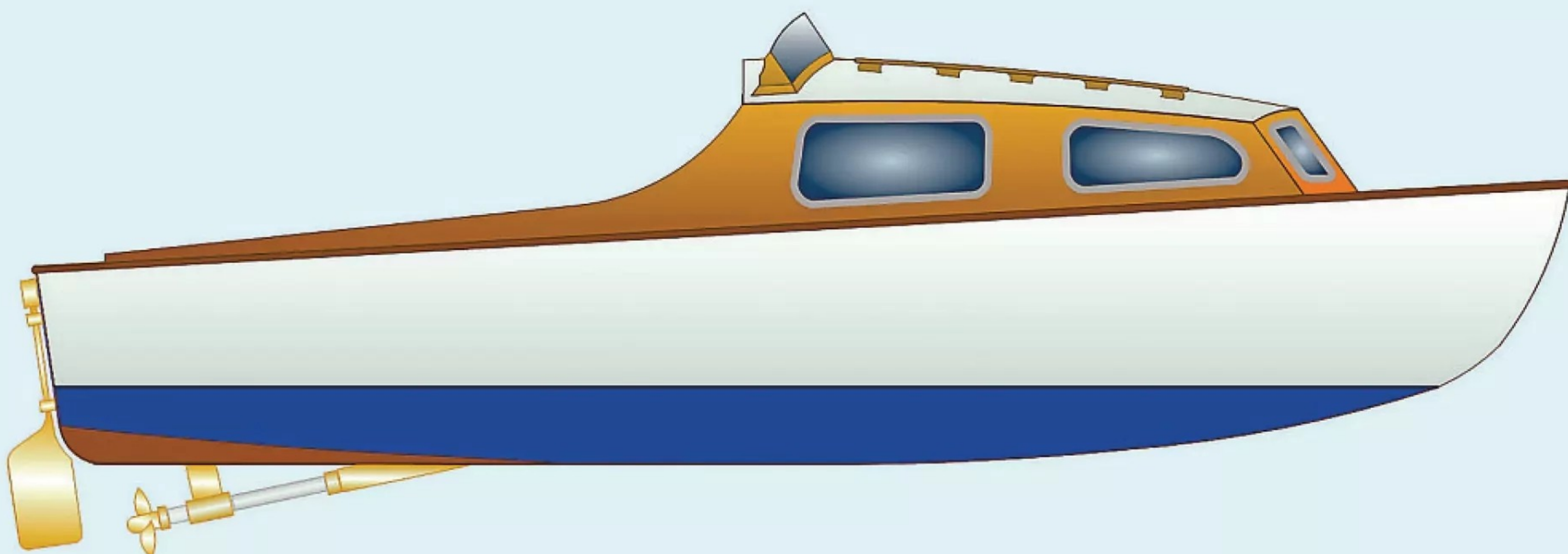
20



21



22



23



I wanted the whole superstructure to lift off for access. This was a particular challenge with its full open cockpit and thin coamings (see **Photos 18 and 19**).

But not content to stop there, my collection also takes in some interesting variants, these builds usually being motivated by photographs or drawings in books. One of these is the River Cruiser, which I designed working simply from a small black and white photograph as my point of reference. Only one prototype was built, which no longer exists, and this utilised a modified Huntress hull to provide greater freeboard and therefore more usable internal space, as required for possible extended river cruises.

A long-cabin version of the Huntress, fitted with sterndrive (see **Photo 20**), is not quite finished yet (none of my builds are), but it has had lake trials and performed well – as indeed has the River Cruiser, albeit at a very un-Fairey like slow speed (see **Photo 21**).

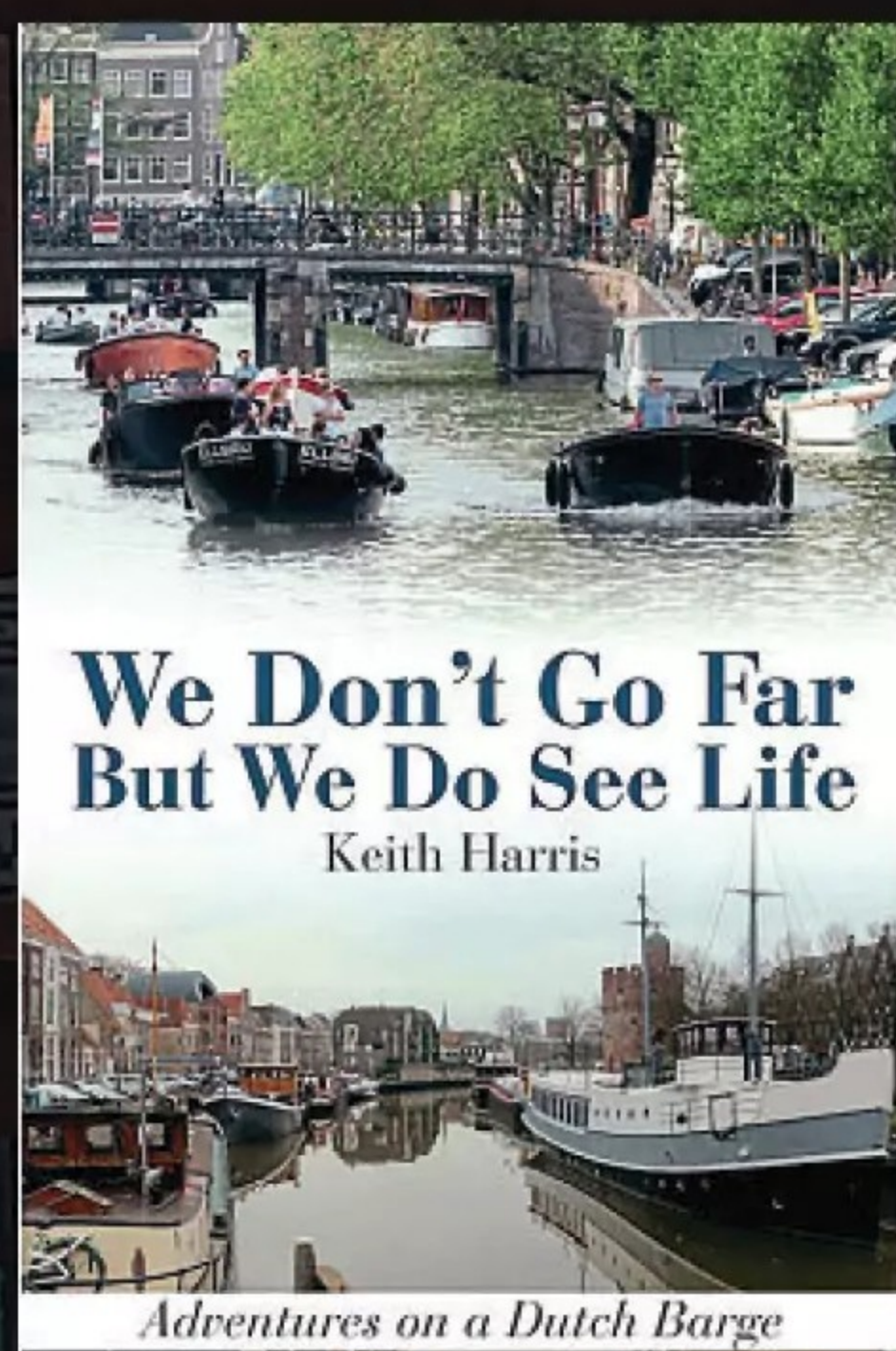
Like many of us, I progress my builds to a certain stage – paint, in my case, and then get the itch to start another, as cutting wood and building is very satisfying. This explains why I have five builds underway and another two recently started!

These latest two were also motivated by wanting to do something different, and in one case having sails involved! These are the Fairey Faun 16 river/lake cruiser (see **Photo 22**) and the Fairey Fisherman 27 motor sailer (see **Photo 23**). – not actually photos but images I have drawn myself. Both are my first (if that makes sense!) plank on frame builds. It will be a while before significant progress is made, as I'm currently finishing the hull builds, but these will hopefully be included as a future article. As with the Huntress Long Cabin and River Cruiser, I'm not aware of anyone building them before. ●

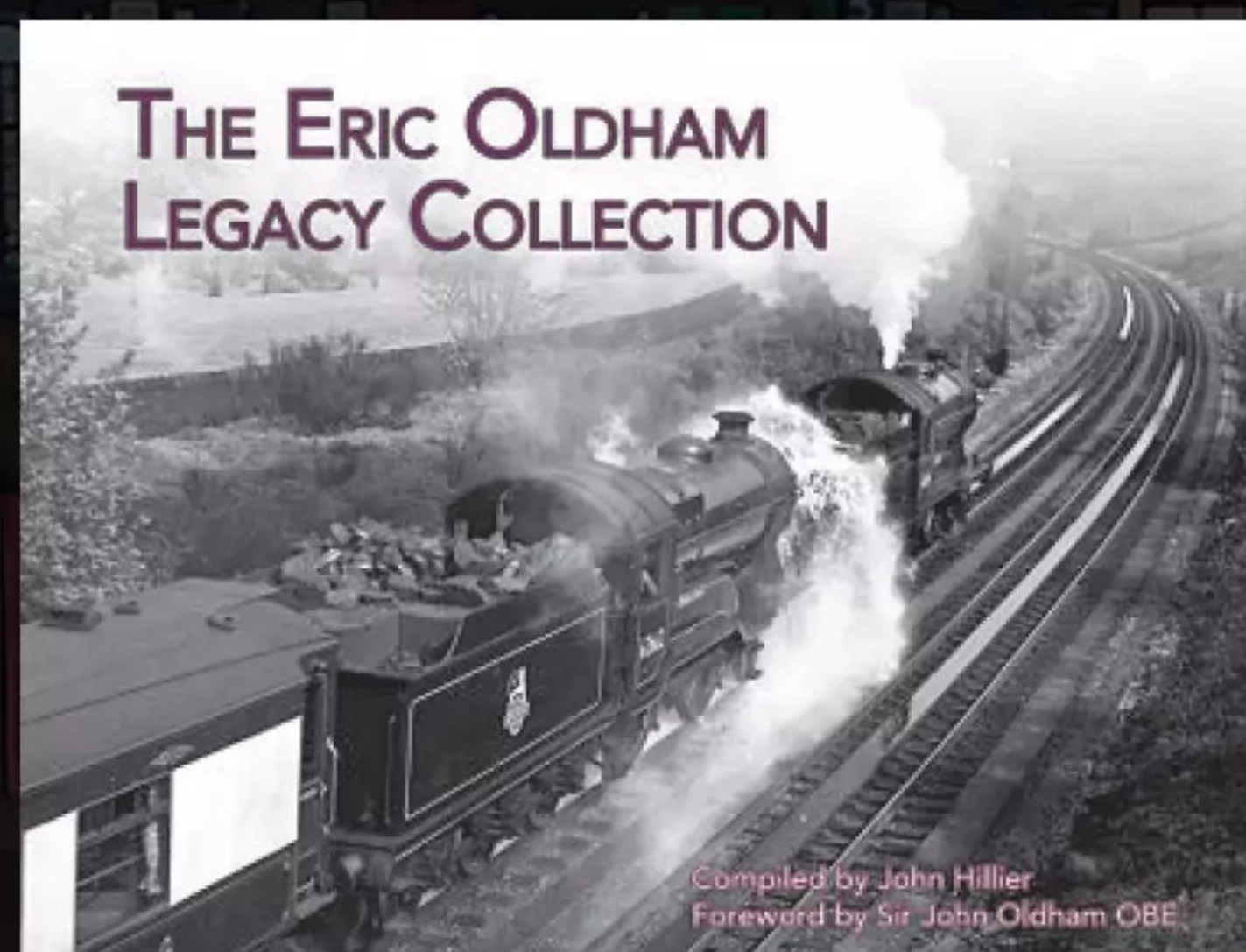
DISCOVER YOUR NEXT READ IN OUR BRILLIANT BOOK COLLECTION

With a diverse selection of non-fiction books – from railway and military history to aviation and hobby topics – we have something for every reader's interest!

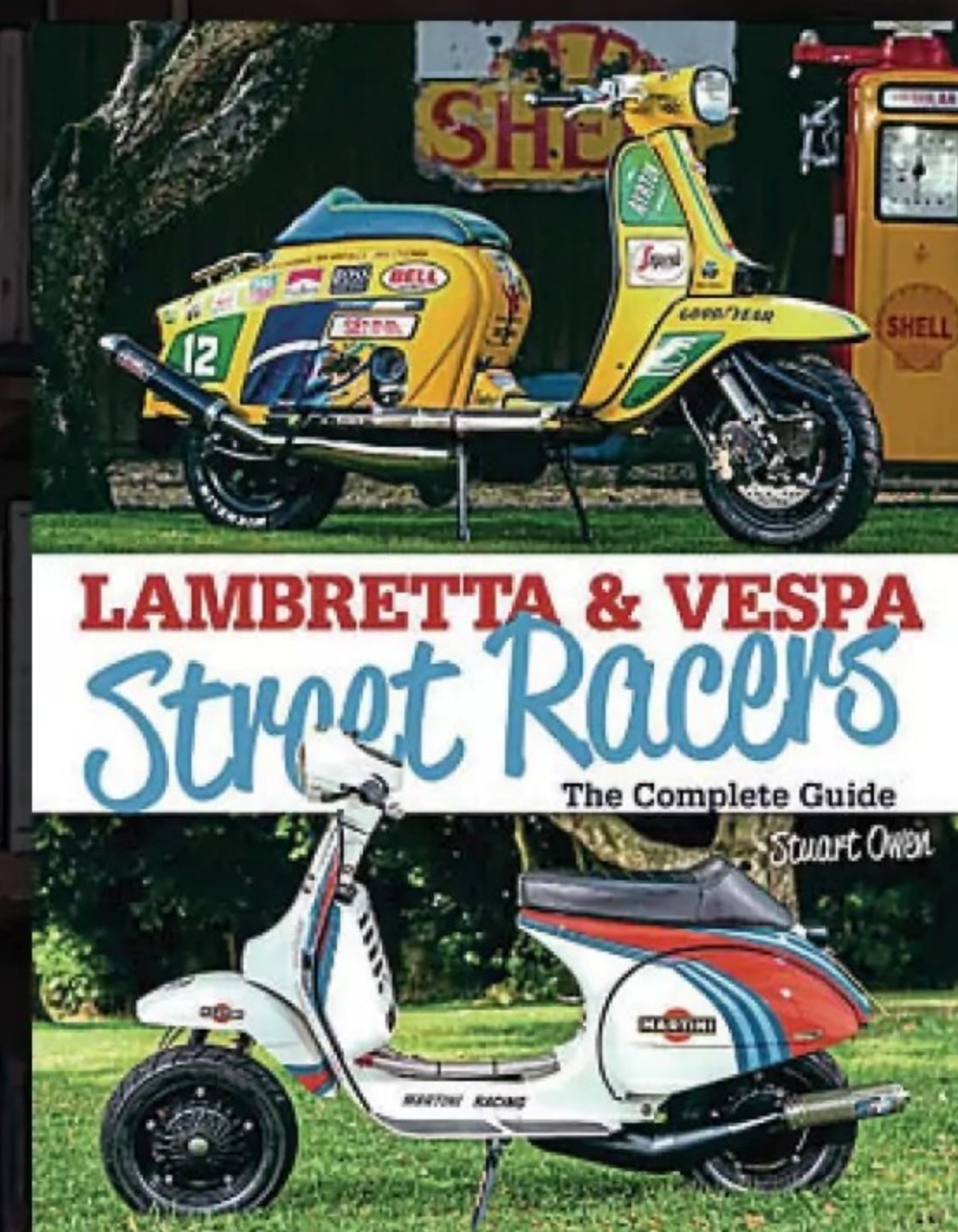
**mortons
books**



**We Don't Go Far
But We Do See Life**
Keith Harris
£7.99



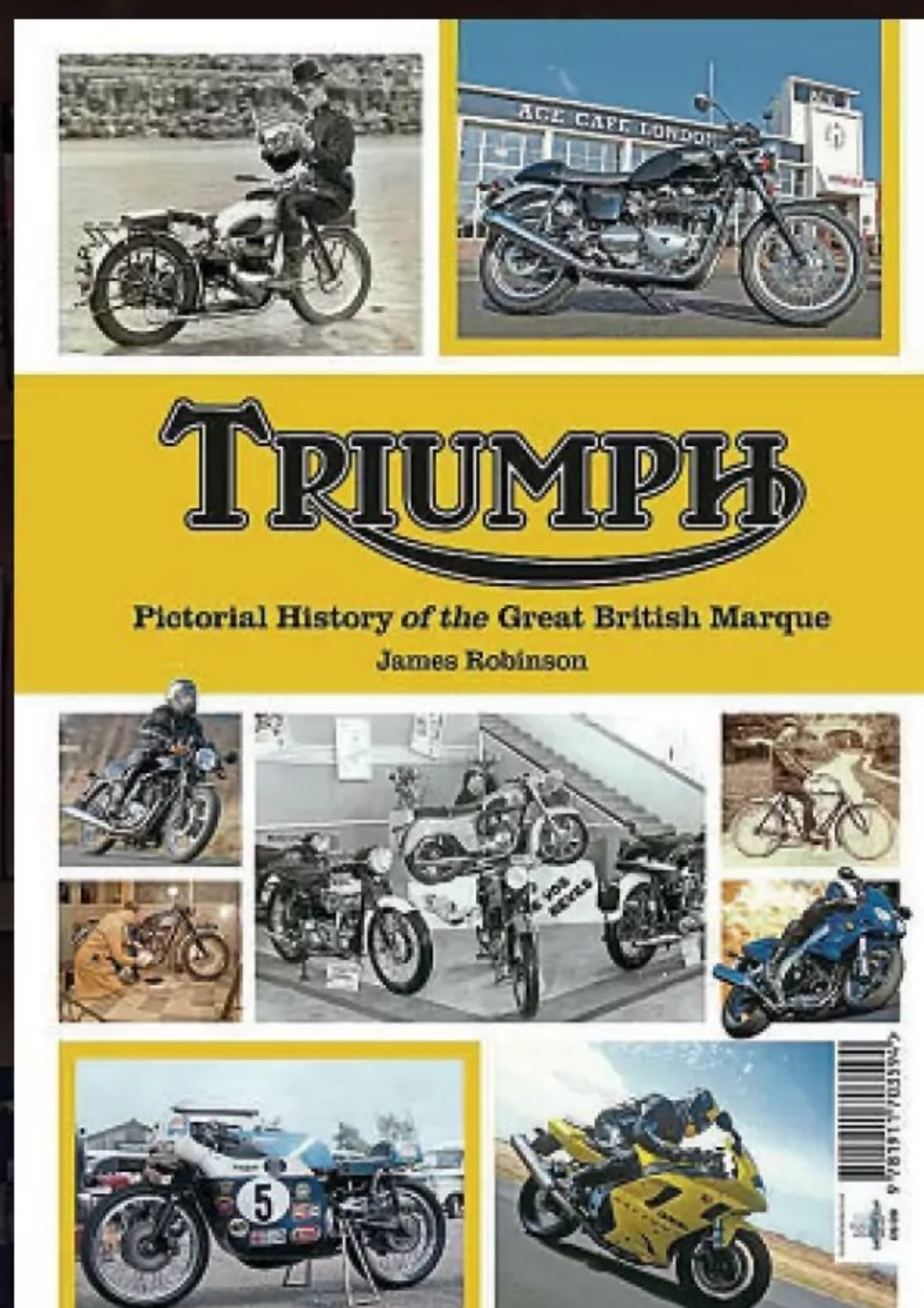
The Eric Oldham Legacy Collection
John Hillier
£35



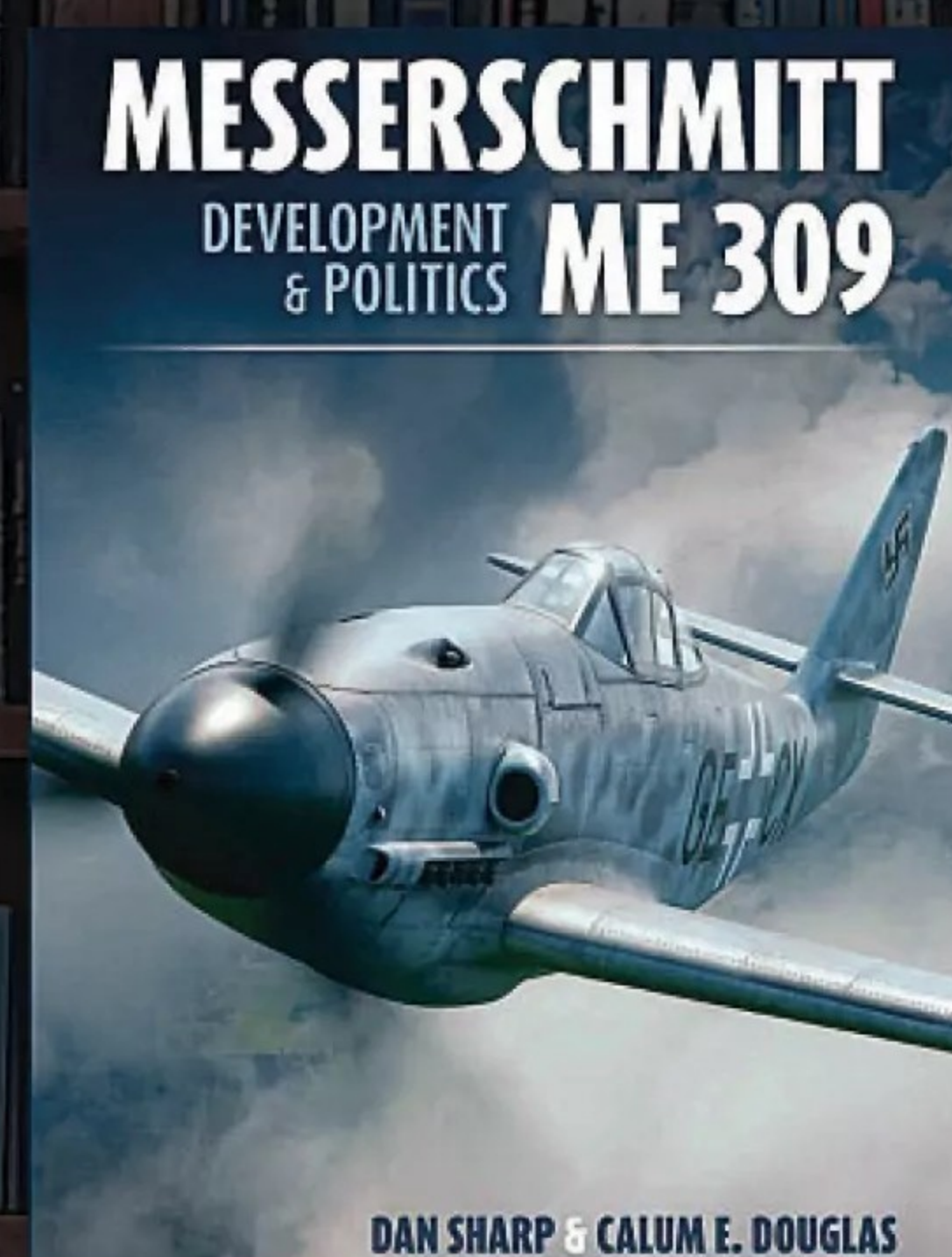
Lambretta & Vespa Street Racers
Stuart Owen
£14.99



British Tanks of the Red Army
Peter Samsonov
£14.99



Triumph: Pictorial History of the Great British Marque
James Robinson
£25



Messerschmitt Me 309 Development & Politics
Dan Sharp & Calum E Douglas
£35

ORDER TODAY

www.mortonsbooks.co.uk

To find out more about our latest releases, join our book club at www.mortonsbooks.co.uk/book-club

**FREE UK
DELIVERY**

BANOALLUM
BOOKS

TIMESPAN
BOOKS

TEMPEST
BOOKS

SLP

The NOSTALGIA Collection

Past and Present

GALLANTRY
BOOKS

GRESLEY
BOOKS



Hermann Marwede

Phil Button tests out an innovative new drive train to power Revell's 1:72 scale German lifeboat kit

In the December 2020/January 2021 issue of 'Model Boats', under the title of 'Transferable Tech', I outlined a way of adapting a model helicopter brushless esc (electronic speed controller) for forward and reverse operation of a model boat using BLHeli software. I rounded off that article by explaining that all I had left to do was to fit the power train of motor and esc into a suitable model boat and try it out, and that has now finally happened...

The model

Towards the end of 2019 I purchased a 1:72 scale Revell plastic kit for the German lifeboat *Hermann Marwede* from a well-known auction site (readers of the above mentioned article will have

seen a picture of a similar model I build some 12/13 years earlier), with a view to completing it as a radio-controlled working model that utilised the new power train. Work on this pre-owned kit had already been started, with some assembly and a little painting carried out (rather badly!). My guess is that the seller had found the project too difficult, and, having abandoned the build, decided to sell the kit.

So, when I found myself at a bit of a loose end when the first COVID-19 lockdown struck in March 2020, I began working on the kit as a way of passing time.

The full-size vessel

The German Sea Rescue Service (DGzRS) decided to commission a new rescue

vessel and in November 2000, Fassmer won the contract to build it. The hull shape was optimised at the Hamburg Ship Model Basin and the aluminium hull was designed and built in Poland by Gdańsk-based Aluship Technology.

The 27-knot *Hermann Marwede* was delivered in 2003. With a length of 45.6m, a beam of 10.6m, and displacement of 400 tonnes, this new rescue cruiser is the largest in the DGzRS fleet (see **Photo 1**).

There are two engine rooms, with two 2040kW MTU 12V 4000 M90 wing diesel engines in the forward compartment and a 2720kW 16V 4000 M90 centreline diesel aft. Each of the three engines drives a fixed pitch propeller through a marine gearbox.



Even in extremely heavy seas, the vessel can maintain a speed of up to 25 knots.

The equipment on board includes a powerful towing winch and a towing hook, plus a 20-tonne deck crane. In the stern, there is a 9.5m 18-knot daughter boat, built by Luerssen. This daughter boat is located on a slipway, which is unfolded when the hinged stern door is lowered. A small Avon RIB is also provided.

Extensive fire-fighting systems are fitted, with twin remote-controlled monitors behind the wheelhouse. They have a 41,667litre/minute capacity and there is a third monitor on the wheelhouse top. The main fire-fighting pump is driven from one of the main engines. There is a helicopter deck at the stern above the daughter boat installation. The hull is protected from bumps by a special polyurethane fender system developed by the builder.

Accommodation is provided for a crew of eight, in single cabins. On the main



deck there's a large survivor space that can be used for extra staff or for training. This deck also has a fully fitted hospital, equipped with an operating theatre.

The model 'as bought'

Photo 2 shows the contents of the kit's box as delivered, including the parts badly assembled and poorly painted by the previous owner. Fortunately, however, this kit readily lent itself to 'plastic magic' conversion as, being 640mm (25 inches) in length, there was plenty of internal space available for electronics.

Thoughts on conversion

Plastic kits are not really designed to create working models from. It is, therefore, essential to study the instructions very carefully and make your own trial assemblies (without glue!) to establish where any changes will be required; these must allow for installation of motors, propeller shafts, rudders and control linkages, batteries, radio-control equipment and any other lighting or auxiliaries.

Hermann Marwede was fitted with twin bow thrusters, so I wanted to incorporate at least one in my build – unfortunately, there really wasn't room

for two! There was, however, plenty of room for a single gear-type pump to be used as a thruster. (In the earlier model I'd built, I'd used a gear-type water pump, which is reversible, pumping water in/out of one side of a bow thruster opening and out/in of the other side). Reversing of the pump would be achieved using a micro servo fitted with a pair of micro-switches.

The prototype had three engines and propeller shafts, and I planned to use a similar arrangement. So, after importing part of the kit plan drawing into my Serif 'Drawplus' software and scaling it to model size, I digitally dropped in drawings of the drive train (motor, coupling and propeller shaft) and rudders to see how they would fit. One wing motor/shaft and rudder is shown in red in **Photo 3**.

Propeller shafts and couplings were adapted from one of my earlier plastic kit conversions and the outline drawing of the motor added. As it turned out later in the build (after flotation tests), the centre propeller and shaft had to be left in dummy form as I was forced to reduce the weight aft by removing one motor/battery/esc combination.

You will note that the rudders shown in **Photo 3** have been increased in size from those in the kit. Basically, this was because there wasn't enough room for an operating mechanism for the prototype's centre rudder below the slipway, so the model would have to work well with only two rudders.

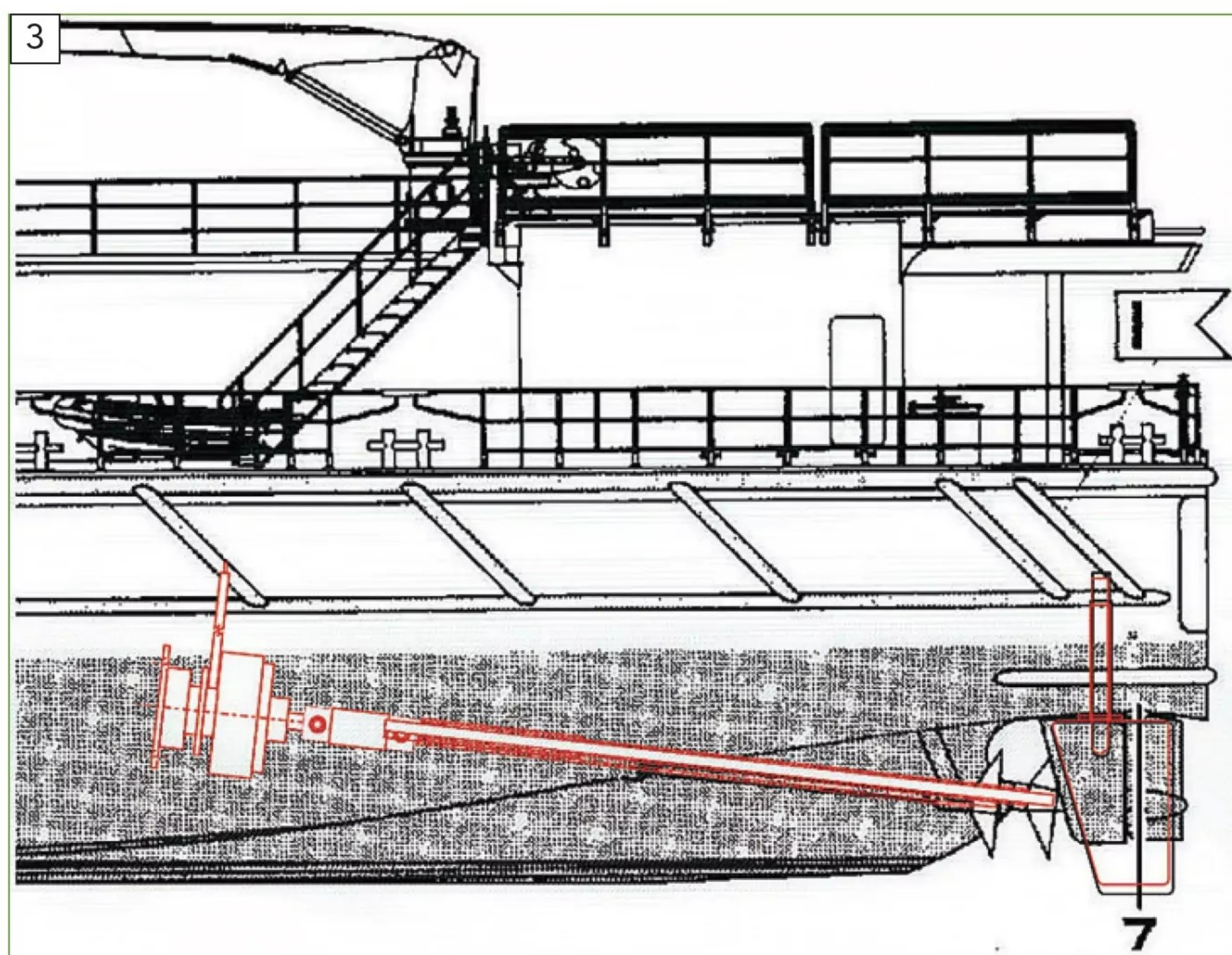
To gain access to as much of the inside of the model as possible for the electrical installation, I wanted most of the deck to be removable. Since the deck of the model also provides bracing to the hull sides, this required some additional supports to be put in place. In addition, the radio control switches needed to be easily accessible without removing the entire deck every time, so the main cabin would also be made removable and the switches located underneath.

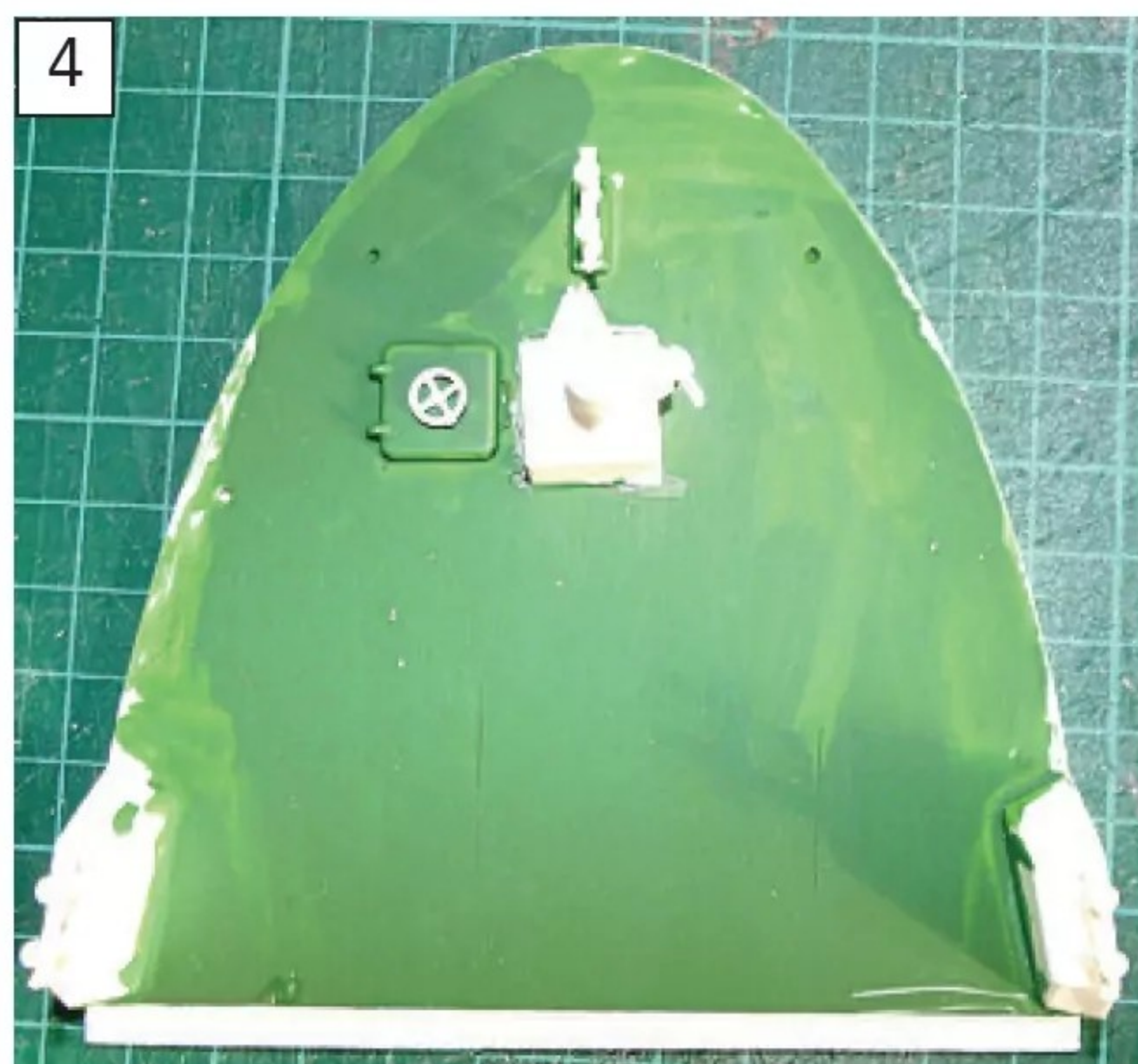
Building and modifications

It is not my intention to go step-by-step through the kit building process in this article but rather to indicate where changes to the kit were necessary for my chosen method of conversion. I suspect that there are as many ways of converting this kit as there are modellers! Building and finishing most of the kit is a straightforward(!) following of the Revell pictorial instructions.

The deck

First came the deck modifications. The deck comprised two sections, the upper (forward) deck with the main cabin and the after deck with the helipad and slipway. My plan was to have the whole





forward deck removable as one piece, with the after deck removable once the forward section was out of the way – allowing access to the whole of the inside of the hull.

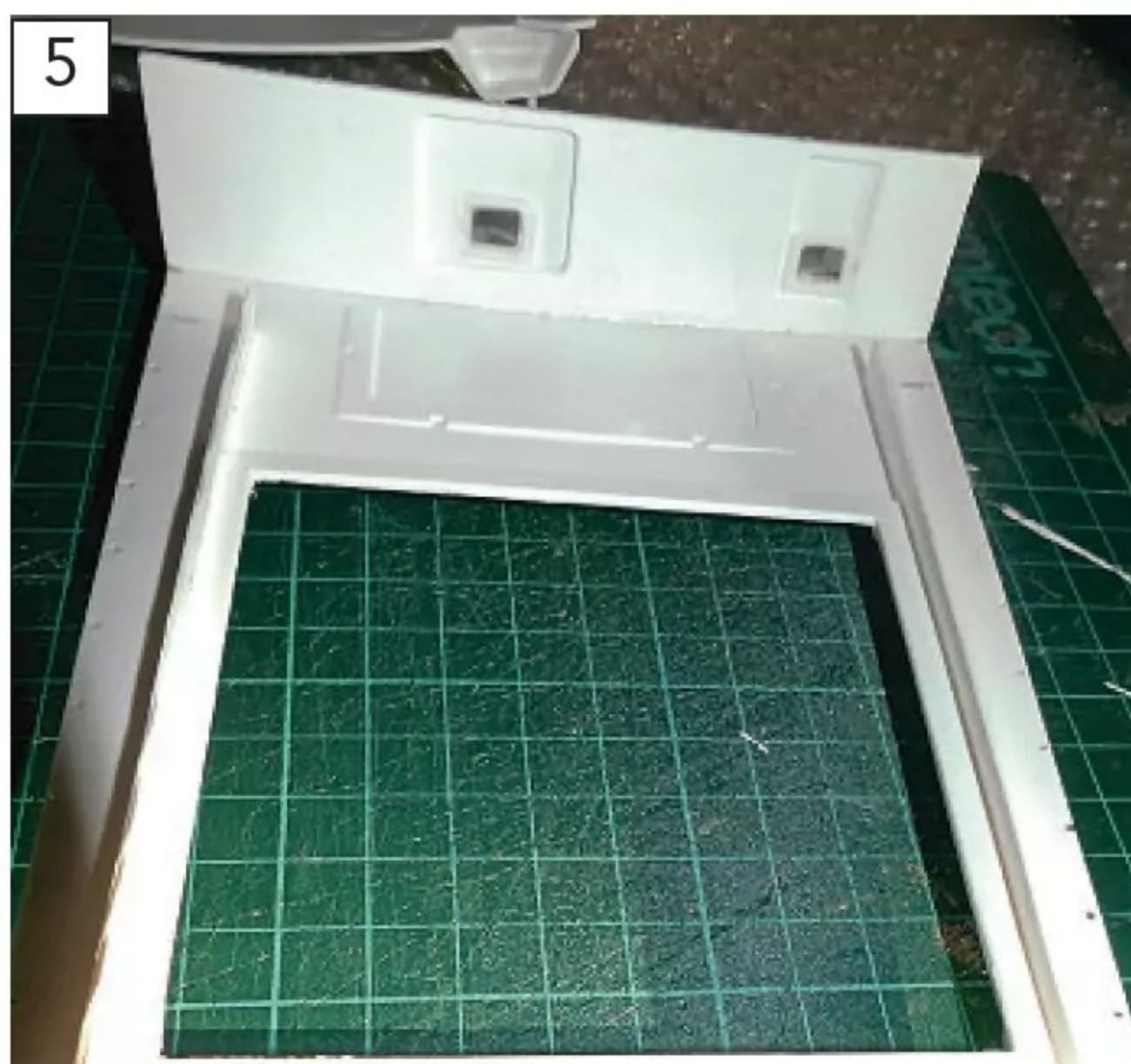
I found it almost impossible to make the entire forward deck section fit the hull in such a way that it would easily come out again! As a result, the forward deck was cut just aft of the bollard mountings so that this piece could be permanently fixed in place in the hull (the forward deck was the area that made it difficult to get the whole deck in and out). To support the forward end of the rest of the forward deck, a strip of styrene was glued under the after edge of this section (see the bottom of **Photo 4**).

Part of the solid centre section of the forward deck had to be cut out to give access to the electronics and on/off switches which were to be located under the main cabin. This left a rather floppy thin strip of deck either side of the opening, which needed stiffening using strips of styrene set on edge underneath it (shown upside-down in **Photo 5**). To help with locating the main cabin in place above the cut out in the deck, and to allow for its removal, strips of styrene were added either side of the opening (**Photo 6** shows these after painting).

Before completing assembly of the deck pieces, I had to brace the hull sides apart so that the deck could sit inside the top of the hull as a close fit, positioned on the kit deck support mouldings. A number of tee-section braces were made up from styrene sheet and cut to length to fit between the hull sides below the deck before being glued in place. Two of these supports are seen in **Photo 7**.

Propulsion and steering

I already had a design in the PC for a propeller shaft that could be modified to suit this model. The centre shaft was no problem as it was a 'normal' arrangement, with bushes at each end of the tube to carry the propeller shaft. The two wing shafts had to be modified to allow for the after end to run through



an outboard bearing. Since the kit outboard bearing support seemed rather fragile, each wing propeller shaft was fitted with an extension tube to carry the propeller shaft from where it left the hull to the after end of the outboard bearing support.

The hull was drilled through for the propeller shafts from the inside using a 2mm pilot drill in a hand-held pin chuck and then opening out to finished size using drills and files. Drilling the plastic kit outboard bearings to carry the extension tubes proved a puzzle until I hit on the idea of putting each one in the lathe chuck and drilling through, using small drills in the tailstock and turning the chuck by hand only!

Photo 8 shows the completed shaft installation from outside the hull.

Inside the hull, each shaft was lined up in the correct position using a styrene support, glued to the bottom of the hull (see **Photo 9**).

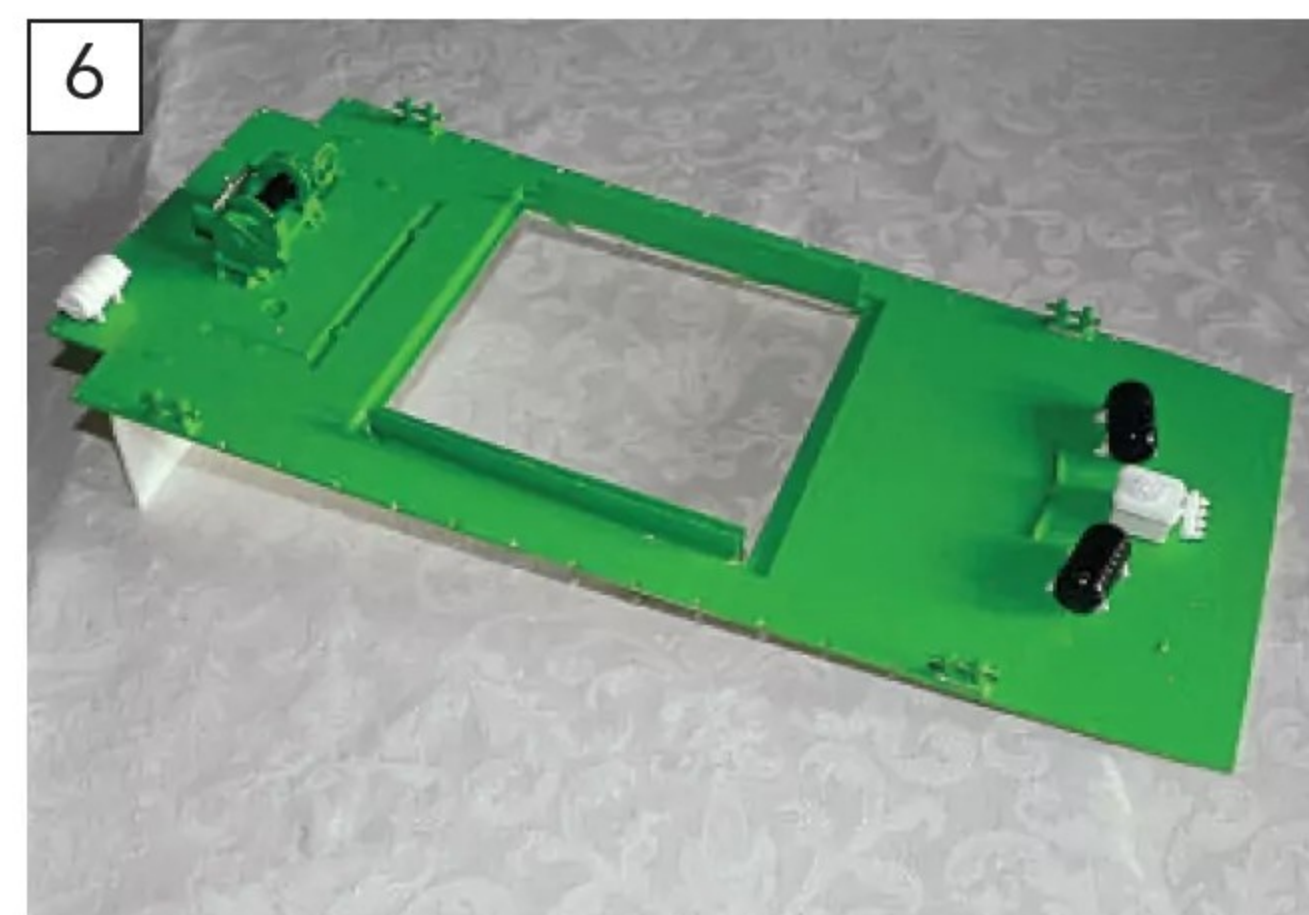
'Plan A' had been to use the kit propellers, but this suddenly changed when they proved to be too brittle to be drilled to fit the shafts (and one blade snapped off). As a result, I fell back on an existing design from my PC and made up three 12mm diameter brass propellers (see **Photo 10**).

A pair of rudders and rudder tubes/fittings was built up from brass from my scrap bin (see **Photo 11**) – note that the picture only shows one of the rudder tubes. **Photo 12** shows the rudders fitted to the hull.

Once again, using materials from the scrap box, a rudder linkage was made up and fitted between the rudders, with a link to the rudder servo. The servo was mounted in a fabricated styrene box, glued to the bottom of the hull (see **Photo 13**). The downward kink in the rudder operating arms is to allow the linkage to clear the underside of the slipway. **Photo 13** also shows the car body filler around the propeller shafts to waterproof them and add strength.

Motors

Over the last few years I've completed a number of 'Plastic Magic' conversions



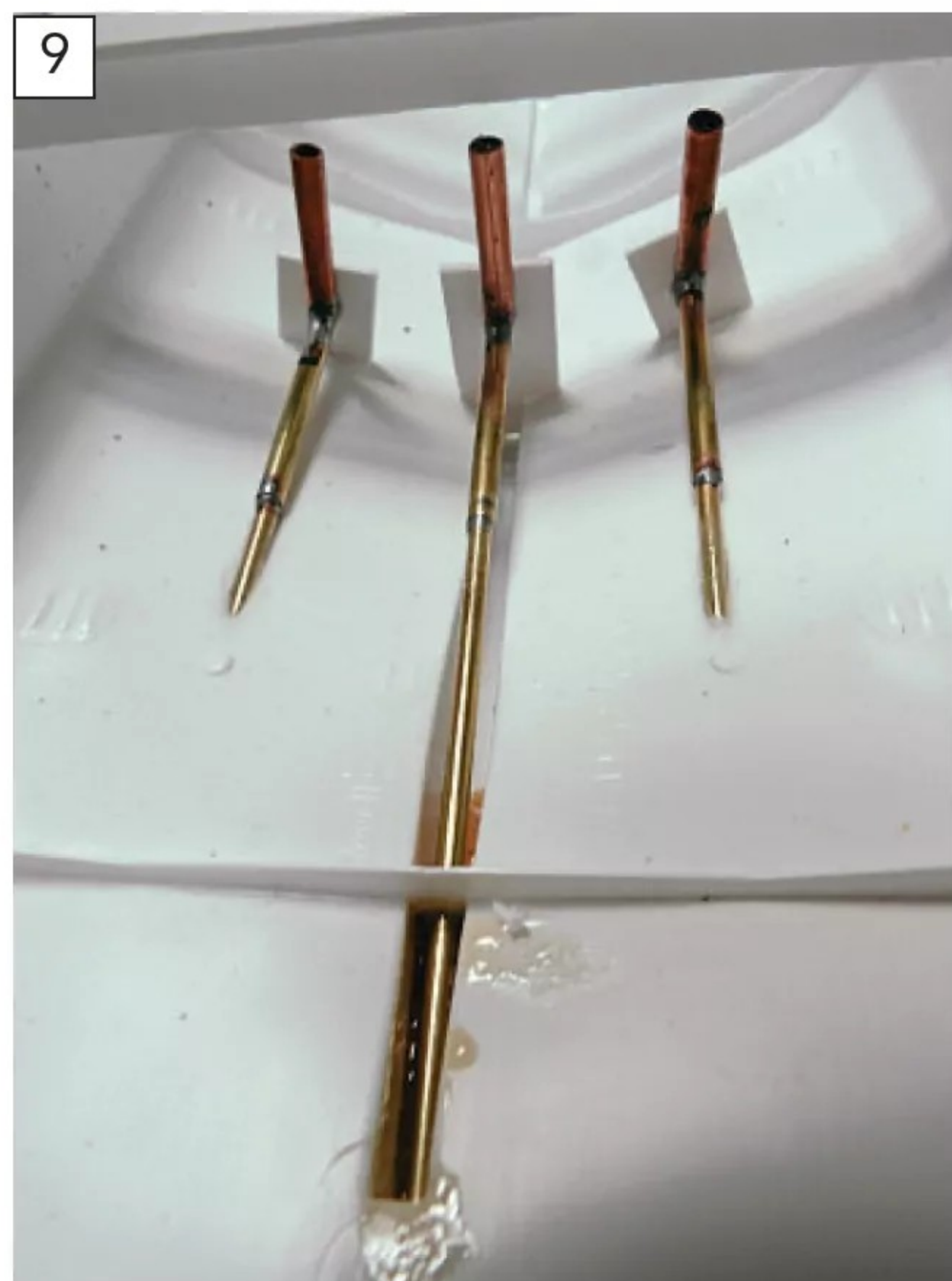
"This kit readily lent itself to 'plastic magic' conversion as, being 640mm (25 inches) in length, there was plenty of internal space available for electronics"

and all of them have utilised the smallest (and lightest) brushless outrunner motors I've been able to find. With an outrunner motor, the windings are fixed to the boat and the magnets inside the rotor rotate with the drive shaft to turn the propeller (rather like the rotary engines used on early aeroplanes).

All of my small models to date have used a type HXM1400-2000 outrunner motor from Hobbyking (www.hobbyking.com). This motor is 14mm in diameter by 20mm in length, weighs all of 5 grams, is rated 2000kV (2000rpm/volt), and will drive the propeller at around 15000rpm from a 7.4V LiPo battery. This set-up has always proved to be very effective for a tiny model when combined with a scale size propeller.

Motor mounting came next. After first cutting out a pattern in card to ensure a good fit, a motor-mounting bulkhead was cut from 2mm thick styrene sheet and drilled to suit the motors. However, I failed to follow my





“This set-up has always proved to be very effective for a tiny model when combined with a scale size propeller”

one direction, it draws water in from one side of the ship and expels it at the other side. Reversing the pump polarity reverses the flow. In the past, I have found this very effective as a bow thruster, although it can be rather noisy!

To allow the pump to operate as a thruster it has to be installed near the bow and coupled via flexible tubing to two small pieces of right-angled copper tube bends inside the aft bow thruster opening. A styrene bulkhead with openings for the pipes to pass through was made up and fitted near the bow to carry the pump. **Photo 15** shows the completed installation. The car body filler was added to strengthen the installation and ensure that it was fully waterproof.

Photo 16 shows one of the copper tubes inside the aft bow thruster opening. Later in the build, I found that I could install the thruster impeller from the kit around the tube without blocking the flow.

Lighting

With my previous *Hermann Marwede* I had fitted a rather limited lighting installation of cabin roof searchlights and navigation lights only. With this build, I wanted to fit a more comprehensive lighting system, covering what I'd fitted previously as well as a full set of cabin, deck and mast lights, using LEDs.

My preferred option for lighting is to use an assortment of LEDs, powered from a single cell (3.7volt) lithium battery. I often use discarded mobile phone batteries for this duty, as they are perfectly OK for lighting even if they can no longer keep up with the phone. However, LEDs need a series resistor to drop the battery voltage to suit them (tables of dropper resistor values are readily available on-line).

The LEDs were fitted as follows:

- Navigation lights – red, green or white high brightness, 3mm diameter
- Mast & deck floodlights – brilliant



- white high brightness, rectangular
- Cabin top searchlights – brilliant white high brightness, 3mm and 4mm diameter
- Deck & cabin lighting – warm white, 2.2mm diameter

To distribute power from the battery to the LEDs, my 'standard' procedure is to run positive and negative 'rails' around the model using self-adhesive copper tape (often used in dolls' house wiring) and soldering the LED leads (and resistors) to them. **Photo 17** shows the 'rats' nest' of LED wiring inside the main cabin – not pretty, but it works! The rest of

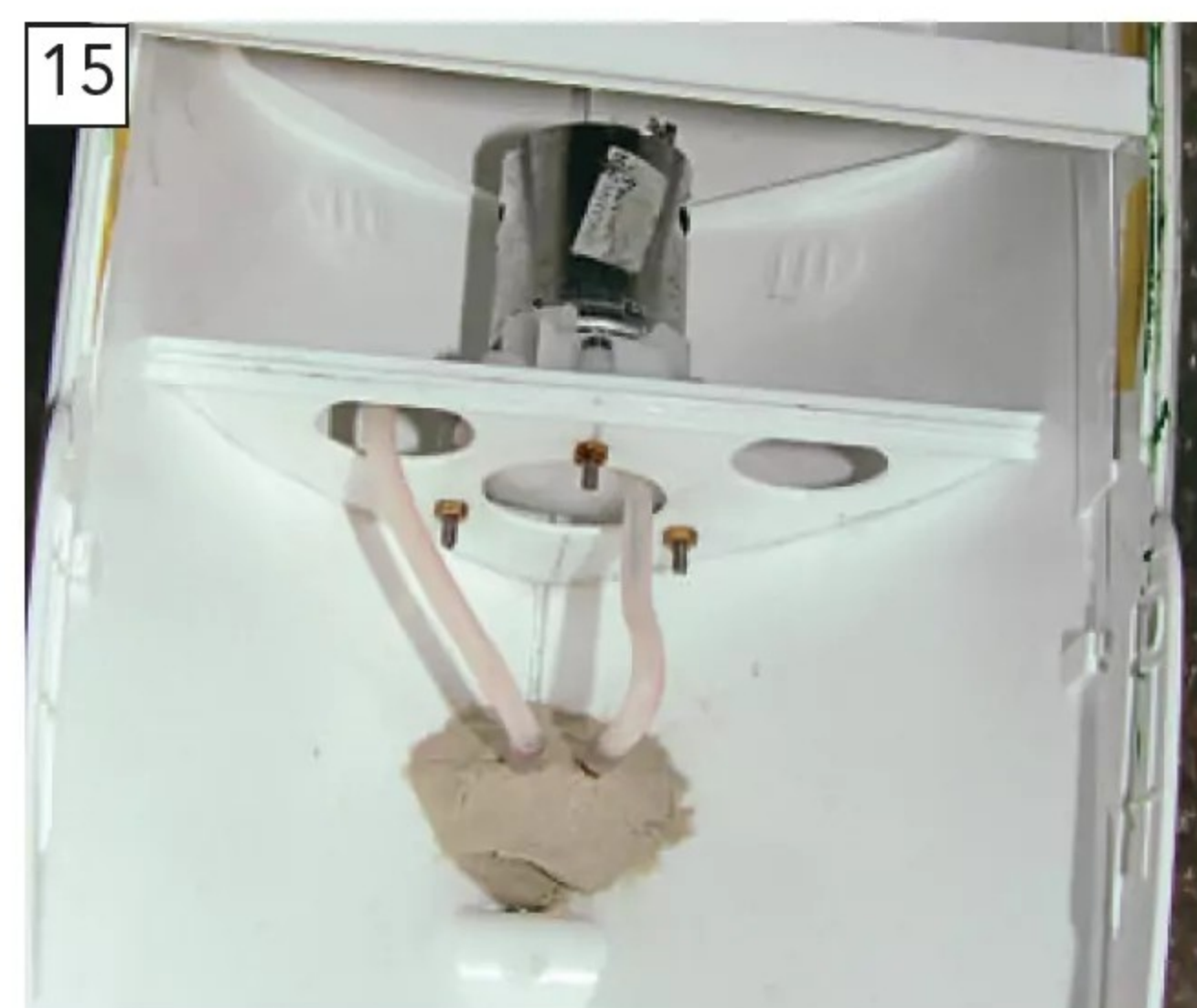
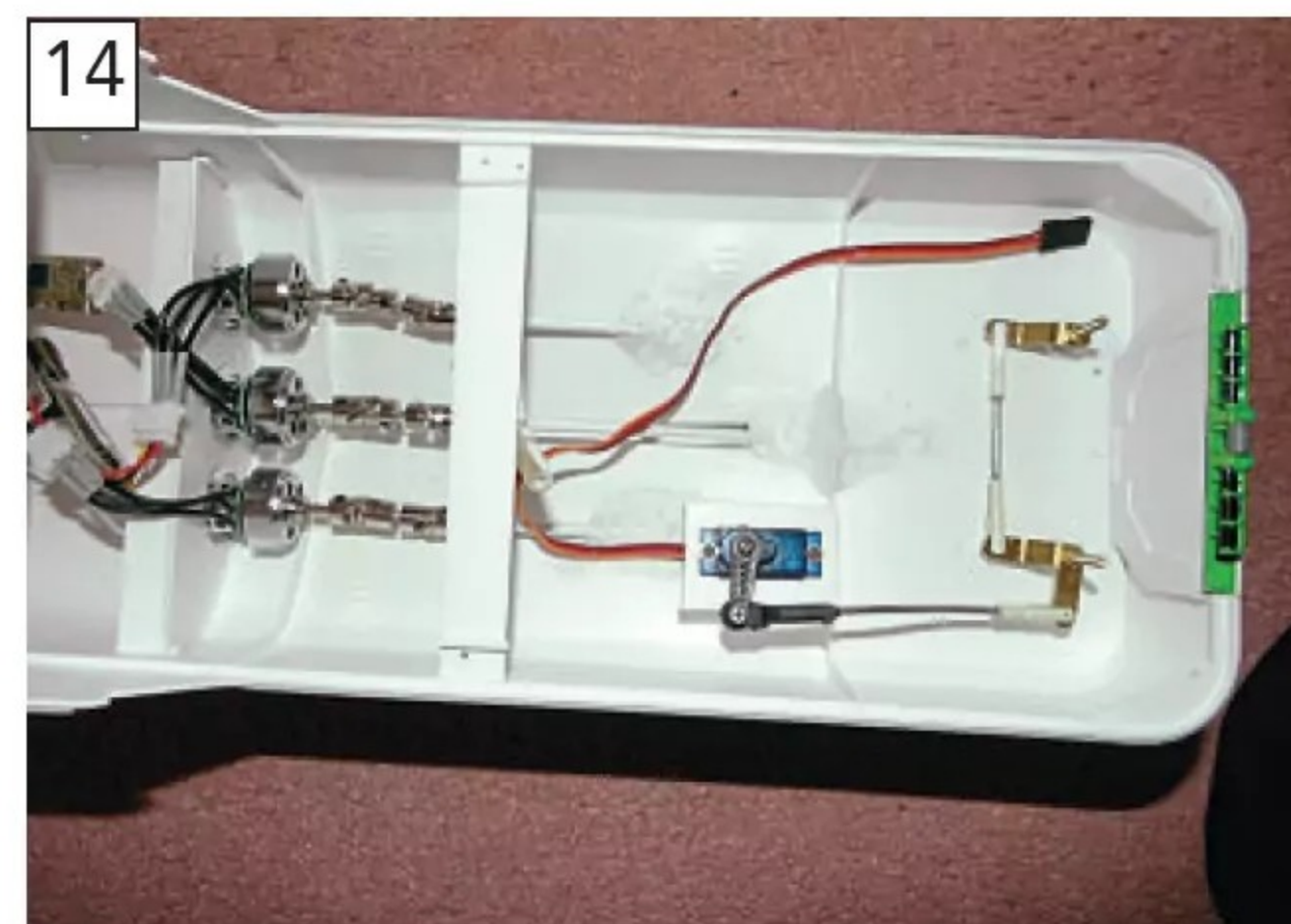


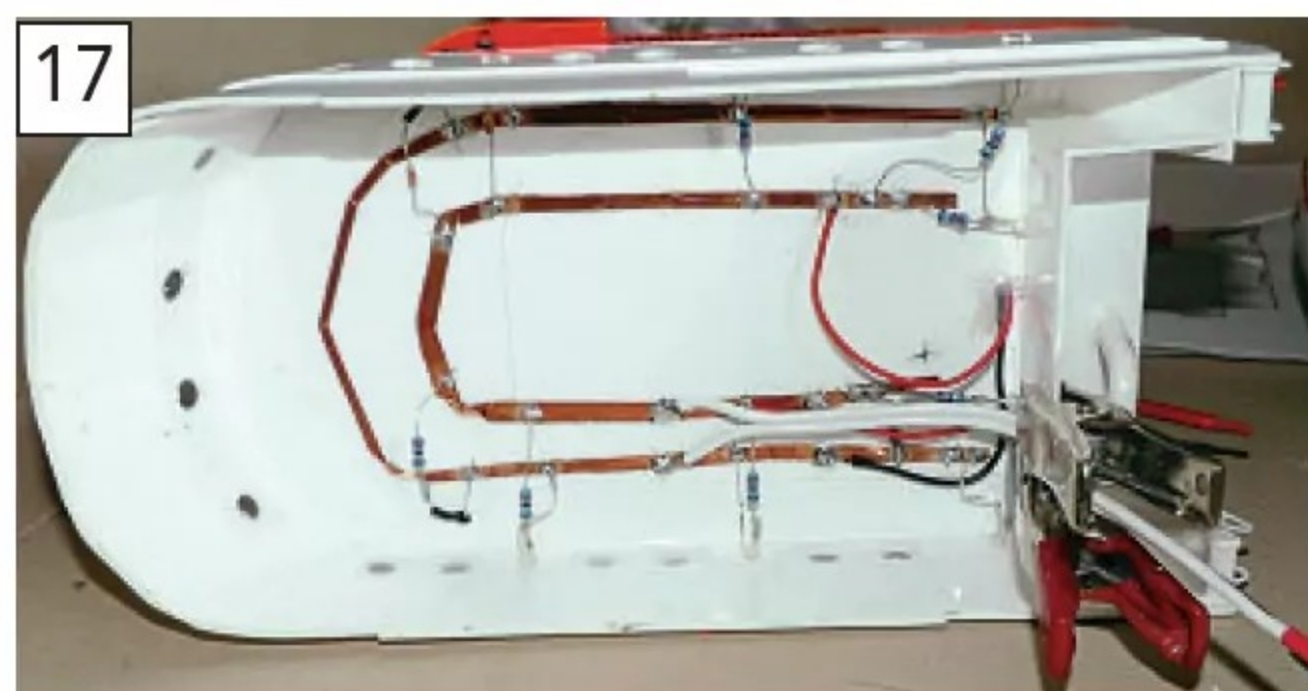
own procedures for lining up motors and actually drilled the bulkhead in slightly the wrong place for them. As usual, I only found this out after gluing the bulkhead into the hull! Fortunately, I had intended to use dual universal joints for each shaft, and they will accept a surprising amount of misalignment. **Photo 14** clearly shows the error for the starboard motor.

As an aside, the best method I have found to align a motor accurately with its shaft is to temporarily fit the motor bulkhead in place and to push a length of rod the same size as the propeller shaft up each tube in turn, with the addition of a small blob of paint on the rod end; this is pushed up to the motor mount, and, bingo, the centre is marked.

Bow thruster

As mentioned earlier, the bow thruster was going to be a reversible gear-type electric pump. When the pump runs in





“The best method I have found to align a motor accurately with its shaft is to...”

the LEDs were, mostly, wired in a similar way, with the searchlight LEDs fitted inside the kit mouldings (see **Photo 18**).

My plans for the mast proved a ‘challenge’ – modern management speak for ‘next to impossible’. I wanted to fit two navigation lights, one searchlight and two deck floodlights. All of the wiring for these LEDs, together with their dropper resistors, had to be shoehorned inside the tiny plastic mast, making sure that none of it shorted out, before finally gluing in the rear cover (see **Photo 19**) – real fun and games!

After much struggling with LEDs, resistors, wiring and soldering, it finally all came together (see **Photo 20**).

Final modification

Almost forgot; the final change to the standard kit build was to waterproof the stern door. The stern door on the full-size vessel was hinged at the bottom and would be lowered into the water to allow the daughter boat to be launched and recovered via the slipway. The kit’s plastic door moulding has openings at its lower edge to represent the hinges and drain holes and these lead through to the bottom of the slipway. So, since my intention was to have the slipway removable as part of the after deck assembly, there was, obviously, potential for water ingress. Sealing, however, was a simple matter of gluing a flat sheet of thin styrene over the outside of the stern door opening (see **Photo 21**). This does not show in the finished model unless you know what to look for!

Electrical installation

Apart from the lighting installation, the rest of the electrical installation required the following:

- Bow thruster pump, servo-controlled reversing switch, 3.7volt lithium battery and on/off switch.
- Radio control receiver and UBEC – the helicopter ECSs I had didn’t facilitate a supply of power to the receiver, so my receiver is



supplied from the bow thruster battery via the UBEC.

- Two main drive brushless motors, each complete with helicopter ESC, with a 7.4 Volt lithium battery and on/off switch.
- Lighting 3.7 Volt lithium battery, with servo-controlled switch and on/off switch.
- Rudder servo.

The receiver, rudder servo, ESCs, UBEC and drive motors were all installed underneath the after deck (see **Photo 22**). Initially, the main drive motor batteries were fitted in the same area, alongside the rudder servo; but this was altered after flotation trials in the ‘domestic test tank’ (a.k.a. the bath) by turning them 90 degrees and moving them a bit further forward, as seen in the photo.

To make them accessible, the switches for the two drive motors, thruster and lights were installed on a styrene plate underneath the (removable) main cabin, together with the reversing servo for the thruster and the lights servo (see **Photo 23**). The batteries for the thruster and the lights were to be placed on the flat floor plate seen aft of the switch/servo plate. Since the main cabin and other parts with lighting connections had to be removable, plug and socket connectors were used (painted green in the picture) for connection to those circuits.

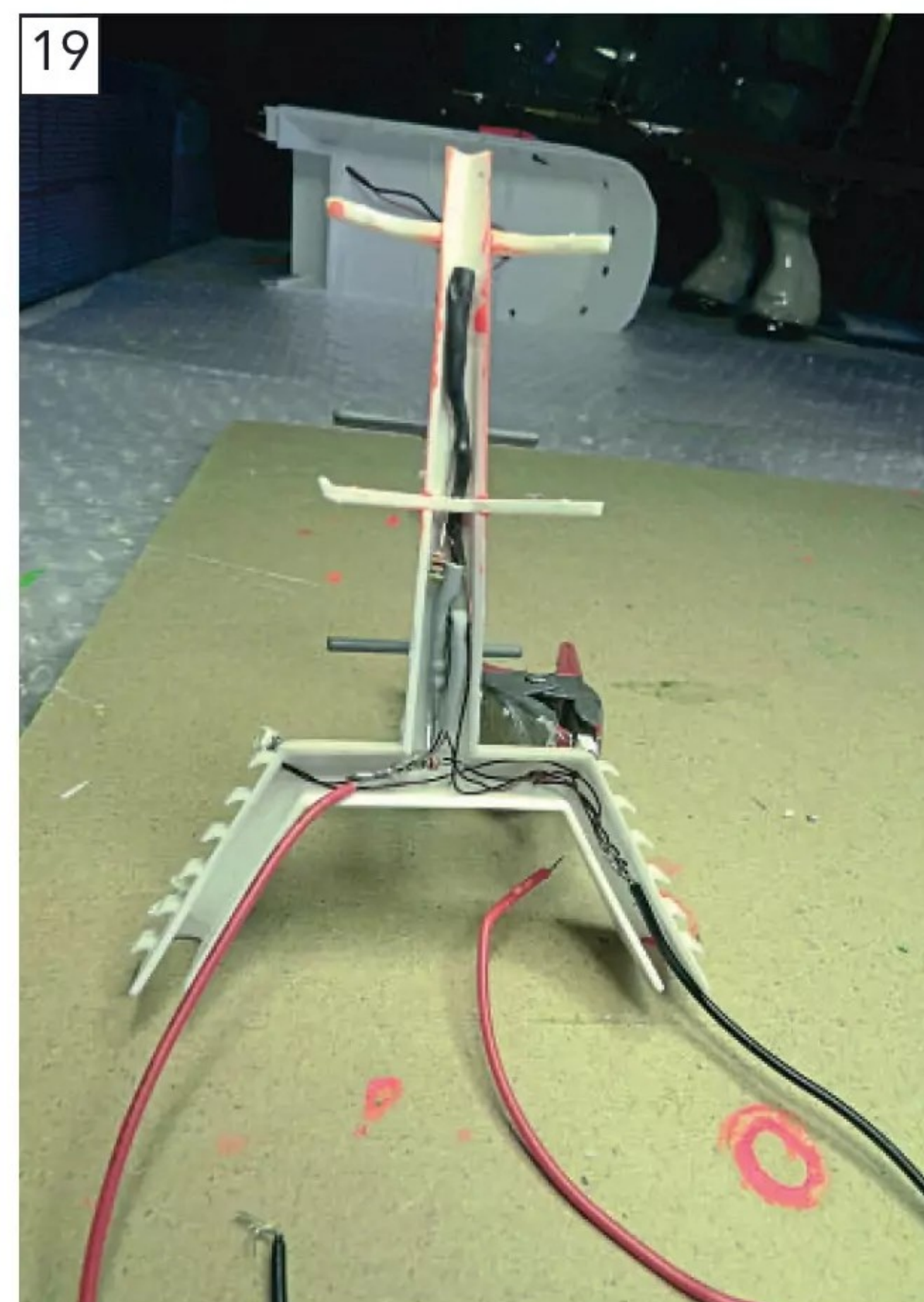
After adding much wiring and trying my best to tidy everything up, the model was deemed to be complete.

Bath tests

Following full function tests on the bench to ensure that all systems performed as they should, the model was taken for its first on-the-water tests in the bath. As far as is possible within the confines of a domestic bath, everything seemed to work fine.

Stability was checked by tilting the model over to one side and letting go.

“If a model continues to roll on letting go, you have a problem!”



23



It returned to upright very quickly, so test passed. If a model continues to roll on letting go, you have a problem!

Maiden voyage/sea trials

Just as I was planning to try out my March 2020 lockdown project on the water, we ran into the new lockdown from Boxing Day 2020 onwards. It then wasn't until June 2024 that I remembered the *Hermann Marwede* had been sitting in its box on a shelf (while I caught up with other things) and was well overdue for a maiden voyage at the lake. I also had a new electric puffer called *Lena Ballantyne*



“My plans for the mast proved a ‘challenge’ – modern management speak for ‘next to impossible’”

(built to the design of *Sandy Bank* from the July 2019 issue of *Model Boats*) and an almost complete live steam sternwheel paddle steamer called *Klondike* that needed trial sailing. So, it was off to the lake in Sheringham!

After checks of the radio control system for correct operation, *Hermann Marwede* was placed in the water and driven around the lake. Surprisingly, for one of my models, she behaved impeccably, with good control of ahead/astern and a relatively tight

turning circle. Even the lights and bow thruster worked as they should. Readers of my previous articles will know that my models usually hide some ‘gremlin’ that then pops out to bite me during the first sea trials, but not this one! Photo 24 shows her ‘at sea’.

If any criticism of the maiden voyage could be made, it is that the boat only had a mediocre turn of speed – hopefully, I can improve on that by altering the pitch of the propellers.

As for the other two models, *Lena Ballantyne* performed admirably (again, much to my surprise!). *Klondike*, however, didn't behave at all well, and had to be returned to the shipyard for major surgery – watch this space for a full build article for *Klondike* at some future date. ●





Navatek

Roger Suiters explains how he managed to capture this experimental ultra heavy-lift amphibious paddler in miniature

Having decided I wanted to build a model paddle boat of some kind, I went scouring YouTube for inspiration and came across footage of this monster, slowly crawling up the beach, supported by 100 paddles. It really has to be seen to be believed – so I suggest keying ‘Military paddle boat’ into the YouTube search engine to view the video yourself. At first, I wondered if I was looking at a scene from a remake of the old James Bond film *Dr. No* – but no, Naveatek is an actual experimental vehicle/craft, capable of delivering loads such as tanks onto a beach.

The prototype featured in the clip, measuring 42 ft (13m) in length, 28 ft (8m) wide and 17ft (5m) in height, is apparently half the size of the intended full-size craft. Made of aluminium, it has a small pilot’s wheelhouse and uses dense air-impregnated foam blocks. Apparently designed with the intention of replacing the hovercraft, at the time of writing, no further progress reports on the project have been forthcoming.

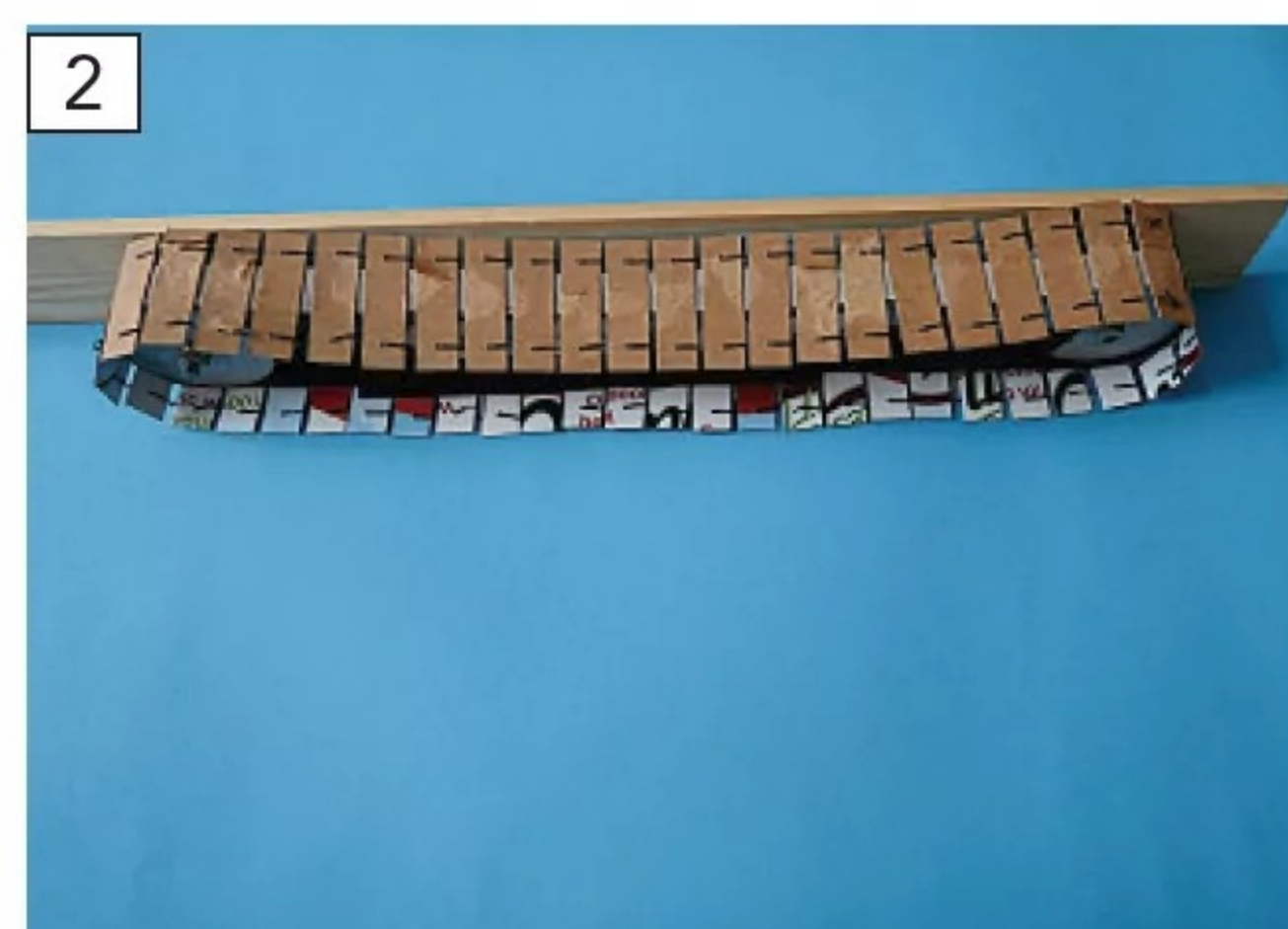
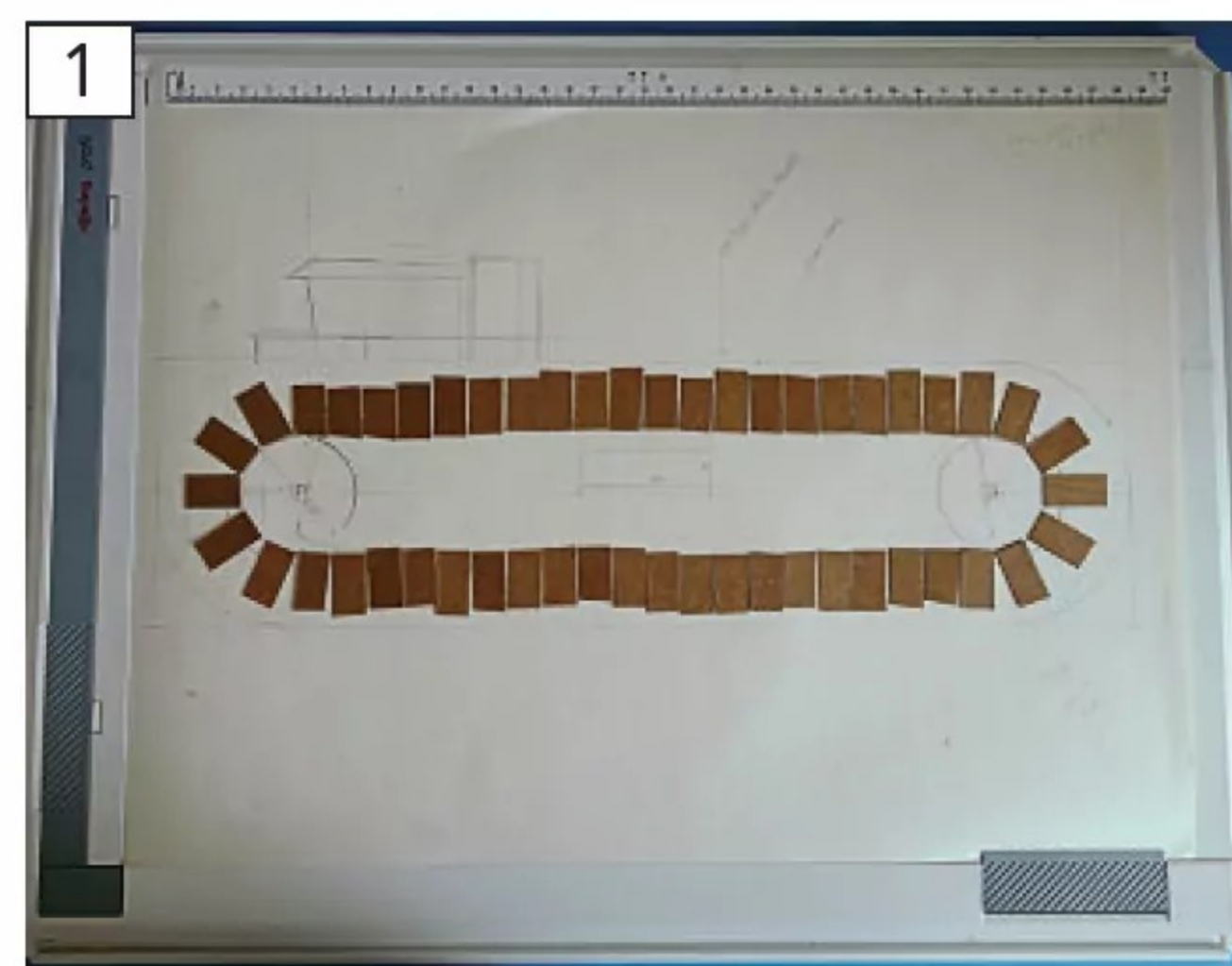
Tentative first steps

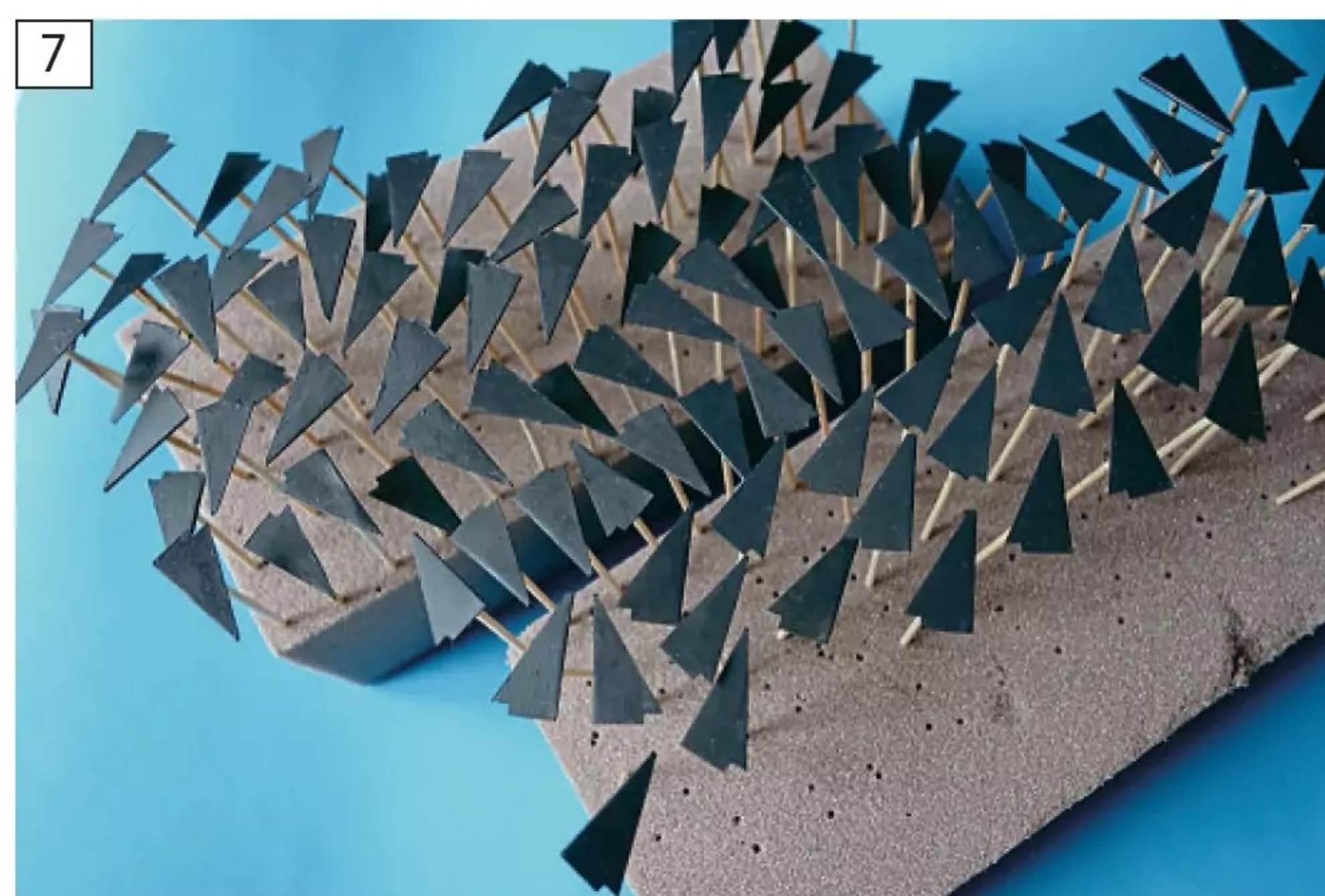
Having drawn up plans for my model from various photos, cardboard sections were first cut out to check the spacing of the paddles (see **Photo 1**). These sections were then laced together and placed over two temporary discs, which were screwed to a piece of wood (see **Photo 2**). The measurements of my design had been calculated to result in a 1:35 scale model, something I checked by placing some 1:35 scale Tamiya figures alongside a very basic mock-up build.

The paddle drive assembly

The first actual build item I decided to tackle was the paddle drive assembly. I made the parts for this from ‘Easyflo’ resin (supplied by MB Resins), mixing in some aluminium powder to give my casting more strength.

Having sourced a tube of the required diameter to cast the forward drive assembly, I then fitted two previously cast rings, one with





“At first, I wondered if I was looking at a scene from a remake of the old James Bond film Dr. No – but no, Naveatek is an actual experimental vehicle/craft”

holes in its flange, over it (see **Photo 3**). Some grease proof paper was wrapped around these two rings and then sealed with tape before resin was poured through the holed ring, resulting in a long resin tube. To support this tube in the lathe, I cast two plugs, again using ‘Easyflo’ resin but this time with no added aluminium powder added. These plugs were then trimmed on a lathe to ensure a tight fit before being pushed into either end of the tube; this allowing for one end to be placed in the chuck and the other end to be supported by a rotating centre so that the lathe cutting tool could travel the complete length of the tube unhindered. Finally, I cut this tube into two sections and trimmed the ends, giving me two tubes of the same dimensions (see **Photo 4**).

The ring casting to fit over the tubes needed teeth to engage with the paddle drive. So, I cut off some from a scrap gear and reshaped them. Once alignment of the teeth had been double checked, the ring, fitted with its new set of teeth was placed into a plastic card box and secured with glue. Once the glue had cured, silicone rubber was carefully (to avoid bubbles) poured

over the assembly. After being left overnight to cure, the silicone rubber was removed. A mixture of resin and alloy powder was then poured into this silicone mould. The process was then repeated four times to produce the four toothed rings required (see **Photo 5**).

Next, I cast eight discs, each with a hole in the centre to take an 8 mm diameter brass tube and a slightly smaller brass tube; this would become the main bearing, allowing one tube to rotate in the other. These discs were turned to fit inside the previously cast tube: that’s two discs per tube. The two bow toothed rings drive the paddles, but the two stern toothed units are freewheeling.

A brass gear was fitted to the smaller brass shaft, this allowing the assembly to be driven by a continuous rotating servo. The assembly was then secured with brass screws, leaving the stern units free to rotate on the brass tube bearings. Following this, the gap between the two discs, on each unit, was filled with a two-part mix foam to increase buoyancy (see **Photo 6**).

Under each of the units with the toothed gears is a cast item with six legs, used on the real craft to secure everything in place via large bolts. I nicknamed these units ‘spiders’ even though they have only six legs. To create these, I first made a spider, cut out from plastic card. To simulate the bolt fittings on the real craft I made a silicon mould of 16-BA brass nuts. This was filled with resin and, once cured, the resulting resin nuts were glued to the plastic card spider around a previously drilled hole. This done, I could then create

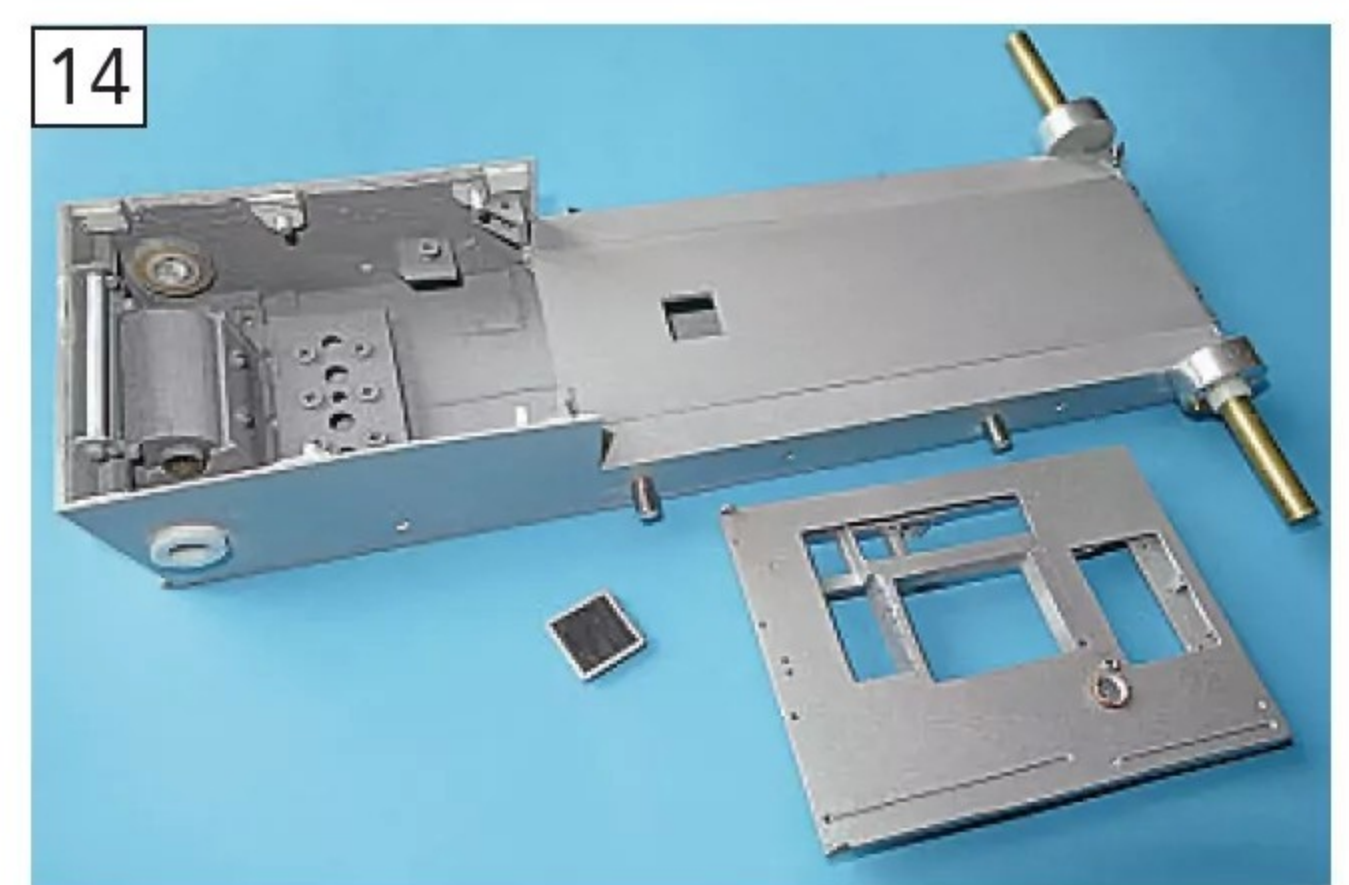
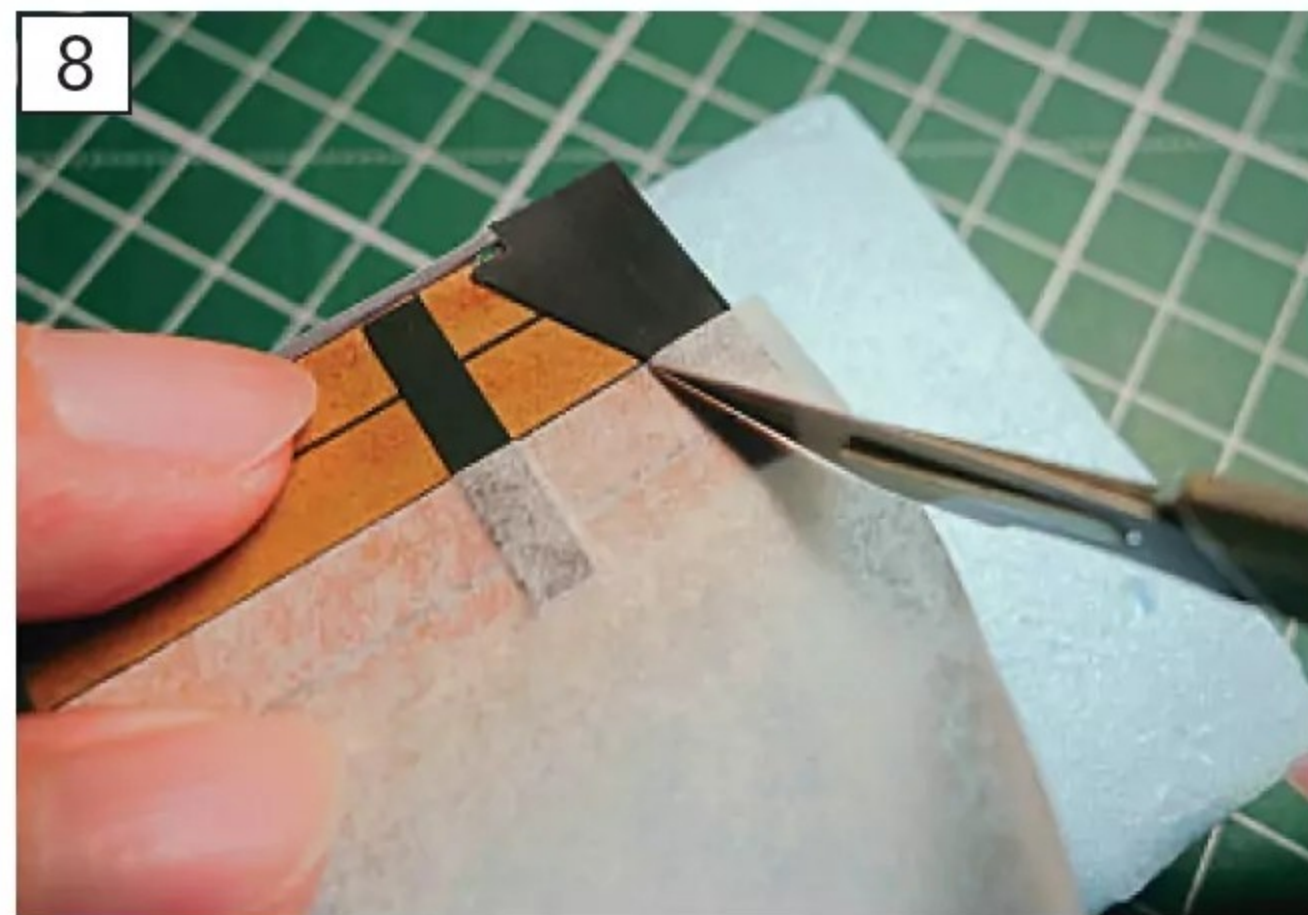
a mould for the spider and make four castings, each of which I simply pushed into place and secured with industrial double-sided sticky tape (this allowing for easy removal if necessary). Where the hole is, a screw can be screwed into a locknut, this locknut cannot be seen. Using this principle, the screw will not come unscrewed on its own accord. (again, see **Photo 5**).

Finally, a smaller diameter brass tube, which I would fit inside the larger tube made previously, was filled at both ends with plastic metal glue to stop any water getting in. However, one end was drilled and tapped to allow a self-locking screw to be inserted so that the brass bearing would be locked in place.

As the paddles had to be very lightweight so the model would not sink, I decided to use styrene foam. However, this foam has little strength, so the paddles would need frames. To speed up the process, five plastic card frames were made. Each frame was moulded, then all 100 frames, plus a few spares, were cast. Styrene foam blocks were then glued to the inside of each moulded frame.

Next came the wooden panels, which on the real craft are fitted to front and rear of each paddle: these were simulated using brown gum tape, each strip cut, to the required size. these gum strips were secured in place using double sided stick tape, all very time consuming.

A very fine black coloured pen was used to pick out the gap between each simulated wooden panel, and a coat of dry of paint was added to enhance the wood effect.



On the original craft, front and rear of each paddle had metal segments fitted protecting the wooden end section. To simulate these, I cut the shape out, from 0.5 mm plastic card, then sprayed them black. These were glued in place on each paddle. (see **Photo 7**). To represent the protective coverings used on the real craft, masking-tape

made was used. This tape was made to look suitably 'tatty' to reflect the wear and tear caused to the coverings by constant exposure to, and battering by, the sea (see **Photo 8**).

That task completed, things did not get any easier. On the actual craft, fitted on top of each paddle is some sort of mechanism. There are two different

types, so I made one of each, using separate segments of plastic card. From these two plastic card segments, I moulded ten of each. I then glued the 20 castings into a box, using the resulting mould to cast well over 400 more. Due to the fact they were such delicate items, many did not cast well, so producing many of the same allowed for any spoils to be discarded (see **Photo 9**).

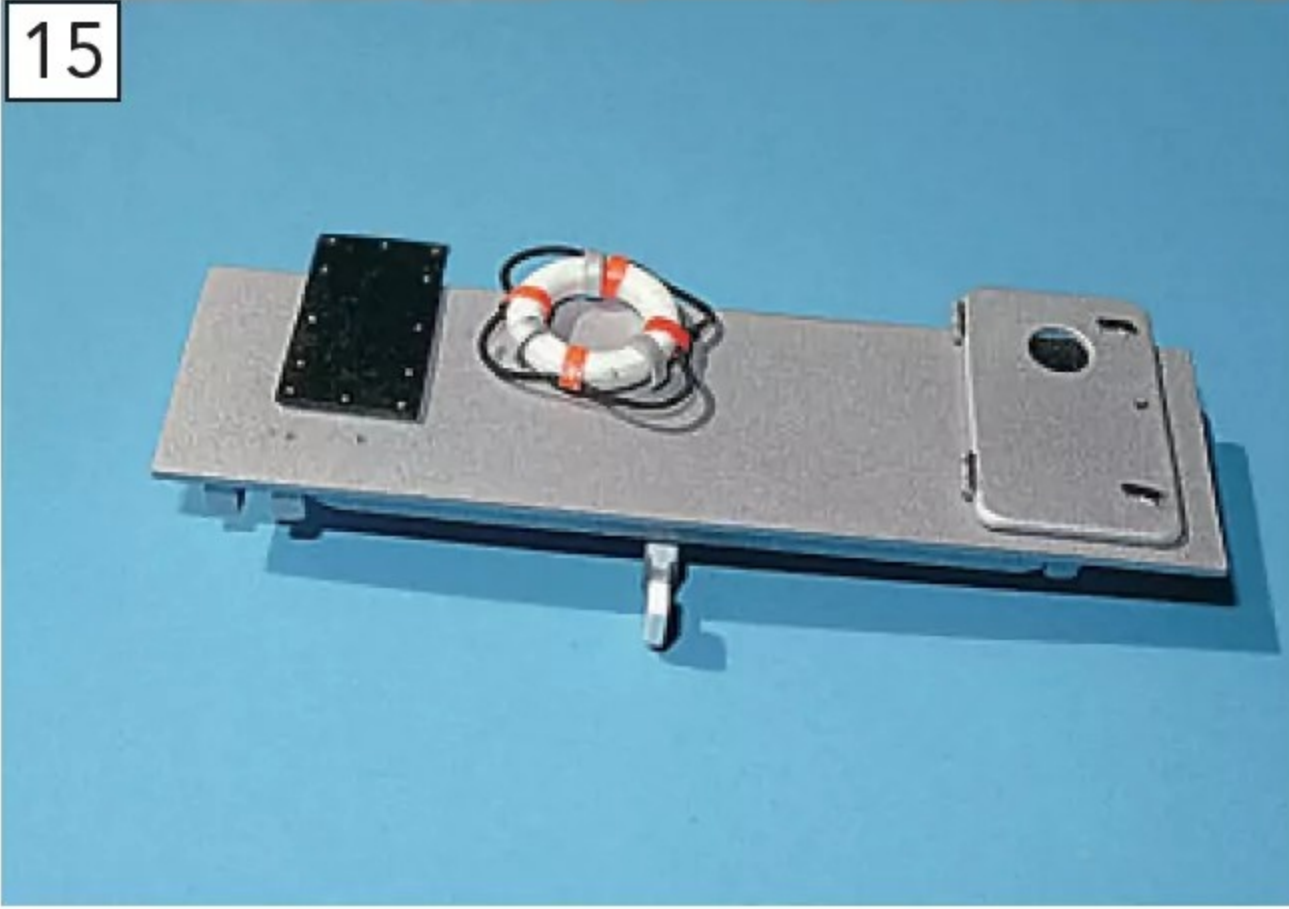
Jigs were made and cast to allow me to align and glue the required sections at the correct angle to the previously cast section, which in turn allowed the paddle to be secured to the drive belt (see **Photo 10**).

I was able to attach the units to the track with black Duct tape. As this had to be done with precision, another jig was made, to ensure the square cut-outs aligned with the drive teeth (see **Photo 11**). The final assembly I secured with 3mm acrylic screws. Acrylic nuts had been previously inserted and glued into the styrene foam blocks used on each paddle.

Crafting the cabin

What the Americans call 'the pilot house' was constructed using plastic card, with sections cut out to take the window frames. The window frames

15



“As this had to be done with precision, a jig was made...”

I made with 0.5 mm plastic card, into which I drilled holes that I could 0.5 mm plastic rod into before gluing in place. Once the glue had cured, a piece of 0.25 mm plastic card was drilled with a slightly larger hole. This piece of scrap card was then placed over each rod before snipping with a pair of cutters, the result being that all rivets were at the same height, the inner rivets were chopped off level with the inner frame. The clear plastic was coloured using a black Sharpie pen. It was then dipped in a mixture of nail varnish and approximately 20% of acetone, and left for one minute, before the process was repeated at 30 second intervals until the required colour was reached.

I now turned my attention to the control panel, which, again, I made from plastic card. Detail was added as per my reference photos, and the panel was then clipped onto another plastic card oblong box I'd glued into the inner cabin – this permitting easy removal, should that be required.

For my pilot, I chose a Tamiya figure, although he had to undergo a bit of 'surgery' so that his arm would rest on the steering column. The microphone I fashioned from plastic rod, using a drop of glue on one end, while the headphones came from a Tamiya kit – these did, however, need to be modified to fit my pilot's head. The

pilot's seat was made from plastic card, with a bit of filler added and shaped, before both pilot and seat were glued to the cabin floor (see **Photo 12**).

Work then began on the cabin's exterior. At this point my window frames could finally be glued in place, and a tall square section at the rear of the main cabin was made from, yes, you've guessed it, plastic card. The vents simulated on all three sides were constructed by gluing vertical plastic card strips onto a flat section of plastic card. Once cured, a silicone mould was made, then filled with resin, producing the grey coloured panels.

Railings

The railings were made from plastic rod. However, I soon realised that these would prove too weak and would therefore need strengthening. Consequently, I drilled into each end of these horizontal rods so that 0.5 brass rod could be inserted before the complete structure was glued together. Removing this structure is a simply a matter of pulling upwards.

At this point, another Tamiya figure was surgically modified so that he could be posed leaning against said railings (see **Photo 13**). Having chopped him up a bit to reconfigure him, any resulting gaps were filled with Milliput. I also added a larger layer of filler around the stomach area to give him a 'pouch'. I can never understand why purchased figures are always slim. Why not produce figures that are truer to life? Anyway, as he'd previously been in German uniform, I also suitably re-attired him. Rounding off his head area, the peak of his new hat was shaped from 0.5 mm plastic card and glued in place, while his glasses were made from plastic sheet and thin brass rod. You will notice his shoulder straps look somewhat voluminous: this is because they form part of his lifebelt and therefore also inflate.

The exhaust system

The exhaust system was constructed with plastic tube, while the heat shield around the exhaust was made from 0.5 mm plastic card, drilled but shaped so it clipped in place around the exhaust, thus allowing easy removal. The complete unit was painted silver, before a dry brown coat of paint was added to simulate the effect heat has on an exhaust.

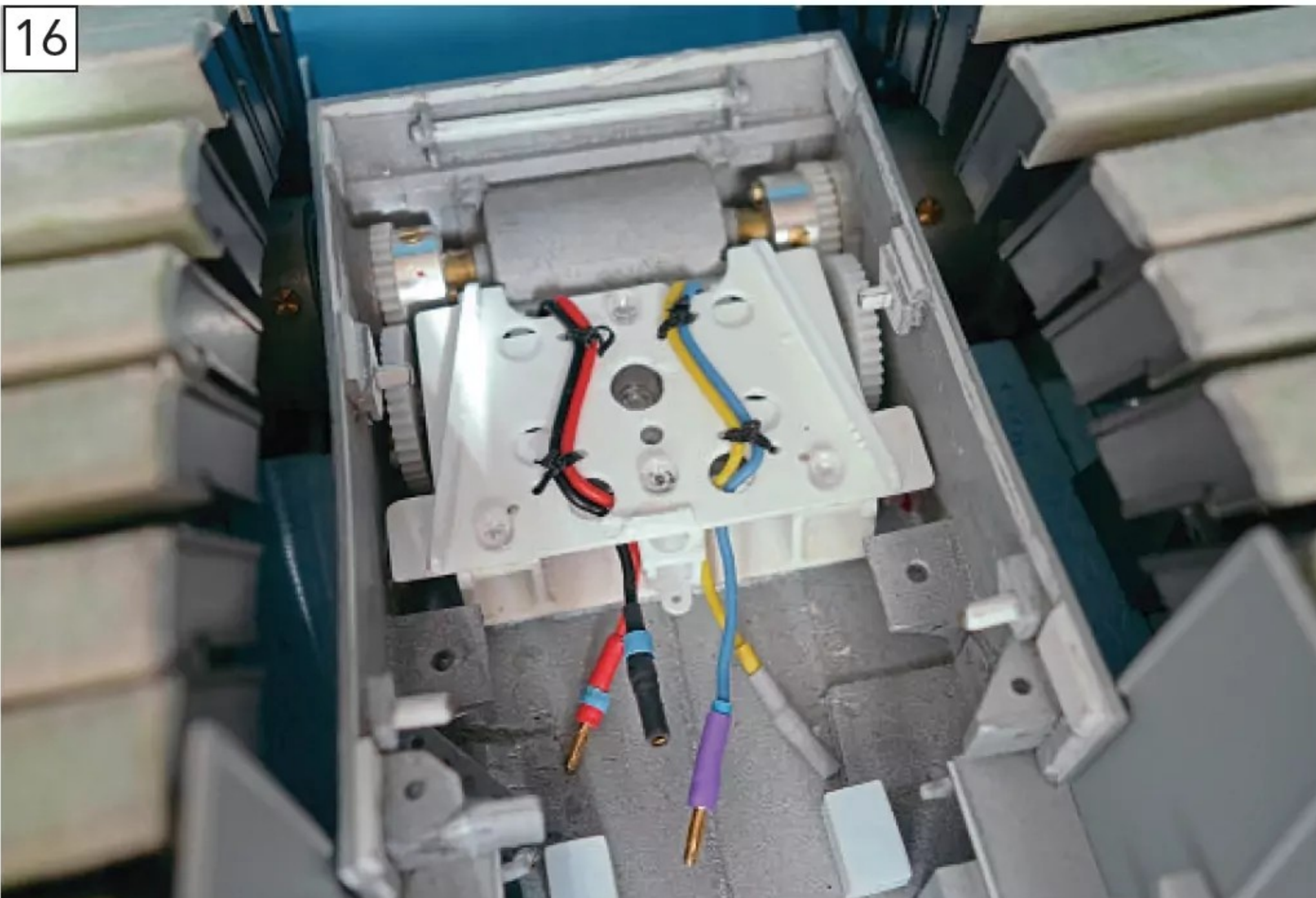
The hull and remainder of the superstructure

The hull was constructed from 1.5 mm plastic card, with brass tube inserted to support the necessary running gear (see **Photo 14**). The plastic card upper deck was slid into place, with its locating claws allowing the cabin to be attached. The upper deck that supports the pilot's house, which has these small claws on the underside, was made from plastic card, so I could slide the upper deck into place, locating onto lugs (one on the bow inner wall and four extending from the inner side of the hull).

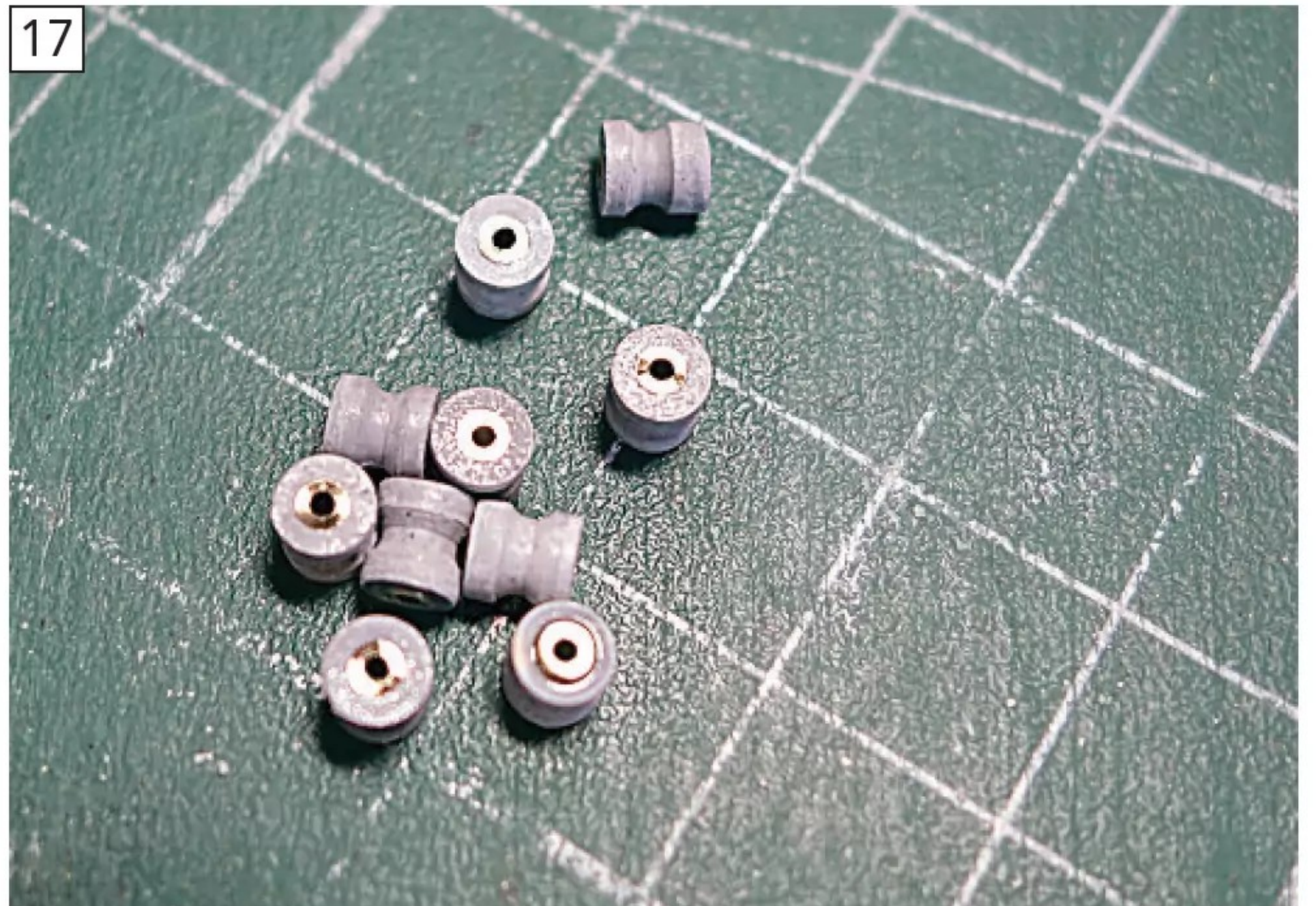
Between the upper and lower deck, this left a large gap at the rear end of the upper deck, therefore an oblong plastic card section was cut out and four holes were drilled in this plate, this allowing four small 10 BA counter sunk screws, two either side, to pass through, securing this plate to the rear section of the upper deck. Embedded next to these screws were 2mm diameter magnets. Magnets were also embedded in two plastic card doors, so that when the doors get near this oblong panel, they snap into place, covering the previous mentioned magnets (see **Photo 15**).

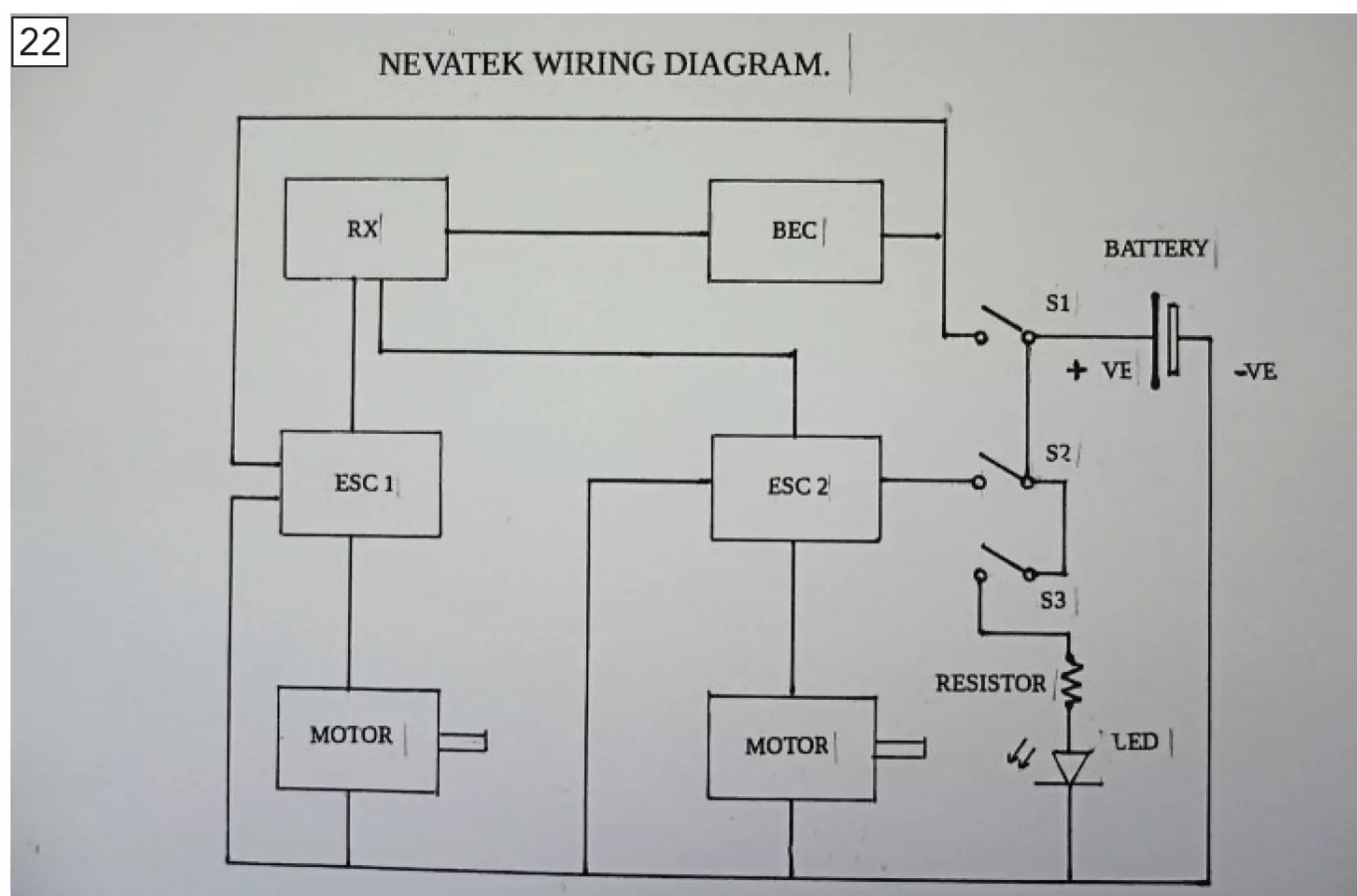
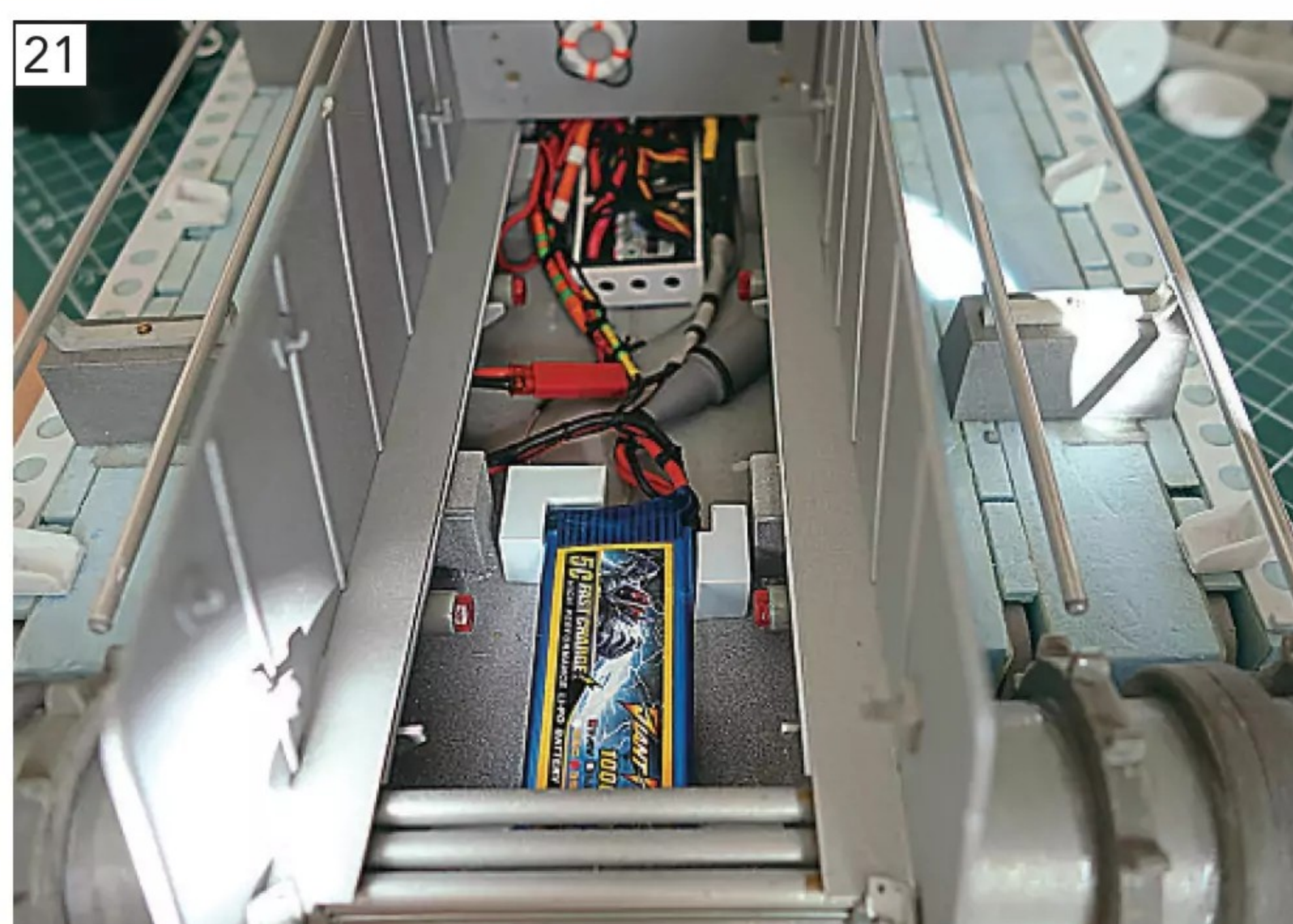
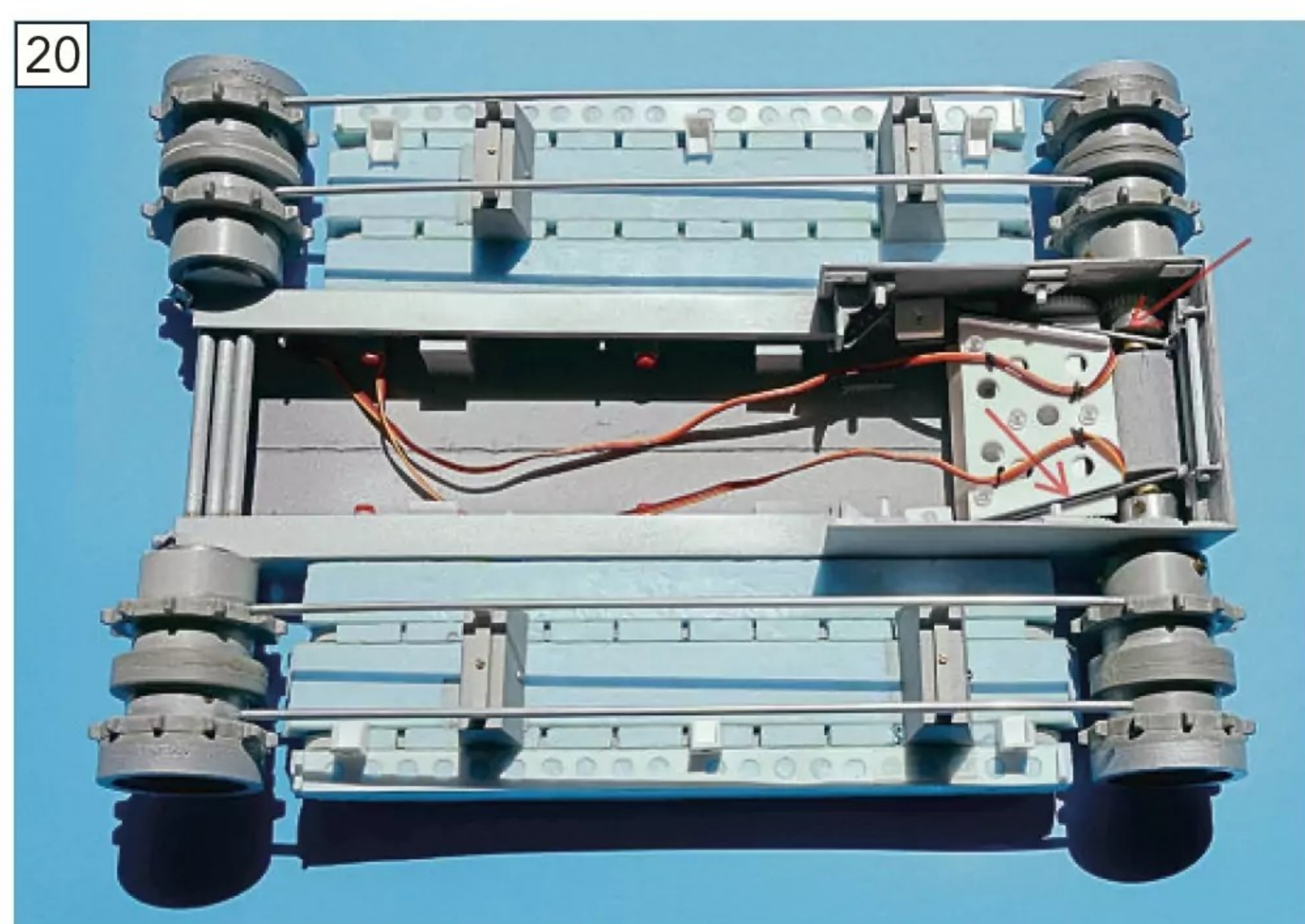
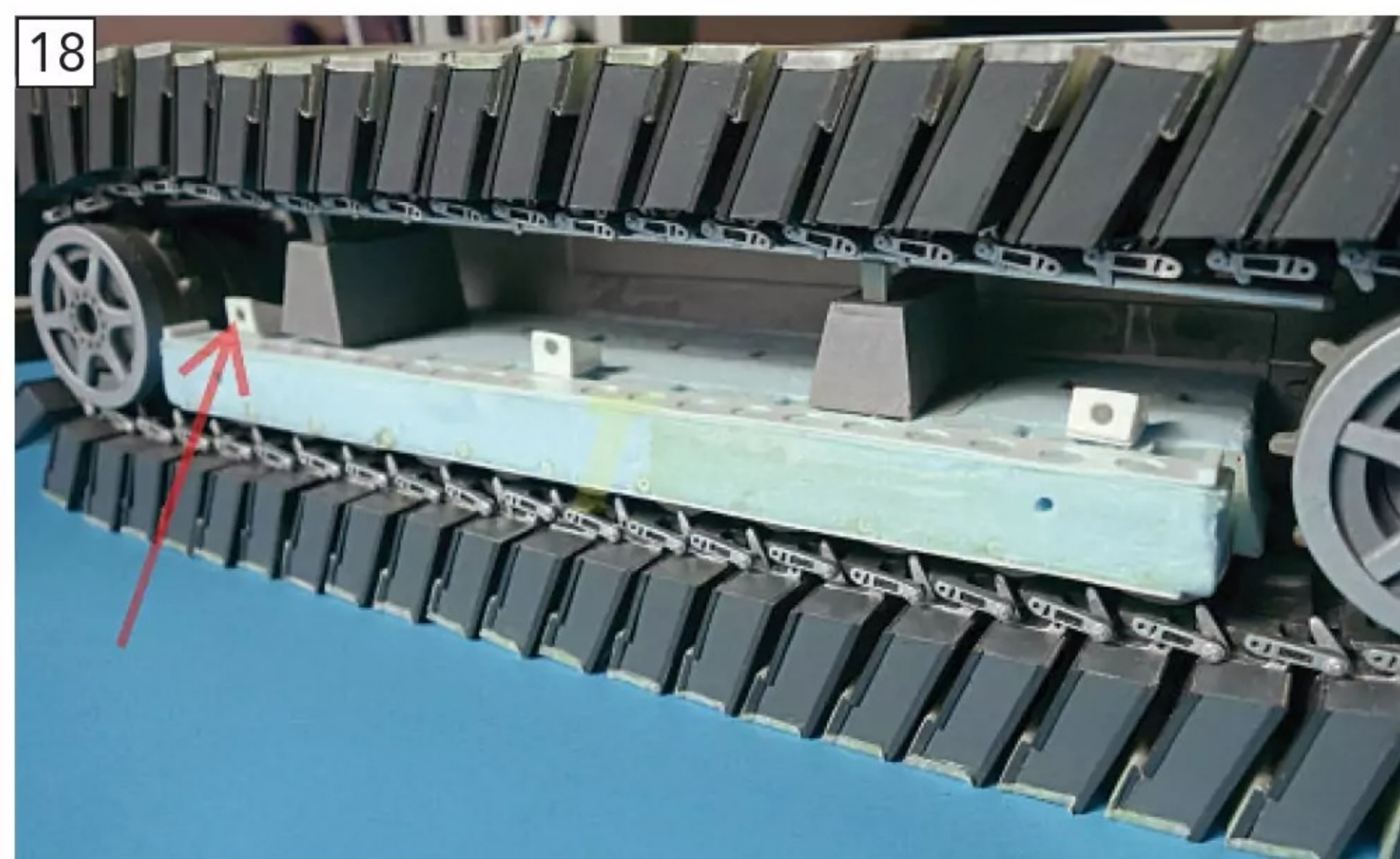
Located in the centre of this plate there is a lifebelt fitted. I couldn't obtain this in required scale commercially, so had to create my own. To do so, plastic card rings were made and glued together; once the glue had dried, the rings were then filed to the correct doughnut shape. White lacing was wound around the finished lifebelt and

16



17





glued, although dental floss could also be used.

The silver claws supporting the safety buoy are in fact an illusion; they were in fact made from thin aluminium strip and glued to the buoy itself, rather than to the backplate. The method I adopted here was to drill two 0.5 mm holes in both the backplate and the buoy. Two brass 0.5 mm rods were then glued into

the buoy and simply pushed into the backplate. Finally, I added a lug at the bottom of the back plate which supports the buoy; this locates onto the lower deck. The deck is slightly raised so as to meet the back plate with its underside when slid on, thereby achieving a reasonable seal against water flowing onto the deck from another model's wash (again, see **Photo 15**).

The running gear

I removed the electronic circuits from two small high-torque servos. This left the unit with a motor and the necessary brass gears. The motors were connected to their individual speed controls, thus allowing the port and starboard paddles to be independently driven, and the craft to be able to turn, reverse, etc (see **Photo 16** on previous page).

As the craft can run on land as well as water, suspension was required. This I overcame by casting silicone wheels to support the paddles. Brass tube was glued into the silicone casting centre to act as a bearing (see **Photo 17** on previous page) and then simply slid over a row of protruding brass rods, permitting silicon wheels to rotate. The rods are supported by a high-density foam strip, which unfortunately hides the suspension (see **Photo 18**). Also shown in **Photo 18** are three white blocks; these house neodymium magnets (note the red arrow on the photo) which support the side panels, also containing a set of these magnets, (see **Photo 19**).

I knew the upper section of the paddles would sag, so to support this I used four good quality aluminium tubes. Each of these tubes was given a gentle curve, due to the bow paddle arrangement being slightly higher

23



than the stern running gear (see **Photo 20**).

Time to test the paddler's performance

Having fitted the battery and electronics (see **Photos 21 and 22**), it

was time for a quick test in the bath, and this suggested all was well.

So, once reasonable weather decided to show, I headed for my local pond for a proper on the water trial. Everything seemed satisfactory, until one of the drives decide to fail!

24



Once home, I detected too much play between the gears, so a spacer was fitted, (see **Photos 23 and 24**), which fortunately resolved the issue.

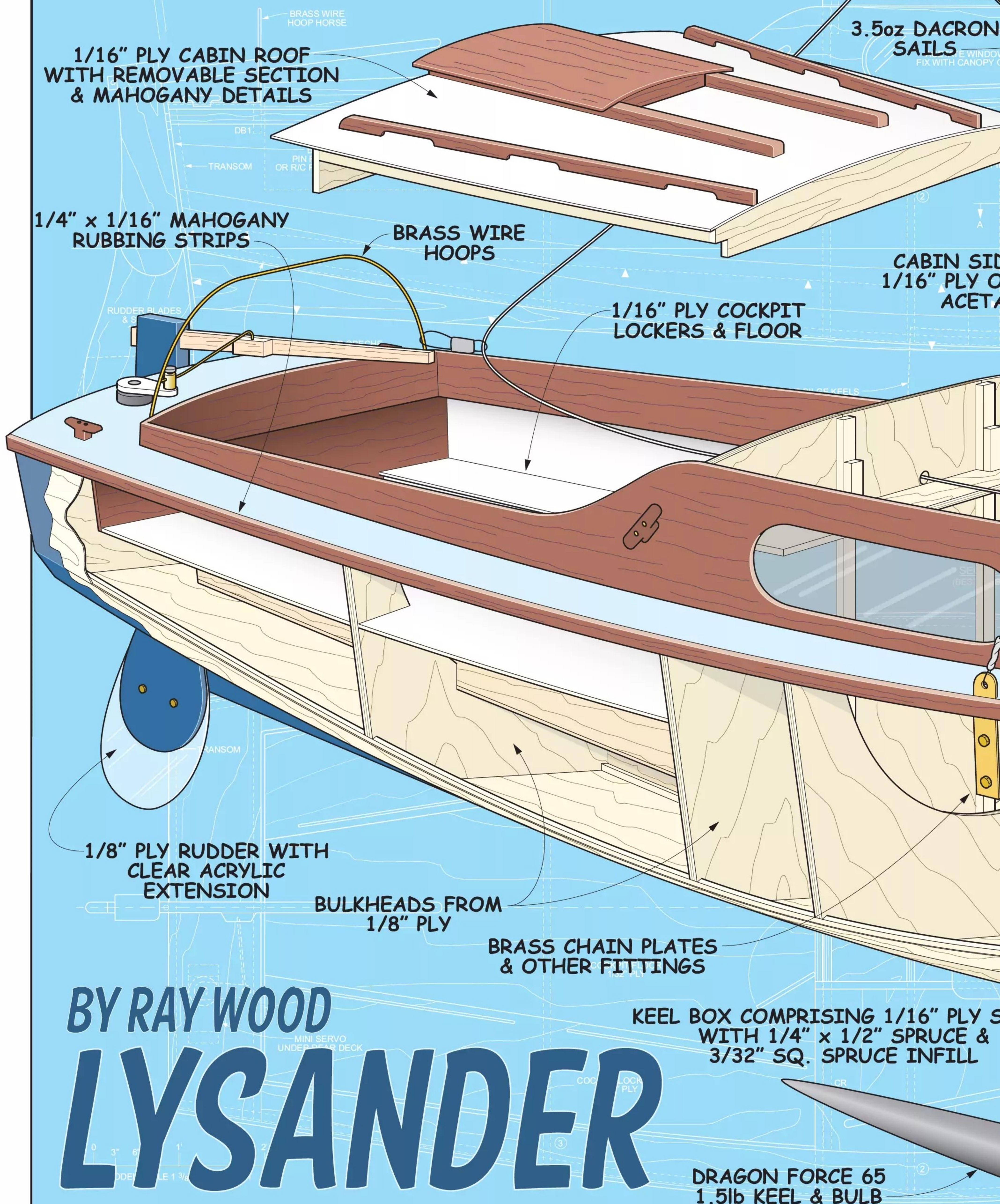
Photos 25 (see also the intro image) shows the model on the water again, now performing very nicely! ●

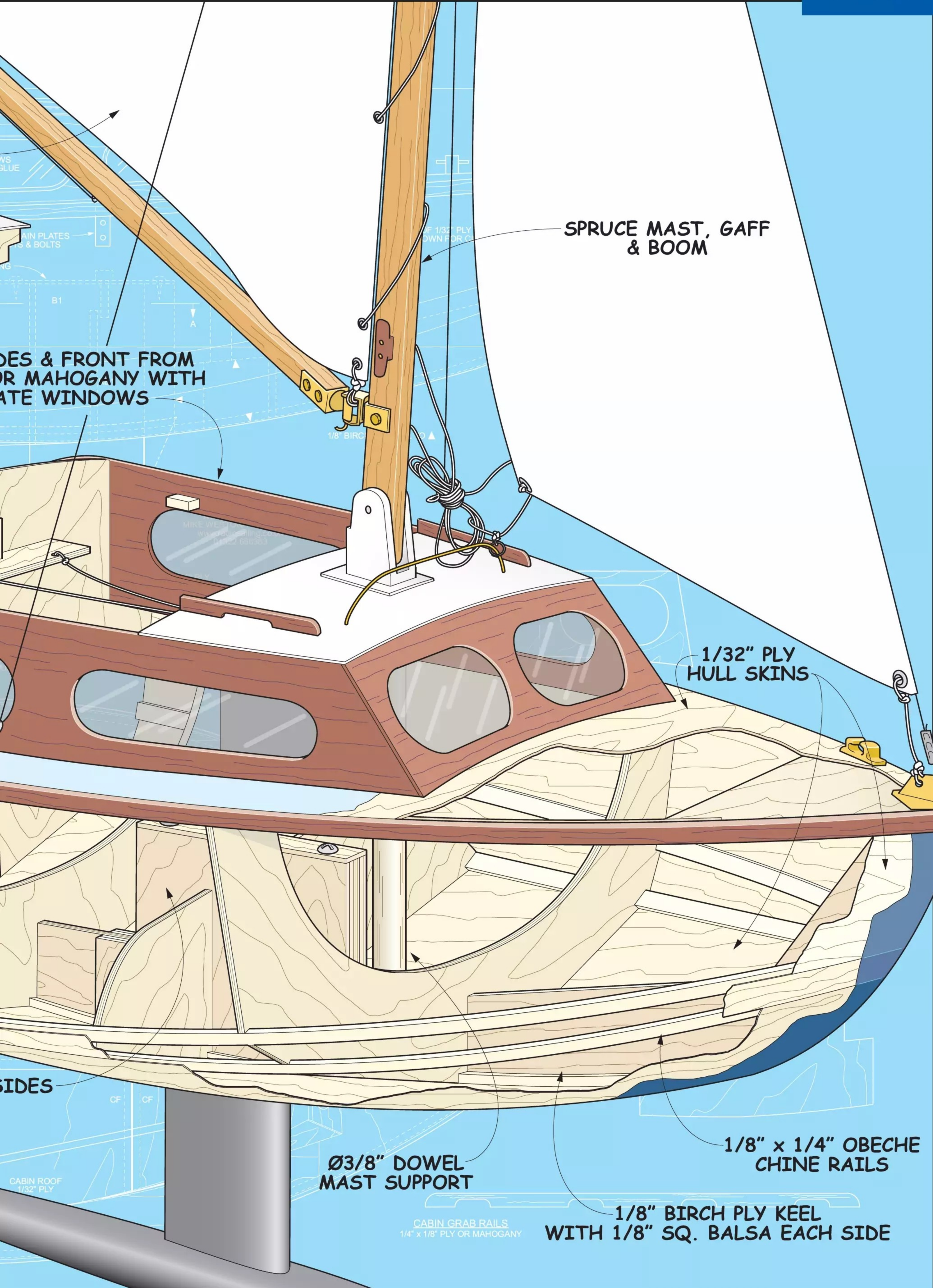
25



BUILD EXPERIENCE REQUIRED
(NOT FOR THE BEGINNER)

A MODEL OF THE PERCY BLANDFORD SAILING CRUISER







The lovely Lysander

Ray Wood's show & tell guide explains how to build your very own model of one of these charming sailing cruisers when working from this month's free plan

The Lysander is a sailing cruiser with a gunter rig. Designed by Percy Blandford, it was first shown to the public at the 1963 London Boat Show and went on to become one of the most popular home-build marine plywood designs of the 1960s, as you could build the 17ft double chine hull in a standard size garage (with the doors open). In terms of practicality, it was certainly advantageous to be able to dry out the hull on the beach while sat on its twin steel bilge keels,

although compared to a fin keel, these bilge keels did somewhat compromise sailing performance. The simple nature of the yacht's design, however, made it one of the first trailer sailers, as the mast and gaff could be stowed within the boat's length.

My father bought the full-size drawings and plans for a Lysander from Percy in the early 1960s but never actually built one. He did, however, build several other boats with my uncle. Neither of them could claim

to be the best of sailors, but they did have many adventures and epic voyages on the tidal River Medway in Kent, and they both enjoyed the building process. In fact, this is what kick started my love of wooden boat construction and the wonderful aroma of yacht varnish – varnishing being my job as a nipper back then!

The model

This will be my third small sailing cruiser model design for Model Boats

magazine, following on from the *Yachting Monthly* Wild Duck in 2016 and *Eventide* in 2023. These small designs seem to have proved very popular, with models springing up all round the world. This design, though, is my first with a double chine hull, the previous designs being single.

I race a Dragon Force 65 at the club I am a member of, which is where the idea of a design based around a commercially available fin and bulb came from. This will, I hope, make the design more buildable, especially as, in terms of the latter, most folk are somewhat daunted by the prospect of making a mould from

plaster and casting their own lead bulb – not surprising really in these Health & Safety aware days.

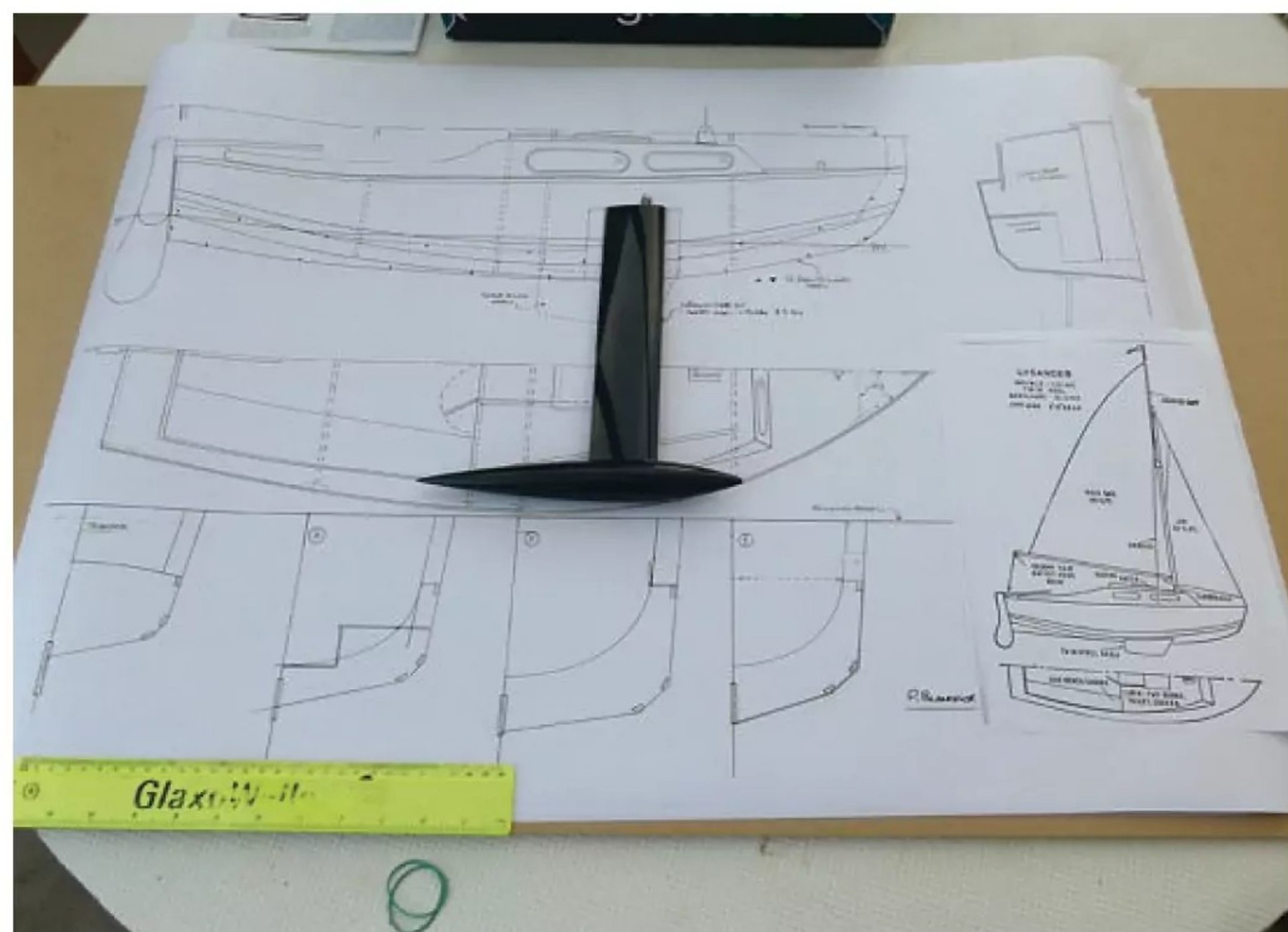
The sails were expertly made by my friend Tim Rowe in Mallorca from Dacron 3.5oz sail cloth; as a yacht surveyor and sailor, he knows exactly what he's doing. Thanks, Tim!

The Dragon Force short fin and keel weight are available from Mike Weston of RC Yachts in Swanley, Kent (Tel. +44 (0)1322 666363).

This project is probably best tackled by someone with a little experience, and you will need to research the full-size fittings. I've tried to design it as

a practical model sailing boat and so certain aspects have been simplified. The size has been very much restricted by the A1 pull-out, but you can, of course, have the plan enlarged if you wish, and use a DF95 keel (although, as I've recently discovered, that's a rather expensive option – I'm using one for my next yacht design!).

Here, the various stages of the build are explained in the captions to the construction photos, but for a more detailed account check out my build blog listed under the 'Sailing Craft' category on the Model Boats' website forum.



The initial draft of my build drawing, with the Dragon Force short keel and bulb laid on the drawing for final positioning. The fin is currently costs around £7, while the bulb around £25 but will save you the time and effort of having to cast a lead one.



The main bulkheads and transom need to be cut from 3mm plywood (I purchased mine from Wickes). The extensions to the building board can be cut off once the hull is complete. The keel is constructed from 1/4-inch ply, while the keel box (marked B1 on the plan) is made up, in position, from 1/16-inch ply, remembering to paint or varnish the inside before final assembly to keep the water out.



Here, the fin keel is shown being trial fitted with a 1/16-inch ply capping piece incorporating the retention cap head bolt which comes with the keel; accurate drilling is required. The capping piece is held in place with two small screws and glued (I used Gorilla woodworking glue for all the timber-to-timber joints).



The bulkheads need to be mounted on your building board, with cross beams on a centre line to keep it true. Please note, the transom must be at a slight angle rather than completely vertical; I used 1/8-inch x 1/8-inch square balsa doublers each side of the keel to create a gluing surface for the bottom skins. I made my double chine rails up from 1/8-inch x 1/4-inch obeche strip, which I find bends nicely. Care must be taken with the shaping where they attach to the stem. At the bow there is a small breast hook (again, see B1 on the plan). To achieve the correct deck shape and provide a good gluing surface to accept the plywood skins, some fettling and sanding is required to the chines and gun whale.



The hull is sheeted with 1/32-inch birch plywood, starting with the topsides, then the bottom skin, and finally the double chine skin, the former being sanded to receive them. I suggest the shape of each panel is templated with tracing paper or card to reduce any wastage, as ply is expensive these days! The keel slot needs to be opened up, and a good tight fit achieved. Again, some varnish should be applied to the joint.



The hull needs to be cut free from the building board at this stage, and the keel box braced with 1/8-inch ply pieces (see KB1 on plan) so that the strain of the sailing pressures on the keel is evenly distributed. Here, the forward deck beam has been cut and fitted in place curved to give a 3/16-inch camber at the centre of the deck, as per the drawing.



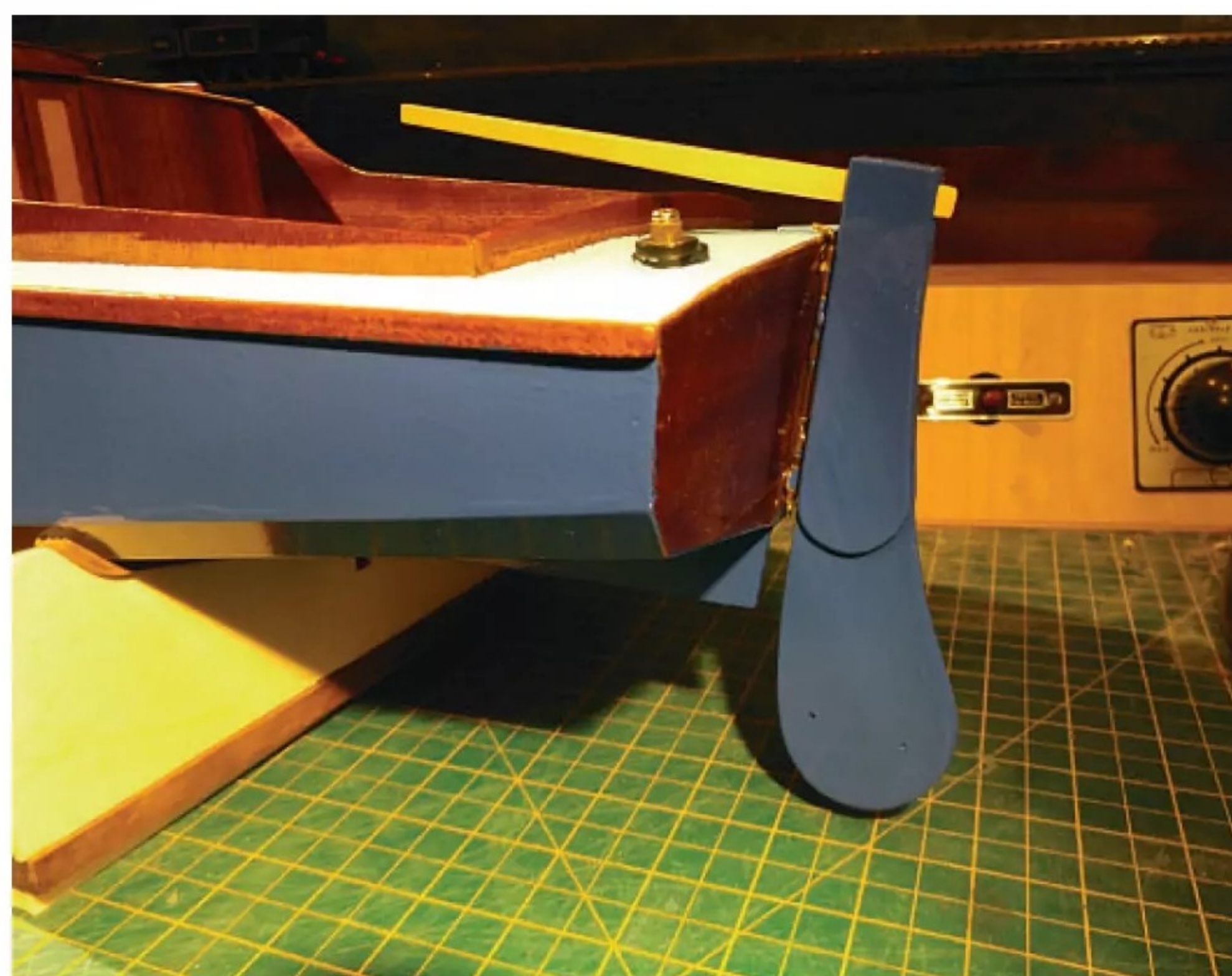
I have indicated the shapes on the plan for the simple building cradle, which is most useful during the formation of the deck, cabin, cockpit and cabin roof, as it stops them skating around



The cabin rear bulkhead isn't on the bulkhead line, so this has to be cut and formed in situ, using card templates to establish the shape as it's in two halves to allow for the cabin doors. For my cabin and cockpit sides I used 1/16-inch mahogany, purchased from Mantua Models, which, following a coat of varnish, I think looks really smart. The chain plates for the shrouds were cut from 18g brass sheet, drilled and bolted to the topsides in the positions indicated in my drawing as Lysander hasn't got a backstay.



In this view from the stern portside you can see the steering servo in position under the rear deck, with the arm above. As she is quite a small craft, I wanted to keep the linkage easy to adjust. Locating this below deck would be possible but that starts to get complicated, and I'd rather keep things simple. The prototype has now been fitted with a ball joint on the tiller, which works better than my original brass wire link.



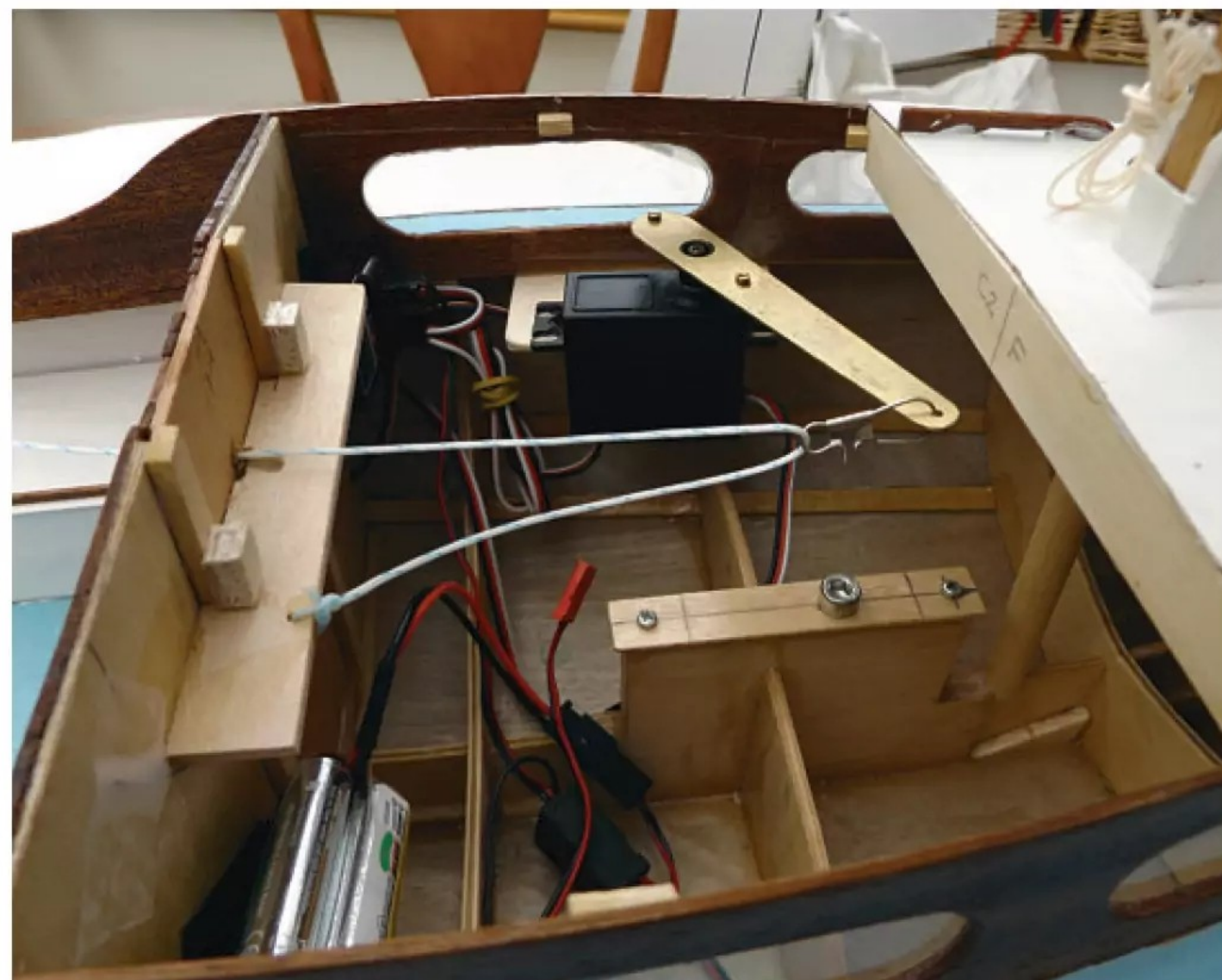
The rudder is cut from 1/8-inch ply for the blade and the doublers, which allows a slot to be formed for the 1/8-inch x 1/4-inch obeche tiller. The rudder pintels are formed with brass tube soldered onto brass wood screws with a continuous 16g brass pin. The scale shape isn't big enough for controlling our model, so a clear acrylic extension is shown on the drawing, with 10 BA bolts and nuts.



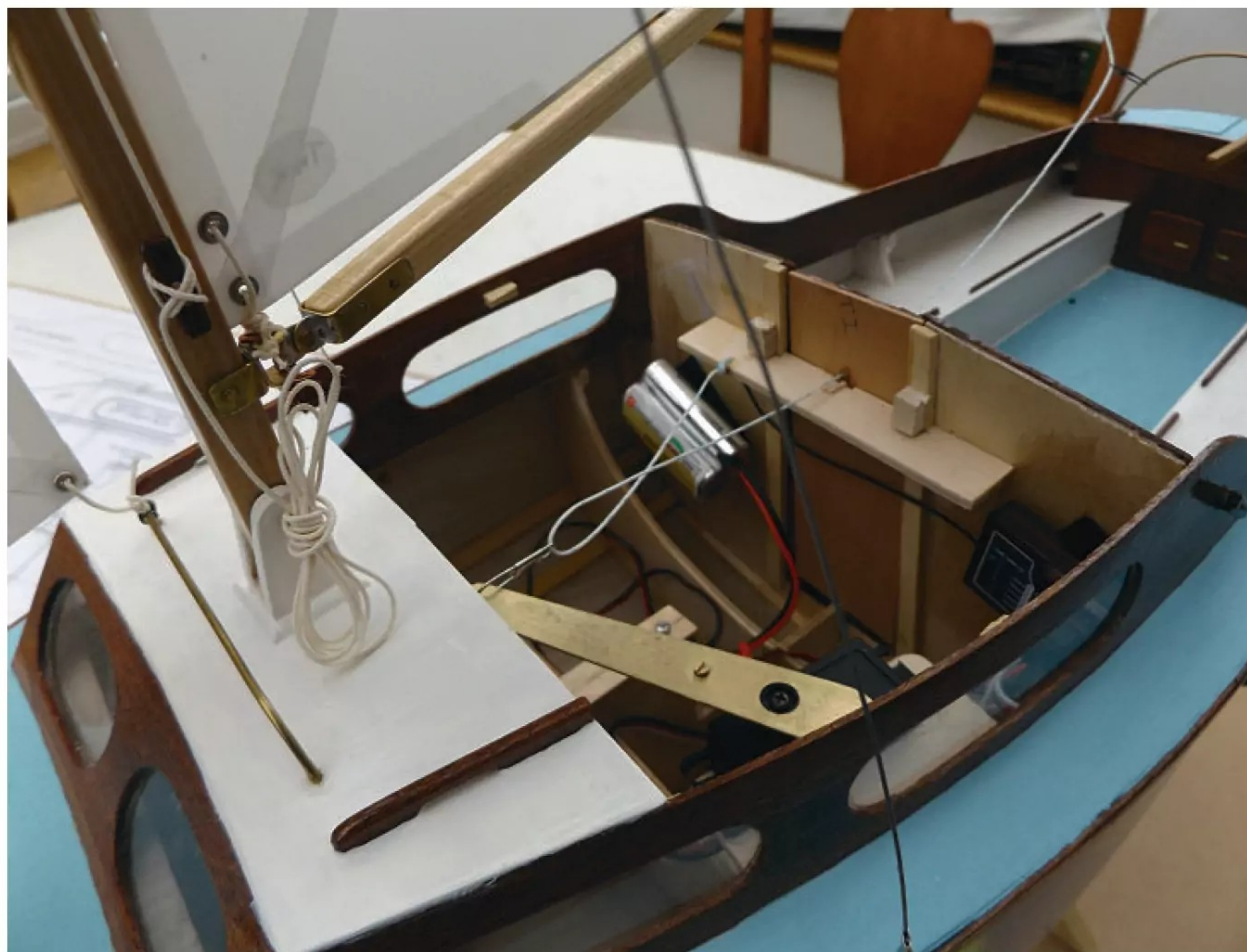
The rear part of the cabin roof is 1/32-inch ply and is built with the roof beams (see CF & CR – cabin front and rear – on the plan). The cabin roof structure needs to be constructed in situ using clingfilm so that it can be easily removed for radio installation. The mast tabernacle sits on the forward fixed section of the roof and needs a 3/8-inch dowel under it to take the load from the rig. Various pieces of brightwork, hatch sliders and grab rails need to be fitted (mine are all from mahogany, which I varnished). The stem head fitting involves a small brass fabrication that you will need to pin and glue to the stem along with a brass upstand into which two holes have been drilled for the forestay and jib attachment.



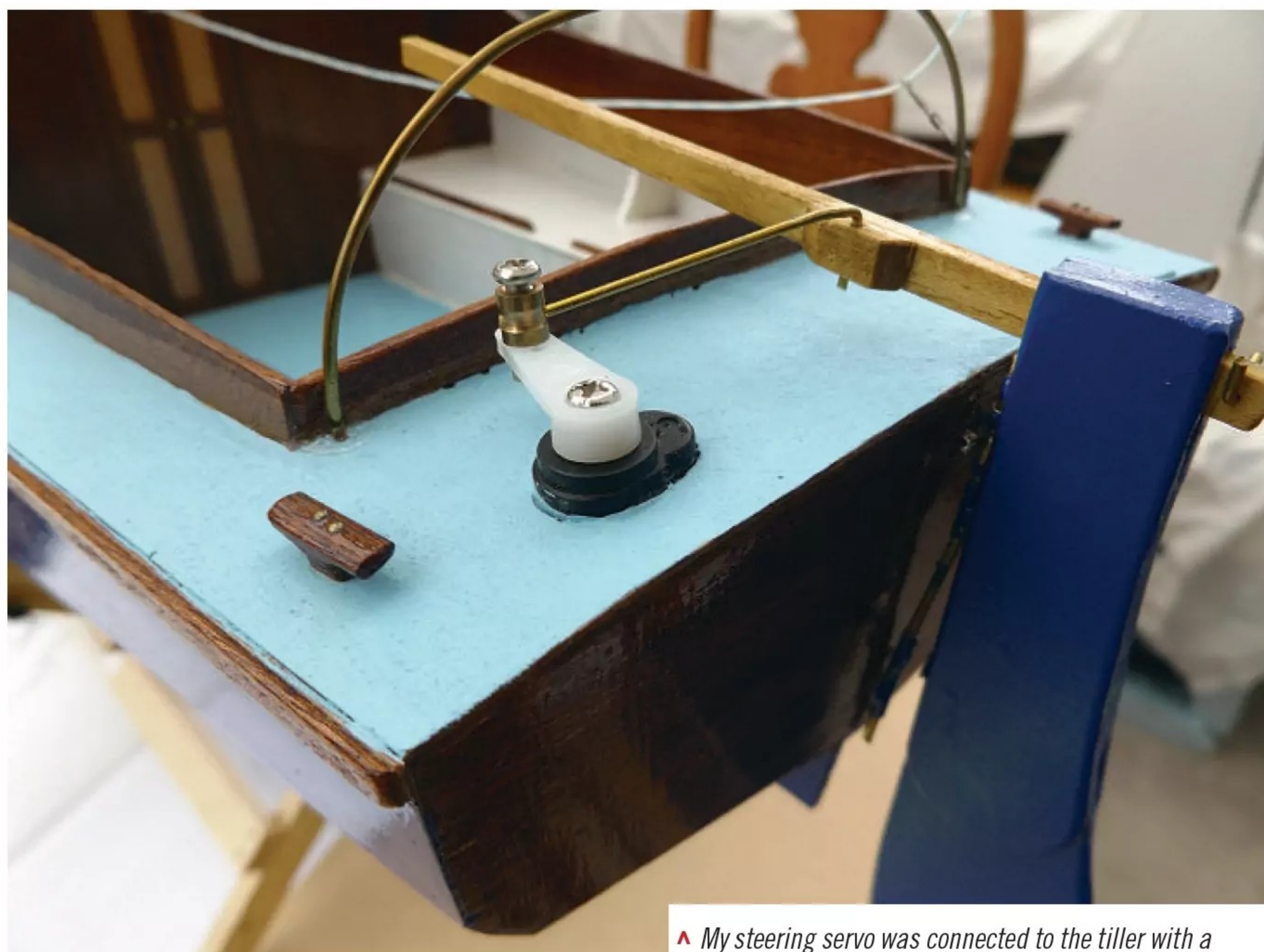
The prototype fresh from the paint shop, now with painted topsides and cabin roof. I still use Humbrol oil-based paints when I can, over a sanding sealer primer coat. For my deck I used Pukka International Deck Paint (a non-slip product); I bought a 1 litre tin of this a couple of years ago and I'm determined to use it all up by the year 2095! But I find the cheap Poundland yacht varnish is as good as any. And, by the way, it's always a good idea to give the hull's internals a coat, too.



The mainsheet is controlled by a standard servo with an extension arm. I like to use brass on boats, of which I have plenty as I also do model engineering. The cabin doors are fixed on the prototype, with a brass eyelet for the main sheet to exit the cabin. There is a fishing type clip on the end of the servo arm and the sheet gives twice the travel of the arm movement shown in the photo.



My 2.4mz radio receiver and battery was attached to the cabin bulkhead with Velcro to keep the electrics well away from the water. I made the spars on this little boat are from spruce and the gooseneck fitting is a small brass fabrication. The full-size boat didn't have a kicker. The standing rigging I made from stainless steel fishing trace wire fixed with brass tube crimps (which do the job well). If you're flush, you could use bottle screws (£££s!).



▲ *My steering servo was connected to the tiller with a brass wire rod and worked OK, although this has since been replaced with a model aeroplane ball joint, which is much more flexible. Small cleats for mooring up were also made, from mahogany. My mainsheet horse is a brass wire hoop, which prevents the sheet from getting stuck on one side, and while it's not scale it works fine.*



◀ *The finished boat on my garden table shows how well the keel works. The addition of ½ lb of lead is required to the rear of the cockpit. This compensates for the weight of the crew and achieves the correct balance as she's not much more than a large dinghy to sail.*



Once the keel is fitted, a simple folding stand is very useful at the lakeside. Mine consists of a pine framework with a couple of bolts and webbing to support the hull. Alternatively, the construction stand could be extended, with a hole cut out for the keel to pass through. The gaff is fixed on my model but could easily be made operational. As the Lysander is quite compact, the model will lay fully rigged in the back of most small cars.



My model, complete, ready for her maiden voyage at the Chantry Model Boat Club Lake at Bluewater, Kent, and showing off the brilliant sails Tim Rowe made for me, with the class sail insignia applied using black Fablon.

Don't you just love it when a plan comes together...

Designing and building this model from my dad's drawings means they

haven't gone to waste, and I have to say I'm very pleased with the result. Good luck building your own version, and if you'd like to view

more pictures of the real boats, please refer to The Lysander Owners Association website, www.lysander.org.uk. ●





I had a few issues finding a crew at this scale. However, as my friend Ashley Needham has Minions on his boats, I decided I could get away with using Woody from Toy Story as my helmsman, and I think he looks just right!

model Boats

SUBSCRIBE

Enjoy 12 months for just £54



THREE GREAT OPTIONS TO CHOOSE FROM...

Print only

- Quarterly direct debit for £16
- 1 year direct debit for £54
- 1 year credit/debit card for £59

Print + Digital

- Quarterly direct debit for £19*
- 1 year credit/debit card for £67*

Digital Only

- 1 year direct debit for £36*
- 1 year credit/debit card for £39*

*Any digital subscription package includes access to the online archive.

Great reasons to subscribe

- Free UK delivery to your door or instant download to your digital device
- Save money on shop prices
- Never miss an issue
- Receive your issue before it goes on sale in the shops

AND SAVE



www.classicmagazines.co.uk/mbodps1



01507 529529 and quote MBODPS1

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

TERMS & CONDITIONS: Offer ends 19 September 2025. Subscriptions will start with the next available issue. Direct debit payments will continue on the agreed plan unless you tell us otherwise. To view the privacy policy for MMG Ltd (publisher of Model Boats), please visit www.mortons.co.uk/privacy. Please visit www.classicmagazines.co.uk/terms for full terms and conditions.



Electric Queen

Roger Bunce validates the philosophy “*Nothin’ a man can’t do if he sets his mind to it*” by fitting a realistic-looking electric steam plant to his delightful build of the iconic *African Queen*...

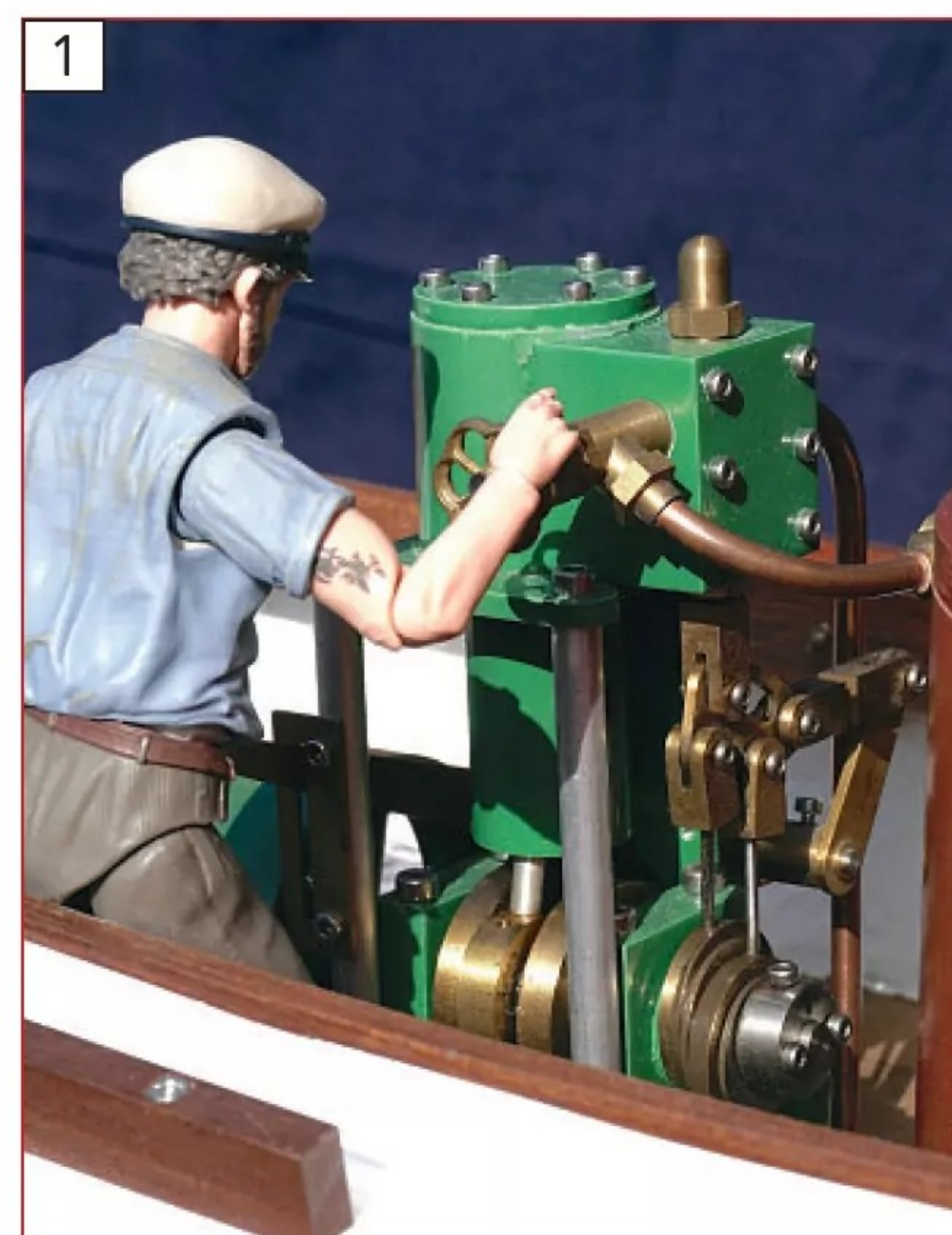
I began building model powerboats in the 1960s/70s – and then stopped for about 50 years! Until, that is, my unfinished 1970s’ Aerokits’ *Swordsman* turned up in a friend’s garage during the 2020 Covid lockdown and he encouraged me to finish it. My pals at Bournville Radio Sailing and Model Boat Club explained what I needed to do to make it go fast – and fast it certainly went! I needed something more sedate. So, I decided on the *African Queen*.

Unfortunately, the popular Billings Boat kit was out of stock at the time, so instead I opted to build my own version based on the Deans Marine *Victoria & Albert* fibreglass hull.

The real Queen

The *African Queen* is, of course, the riverboat featured in the 1951 cinema classic of the same name, starring Humphrey Bogart, as the Canadian gin-swilling mechanic and skipper Charlie

Allnut, and Katherine Hepburn, as the far more prim-and-proper (initially) English missionary Rose Sayer. Set in 1914, the two are thrown together after German colonial troops burn down the African village in which Rosie is based, forcing her to make her escape with Charlie Allnut in the *African Queen*. Along the way, the two hatch a plan, instigated by Rosie, to sink *Königin Luise*, the German gunboat patrolling a large lake downriver.



Apparently, due to the impossible logistics of transporting the *African Queen* from one location to another during the making of the film, two different boats had to be used, one (which had previously served the British East Africa Rail Company as the *LS Livingstone*) for the scenes set on the Riuki River in the Congo, and the other for those shot on a tributary to Nile in Uganda. The former now serves as a tourist attraction in Key West, Florida, although due to having been refurbished/refitted, notable differences in terms of the engine, boiler, etc, featured in the film are evident.

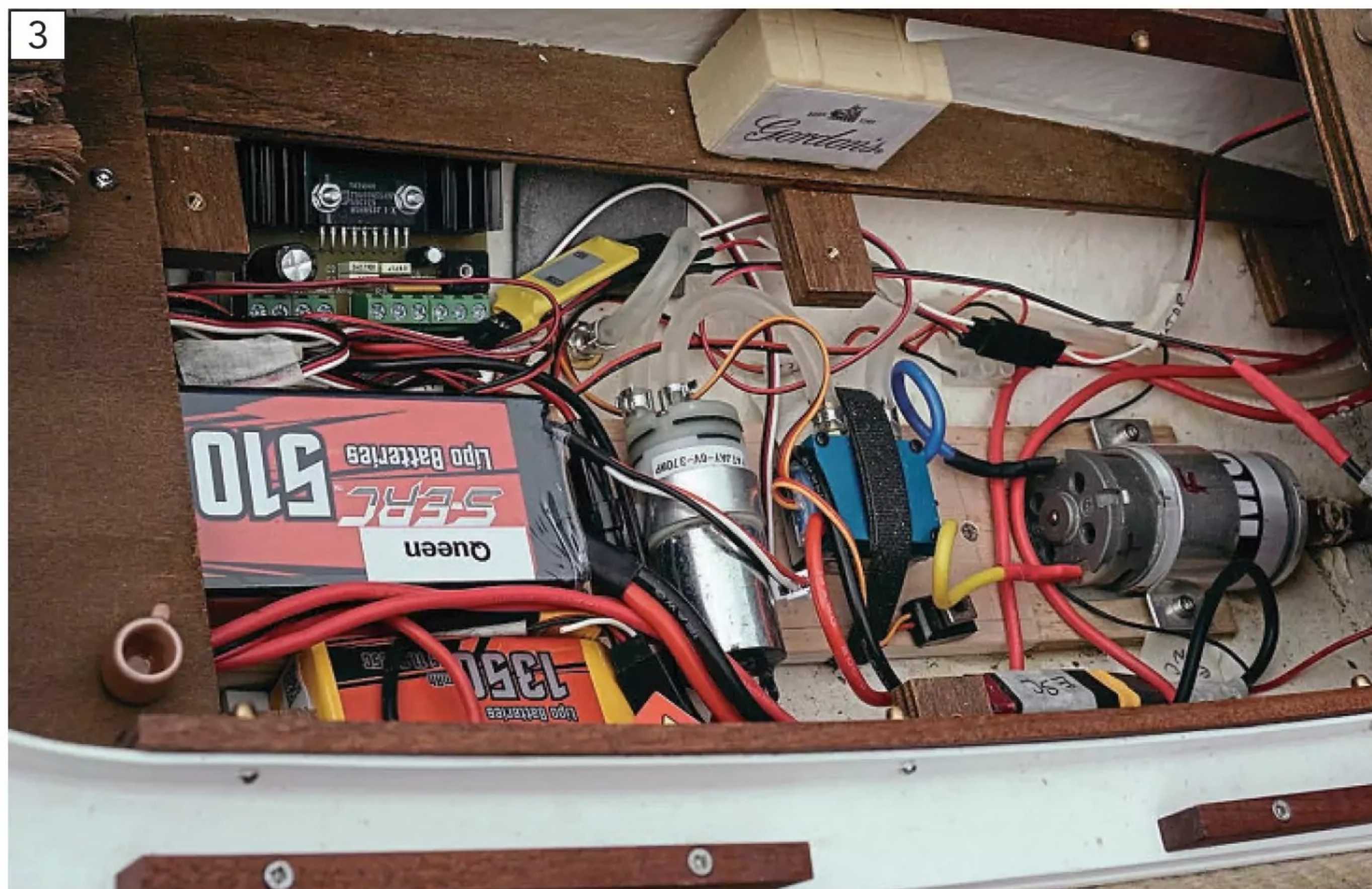
The engine

Getting back to the model, it's a well-known fact that, for practicalities sake, in the film the *African Queen's* steam engine and boiler were just props, with the propeller actually being driven by a diesel engine hidden under stacked crates of cargo. While I wanted my model to look as instantly recognisable as possible, I didn't fancy the cost, complexity and legal requirements of a live-steam plant. So, putting my engineer's hat on, I set about devising a way in which my model would look, for all intents and purposes, as if powered by a steam engine (see **Photos 1**), just as the film's makers had – hence '*Electric Queen*'..

The replica electric steam engine I came up with is driven by a geared micromotor, which is hidden under the green box next to the flywheel (see **Photo 2**). I simplified the construction of the engine by obviating unseen and nonessential parts. I made the parts from wood, metal and plastic, and, as a result, the finished article is not only considerably less weighty than a model live-steam engine but was a fraction of the cost. The engine's speed of rotation can be controlled and, like the steam engine portrayed in the film,



3



4



with the noise of the propeller motor, tends to produce a rather confused sound.

Boiler

The steam engine is only half the story – the *African Queen* must have a boiler. I based my design on stills from the film, and once again, I simplified construction and used wood, metal and plastic parts, making it much lighter and far less costly than a working model steam boiler (see **Photo 4**).

As you will see, I also fitted with a 'smoker' (see **Photo 5**). I like the sort with an ultrasonic transducer that atomizes water to look like steam/smoke. These are inexpensive, costing about £5. My boiler cylinder encloses a container of water, the lid of which is fitted with the ultrasonic transducer. The top of the boiler can easily be removed to refill the container. The 'smoker' is radio-controlled, and 'smoke' can last for about three hours.

includes Stephenson valve gear with reversing lever. What's more, all the parts move realistically.

The motor driving the propeller is an Mtroniks 600, which is hidden under the deck. The motor-housing protrudes slightly from the underside of the hull to give more room for the battery, wiring, etc. (see **Photo 3**).

I've tried several commercial steam engine sound simulation units but I'm still undecided whether to fit one or not. Real steam engines are rather quiet. Electronic simulation, combined

Tarpaulin

Those of you familiar with the film will know that the *African Queen* is shown with and without an awning at the stern in various scenes, but *never* with a red and white striped awning, often seen on models! I have an awning that can be fitted to my model, but without it we get a better view of Rosie, sitting at the tiller, steering (again, see **Photo 4**).

Design and manufacture

I designed the engine and boiler using TurboCAD Mac v14, Designer 2D. I

"Is there a commercial market for electric steam plant? I think there is"

like to plan things out, and to make parts from drawings. I have a nicely equipped workshop, with a small lathe, miller, sanders and other tools. I made the parts for my *African Queen* using conventional methods, but they could also be 3-D printed. Either way, I am aware that most modellers do not have such facilities, so would find it near impossible to make a realistic looking electric steam plant themselves.

Several companies do make off-the-shelf live-steam plants, and articles featuring these appear regularly in this magazine. However, as far as I am aware, the only commercially available electric steam plant is made by Billings, but that is part of their *African Queen* kit. The question is, is there a commercial market for electric steam plant? I think there is.

Controls

The replica steam engine and boiler are fitted to the main deck, which lifts off as one unit. Removal exposes the propeller drive motor, 2S Lipo 5100mAh drive battery, and 3S Lipo 1350mAh battery for the sound system (again, see **Photo 3**). I fit all my models with fuses – one for the power circuit and one for the control circuit. I've seen several model fires because owners couldn't be bothered to fit fuses. The fuses on this model are located under Rosie's seat.

The control switches are located under the front of the foredeck to help conceal them and keep them dry (see **Photo 6**). They comprise a main isolator, ESC water cooling

5



pump on/off, steam engine on/off, steam engine speed control, and various indicator lamps. The radio receiver, steam engine speed control and sound system are located under the foredeck.

Other functions are radio-controlled and comprise steering, drive motor speed control, smoker on/off, and lastly, a delightful sound clip from the film, in which Charlie says: "Rosie – Rosie – Rosie, dear – We're on the lake, we did it!"

Figures

Several club members have asked me about my figures of Rosie and Charlie and where to get them. For Charlie I would suggest the figure 'Renaldo', based on the character from *Indiana Jones, Dial of Destiny* and made by Hasbo and available from the stockist Zavvi, and for Rosie, 'Maid in A Grey Dress' (remove her apron and let her hair down) stocked by Tumdee. Both are about 15cm tall and have moveable arms and legs (again, see **Photo 4**). They fit nicely in my boat and cost less than £8 each. You will need to buy Rosie's sunhat separately: I purchased my 1:12 scale 'Dolls' House Hat with Blue Floral Ribbon' from a vendor on Etsy, and it cost about £11.

Out of Africa

The on the water shots featured in this article were taken at the pond commissioned by the Cadbury family in 1933 especially for model boats. They built the model boathouse at the same time. Located at Valley Parkway, off Bournville Lane, Bournville, Birmingham B30 1QS, it is now home to the Bournville Radio Sailing and Model Boat Club (of which I am a member).

The venue, set amidst trees in lovely parkland has everything a model boat enthusiast could wish for. The pond itself is irregular in shape, made of concrete, and has a constant depth of about 2ft. It was refurbished in 2020/2021 by Birmingham City Council contractors and is now as good as new! Both the boathouse and pond have recently been awarded Grade Two Listed Status.

A small stream runs along-side the pond. The banks are covered in wild vegetation – much like in Africa, where *African Queen* was filmed – the perfect setting for capturing *Electric Queen* on camera. I would like to thank fellow club members, Richard and Phil, for helping me take these photographs.

Every Charlie needs a Rosie...

Finishing *Swordsman* involved a big learning curve – after 50 years model boating inactivity. Making the *African Queen* from scratch proved even more tricky and took me about two years. I am fortunate in living just a few minutes



from the aforementioned pond. My wife, Liz, is a club member too, and comes with me. If we want excitement, we take *Swordsman*. If we want tranquillity, we

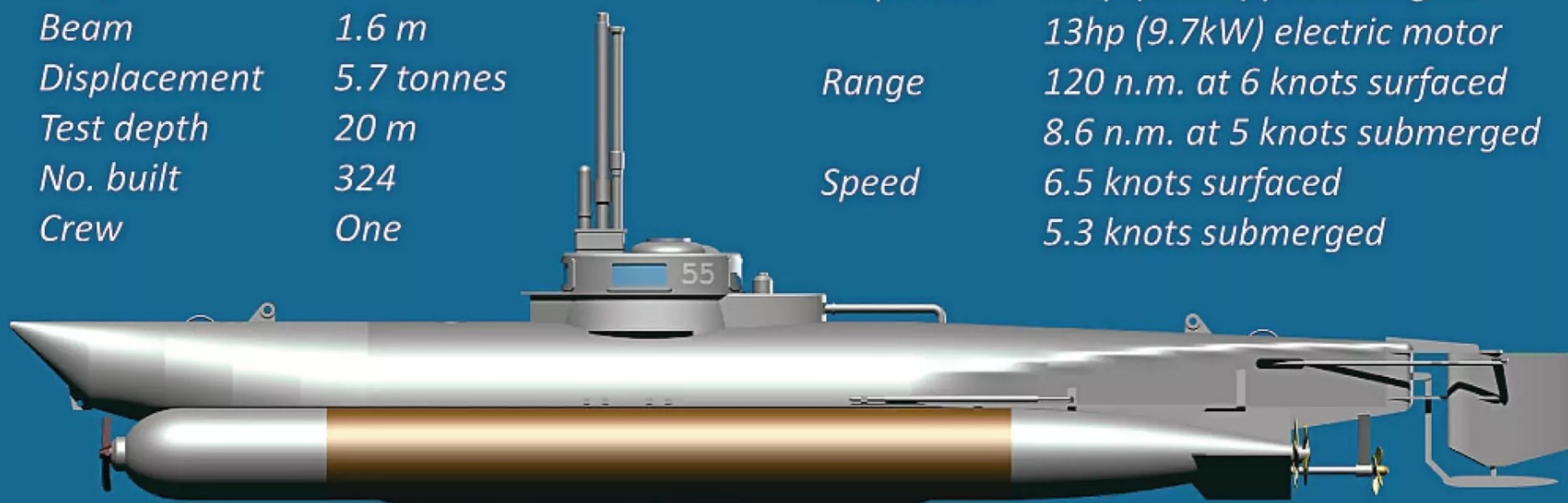
take *African Queen*. I cannot think of a better way to spend a sunny afternoon than sitting by the pond, with friends, sailing boats, and having a picnic. ●

Building the Biber

John Parker looks at the options open to modellers

Length 8.9 m
Beam 1.6 m
Displacement 5.7 tonnes
Test depth 20 m
No. built 324
Crew One

Propulsion 32hp (24kW) petrol engine
13hp (9.7kW) electric motor
Range 120 n.m. at 6 knots surfaced
8.6 n.m. at 5 knots submerged
Speed 6.5 knots surfaced
5.3 knots submerged



BIBER MIDGET SUBMARINE SPECIFICATION

'Biber' is the German word for beaver and was the apt name chosen by them for a one-man midget submarine developed in great haste during early 1944. It was designed to attack coastal shipping, in particular the Allied invasion fleet that the Germans knew would soon be coming. Said to be highly influenced by a captured British one-man submarine, the *Welman* (see *Flotsam and Jetsam*, January 2025 issue), it was a more advanced craft intended to overcome the *Welman*'s shortcomings, but it introduced some shortcomings of its own that led to its almost complete lack of success in action.

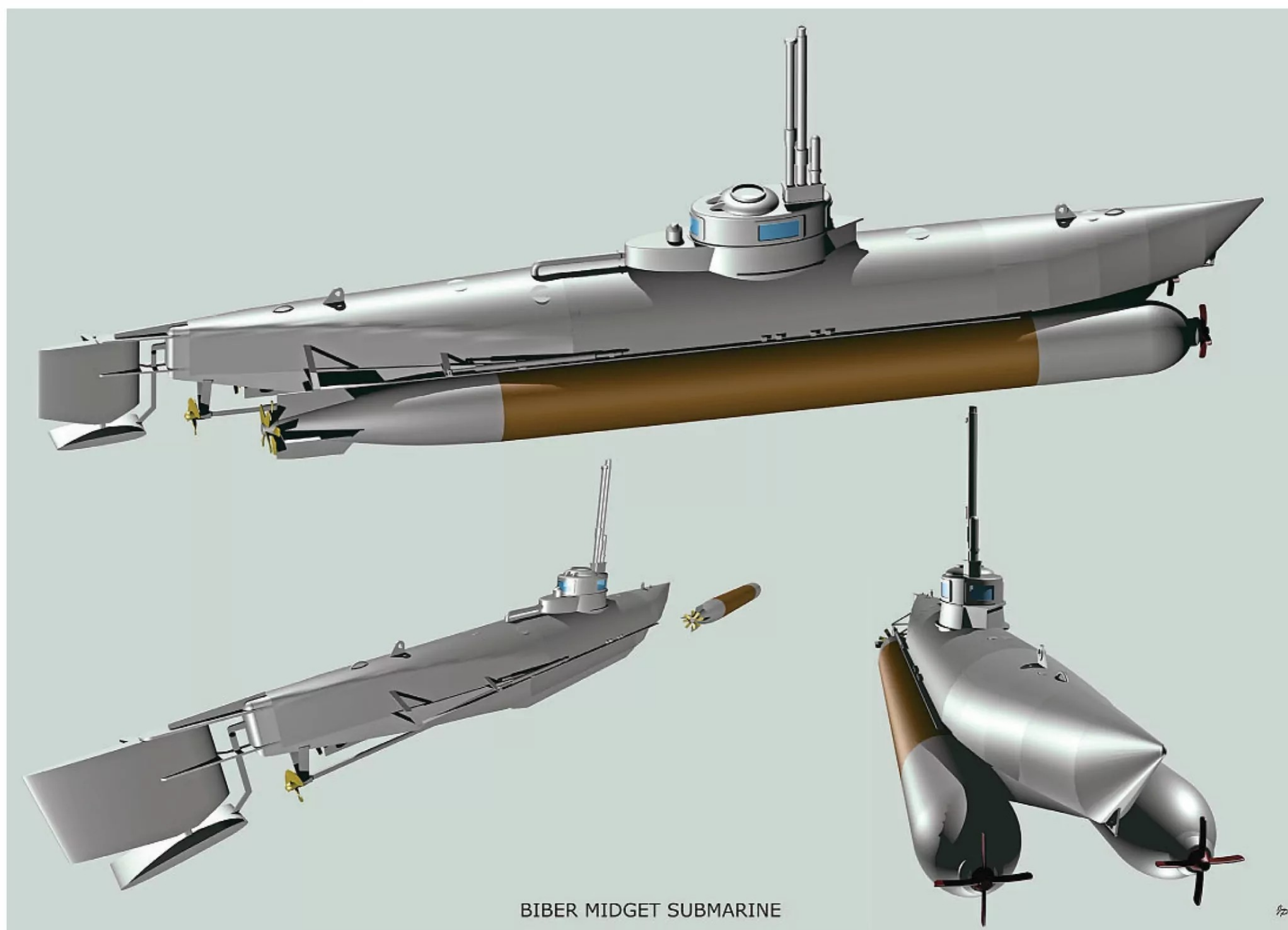
Biber background

The impulsive and charismatic Korvettkapitän Hans Bartells of the Kriegsmarine was spurred into action to develop a German equivalent of *Welman* W46 captured at Bergen in late 1943. He got *Flenderwek* of Lubeck started on construction in February 1944 and just six weeks later the first prototype, known as *Bunte-Boot* or *Adam*, was completed. After brief testing it was accepted into service on March 29, 1944, and the first batch of 24 out of an eventual total of 324 made.



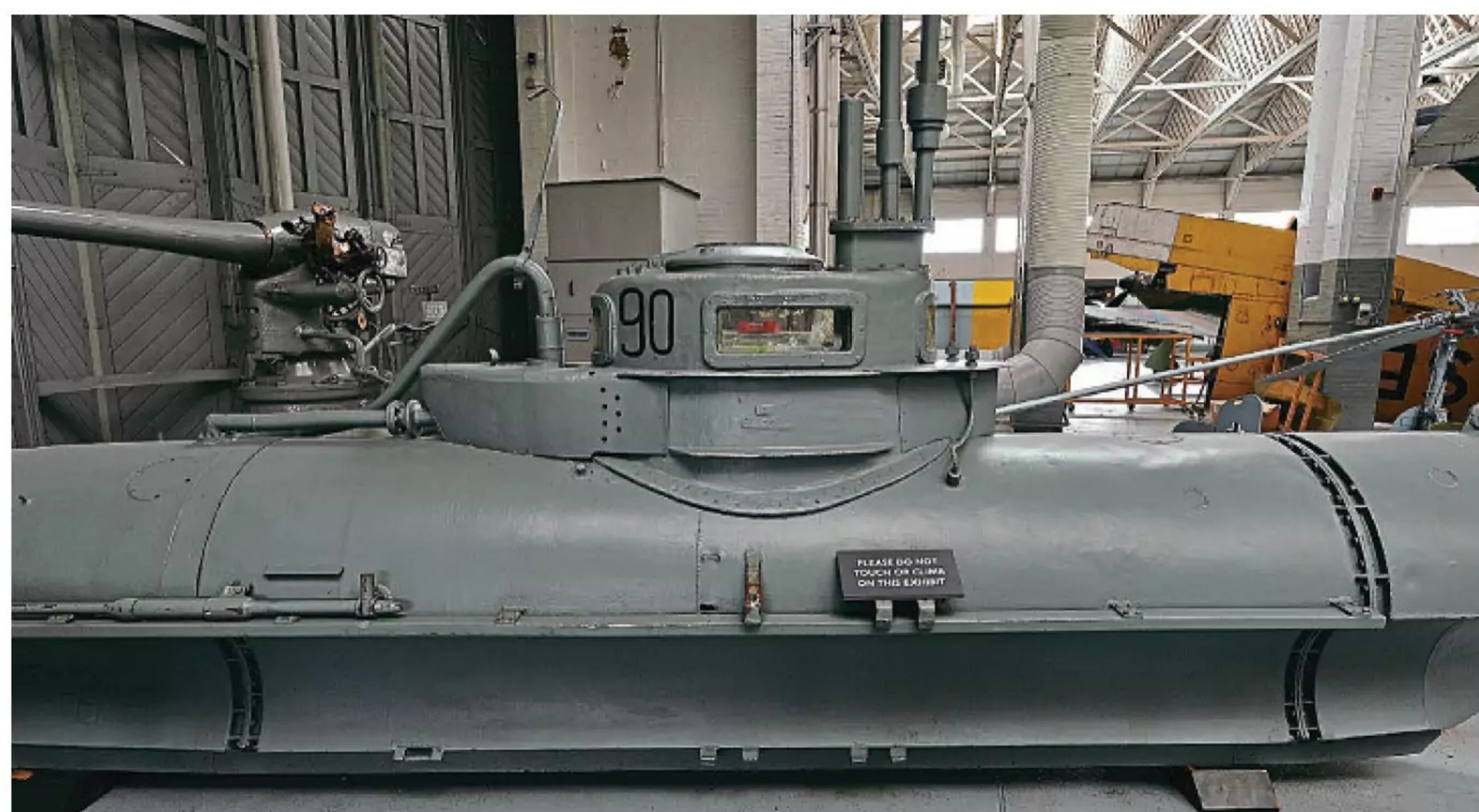
Biber 105 at the Royal Navy Submarine Museum. Image courtesy of Wikipedia.

“Developed in great haste during early 1944, it was designed to attack coastal shipping, in particular the Allied invasion fleet that the Germans knew would soon be coming”



BIBER MIDGET SUBMARINE

Biber artwork.



Duxford Imperial War Museum Biber submarine. Image courtesy of Wikipedia.

Design

The hull of the Biber was constructed of 3mm steel with deeply scalloped sides to accommodate its weapon load, two 21-inch (533 mm) G7e electric torpedoes or two Typ B torpedo mines. The operator sat amidships beneath a small conning

tower with viewing ports similar to the Welman. Unlike that craft, he was provided with a snorkel and periscope, though because of limited space these were offset to one side and the periscope had a fixed, forward-facing view. The third, squat, vertical pipe emerging from the

conning tower was the housing for the magnetic compass.

Three Type T13 T210 battery troughs, the usual power source for electric torpedoes, provided power to the Siemens 13-horsepower electric motor for underwater travel. One trough was located beneath the operator's seat, with the other two stacked in front of him. Behind the operator, shoehorned into a hull that was only some 440mm wide in the keel area, was a 32-horsepower Opel Blitz petrol engine. Its exhaust was led via an external pipe to a muffler box and valve behind the conning tower.

Various other items of equipment filled the remainder of the hull: oxygen cylinders, a foot-operated bilge pump, and a forward-mounted petrol tank containing about 100 kg of fuel. The propeller was supported under the tail on a V-strut and the control linkages emerged from the tail to operate the rudder and hydroplane mounted at the base of the rudder stock. The tapering nose and tail sections contained the



Controls of a Biber submarine. Image courtesy of Wikipedia.

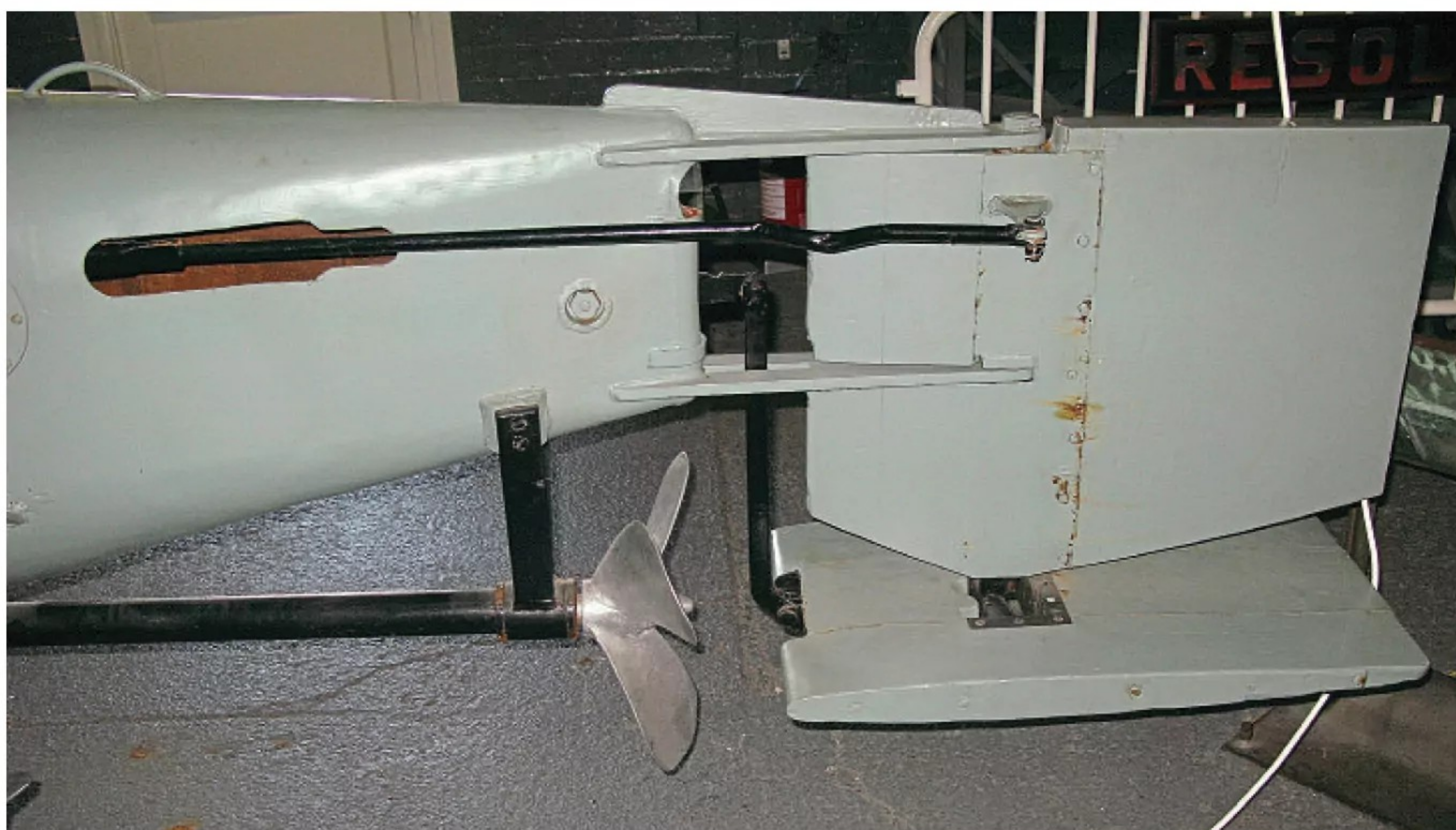
“This was a controversial choice in a submarine because of the risk of carbon monoxide exhaust fumes poisoning the operator, a danger proven to be only too real when the craft entered service”

ballast tanks and could be separated for maintenance of the submarine via rings of bolts attaching them to the centre section, while the small overall size of the Biber meant that it could easily be transported by rail or road.

Shortcomings

The use of a petrol engine was made on the basis of its cheapness, ready availability, small size and quietness; in any case, it seems no suitable diesel engine was available. This was a controversial choice in a submarine because of the risk of carbon monoxide exhaust fumes poisoning the operator, a danger proven to be only too real when the craft entered service.

The other principal shortcoming of the Biber was its complete lack of trimming tanks. In an attempt to overcome this, the operator would only partially fill the ballast tanks, causing a ‘free surface’ effect whereby the ballast water sloshed around, causing an ever-shifting change in the craft’s centre of gravity and making it impossible to maintain periscope depth or even keep the craft under control when submerged. For this reason, the Biber should be regarded as a submersible rather than a true



Control surfaces and propeller of Biber 105. Image courtesy of Wikipedia.



Biber UB407 at the Technic Museum Speyer, Germany. Image courtesy of Wikipedia.

submarine. Handling on the surface, on the other hand, was said to be very good. Adding to the obstacles facing the success of the Biber was the extremely short training time able to be given to its operators, only some three weeks or so.

Operations

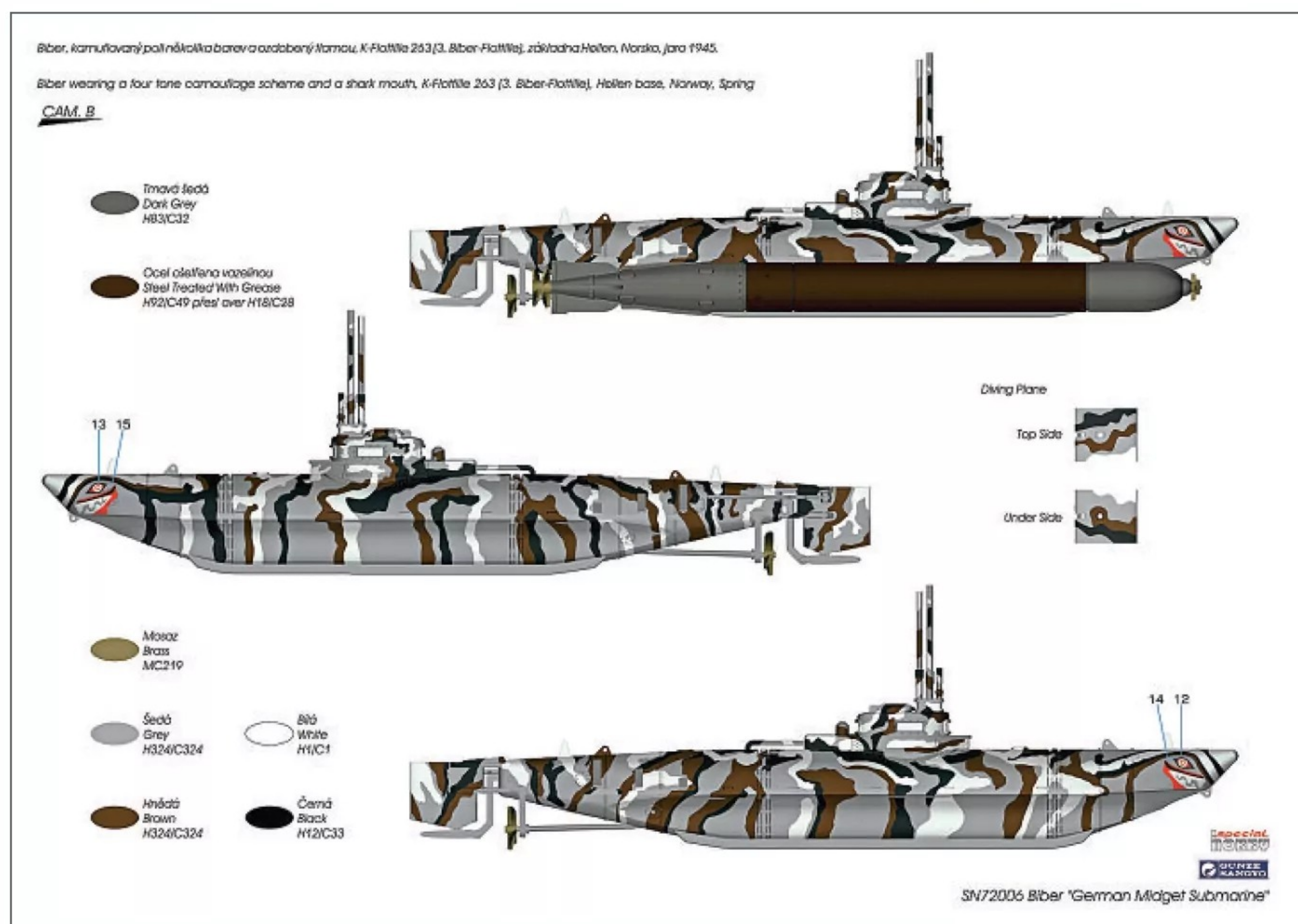
Operated by the K-Verband unit of the German navy, Biber operations concentrated on the English Channel, the Sheldt Estuary and the North Sea off Norway. An early success occurred on August 30, 1944, when they managed to sink two transports, but of 22 Bibers that set out only two reached the operational area. Similarly, operating from Rotterdam for attacks



Box top artwork of the Special Navy 1:35 kit.

in the Sheldt Estuary, only one Biber returned from a force of 18 in a raid that saw the American transport *Alan-A-Dale* sink.

The heavy loss rate was attributed to bad weather, Allied aircraft attacks,



Painting options from the Special Navy kit instructions.



Biber model at The War and Resistance Combat Museum of the Netherlands. Image courtesy of Wikipedia.

bad luck and accidents. One Biber accidentally released a torpedo in harbour which resulted in the sinking of eleven Bibers moored nearby. Three U-boats were fitted to carry Bibers on their casings for an attack on a Soviet battleship in Vaenga Harbour, but the attack had to be abandoned when it was realised that vibration from the U-boats' diesel engines had caused the Bibers' stern glands to leak.

Little or no further success can thus be attributed to the Biber, whose one-man crews nevertheless

remained in good spirits until the end of the war, despite their missions having become effectively suicide ones that required the highest level of courage. Their memorial survives in the form of the 22 remaining examples of Biber submarines throughout the world. In the UK, the Royal Navy Submarine Museum has one in operating condition, while the Imperial War Museum's example was found with its operator, Joachim Landsdorf, son of Captain Langsdorf of the *Admiral Graf Spee*, dead from carbon monoxide poisoning.

“Some interesting options await the builder of a R/C Biber...”

A model Biber

Biber models are available in all the main categories of modelling.

For card modellers, there is a 1:25 scale kit by the Polish GPM company, catalogue number 265, that builds into a model 280mm long.

For static display there are plastic kits to 1:72 scale by Special Navy (product code SPN72006) and a larger one, to 1:35 scale, by Italeri (product code 5609) that includes two figures.

Scratch-builders of R/C models are catered for by a detailed 3-sheet plan that featured in Marine Modelling International in January 1993 and is currently available from Sarik Hobbies as plan MAR2393.

A hull to the odd scale said to be 1:6.6 is listed by Mountfleet Models. I understand this moulding was originally by Darnell; it comes with the two torpedo shells and builds into a model 1295mm (51 inches) long by 140mm (5.5 inches) beam.

Some interesting options await the builder of a R/C Biber. It would be very tempting, for example, to use the two torpedoes to house the model's propulsion battery in the form of cylindrical NiMH cells, and leave the hull free for the installation of the ballast system and motor, etc. Going one step further, it would be possible (at the expense of scale accuracy) to use the torpedoes to actually propel the model, freeing up further space in the hull and eliminating torque effects by having the two torpedo propellers rotate in opposite directions. The main drive propeller could then be freely rotating and not powered.

Take a look at the Subwater video *Biber Midget Submarine* on YouTube (<https://www.youtube.com/watch?v=eJhu-p—9r4>). Here you will see a very fine model of a Biber performing underwater. It does exhibit some roll due to torque reaction from the single propeller but notice how well it responds to the hydroplane pitching action of its beaver tail at about the 3.28 mark. This shows, I think, that the reputation of the Biber as being all but uncontrollable underwater was due to the free surface effect of its inadequate ballast system and need not be of any concern to the R/C modeller, who would never contemplate incorporating such a system in his model! ●

model Boats BACK ISSUES

**£6.35
EACH**
(inc p&p)

For EU and ROW, please see
www.classicmagazines.co.uk

Whether it's recent releases or vintage copies, step back in time and browse through the ages with the *Model Boats* back issue collection.

**AVAILABLE TO ORDER TODAY AT
CLASSICMAGAZINES.CO.UK**



JANUARY 2025

- Blackpool show report
- A first-build with bite
- Square-rigger sailing tips



FEBRUARY 2025

- Fine ferry finished
- New year naval challenge
- Tackling the Tamar



MARCH 2025

- Win Galaxy motor yacht
- Fishing boat transformed
- Square-rigger beginner's guide



APRIL 2025

- Fireboat makes a splash
- Stylish Queen Margaret
- Missile marvel



MAY 2025

- Kitting-out the lifeboat
- The 'new' Zeeland
- Pink pirate ship



JUNE 2025

- Universal crowd-pleaser
- Yacht stability challenge
- Pondside assistance



JULY 2025

- Catamaran fun
- SS Vagabundo plan
- Digisound unit revealed



AUGUST 2025

- Smallest aircraft carrier
- Revival of 1930s star
- Fifie reviewed

OTHER ISSUES ALSO AVAILABLE – ORDER YOUR BACK ISSUES NOW!

2 EASY WAYS TO ORDER

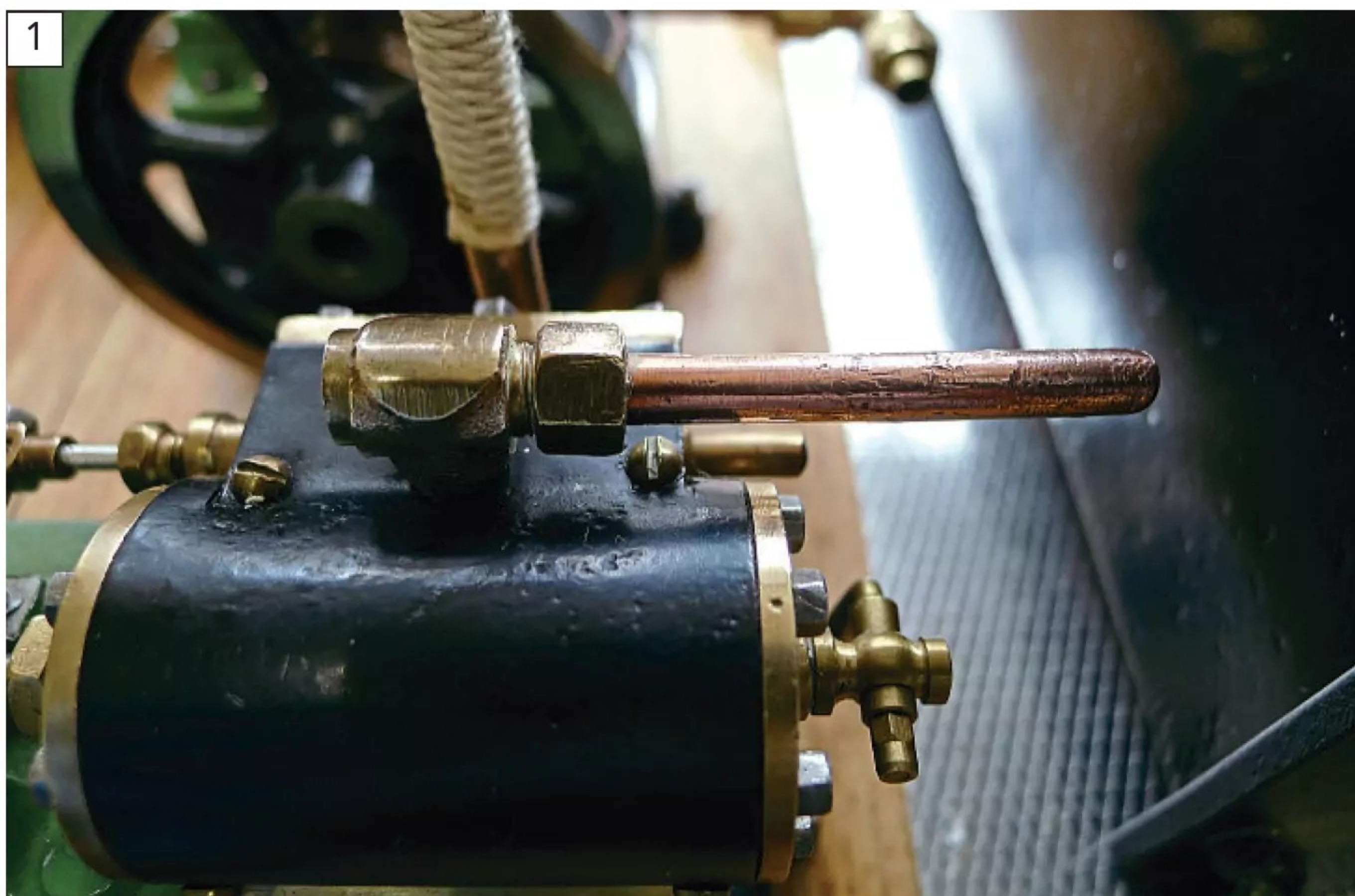
CALL: 01507 529529 ONLINE: www.classicmagazines.co.uk/issues/model-boats

BOILER ROOM

Richard Simpson tackles a bit of DIY with a difference

One thing that seems to come up in conversation frequently on the pondside is the issue of the wide-ranging selection of threads we find on our model engines, boilers, pipework and auxiliary bits and pieces. Many of us don't necessarily want to source every steam plant component from the same manufacturer so we're quite often faced with different threads in a single plant, but the biggest challenge by far comes when we start mixing in older pieces of plant. I was faced with this dilemma yet again only recently when working on the restoration of a Stuart Turner steam plant that had probably been built in around the 1920s (see the Boiler Room instalment 'A Long-Term Project' featured in the June 2025 edition of Model Boats).

This project included three engines, which all exhausted the steam to atmosphere and so would tend to spray a mixture of steam and oily water all over my nicely polished plant. What I needed was a separator tank fitting and, as luck would have it, I had a spare one in my bits and pieces drawer. I always knew I would have a use for it one day! So, having decided where I wanted the separator locating and how I could most efficiently run the exhaust manifold, I set about collecting the parts I was going to need to make up the manifold. Two of the original engines were threaded at their outlets with a homemade brass connector with a short stub of copper pipe fitted to them (see **Photo 1**). After removing what looked like conical fitting nuts and getting nowhere, then trying to heat them to desolder them, I eventually discovered that the copper pipe had been threaded on the end and was screwed into a thread in the fitting, which was then soft soldered (see **Photo 2**). Why I guess I will never know. I was, therefore, faced with the challenge of how to connect modern, readily available, pipe and conical fittings to a very old and completely unknown thread in the engine outlet.



1 Having a nicely polished steam plant and then exhausting the engines through a stub pipe that generously sprays oily water and steam all over everything isn't the best arrangement! A separator was definitely needed for this project.



2 Richard had never come across a piece of copper pipe with a 'sort of' thread on the end! The nut was purely decorative. The problem was that this was the only male thread he had that fitted the engine.

3



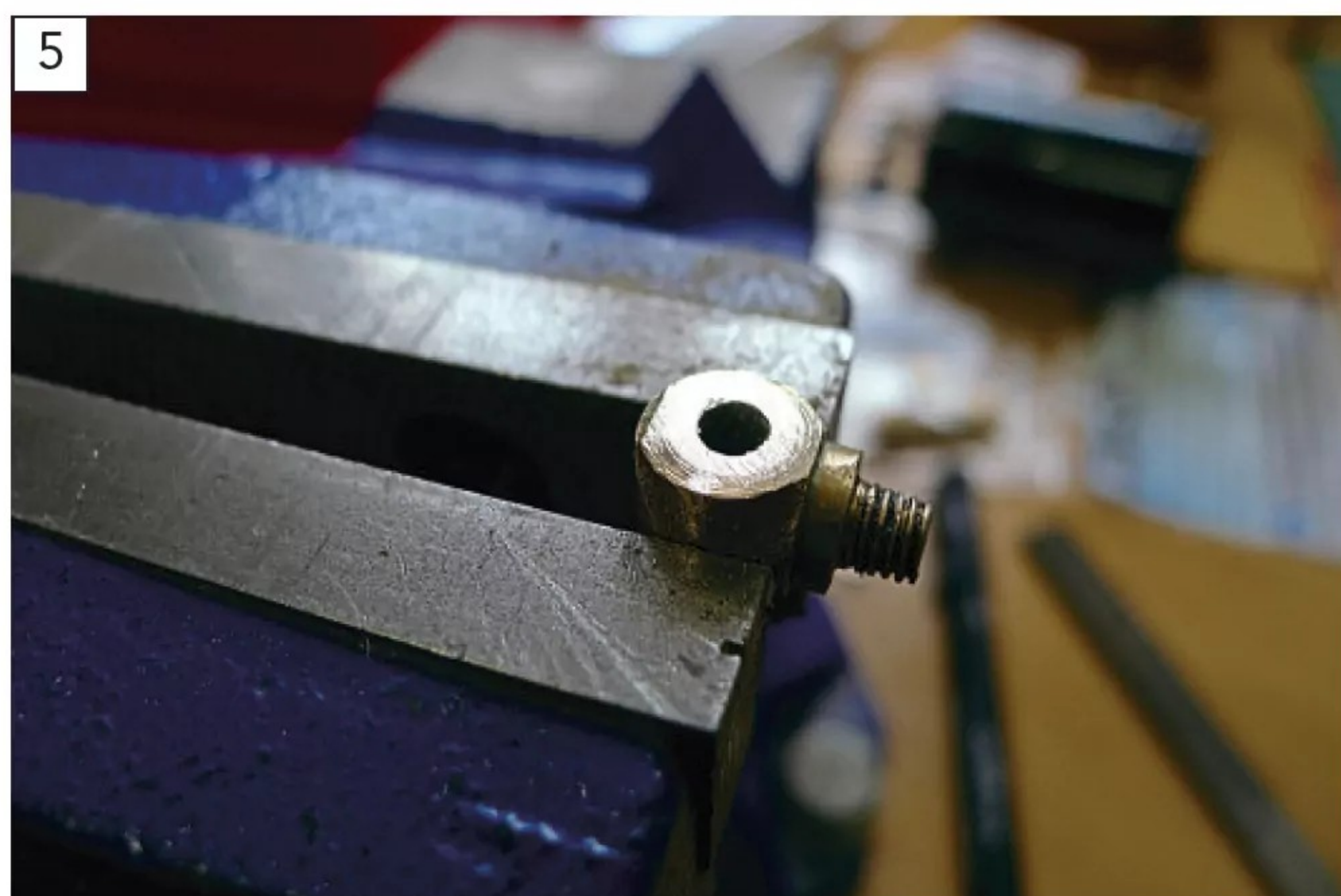
Readily available modern 3/16th copper pipe and brass conical fittings. Getting hold of these was the easy part of the job.

4



There is always a slight lump in the throat when you attack a 100-year-old brass fitting in the knowledge that it is almost certainly irreplaceable but it's the only way to preserve that valuable thread.

5



Careful dressing up with a small fine file is required to give the largest possible flat surface area.

6



Parting off the thread from the new fitting is a lot more straightforward when you can fit the cone and nut to the other side to enable it to be held in a lathe.

The modern bits

The first job was to measure up the pipe that had been originally used, which came to just over 4.8mm, and a look down some conversion tables established that it was almost certainly 3/16th inch pipe. This is still a readily available size and can be purchased in straight lengths from a number of steam fitting suppliers. Knowing that I could purchase the two 'T' pieces that I needed to branch into the manifold, I was then left with how to connect the engine thread to a fitting that would be compatible with the pipe, and that's where we come across the old challenge. I started off by purchasing a couple of fittings and some straight lengths of 3/16th inch copper pipe (see **Photo 3**).

I then contacted a couple of steam fitting manufacturers to see if they might be interested in making me a one-off bespoke fitting and, hardly surprisingly, they told me they were unable to help. I must say I don't blame them as I wasn't even sure just what the engine thread actually was. Even supplying them with the old fitting would be a bit hit and miss, and the time that would need to be spent on such an item would almost

certainly generate a cost beyond reason. Most manufacturers nowadays want to produce fittings in a large number to get unit costs down as much as possible, so the idea of hand making a single fitting is never going to be attractive. An alternative approach would be to join one of the engineering societies we have up and down the country and see if there might be anyone there who could help with such a project. Matching up that old thread in the Stuart engines, however, was never going to be easy, nor would there be any guarantee of success.

The idea

The bottom line was that I really wanted to use the male thread from the original fitting to go in the engine because I knew that fitted, and I wanted to also use the female side of a conical fitting on the other side to be compatible with the pipework. Consequently, I needed to make up a bespoke fitting to suit this single use. This would involve cutting up the original fitting, cutting up a new fitting, and then silver soldering them together. This was something I'd done in the past when faced with a similar

“Most manufacturers nowadays want to produce fittings in a large number to get unit costs down as much as possible, so the idea of hand making a single fitting is never going to be attractive”

dilemma, so it wasn't a totally alien concept, but I was also very aware of the potential pitfalls.

The first challenge was deciding exactly where to cut the two fittings. They were not going to be threaded together, they were only going to be silver soldered, so the cuts had to be made in such a way as to give the best possible area of contact between the two for the solder to hold to. Once I had decided on the best place to cut, I then had to consider how the fitting was going to screw into the engine and what sort of clearance I would have, which then dictated that the 'new' side of the fitting would need to be no larger in diameter than the 'old' fitting. I also had to consider how I was going to go about silver soldering the two



Richard didn't want the diameter to be any greater than the original fitting to avoid interference, so the hexagonal section had to be turned down as well.



The best surface area Richard could arrange for the strongest possible joint, while also allowing for a nice fillet of solder on the outer surface.



These are probably one of the most expensive silver soldering rods you can find; however, a single rod is enough for a very large number of pipework and fitting joints. Many modellers favour separate solder and flux, but Richard prefers having the flux coating on the rod.



Vermiculite blocks are readily available from engineering suppliers. Richard was lucky enough to get a couple of large pieces when new insulation for a wood burning stove arrived broken and as a result were duly replaced.

parts together to ensure I ended up with a strong reliable sealed joint.

The making

Once I had the concept sorted in my head, it was time to make the cuts and completely burn my bridges! The old fittings were of a completely irregular shape so the only option there was to use a hacksaw (see **Photo 4**) and finish off with a fine file (see **Photo 5**), but the new fittings went into the lathe and could be parted off and turned down to give me the face to face contact that I wanted (see **Photos 6 and 7**). Such jobs can be easily tackled on a small hobby lathe, but I appreciate not everyone has that luxury, so, for those of you that don't, more use of a hacksaw and filing will be required.

Eventually I was pleased with the two parts of the fitting (see **Photo 8**), so it was time to set up for silver soldering. I know there are advocates of separate fluxes and different types of silver soldering rods, but my own personal preference is to use flux coated rods. I like the convenience of having the flux and the solder in one hand, ready to

apply without having to put things down and pick things up in the middle of a soldering job. You can even apply a little more flux if you need it to help the solder flow without having to pick up something different. I also find the flux and the solder nice and controllable, giving me the best chance of a successful joint (see **Photo 9**).

I have a few pieces of vermiculite, collected over the years, which I can arrange on the workbench to create a hearth. A piece at the rear reflects heat to get the temperature up easily, plus it allows bits of metal, or even other bits of insulation, to be rested on the workpiece to ensure things don't fall over during soldering (see **Photo 10**). In this case, though, things were pretty stable, so I decided that free standing would be steady enough – as long as I didn't knock the worktop or inadvertently touch the job with the rod.

Most modellers have their own personal preferences when it comes to a heat source for silver soldering. Personally, I find, for pipework at least, that a good old plumber's gas torch is convenient and controllable. I have a



A couple of handy sized torches for most hobby silver soldering work. Serious jobs might require oxy-acetylene equipment, but pipework and fittings can easily be done with plumbers' type torches.

“Once I had the concept sorted in my head, it was time to make the cuts and completely burn my bridges!”

big one for larger soldering jobs and a smaller one for fittings such as the ones I was making here (see **Photo 11**). One thing must be remembered however,

12



It's easy to see now why the larger surface on the lower part allows a nice fillet to form, affording extra strength to the joint. You want a fillet all the way around but with nothing running through to block the insides.

13



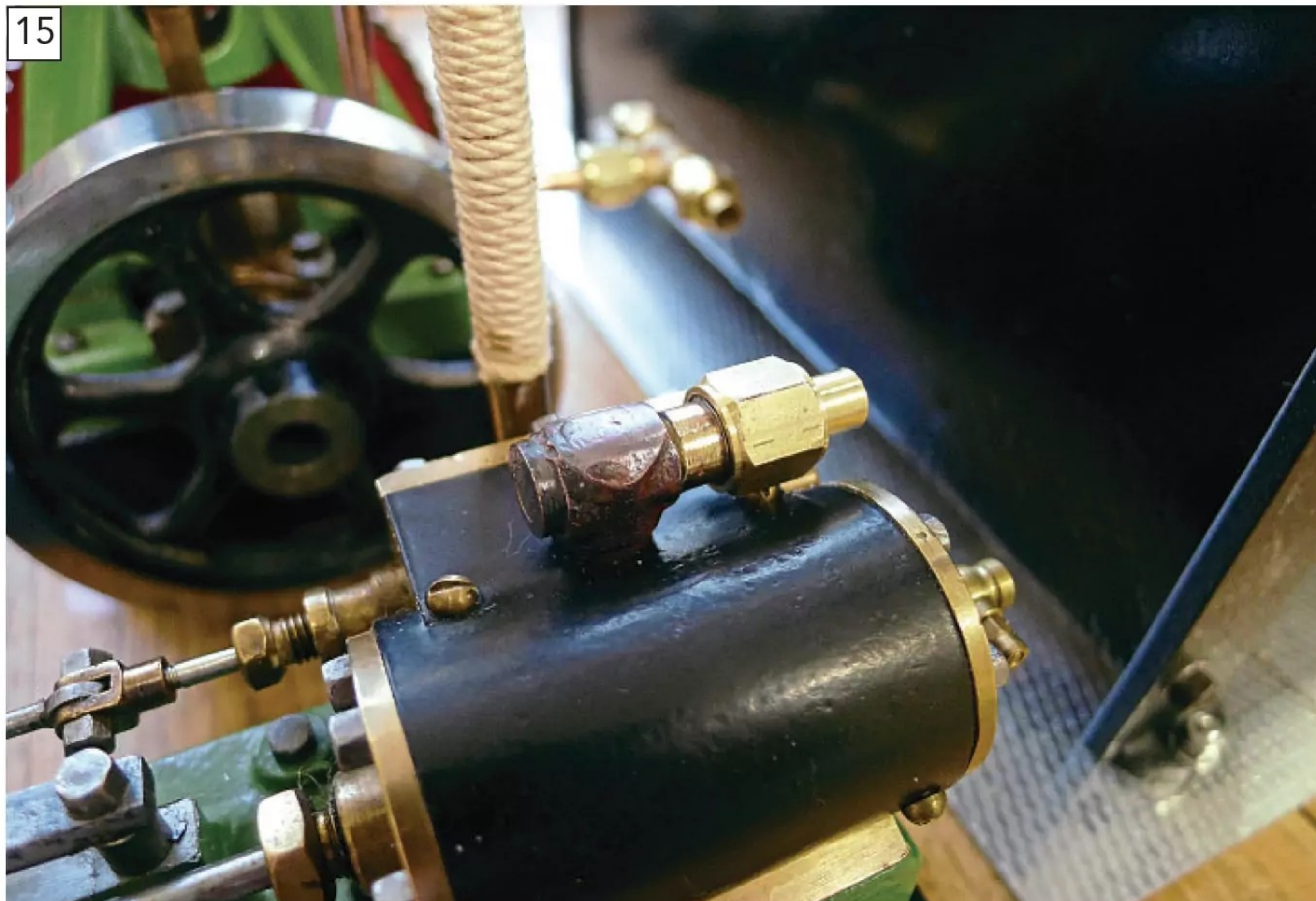
Strips of wet and dry paper make for a handy tool that can be pulled over a part to clean off the hard flux. There are other handy abrasive tools, but they don't tend to last too long when they come up against silver solder flux.

14



The cleaned up finished part. There is something a bit more satisfying about using as much of the original as possible rather than simply buying something new, although, in this case, it would have been practically impossible to buy a new replacement item.

15



Now with a modern 3/16th inch conical pipe fitting, it's ready to connect up to whatever modern arrangement is chosen.

“One challenge with silver solder flux is that it is quite hard when cooled down and will stubbornly resist any attempt to remove it”

and that is you can overheat the work if you're not careful. This can lead to an oxidizing layer forming on the surface, which is then difficult to displace, even with the flux. Consequently, I bring the temperature up slowly and carefully, while frequently introducing the flux on the rod. As soon as the flux melts it should run into the joint and clean it ready for the solder. Again, bringing the temperature up slowly to the point at which the solder just melts, it should then flow readily into the joint. With such jobs as soldering cones onto the end of pipes I tend to keep the solder to a minimum as the gap in the joint is very small, but when joining two face to face items such as bespoke fittings I want a bit of a fillet on the outside, so I apply a little more solder. Again though, care must be taken not to overdo it, as the solder can flow internally and block the fitting, which may then require drilling out. Once I have a nice even fillet all around the joint, I leave it to cool down (see **Photo 12**).

The clean up

Once cool, I had a nice even fillet around the two faces and a clear hole through the middle of the fitting. I was, therefore, able to screw it into my old Stuart Turner engine and connect it to my modern conical fittings to take the modern 3/16th inch copper pipe. The only remaining job, therefore, was a good clean up.

One challenge with silver solder flux is that it is quite hard when cooled down and will stubbornly resist any attempt to remove it. The temptation is to have a go with a file, but you then end up with a fitting that is very difficult to polish.

16



The adjacent engine in this project had exactly the same challenge with the steam outlet, so a bespoke fitting was manufactured for the engine, too. Unfortunately, Richard didn't have as large a mating surface with this one, so a supporting fillet was not possible.

Another possibility is a Dremel with a wire brush fitting, but this tends to skim over the flux and mars the brass surface

“Have a practice, familiarise yourself with the various processes, and soon you, too, will be making your own bespoke pipework fittings”

without easily removing the flux. So, I tend to rely on two grades of wet and dry paper, with the first, around 800 grit, cut into strips and then drawn over the parts to be cleaned up (see **Photo 13**). This does effectively remove the flux without too much marring of the brass surface, and this is then followed up with a much finer grit wet and dry paper, around 1200 to 1500, to finish the surface (see **Photo 14**). If required, this can then be finished off with a good rubbing over with Brasso wadding before being polished with a clean dry cloth. If you want to a highly polished shine, a greater degree of finish can be achieved with a polishing mop in a Dremel. I, however, tend to prefer a 'well used but well looked after' look, so only use metal polish.

Following this process should result in a bespoke fitting which screws directly into an old thread but accepts a modern conical fitting that's compatible with your pipework (see **Photo 15**).

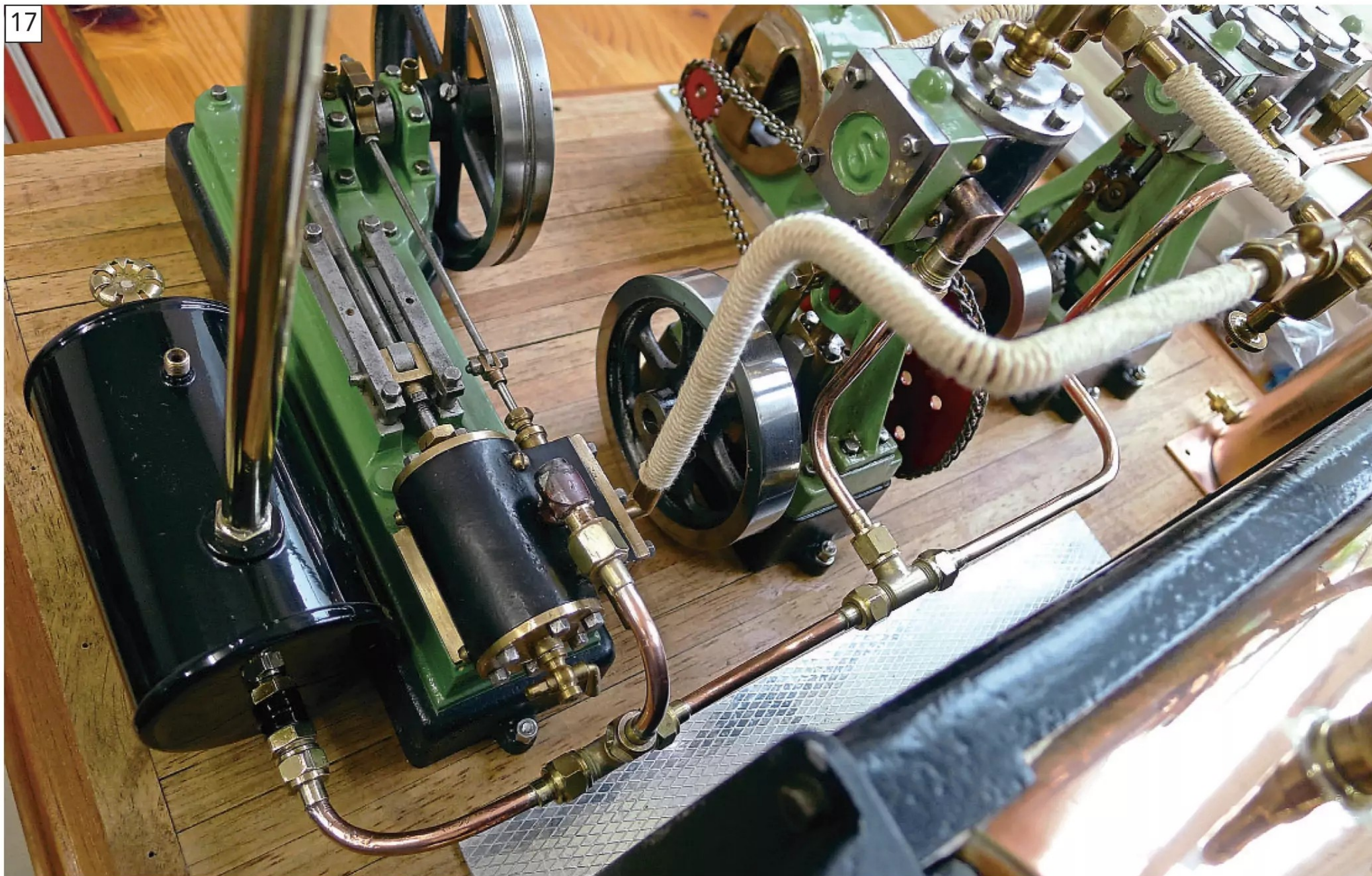
Conclusions

So, there you have it: pipework fitting that combines two completely different threads. As you can imagine, this opens up a whole new area of flexibility when putting together components from different sources and, in particular, different ages, thus avoiding the challenge of trying to find a third party willing and able to create what will almost certainly end up being very expensive parts.

The other engine involved in this project was dealt with in exactly the same way, as a bespoke fitting was manufactured for its steam outlet as well (see **Photo 16**). This then enabled me to manufacture and fit a complete exhaust manifold connecting all three engines' exhausts together and leading them into a modern separator tank (see **Photo 17**).

For anyone not familiar with the process of silver soldering, it really is a very useful skill to have, so I would readily recommend getting hold of some vermiculite blocks, some flux coated silver solder rods and a suitable gas torch. Have a practice, familiarise yourself with the various processes, and soon you, too, will also be making your own bespoke pipework fittings. ●

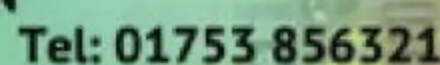
17



Converting the two engine exhausts to be compatible with modern parts then allowed the construction of a complete 3/16th inch exhaust manifold to be plumbed into a separator tank.

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

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



Mantua Sergal and Panart model kits fittings and accessories

fast mail order service

WESTWARD MOULDINGS LTD

www.floataboat.com.au Mail Order

South Gloucestershire

www.clevedonsteam.co.uk

Buyer collects, Notts/Derbys.
E: timjcooper16@gmail.com

County	Tel	
Email		

RADIO POT-POURRI (PART 2)

Dave Wiggins reflects back on the first British-built Sprengbrook radios

Back in 1968/9, two radios were at the very cutting edge of R/C technology here in Britain, these being the first sets designed by a then new to the market manufacturer named Sprengbrook.

The very first Sprengbrooks

The founder of the new concern was a chap named Harry Brooks. Mr Brooks had much experience in R/C, having formerly been a champion R/C aerobatics pilot during the reed control era, as well as the owner of a Brighton model shop, but he was not a professional electronic engineer. So, to accomplish his dream of dominating the British R/C scene with top quality proportional radios built in Britain he very sensibly recruited a well-known American design engineer called Doug Spreng – a man who had built up a significant reputation with well-regarded American brands like Digicon and (especially) Micro-Avionics Inc.

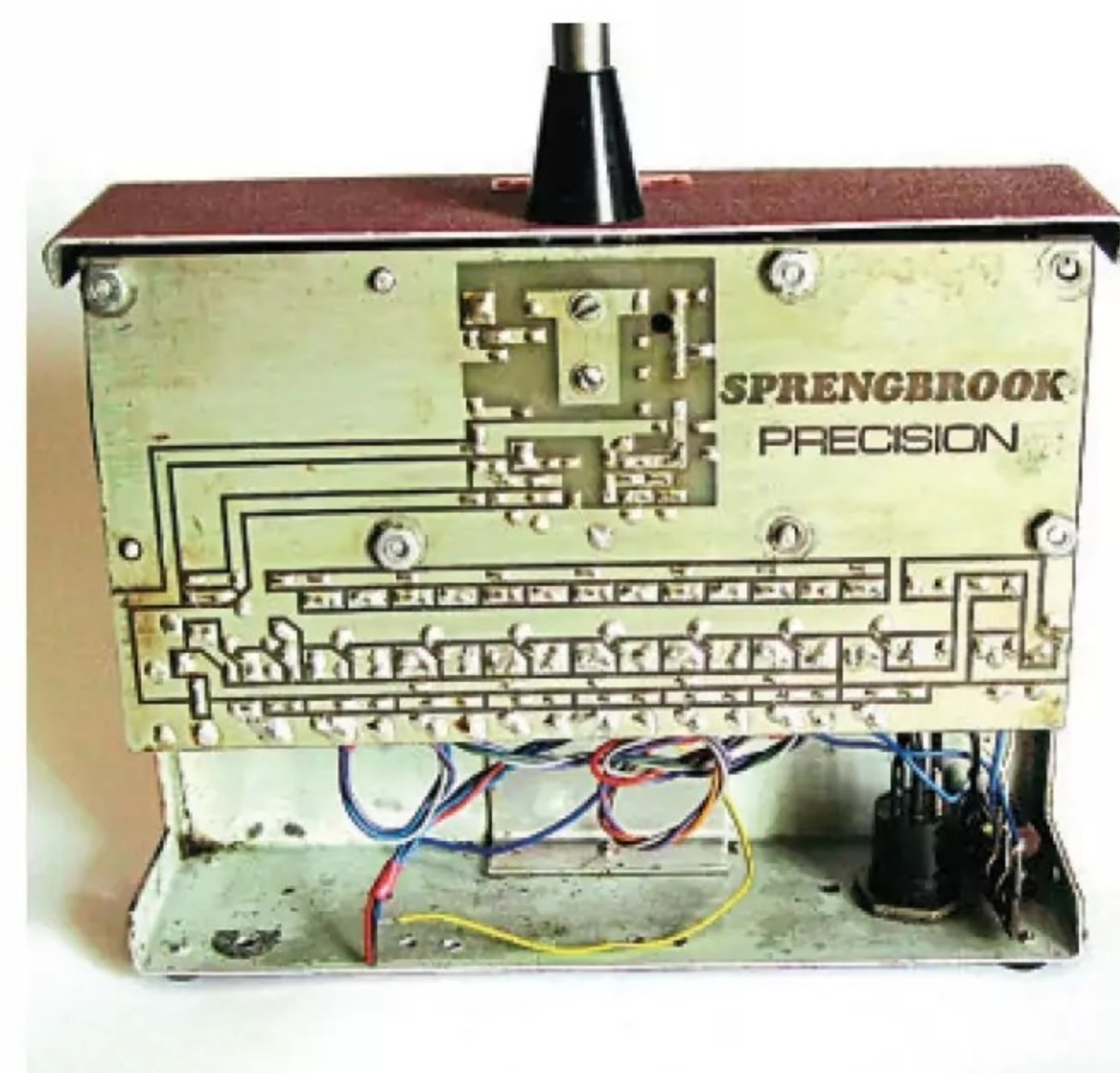
The result of Mr Spreng's first effort here in Britain was the Sprengbrook-6 radio, which can be seen in my first two photographs this month. The example



The very first Sprengbrook radio, the company's original 6-channel set, was heavily American influenced

shown appearing courtesy of a kind reader, Mr Chris Jesuiter. For its time (1968), this was an outstanding bit of electronic design work, equal in every way to the very best American brands and offered at much the same price.

The transmitter used Mr Spreng's characteristic 'maximum copper' printed circuit board layout and is very recognisable as his work as a



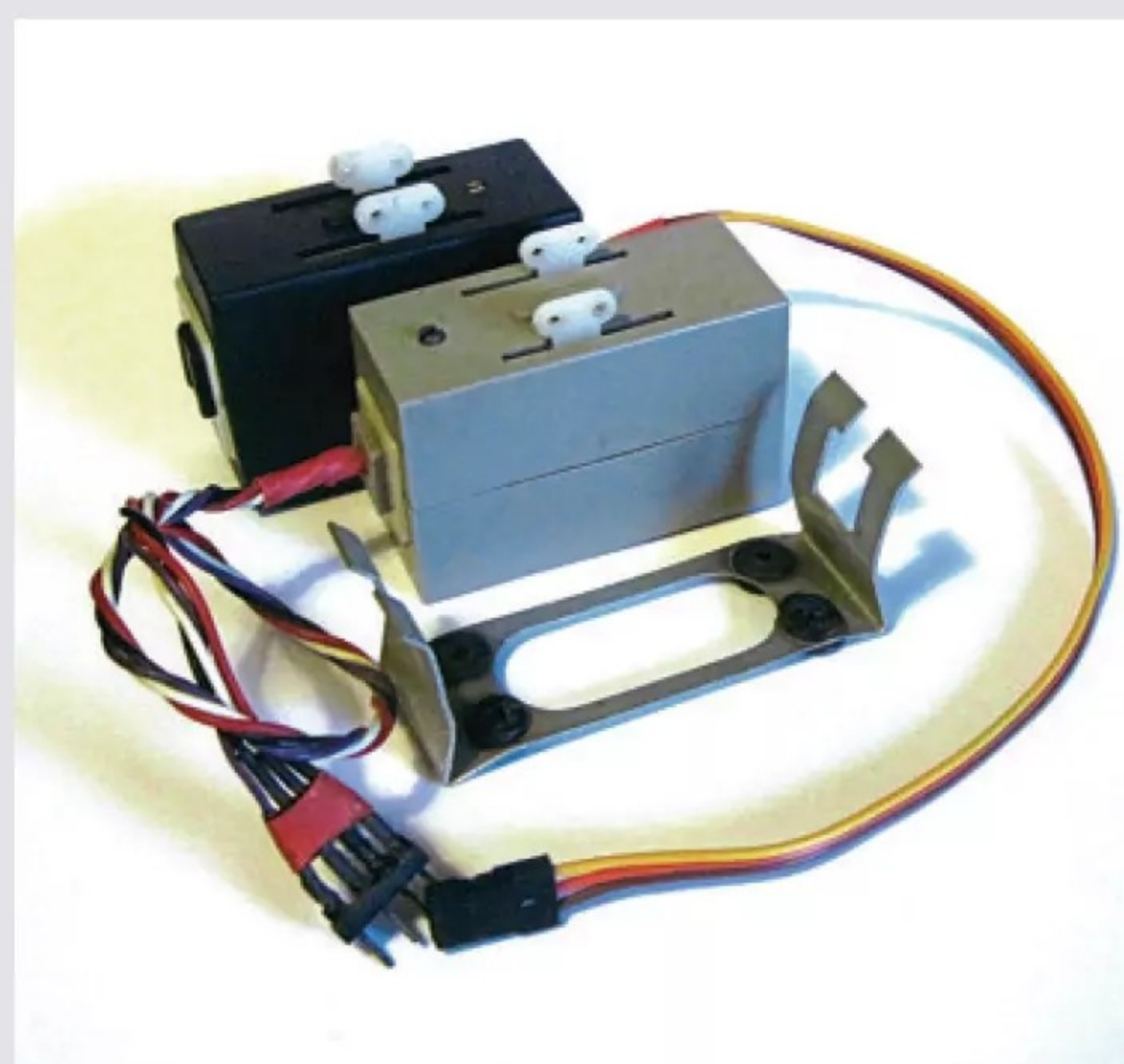
A look inside the Sprengbrook-6 Tx shows its very Spreng-style circuit board, known in those days as 'maximum copper'. The original NiCad battery and integral battery charger was removed by a previous owner.

"This was an outstanding bit of electronic design work, equal in every way to the very best American brands and offered at much the same price"

result. In the manner of the late '60s, a built-in 240 Volt dual battery charger was provided, but in the example shown this has been removed by a previous owner. I have the necessary transformer and parts to reinstate this, although this is not, nowadays, recognised as good electrical practice – the Tx case being made of metal.

S-B receivers were just as beautifully designed as the transmitters, as my pictures of a 4-channel receiver show.

In order to get his new radio brand onto the UK market as speedily as possible, Mr Spreng called upon the services of his previous US employer Micro-Avionics Inc; consequently, the new radio incorporated its thoroughly proven control sticks and its (linear or push-pull) servos, both designed, I believe, by the late Joe Martin (later with Kraft Systems and



The famous Sprengbrook 'Micro-Lok' linear servo (in grey case) – sourced, like the control sticks, from Micro-Avionics Inc of California, alongside a later version (in black mouldings) fully modernised by the author.



THE CHOICE IS YOURS AT 308

We carry stocks of the best of British and American proportional equipment and the two illustrated here are outstanding choices for reliability, performance and value for money. We will demonstrate any set to callers who are interested and any set can be flight-tested by Richard Nicholls if required. A visit to 308 is well worth while before making your final choice, for here you can see and compare the sets and choose for yourself.

SPRENGBROOK

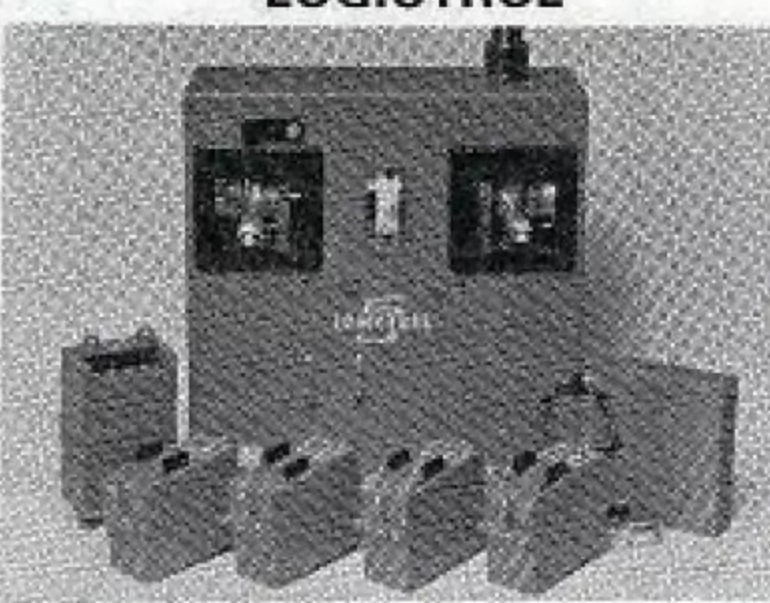


This fine British equipment designed and built by Doug Spreng has already earned itself a reputation for all-round excellence. This is a 6-function set that now comes complete with 4 of the new small MicroAvionics servos. All-up weight in the model less than 16 oz. Transmitter is fitted with built-in mains charger for both TX and RX batteries. This equipment is highly recommended.

Cash price £205 or 24 monthly payments of £10. 15. 4.

LOGICROL

The new Logicrol MS111 systems are at last available. This is the most advanced digital system obtainable and features a double tuned R.F. stage front end to the receiver, a brand new LOGICROL miniature servo with all-up weight in the model of just under 14 ozs. Whole system is new throughout with two-wire battery and three-wire servo connections. Send S.A.E. for data sheet giving full technical description. This is a proven equipment with outstanding performance and high reliability. Noise rejection is exceptionally good and the Logicrol will fly through interference conditions that will ground other sets.



Price £225. 10. 0 or 24 monthly payments of £11. 0. 4.

WE TAKE R/C EQUIPMENT IN GOOD CONDITION IN PART EXCHANGE

The very first advert for this fine set, dated 1968. Note the prices!

“Most vintage R/C kit can be modernised”

later still with Sherline Lathes, both out in the USA).

Electronic technology was typical of best practice at the time, being entirely discrete and silicon throughout.

This first radio received an enthusiastic review and test in *Radio Control Models & Electronics* (RCM&E) magazine and was well

received by the more affluent members of the R/C flying public. Its high price was certainly a problem, though, as buyers could purchase an imported Kraft 'Gold Medal' or a Logictrol for about the same sort of mega-money. Clearly, changes were required if future mass sales were to be achieved.

The SB-4

Mr Brooks obviously recognised this immediately and had Doug Spreng design for him the alternative 4-channel (non-expandable) set, also illustrated. This was aimed at Pylon Racing fans and at 'Sport' (club level) model aircraft buyers. Cost savings in the 4-channel set were achieved by using British made control sticks (source unknown to me) in place of the imported American units, and less expensive servo mechanics.

It was this unit that gave Brooks the basis for a whole line of successful subsequent radio sets, long after Mr Spreng departed Brighton, firstly to work for Staveley (designing its Silver Star digital), and eventually to fly home to do design work for Kraft Systems, which back then was the biggest R/C concern in the world.

The Sprengbrook servo

Let's just take a very quick look at the servo mechanism sold and used for very many years by Sprengbrook. My pictures show two first generation examples of Harry Brooks' and Doug Spreng's first generation servo (the famous 'Micro-Lok') and its spring steel mounting clip.

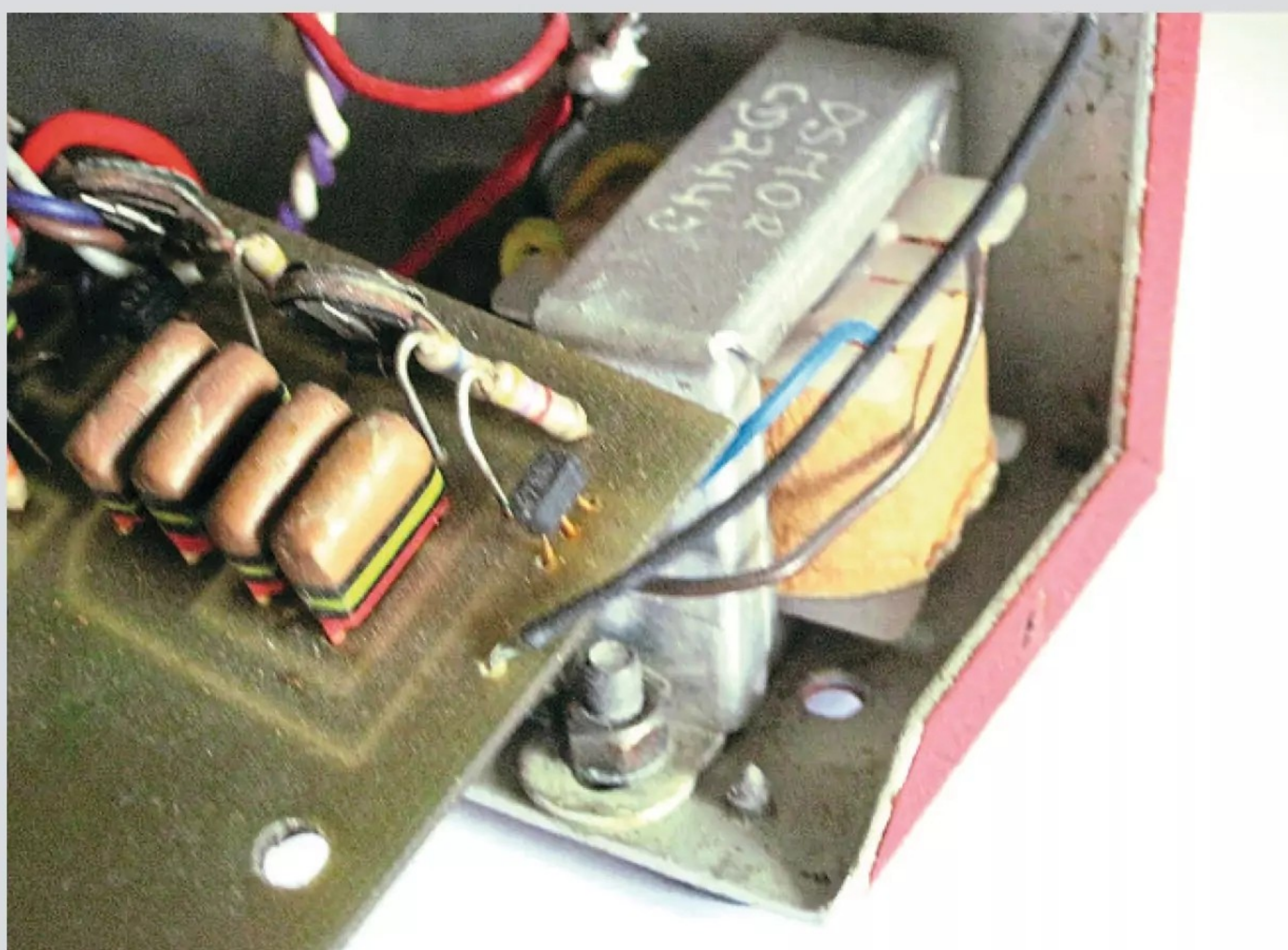
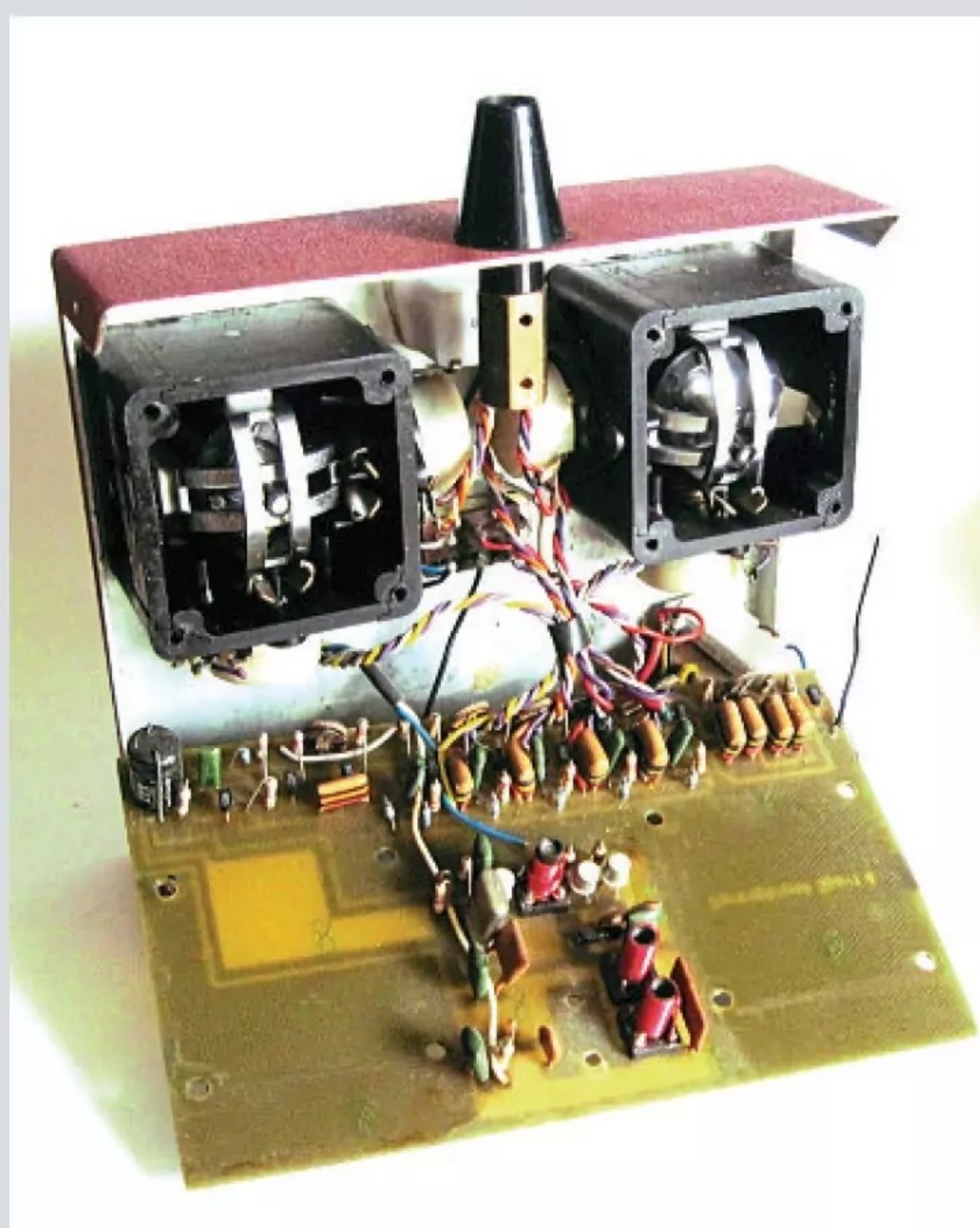
This servo was originally designed



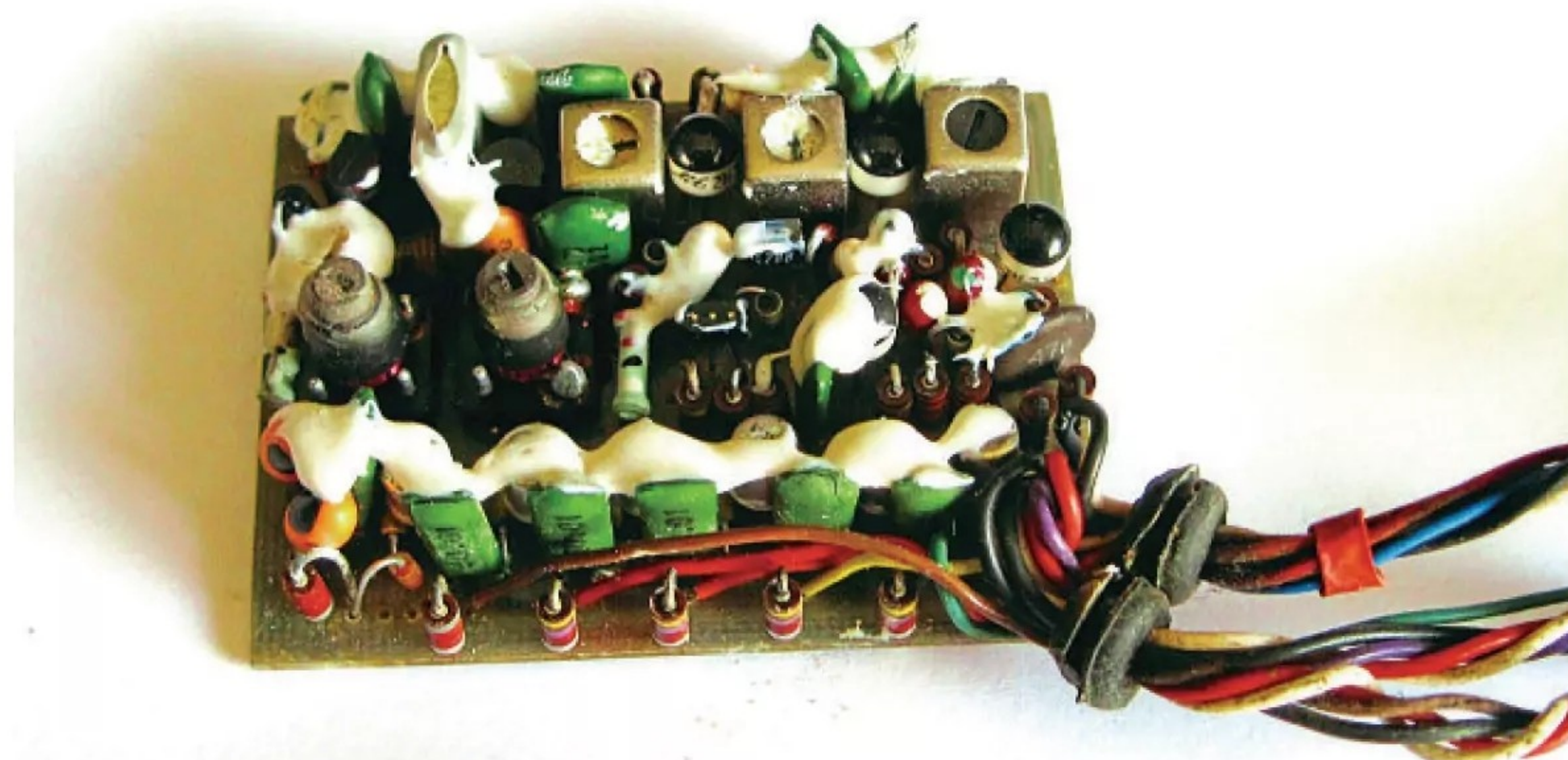
A lovely example of the firm's second radio, a 4-channel meant for pylon racing aircraft.

by Joe Martin for the American digital pioneers Micro-Avionics, but continued in production for many decades, appearing at different times in black, grey and red outer casings. I've even seen some in clear (see-through) cases, but these may have been for display purposes only.

The Micro-Lok was not the only servo supplied by S-B, but it was by far the most prolific and best received by the public. The black cased example I show is one of a set of four rebuilt by myself using more modern 3-wire amplifiers and cables to make it more compatible with today's R/C sets including 2.4GHz radios. To be honest, this was done purely for my own satisfaction, although it does show that most vintage R/C kit can be modernised.



A look inside the 4-channel transmitter, including a close-up of its 240 Volt charger transformer.



The matching 4-channel receiver in its metal case – again, with Mr Spreng's 'maximum copper' design. The 6-channel receiver was identical, aside from slightly increased size.

“One signature item remained for pretty much the entire lifespan of the company...”

In closing

Doug Spreng was, without any doubt, one of the most influential designers of radio-control technology ever, with a very impressive engineering CV.

Mr Brooks went on to run

Sprengbrook for many years, successfully making the leap both to integrated circuitry and to FM when these new technologies popped up in later decades. Even though these changes and modernisations took place long after Mr Spreng had departed the UK and Brooks had struck up relationships with German suppliers, the stars & stripes and union flag continued to embellish SB radios.



An example of one of the later, German inspired, Sprengbrook range, with no Spreng influence.

One signature item remained for pretty much the entire lifespan of the company, this being the 'Micro Lok' linear servo. This is a very interesting fact, I think, as virtually the entire R/C world abandoned linear output servos once rotary outputs became easier and cheaper to manufacture.

Clearly, demand was there though, as recognised by rival Skyleader (see July) with its own SRC-1 mechanics set. ●

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

classicmagazines

Celebrate what you love with a magazine subscription

WHAT IS BEST OF BRITISH?

Best of British is the UK's premier nostalgia magazine, covering every aspect of life from the 1930s to today.



Message from the Editor...

Best of British is the UK's premier nostalgia magazine, covering every aspect of life from the 1930s to today. Packed with features that celebrate classic entertainment, transport, food and drink, and more, not to mention Postbag and the Yesterday Remembered memoir section, a subscription to Best of British is always going to be great value.
Simon Stabler

VISIT: www.classicmagazines.co.uk

CALL: 01507 529529

Your favourite magazines delivered direct to your door.

Free Post & Packaging.

Huge savings across our whole range on 12 & 6 month subscriptions.

Your Models

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

Maid of Sker

The original *Maid of Sker* now sits in Bischof Pioneer Park in Nerang, Southeast Queensland. She was built in 1884 by Evans, Anderson, Phelan and Company, Brisbane, and serviced Brisbane, Southport and Nerang, carrying cargo as well as passengers.

1:24 scale plans were purchased from Float-a-boat in Victoria. I originally intended to build the model for radio-

control, however at the moment a static display will have to suffice.

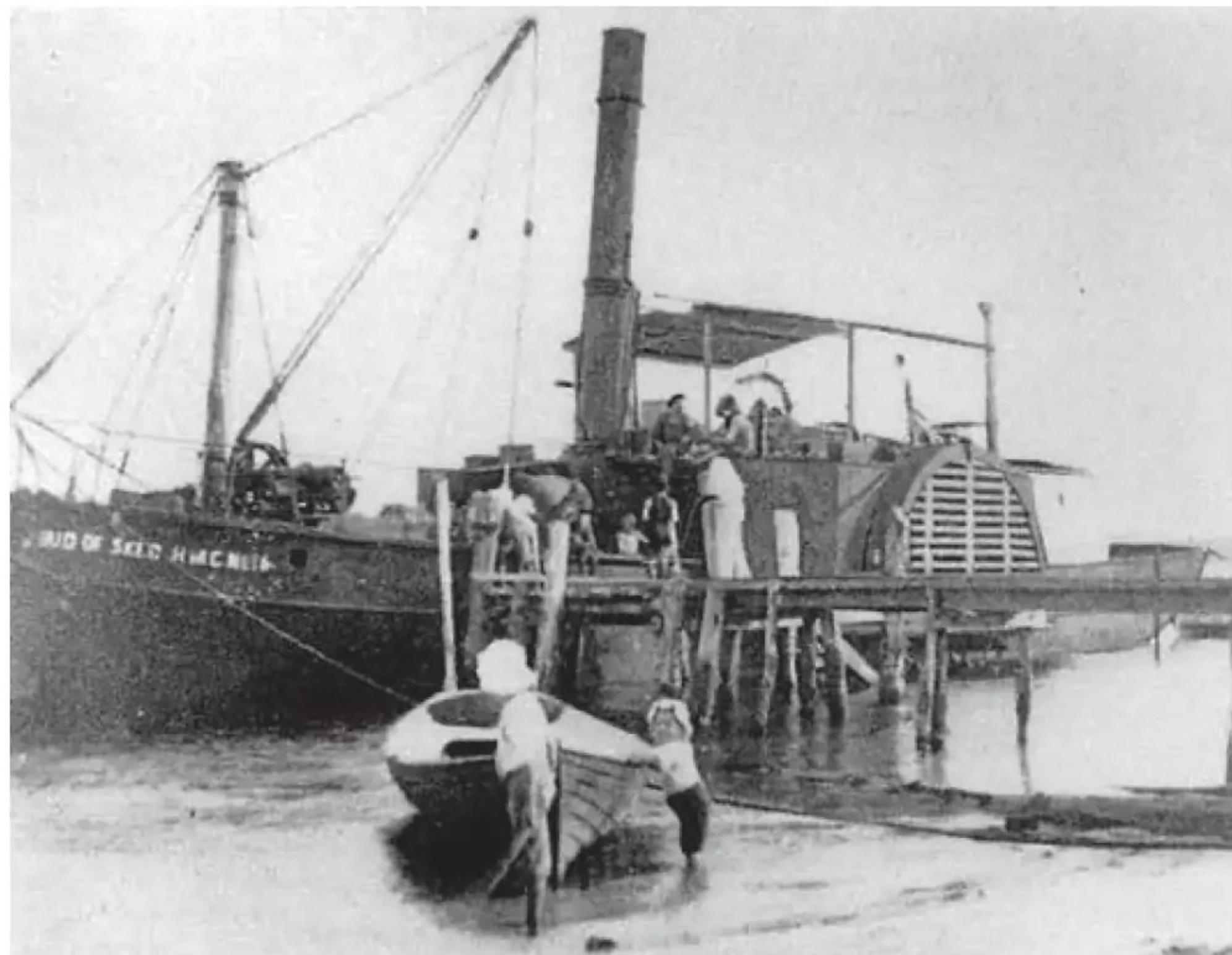
The hull frames are 6mm mdf with a single layer of walnut planking, with the entire hull then epoxied. The hull plating is self-adhesive aluminium tape, with the rivets formed by rolling a small plastic gear wheel on the reverse side of the tape prior to application. The paddle wheels and superstructure are all made from evergreen plastic, while the boiler started

life as a can of coconut cream! Apart from the four figures I purchased from Cornwall Model Boats, the rest is scratch built.

My weathering technique probably needs improving, but, overall, I am happy with my first go.

STUART DEACON
GOLD COAST, AUSTRALIA

You're way too modest, Stuart – she looks superb! Ed



A charming historic photo, circa 1910, of the Maid of Sker. Photographer unknown.



The Maid of Sker now restored and in preservation in Nerang, Queensland, with Stuart Deacon's magnificently built and detailed 1:24 scale static model of her to the fore.



From every angle, this gorgeous model offers something to marvel over.





Zippo

I thought I'd share some pics of the 1:35 scale Vietnam Zippo I've created by amalgamating parts from two different kits (see photo), one being resin, the other plastic. I've fitted my own running set and carried out some build work at the front to form the rounded bow section. As you can see, I've already successfully tried the model out on the water at the RMBC Glasgow's pond, where I've been a member since 2012.

I plan to build a 1:24 scale version

in the near future. For this I will probably have to buy a suitable hull to convert and then scratch built the superstructure myself.

I also have a number of R/C Royal Navy World War I ships in my fleet, with work currently underway on a 1:96 scale model of HMS Skirmisher, a 1:128 scale model of HMS Lion (nearing completion), and a 1:48 scale 1st class torpedo boat. I have some static builds on the go, too, including some Lord Nelson's navy vessels and a 1:48 scale model of HMS Surprise (which I am

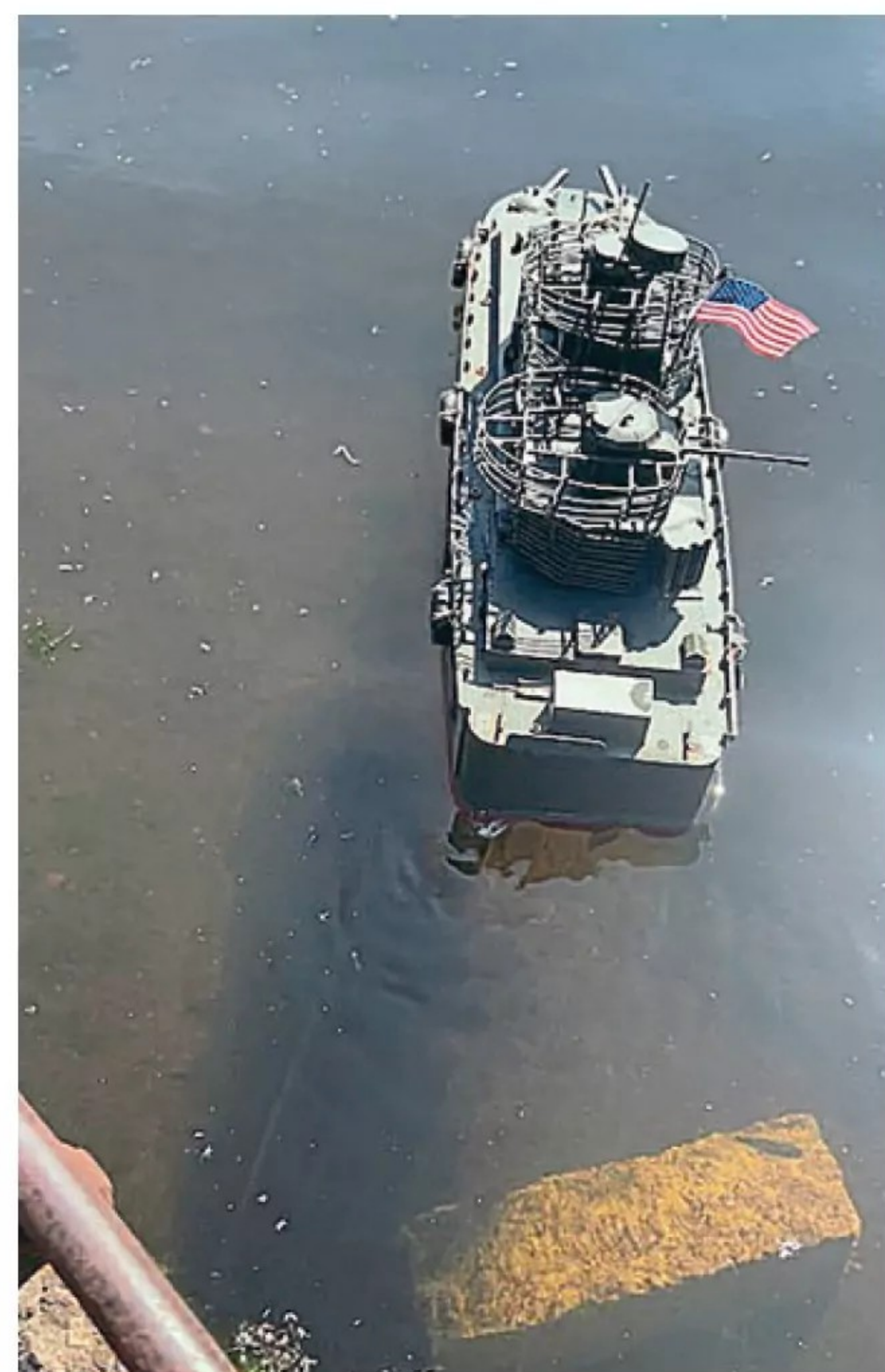
constructing from a Chinese kit of surprisingly good quality).

**DONNIE MCLEOD
EMAIL**

Well, you certainly like to keep yourself busy, Donnie!

As for your menacing looking Zippo, I'm pretty sure Lt. Col. "I love the smell of napalm in the morning" Kilgore (Robert Duvall's character in Apocalypse Now) would approve!

Looking forward to seeing more of your work as and when the other projects mentioned are completed. Ed.





Donnie McLeod's 1:24 scale Vietnam Zippo Monitor looking suitably hardcore!

Victoria Harbour Ferry

I have recently completed the build of a 1:20 scale Canadian Harbour Ferry (the real vessel operates in Victoria Harbour, British Columbia) from a kit produced by a Chinese manufacturer. The kit comprised 3D-printed constructional parts and the necessary R/C components, with the finished model weighing in at around 1090 grams.

LORENZ SCHMUKI INTERLAKEN-SWITZERLAND

What a cute little model, Lorenz! Unfortunately, I can only share the images of your build and not, for copyright reasons, the internet sourced image of the vessel you kindly sent for comparison purposes. However, for anyone interested, a quick Google search will call up loads of different photos of this particular 'pickle boat', along with a Water Taxi version that also operates out of Victoria Harbour. Ed.



Lorenz Schmuki's neat little Victoria Harbour Ferry Pickle Boat build.

Lysander

Having just received the latest edition of Model Boats I was very interested to read about next month's free plan and build guide for a Lysander.

I used to own and sail the real thing on the river Ouse, just south of York.

In 1982, while onboard ship serving in the Merchant Navy, I built a scale model of the yacht. The original just had bilge keels but I had to add a false fin keel to the model for stability.

I hope my photos of this model may be of interest.

**PETER SHAW
EMAIL**

Another lovely Lysander! Thanks so much, Peter. I am sure this will yet further inspire anyone tempted to have a go at building their own version from this month's free plan. Ed.



Your Letters

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

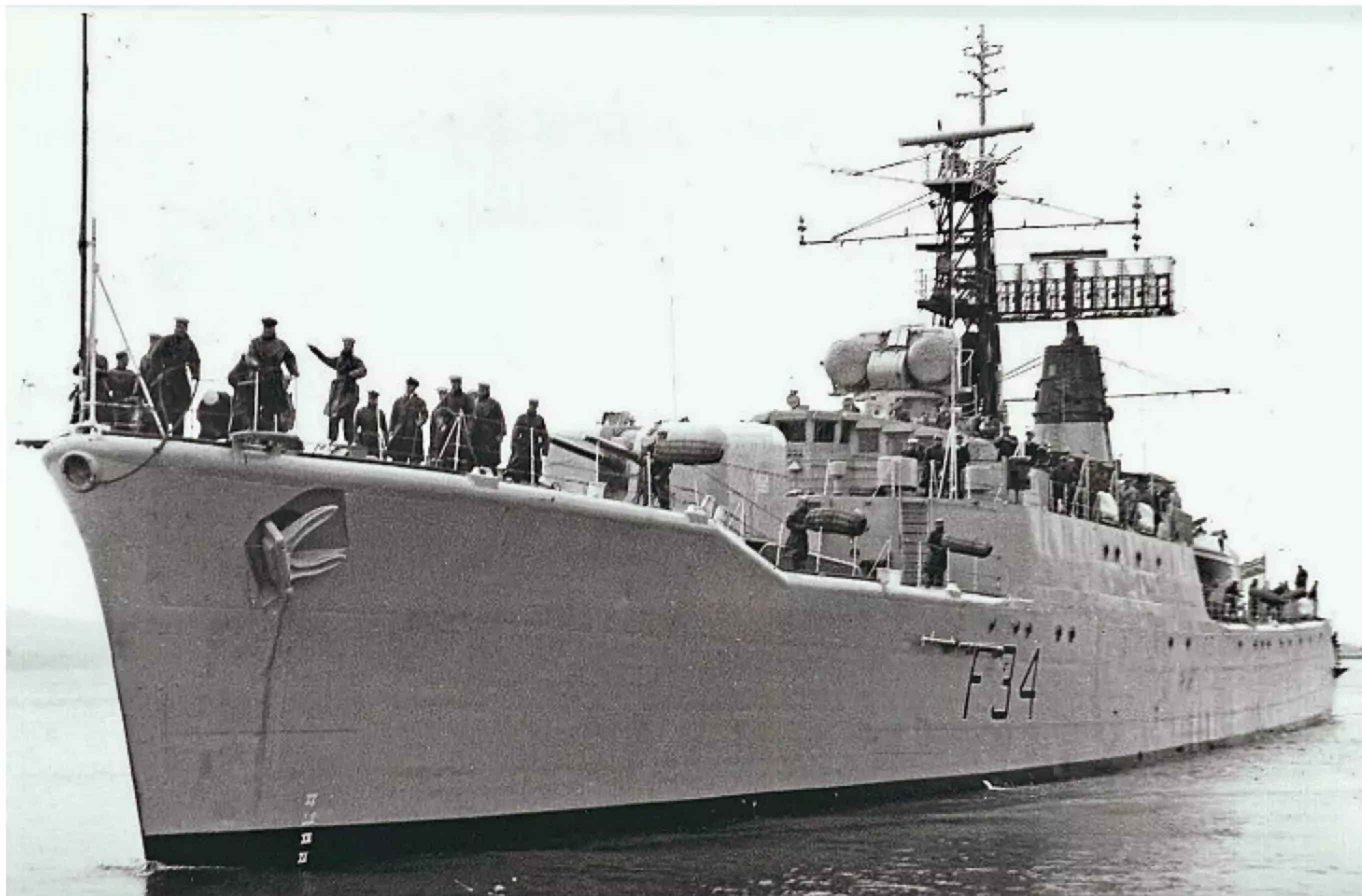
Letters can either be forwarded via email to editor@modelboats.co.uk or via post to **Readers' Letters, Mortons Media Group, Media Centre, Morton Way, Horncastle, Lincs LN9 6JR**

Leopard can't change its spots!

I think the labels have got mixed up somewhat regarding the model purporting to be HMS Leopard built by Denny of Dumbarton on page 11 of last month's issue. The model shown is certainly not that vessel; in fact, it's the German *Graf Spee* – the torpedo tubes on aft deck are a dead giveaway! Having spent a year of my marine engineering apprenticeship with Scotts' Shipbuilding & Eng. Co Ltd at Greenock in the fitting bout basin on HMS *Puma*, sister to *Leopard* (photos of which I can share), I can definitely confirm that shown is not HMS *Leopard*.

**JIM POTTINGER
EMAIL**

I am guessing the museum's photographer got the labels mixed up while shooting a number of different models (easily enough done) but, as I failed to spot this faux pas myself, thank you so much for setting the record straight, Jim. Ed.



Many thanks to Jim Pottinger, both for setting the record straight on an unfortunate image blunder in last month's Compass 360 news section and for these fabulous shots of HMS Puma, sister ship to HMS Leopard, which serve to validate his eagle-eyed and knowledgeable observation.

Stepping down

I have now been a club member, committee member and Public Relations Officer for the Kirklees Model Boat Club for a total of 40 years. Throughout that time, I have organised home events, such as gala days, racing events, Christmas lunches, night sails and competitions and away events, and have represented the club at commercial shows and other local club functions. I have met a huge number of incredible people in the model boat world during this time and enjoyed lasting friendships with many of them. Sadly, the effort and commitment that the role demands are proving to be ever more difficult to accommodate and so I feel that finally the time has come to stand down and let someone else take over the reins.

I would, therefore, just like to thank everyone from the organisations and clubs that I have dealt with during this time for their support and assistance

in making all the events the successes they have been.

An official announcement will be made by the club as soon as a new Public Relations Officer has been appointed.

**STAN REFFIN
EMAIL**

Well, it's now my turn to say thank you, Stan, for always keeping me posted well in advance of forthcoming club events. You have certainly been an excellent ambassador for both the club and the hobby in the general. I do appreciate, however, the sheer level of work that goes into the organisation of open days, events, etc, so you've more than earned some R&R! I know from our



Stan Reffin.

telephone calls that you currently have various different modelling projects of your own on the go, so I look forward to being able to share more of your wonderful work in the Your Models section of future issues. Ed.

In search of Victory

In 1965 I scaled up a plastic model of the HMS Victory, creating plans to a ginormous scale. Being so long ago (I was 26 years and am now 86), my memory of this has worn a little thin. What I can recall is that I acquired floorboards from a recycling firm who were retrieving useful timber from local slum clearance in South London, which is where I lived at that time, for the build!

After that, I set about construction using bread-and-butter techniques. I had no power tools at all back then, just ordinary woodwork tools, such as chisels, a handsaw, a smoothing plane and a Surform tool. You can, therefore, imagine the length of time it took me to remove the excess wood from the huge hollowed-out hull and the joy I felt when my initial float test confirmed it to be watertight.

By 1970 I had a proper ship, albeit still with no masts.

We relocated to Devon in 1971, where work on the farm took over, and the project was shelved. In the mid-1970s, though, I finally found time enough to put in the masts and standing rigging. Unfortunately, this just made the folly of its size even more obvious. Any photograph taken in the house seemed to have the Victory in the background!

Fast forward a few more years and I made a set of sails, enabling us to try the model out in the, fortunately very large, pond in our garden. 28lbs of lead

to ballast were required to get it to its waterline, after which, it sailed beautifully and looked magnificent: 40-inches on the waterline, over 6ft from bowsprit to spanker tail end, and about 5ft from the keel to the top of the main mast!

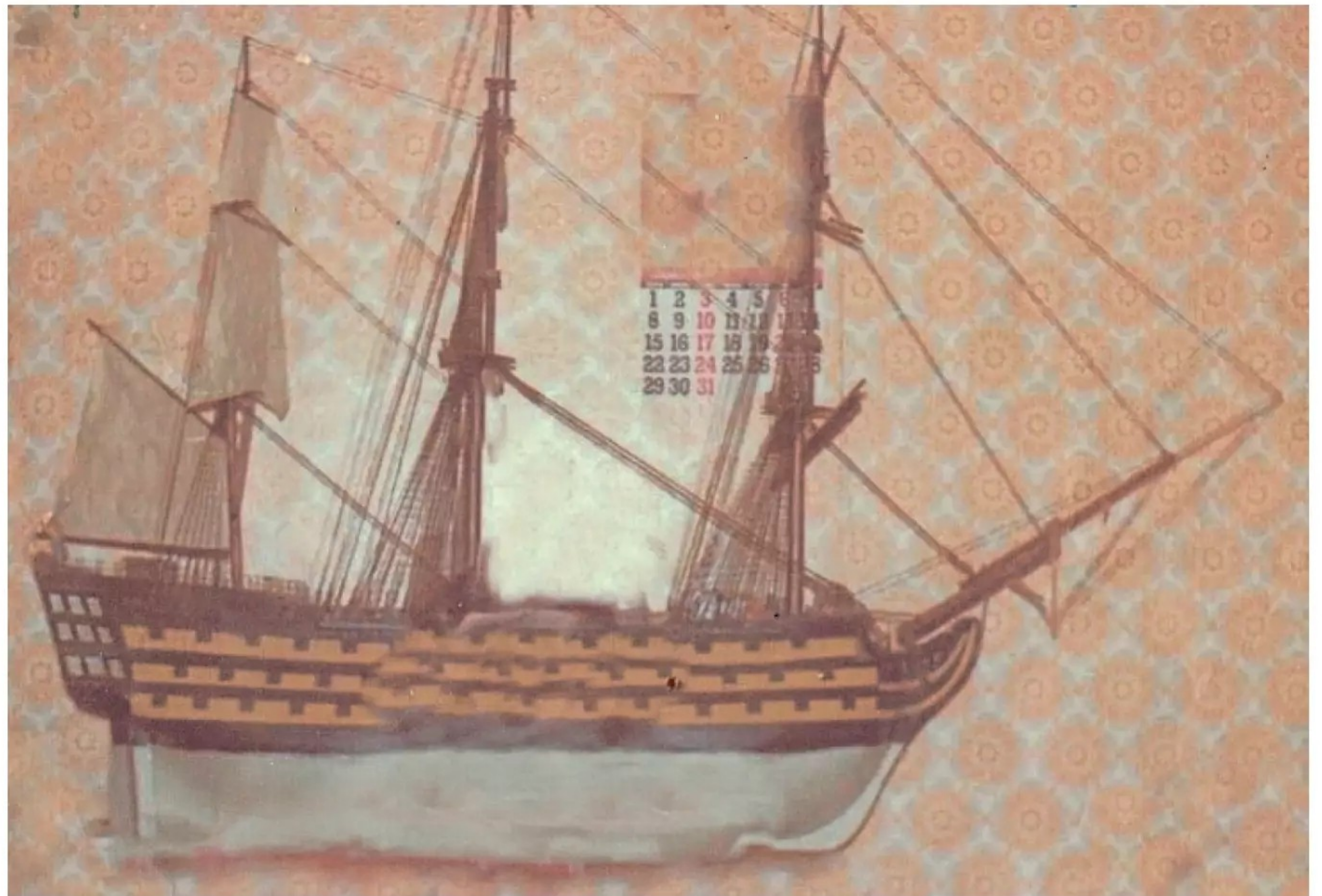
In the 1980s we were short of money, so the model was sold. This is the only picture I still have of it (all the others were lost somewhere). all the others were lost somewhere.

I would love to see the model

again, but so far, my research into its whereabouts has drawn a blank. I am hoping against hope that it has survived and that perhaps someone reading Model Boats will recognise it and be able to point me in the right direction.

ALAN TURNER
EMAIL

Like you, Alan, I am keeping my fingers crossed that someone will be able to help here. Over to you, chaps!



It's a real long shot, but if anyone recognises the large-scale model of Victory and can shine any light on its whereabouts now, we'd love to hear from you.

Hotham Park revisited

I am contacting you because your readers might like the following update about the Hotham Park Boating Lake in Bognor Regis. It is probably a couple of years ago that I emailed a message to you lamenting the poor condition the park's boating lake had been allowed to fall into, which very kindly published. Well, following a return trip after not having visited for quite some time, I am very pleased to report that Arun District Council and the park staff have done a really good job of renovating this facility. The weed has gone (naturally, you still get a little, only to be expected, flotsam from the trees) and the water is now maintained at a good level, so boating is now most pleasurable on a warm summer's day.

The rough dimension of the boating lake as follows: length – 155ft; width 65ft. Depth is okay for boats with a keel length of about 16 inches, depending on water depth at the time.



The beautifully renovated boating pond at Hotham Park, Bognor Regis, as recently photographed by Nigel Peachey.

It currently costs £2.40 to park for two hours, with conveniences close by and a cafe selling all the usual foods and drinks.

Thank you for an excellent magazine.

NIGEL PEACHEY
EMAIL

I really appreciate this update, Nigel, and I'm sure anyone within easy striking distance will, too. The pond looks absolutely lovely, so bravo to the council and the park staff for putting it back on the map for model boaters. No better way to promote the hobby than showing the public how much fun it can be. Ed.

Cambridge MBC Open Day success

I just thought I would let you know that flagging up the Open Day we held on July 12 at Paxton Lakes Sailing Club in the news section of the mag really worked. There was a local fete type show on that day as well, so we had lots of people come along to our event too, including children eager to try out our 'have a go' club boats. We also engaged with some potential new members, one of whom signed up on the day, while a further three have come onboard since!

We are a friendly, inclusive club. We don't care whether someone has made their own boat, acquired it from its original builder, or bought it ready-made. Small or large, fast or slower (and that goes for the owners as well as their boats!), all will be made most welcome.

Thank you very much for your support.



JOHN PARSONS CHAIR, CAMBRIDGE MODEL BOAT CLUB

You are so welcome, John, but I think you and the other members of Cambridge MBC need to take full credit for all the work that went into what was obviously a very enjoyable

day. No doubt the fab weather we've been having didn't do any harm, either! Delighted to hear you've now got four new members, too. Please do keep us posted on future events and indeed any other club news worth sharing with the readership. Ed.



Just a little taste of the models on static display and out on the lake at the Cambridge MBC Open Day in July.

Kenwith Castle MBC Open Day 2025

On Sunday 22 June we hosted our annual open day at the beautiful lake in the grounds of Kenwith Castle Care Home in Bideford, North Devon.

Clubs came from all over the southwest (Camborne Pond Hoppers, Falmouth MBC, Plymouth MBC, The Surface Warship Association, Shepton Mallet Drifters, Sedgemoor MBC and Millbrook Marine Modellers) and we had our first trade stand, Dockyard Models, manned by Martin, also was also representing the Chantry MBC and who made the journey from Kent to attend.

The day started ominously with rain and cloud but cleared up by mid-morning and the lake was soon busy with craft of every description. The build quality was stunning, as we have come to expect. Only one rescue was required using the brilliant JAWS rescue boat, and everyone enjoyed their day. A free buffet lunch was provided, and also a tombola.

I would, therefore, like to extend my gratitude to all those mentioned above, and, of course, to my fellow KCMBC members, for making this event such a success. A special thank you must also go to Kenwith Castle Care Home

for their help, encouragement and support, both in hosting the event and throughout the year.

STEVE MURCH
KC MBC

It's always a pleasure to share images taken at your idyllic sailing venue, Steve – so I'm not at all surprised to learn how well attended your event was. I can see you had some gorgeous models grace both the lake and the static display stands again this year, too. Thanks, once again, then for this little taste of model boating bliss! Ed.



A few fabulous shots from the Kenwith Castle Model Boat Club's Open Day in glorious Devon on June 22 this year.

Triple SSS MBC

Over the weekend of July 13/14, the Pine Rivers Model Train Show was held and, as in previous years, our club, the Triple SSS Model Boat Group, was invited to display some of the members R/C model boats. I am proud to say that this year's display was magnificently supported, with over 32 members' boats on show and up to ten members giving their weekend up to man the stand.

Considering it was a model train show, the public's interest was quite overwhelming, with lots of questions about the boats on display and details of where the club operates from (the Brisbane Entertainment Centre's picnic lake here in Queensland).

A little bit of information about our club, the triple S stands for Scale, Sail and Speed. We have a club house onsite, with a sheltered platform on the



The Triple SSS MBC stand at this year's Pine Rivers Model Train Show in Queensland, Australia.

edge of the lake, and members meet up on various days during the week, although Saturday is the main day in terms of attendance. The members are a diverse group bound together with a love of model boats, and the get togethers are always full of laughter and micky taking in the good old Aussie fashion. There is no hierarchical order and everyone is welcome, no matter if

you have a highly detailed model or just an over the counter one. It's all about having a good time and enjoying the day.

Like most clubs these days, we have to compete for the younger generation's interest against gaming consoles and the like, but it was heart-warming to see so many youngsters totally fascinated by the models on display at the show. I've included a picture of the gang of mates that manned the stand. It was a lot of fun. Roll on next year's show!

**MICK EAST, AKA EASTIE
QUEENSLAND, AUSTRALIA**

Great to hear from you, as always, Mick, and thanks so much for flagging up the club. Love the sound of its friendly and inclusive ethos – bet some great banter goes on! I can see some fantastic models on display there, too. Good on you all! Ed. ●

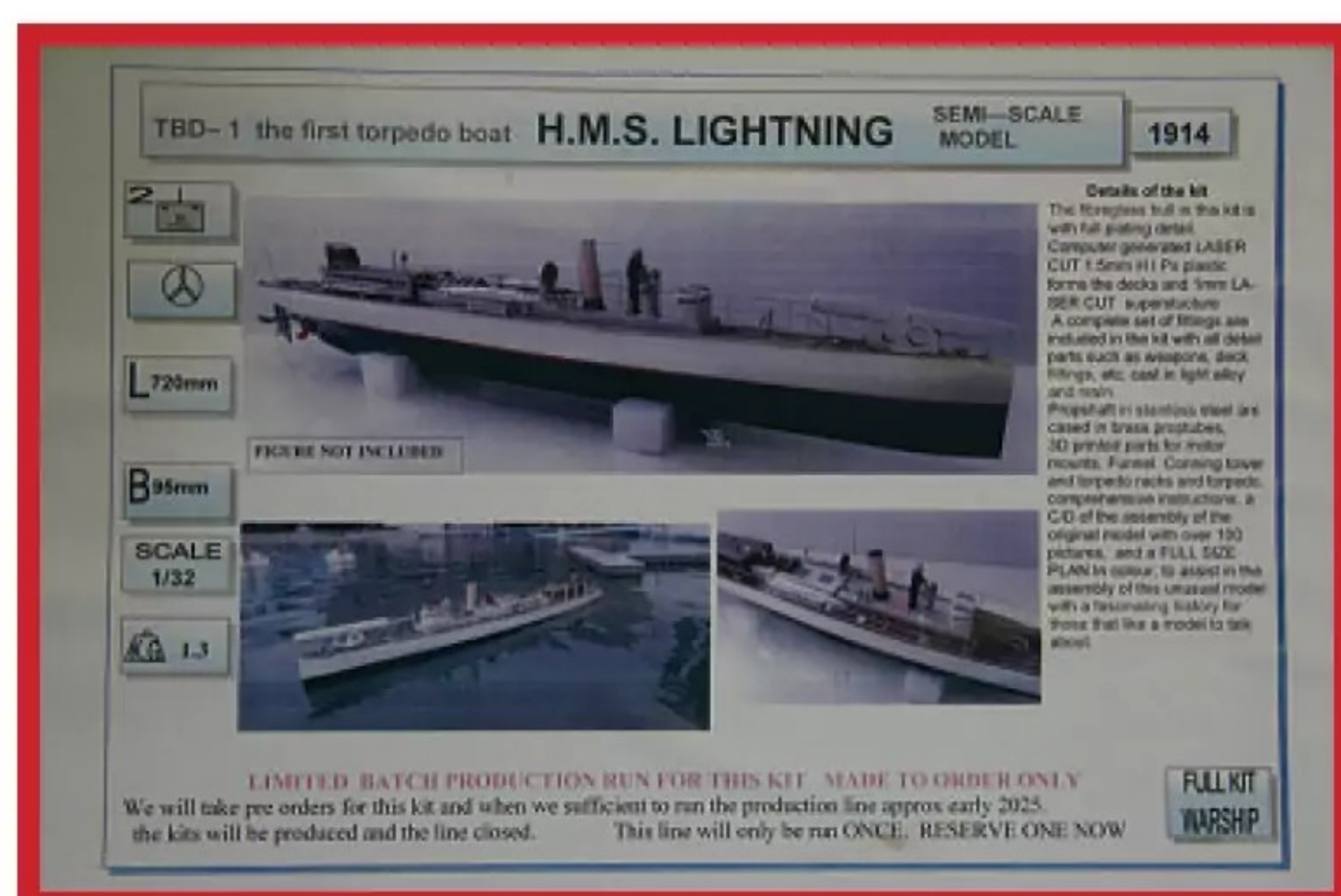
Next month in **model Boats**

In the October issue, on sale from Friday, September 19, 2025, don't miss...



▲ **Duchess of Cornwall**

Capturing the classic wooden St Mawes-Falmouth passenger ferry in 1:18 scale



▲ **HMS Lightning**

A hands-on review of Deans Marine's historic torpedo boat kit



▲ **Jennifer**

A wonderful 1:32 scale West Country Trading Ketch build

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

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

You can, of course, order your copy of the October 2025 issue, which goes on sale at all good newsagents from Friday, September 19, 2025, now, but why not treat yourself to an annual subscription, as monthly copies will then be delivered directly to your door.

What's more, if you opt for either a digital subscription or a combined digital/print package, the unique subscriber number allocated to you will also provide website access to our digital archive of back issues, along with exclusive bonus content.

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



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

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

Surname.....

Address.....

Postcode.....

Telephone number.....

If you don't want to miss an issue



SECURE ON-LINE
SHOPPING AND WORLDWIDE
MAIL ORDER SERVICE

CORNWALL MODEL BOATS

www.cornwallmodelboats.co.uk

Highfield Road Industrial Estate, Camelford, Cornwall PL32 9RA

Telephone: **01840 211009**

**SECURE ONLINE SHOPPING
& MAIL ORDER SERVICE**

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

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

**SPECIALIST ADVICE
AVAILABLE!**



**3D Fittings Now Available.
Fishermen, dogs, lobster
pots, fish and more**

**Plastic Kits Academy,
ARV Club, Airfix, Belkits,
Dragon, Ebbro, Easy Model,
Heller, Hobby Boss, I Love Kit,
ICM, Italeri, and many more.**

Model Shipways

Benjamin Latham 1:48	237.00
Dapper Tom 1:76	208.00
Flying Fish 1:96	379.00
Glad Tidings Pinky Schooner 1:24	189.00
Katy of Norfolk 1:48	144.00
Niagara US Brig 1813 1:64	310.00
Taurus Solid Hull Towboat 1:96	67.99
US Brig Syren 1:64	312.00

Aeronaut R/C Model Boat Kits

Bella Sailing Yacht AN3009/00	189.00
Bellissima Sailing Yacht	260.00
Bismark Battleship With Fittings AN3620/03	455.00
Clipper Sail Boat AN3002/00	43.00
Diva Cabin Cruiser AN3093/00	89.00
Jonny Harbour Tug AN3030/00	459.00
Lili Sail Boat AN3003/33	99.00
Marina AN3084/00	162.49
Mowe 2 Fishing Boat 495mm	79.00
Princess Sport Boat AN3081/00	179.00
Queen Sports Boat Circa 1960's AN3080/00	179.99
Ramboline Push Lighter AN3048/01	195.00
Ramborator Springer Tug AN3048/00	99.00
Scharnhorst Battleship with Fittings Set	414.00
Sudersand Steam Tug AN3033/00	240.00
Tirpitz Battleship with Fittings 1255mm	487.00
Torben Modern Hamburg Harbour Tug	275.00

Amati Victory Models

Lady Nelson Cutter XVIII 1:64 A1300/01	115.00
HM Bomb Vessel Granado 1:64 A1300/02	259.00
HMS Fly 1776 1:64 A1300/03	265.00
HMS Pegasus 1776 1:64 A1300/05	320.00
HMS Vanguard 74 Gun Ship A1300/04	685.00
Mercury 1820 Russian 20 Gun Brig 1:64	365.00
Revenge 1577 Elizabethen Navy Warship	407.00

Amati Model Boat Kits

Adventure Pirate Ship 1760 A1446	84.90
Arno XI Ferrari Timossi 1953 Built Hull and Canopy	381.00
Bellezza Italian Sports Boat R/C A1612	149.00
Bismark 50 inches long 1:200 Sc A1614	493.00
Blue Nose Fishing Schooner 1:100 A1447	87.95
Bragozzo Venetian Fishing Boat A1570	75.00
Chinese Pirate Junk 400mm 1:100 Sc A1421	84.00
Coca Spanish Cargo Ship 41cm 1:60 Sc A570	102.00
Dorade Fastnet Yacht 1931 Length 856mm A1605	279.95
Endeavour Americas Cup Challenger 1:35 Sc A1700/82	260.00
Endeavour Americas Cup Challenger 1150mm A1700/10	79.00
Endeavour 1:80 Sc Polystyrene Hull A1700/50	84.89
Fifie Scottish Fishing Vessel R/C 700mm A1300/09	224.00
Golden Yacht - Ship in a Bottle	45.00
Grand Banks 46 Modern schooner R/C A1607	529.99
Greek Bireme 480BC Length 560mm A1404	74.95
Greek Galliot 18th Century 1:65 A1419	103.00
Hannah US Schooner - Ship in a Bottle	45.00
HMS Bounty 1787 Length 720mm A1432	219.00
Mayflower English Galleon 1620 Length 650mm A1413	159.95
New Bedford Whaleboat 1:16 Scale A1440	112.00
Nina Caravel Of Columbus 1:65 Scale A1411	89.95
Oseberg Viking Ship 1:50 A1406/01	99.00
Pinta Caravel Of Columbus 1:65 Scale A1410	89.95
Polacca Venetian Cargo Ship Length 450mm A1407	119.95
Pirate Ship 1760 1:60 A1446	84.90

Q Ship Hunter 1:60 Sc A1450	94.96
Rainbow J Class Yacht 1:80 480mm A1700/11	79.00
Rainbow 1:80 Sc Polyester Hull A1700/51	84.99
Riva Aquarama R/C - Italian Runabout 850mm A1608	319.00
Robert E Lee Mississippi Steam Boat 1:150 A1439	243.95
Sampang Chinese Fishing & Cargo Boat A1561	43.94
Santa Maria 1492 1:65 Scale, Length 540mm A1409	119.00
Sexy Lady Riva type launch R/C A1611	173.00
Swedish Gunboat 1775 A1550	58.94
Titanic 1912 1:250 Length 1070mm A1606	374.00
Trabaccolo A1562	46.50
Venetian Gondola 1:22 Sc A571	114.00
Xebec 1753 1:60 A1427	144.00

Billing Boats Radio Controlled Boat Kits

NEW! Hjejlen Paddle steamer B403	338.00
Carli Freighter B236	72.00
Progress Trawler B240	69.00
Ymer Tug Boat B244	79.00
WSP 10 B408	189.00
Absalon B500	599.00
African Queen B588	169.99
Andrea Gail - Perfect Storm B726	234.00
Banckert B516 also called "Maasbank" B516	238.99
Boulogne Etaples B534	175.00
Calypso Research Vessel B560	418.00
Colin Archer B728	463.00
Elbjorn Ice Breaker B536	313.99
Emile Robin B430	169.00
Fairmount Alpine B506	347.00
Hoga Pearl Harbor Tugboat R/C B708	136.99
Kadet B566	108.00
Mercantile Traditional Freighter B424	399.00
Monterey B522	109.99
Nordkap B476	240.00
Phantom Runabout B710	115.00
RMS Titanic B510	959.00
Slo-Mo-Shun B520	178.99
Smit Nederland B528	389.00
Smit Rotterdam B478	326.00
St Canute B700	155.00
White Star B570	104.00
Will Everard B601	109.00
Zwarte Zee B592	279.95
Zeeland B592	349.99

Billing Boats Static Boat Kits

NEW! Hjejlen Paddle steamer B403	338.00
America B609	85.00
Andrea Gail - B608	115.00
Bluenose B576	151.00
Bluenose II B600	85.00
Colin Archer B606	94.00
Cutty Sark B564	355.00
Cux 87 Krabbencutter B474	139.00
Dana Fishing Cutter B200	43.99
Danmark Sail Training Ship B5005	390.00
Dragon Yacht B582	167.00
Esmeralda B730	388.99
Esperance B908	58.00
FD10 Yawl B701	107.00
Henriette Marie B904	57.00
HMS Bounty B492	216.00
HMS Endeavour B514	244.00
HMS Renown B604	88.00
HMS Victory B498	478.00

HMS Warrior B512	519.00
Jylland B5003	289.00
Le bayard B906	52.00
Le Martegaou B902	58.00
Lilla Dan B578	158.00
Mary Ann B437	139.00
Mary Jeanne B580	129.00
Mayflower B820	179.00
Norden B603	99.00
Nordlandsbaaden B416 Viking type fishing boat	152.00
Rainbow Shrimp Cutter B201	51.00
RNLI Lifeboat B101	52.00
Roar Ege Viking B703	92.00
Sir Winston Churchill B706	159.00
St Roch B605	129.00
Torborg B910	52.00
US Coast Guard B100	53.00
USS Constitution B508	269.00
Viking Ship Oseberg B720	22.95
Wasa B490	340.00
Will Everard B601	109.00

Caldercraft R/C and Nelsons Navy

Alte Libe 1:25 Scale C7020	388.99
Brannaren 1:48 Scale C7015	492.00
Fifie Amaranth 1:40 Scale C7010	192.00
HMAV Bounty 1789 1:64 C9008	239.99
HM Bark Endeavour 1768 1:64 Scale C9006	299.00
HM Bomb Vessel Granado 1756 1:64 Scale C9015	302.00
HM Brig Supply 1759 1:64 C9005	179.00
HM Cutter Sherbourne 1763 1:64 Scale C9010	89.99
HM Gunboat William 1795 1:32 Scale C9016	274.00
HM Mortar Vessel Convulsion C9012	133.00
HM Schooner Pickle 1778 1:64 Scale C9018	175.00
HM Yacht Chatham 1741 1:64 Scale C9011	123.00
HMS Agamemnon C9003	899.00
HMS Cruiser 1797 1:64 Scale C9001	183.82
HMS Diana 1794 1:64 Scale C9000	648.34
HMS Jalouse 1794 1:64 Scale C9007	308.66
HMS Mars 1:64 Scale C9009	277.56
HMS Victory C9014	POA
Imara 1:32 Scale Single or Twin Screw C7012	764.00
Joffre 1:48 Scale C7000	397.00
Marie Felling Single or Twin Screw C7003	656.00
Milford Star 1:48 Scale C7019	367.00
North Light 1:32 Scale C7001	398.00
Schaarhorn 1:35 Scale C7021	499.00
Schooner Ballahoo 1:64 Scale C9013	86.00
Sir Kay 1:48 Scale C7011	468.00
Talacre 1:48 Scale C7005	401.00

R/C Equipment

Radion Link T8FB-BT 2.4HZ 8 Channel	59.99
Carson Reflex Stick 4 Ch Pro	90.00
Carson Reflex Pro 3.1 2-Channel 2.4Ghz Stick Transmitter	64.99
Futaba T6L Sport 2.4Ghz T-FHSS & R3106GF	97.49
Carson Reflex Wheel Pro3 LCD Marine	113.00
2.4ghz Package Set inc Servo Batteries & Charger	86.99

Plastic Hull, Easy Builds To Make

Avon Fire Boat Semi Scale	40.00
Fast Attack Craft Semi Scale	40.00
Pilot Boat South Coast Semi Scale	40.00
US Miami Class Crash Tender Semi Scale	40.00
Vosper Type ASLR Semi Scale	40.00

Balsa Cut Wooden Boat Companies Semi Scale Boats

WBC Polic Launch 400mm long	66.00
PT-109 Torpedo Boat 400MM long	80.00
Riviera Motor Boat 400mm Long	64.00

Dumas R/C Boats

Akula Russian Nuclear Attack Submarine #1246	219.40
American Beauty Mississippi River Towboat #1215	261.00
Mincio Freelance Mahogany Runabout 704	117.99
Brooklyn Tug #1238	461.95
Big Swamp Buggy #1505	163.69
Carol Moran Tug #1250 1:72 Scale	121.00
Chris Craft 16' Hydroplane #1254	275.00
City Of Buffalo Lake Steamer #1270	283.00
Creole Queen Mississippi River Boat #1222	461.95
Dauntless Commuter Boat #1211	238.00
George W Washburn #1260	247.28
Jersey City Tugboat #1248	359.29
Jolly Gule Fishing Trawler #1231	196.45
Lackwanna Coal Burning Steam Tug #1251	330.97
Myrtle Corey Memphis Tow Boat #1253	350.45
Noahs Ark #1252	109.00
River Barges #1219	178.00
SC-1 Class Sub Chaser #1259	242.40
US Coastguard 41' Utility Boat #1214	196.45

Preformed Hulls, a good starting point!

Breeze Pilot Cutter Hull with Plan DSET006	133.50
Forceful Paddle Tug FG	99.00
Galway Hooker Hull & Plan SETSH2022B	141.00
Katie Gaff Rig Pilot Cutter 40.5" Fibreglass	126.50
Keenoma Tug Model Boat hull FG	115.00
Moorcock Hull with Plan 1:24 Sc	159.00
Victoria ABS Hull	32.00

Mantua RC Model Boat Kits

Ajace Cargo Ship 731	395.95
Anteo Harbour Tug 1:30 Scale 743	413.00
Bruma Open Cruiser 1:43 Scale 736	222.98
Galaxy Model Kit 705	137.00
Mincio Freelance Mahogany Runabout 1:20 Scale 704	118.00
Titanic in seven part builds excellent value	POA
Venetin Passenger Motor Boat 1:28 730	270.00

Occre Model Boats

Hercules Tug 1:50 Scale	269.99
Albatros Schooner 1:100	107.99
Amerigo Vespucci 1:100	413.99
Aurora Brig 1:65 Scale	161.99
Black Swan 1:70 Scale	215.99
Side Cut away Hull of the Bounty 1:45	359.99
Bounty Launch 1:24 Scale	62.99
Buccaneer 1:100 Scale	125.99
Cosair Brig 1:80 Scale	202.99
Diana 1:85 Scale	305.99
Hercules Tug 1:50 Scale	269.99
HMS Beagle 1:65 Scale	188.99
HMS Erebus 1:75 Scale	188.99
HMS Revenge 1:85 Scale	202.99
HMS Terror 1:75 Scale	188.99
Prinz Eugen German Heavy Cruiser 1:200 Scale	431.99
RMS Titanic 1:300 Scale	269.99
USS Missouri 1:200	674.99

ALSO:

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

Visit the website for our full range of kits:

www.cornwallmodelboats.co.uk

email: sales@cornwallmodelboats.co.uk

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



Hoga pearl
harbour tug



Mtroniks

electronics innovation



microMARINE

12V/10A Brushed
waterproof speed
controller

£37.99



vipermARINE

12V Brushed
waterproof
speed controller
15A, 25A, 40A or 75A

from £37.99



tioMARINE

12V Brushed
waterproof
speed controller
15A, 30A or 50A

from £44.99



vipermARINE-HV

24V Brushed
waterproof
speed controller
15A, 25A or 40A

from £46.99

digiSOUND-6D

Realistic sound for RC
boats

£77.99



Improved
design for
2025!

marineMOTORS

Brushed motors for RC boats

M500
£14.99



M550
£16.99



M775
£22.99



Mtroniks
electronics innovation

41A Ilkley Road, Otley, LS213LP, UK - Tel: +44(0)1943 461482
web: www.mtroniks.net email: enquiries@mtroniks.net

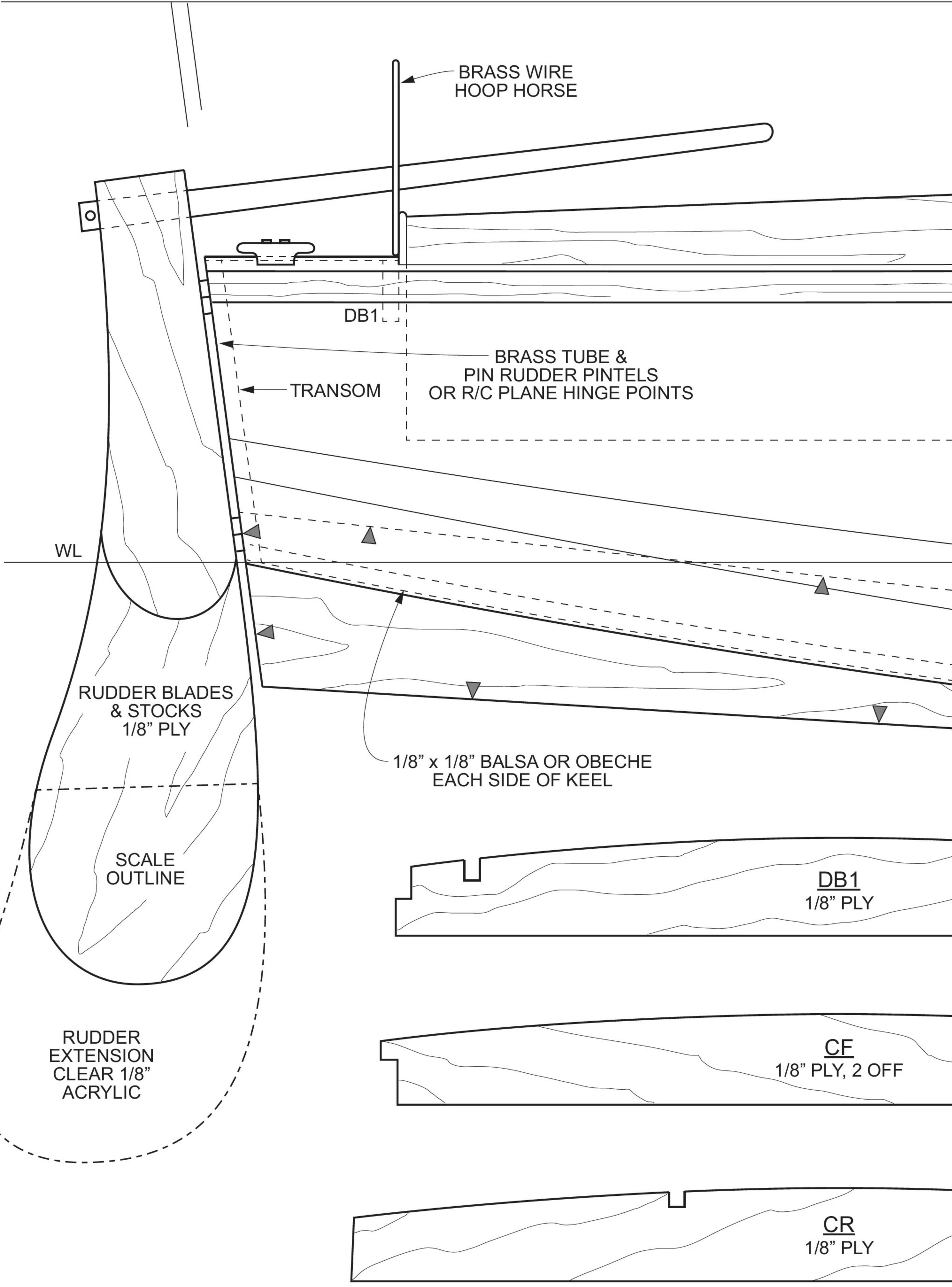
24 Month Warranty on all
Mtroniks electronic products

Over 30 years of
know-how

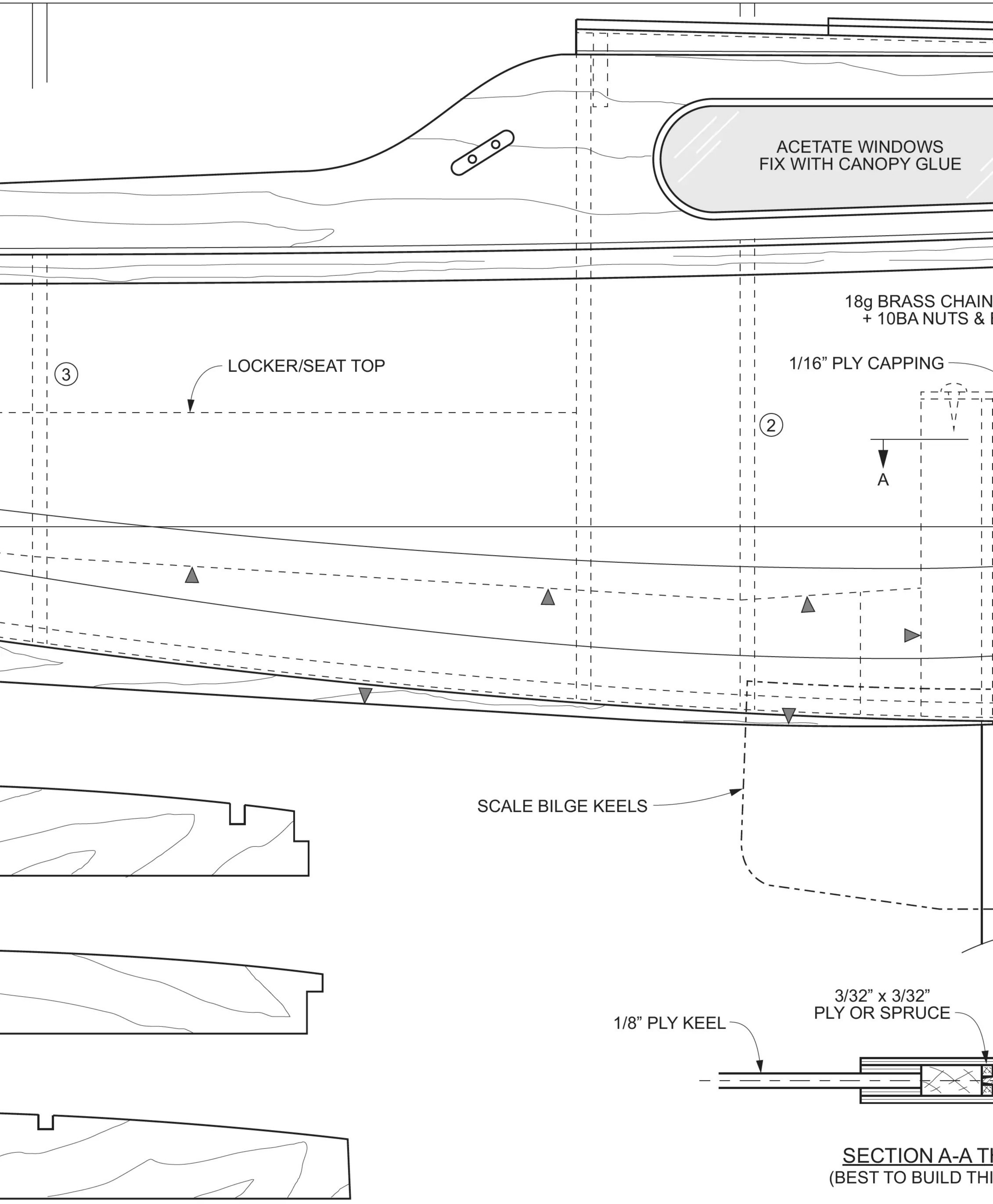
500

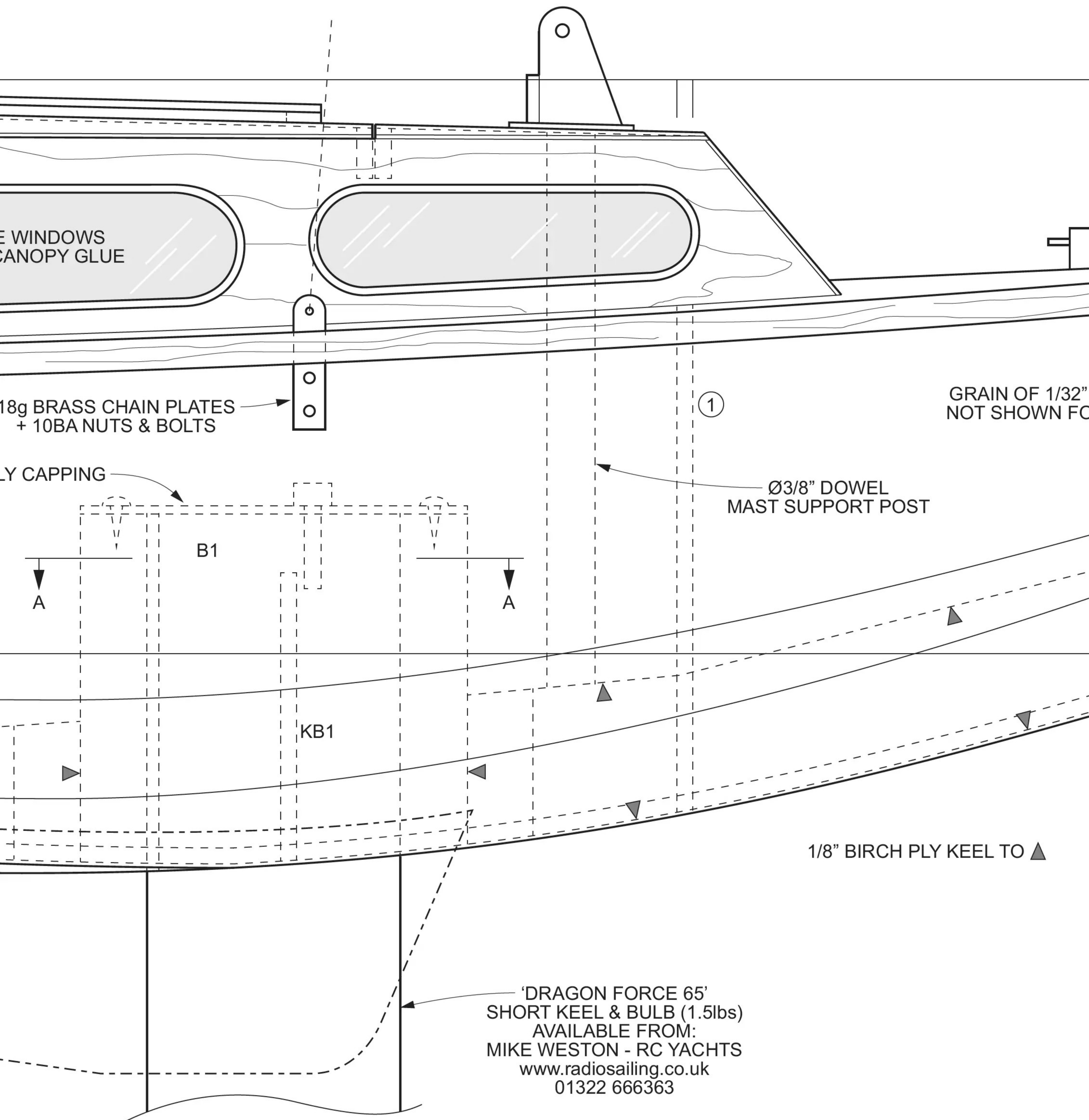
400

300



BUILD EXPERIENCE REQUIRED
(NOT FOR THE BEGINNER)





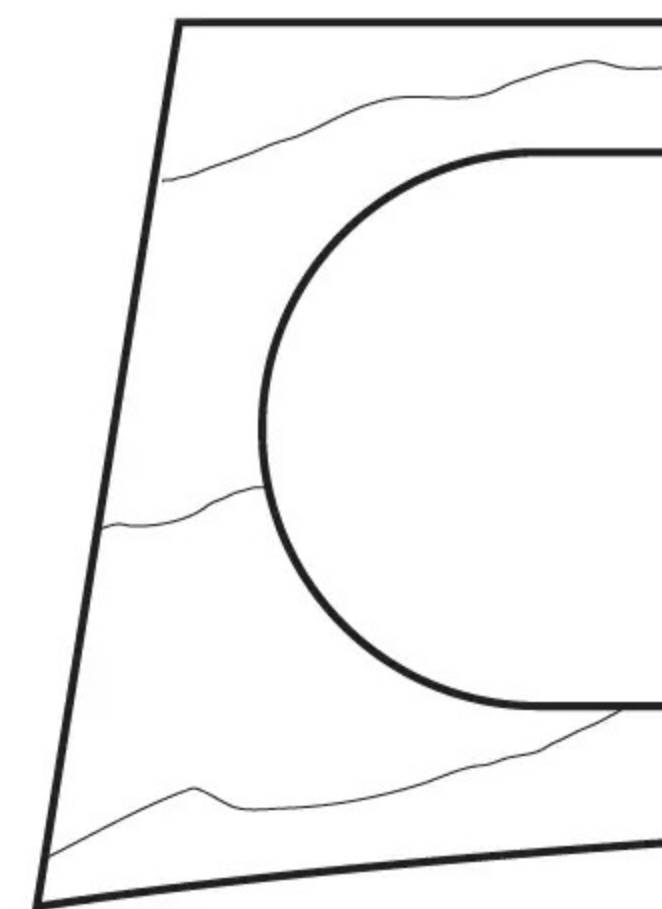
3/32" x 3/32"
OR SPRUCE

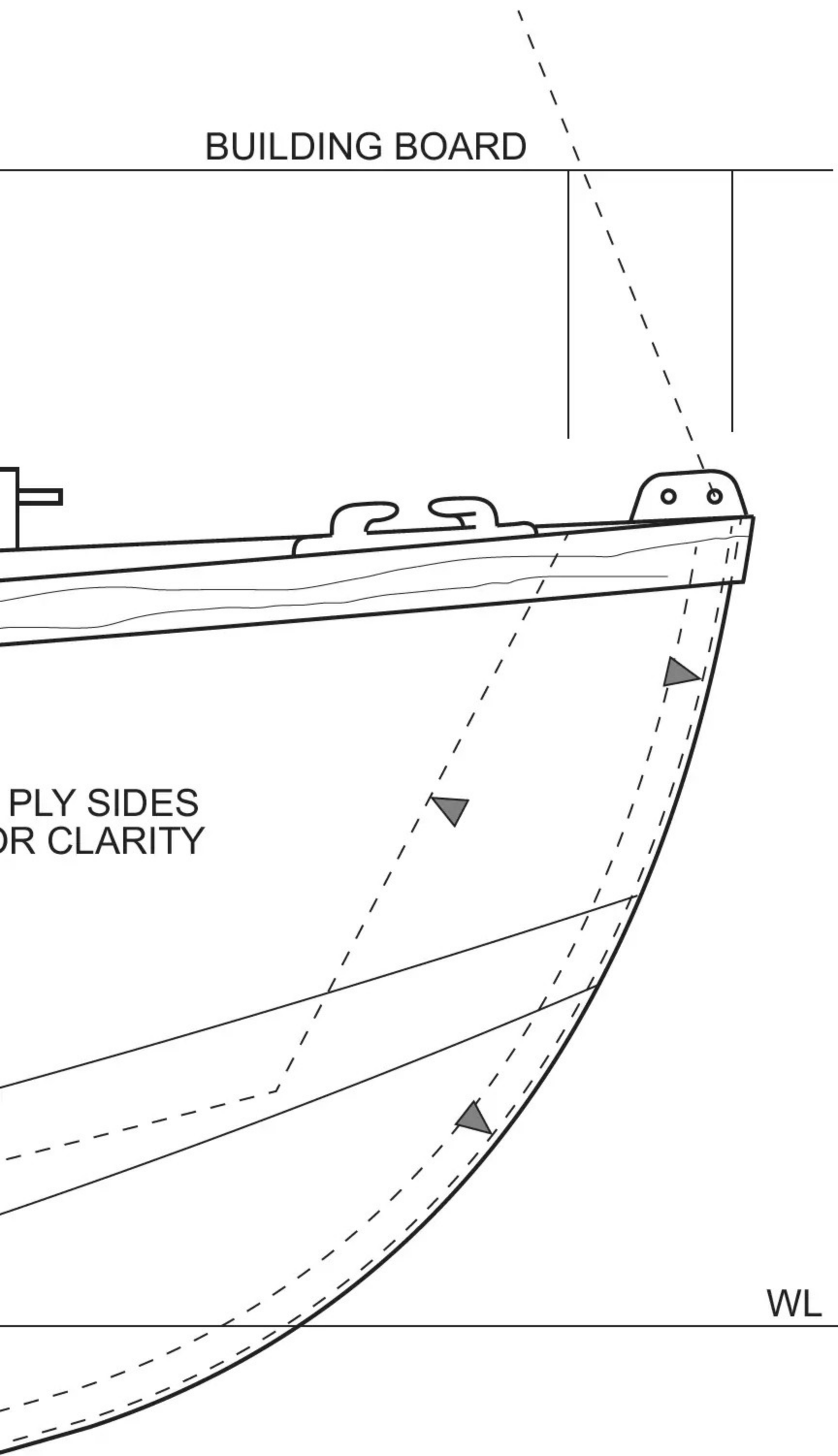
1/16" PLY
KEEL BOX SIDE

1/16" PLY

1/4" x 1/2" SPRUCE
OR PLY INFILL

SECTION A-A THROUGH KEEL BOX
(BEST TO BUILD THIS BOX AROUND THE FIN)





Boats LYSANDER

BY RAY WOOD

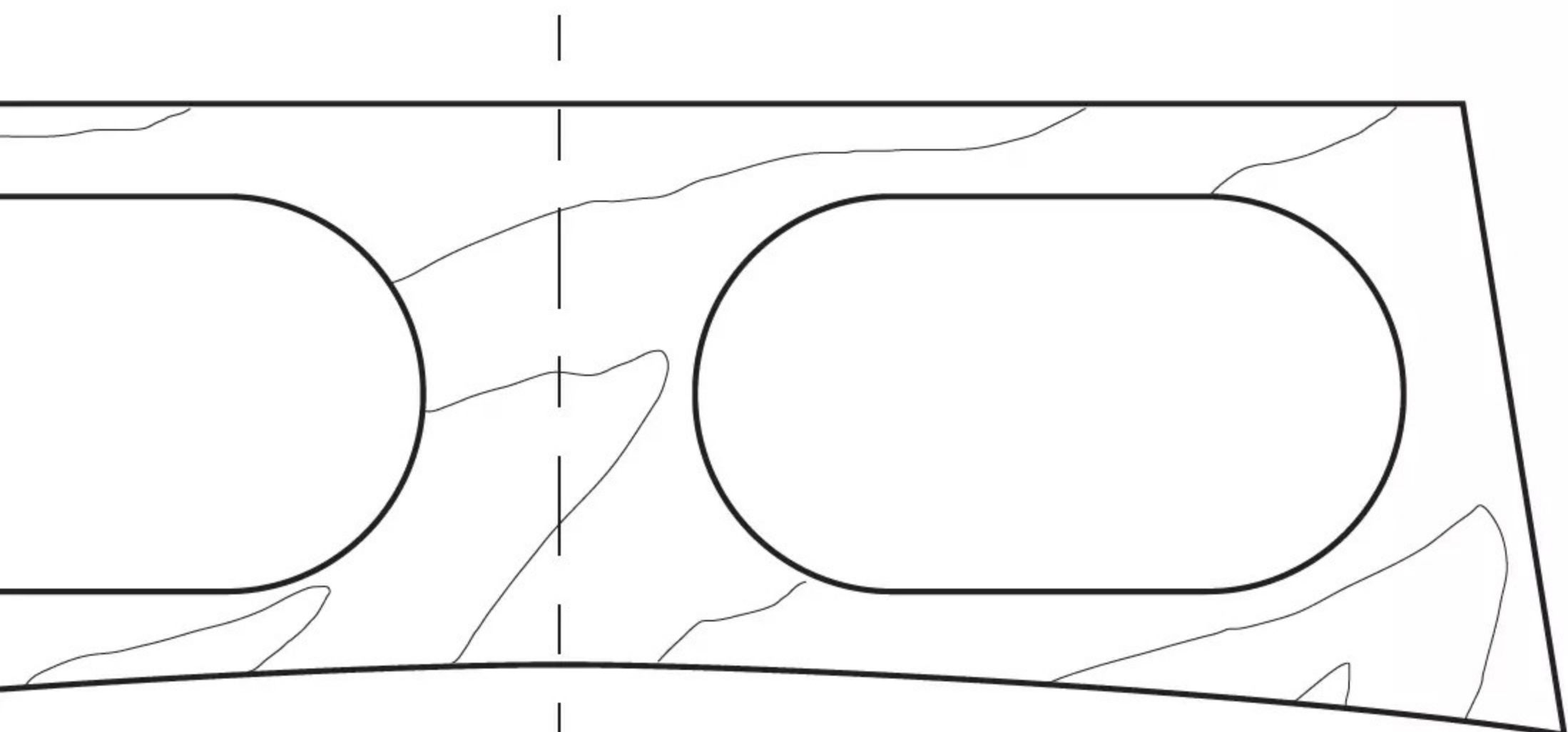
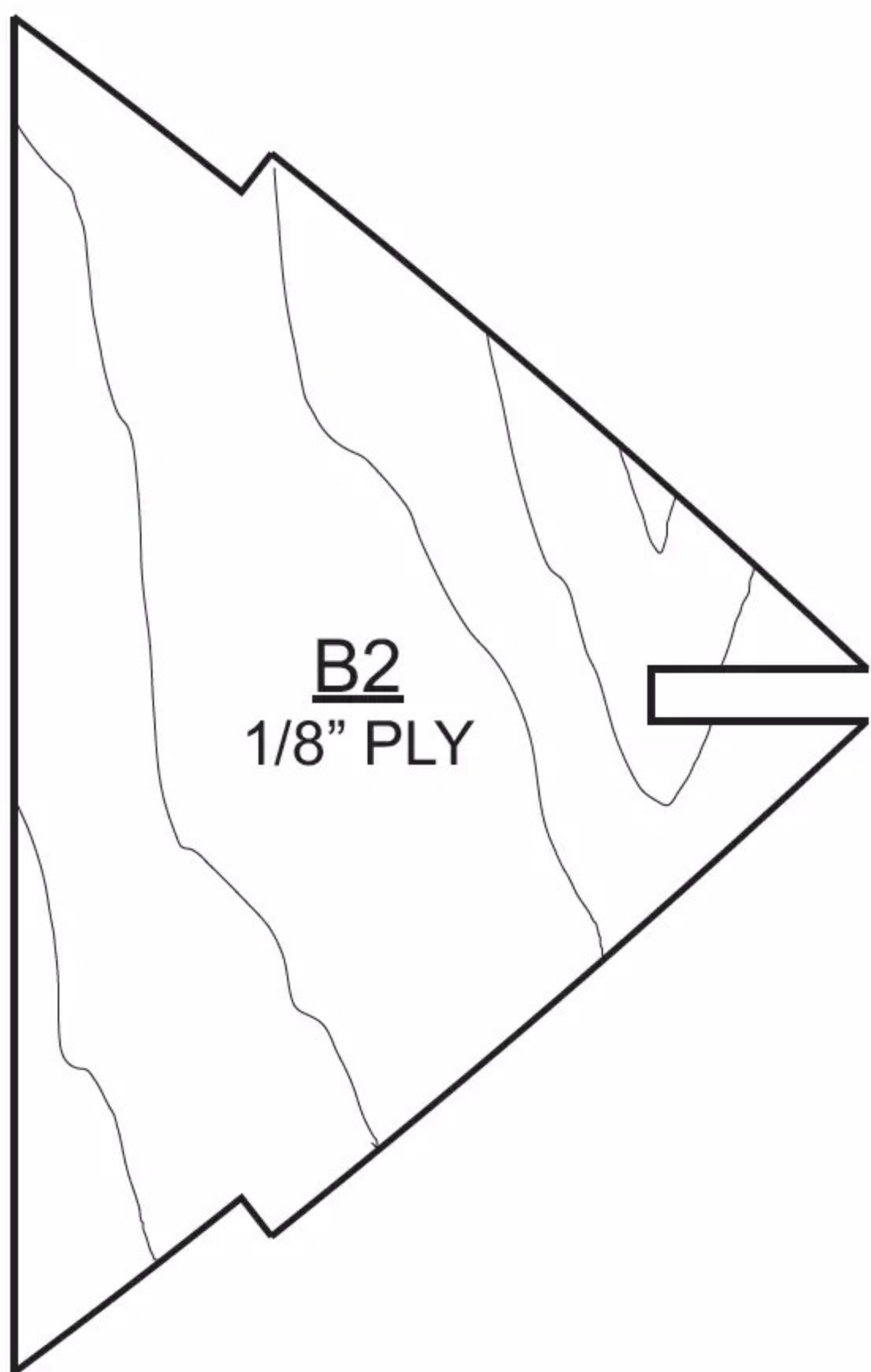
PLAN No: MM2182

No. OF SHEETS: 1 OF 2

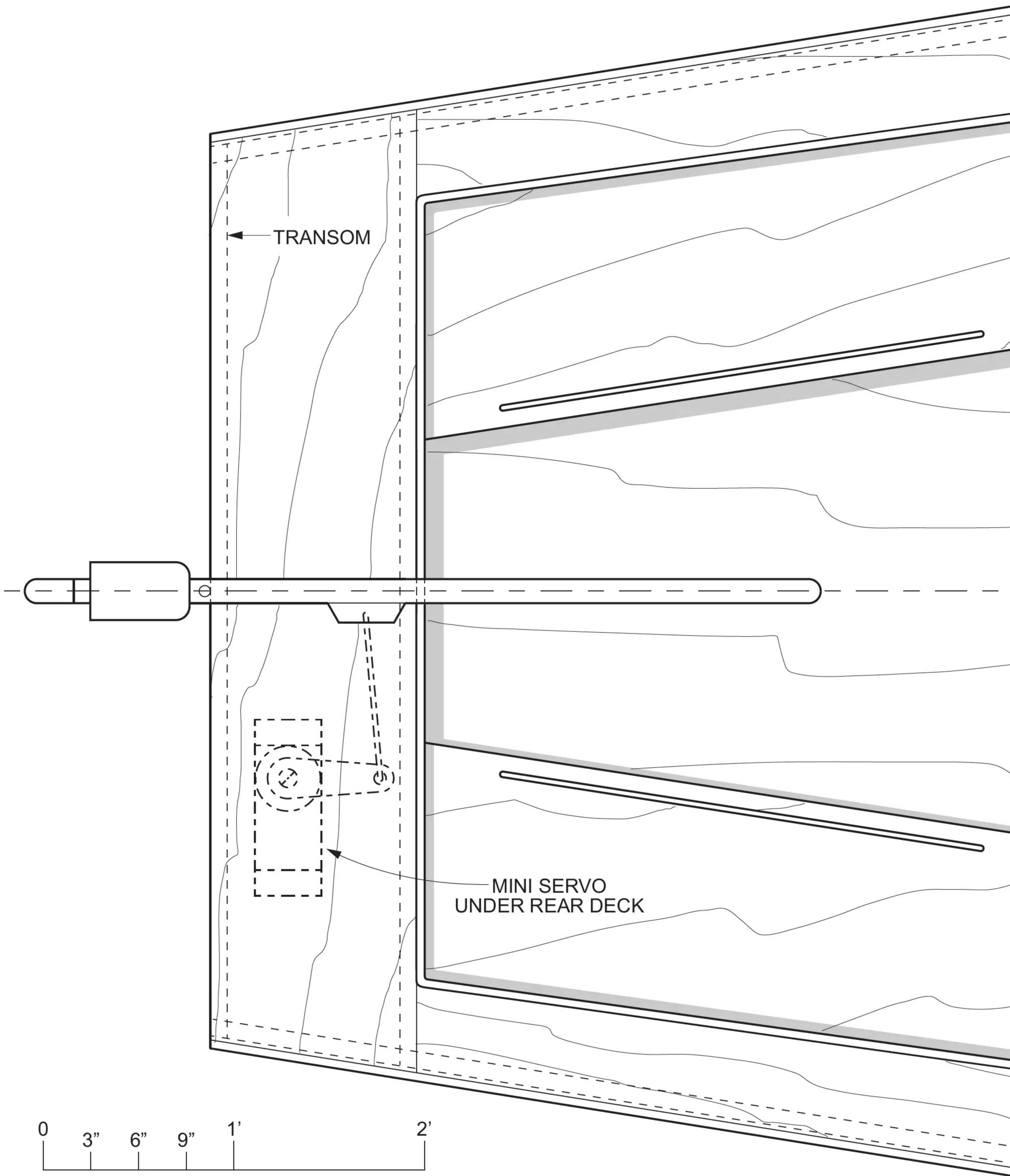
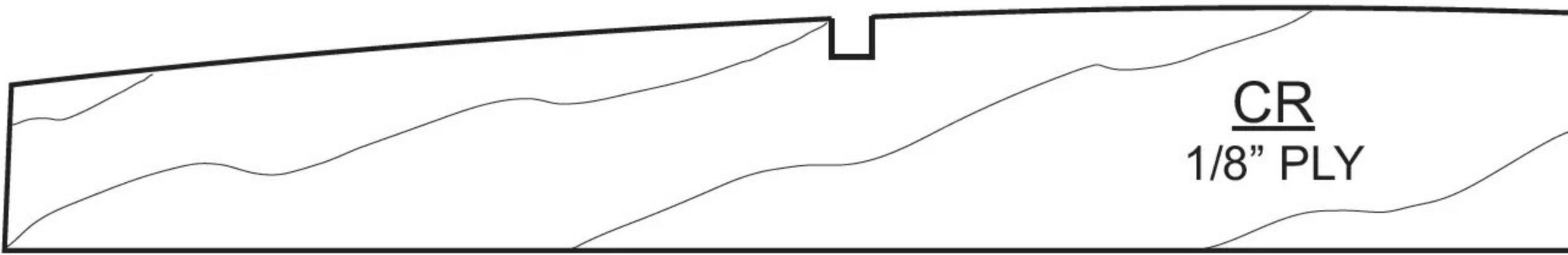
First published in
Model Boats September 2025

PLEASE VISIT WWW.SARIKHOBBIES.COM TO VIEW ALL AVAILABLE PLANS

PLEASE NOTE, THIS PLAN IS COPYRIGHT OF KELSEY MEDIA.
NO PART OF THIS PLAN MY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS,
ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR ANY INFORMATION STORAGE
RETRIEVAL SYSTEM WITHOUT PRIOR PERMISSION IN WRITING FROM THE PUBLISHER.



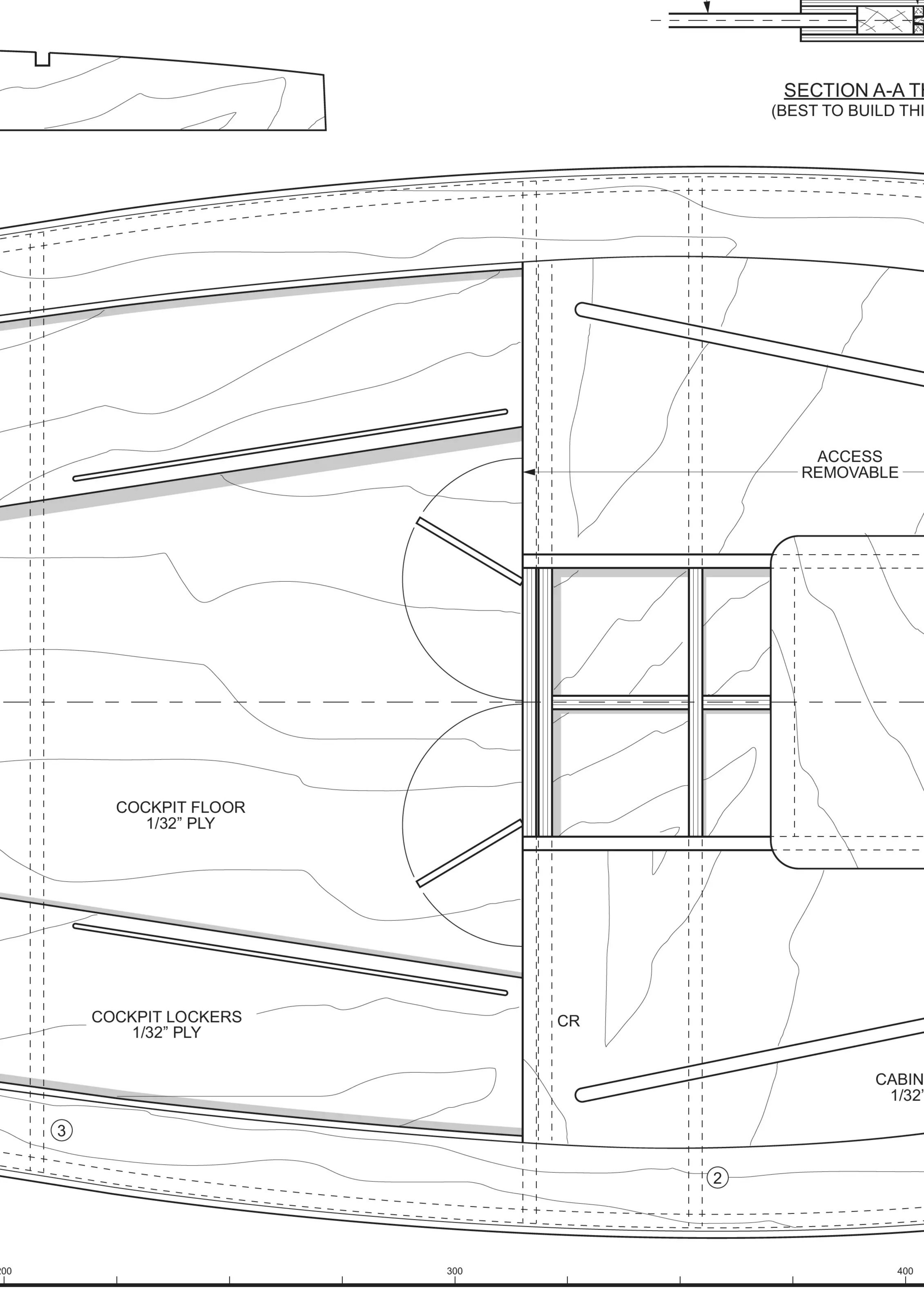
CABIN FRONT



0 3" 6" 9" 1' 2'

MODEL SCALE 1 3/8" TO THE FOOT

SECTION A-A THRU
(BEST TO BUILD THIS WAY)



COCKPIT FLOOR
1/32" PLY

COCKPIT LOCKERS
1/32" PLY

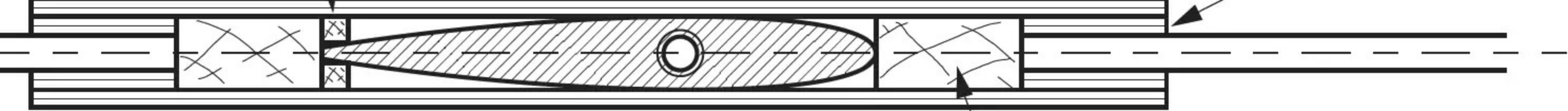
ACCESS
REMOVABLE

CR

CABIN
1/32"

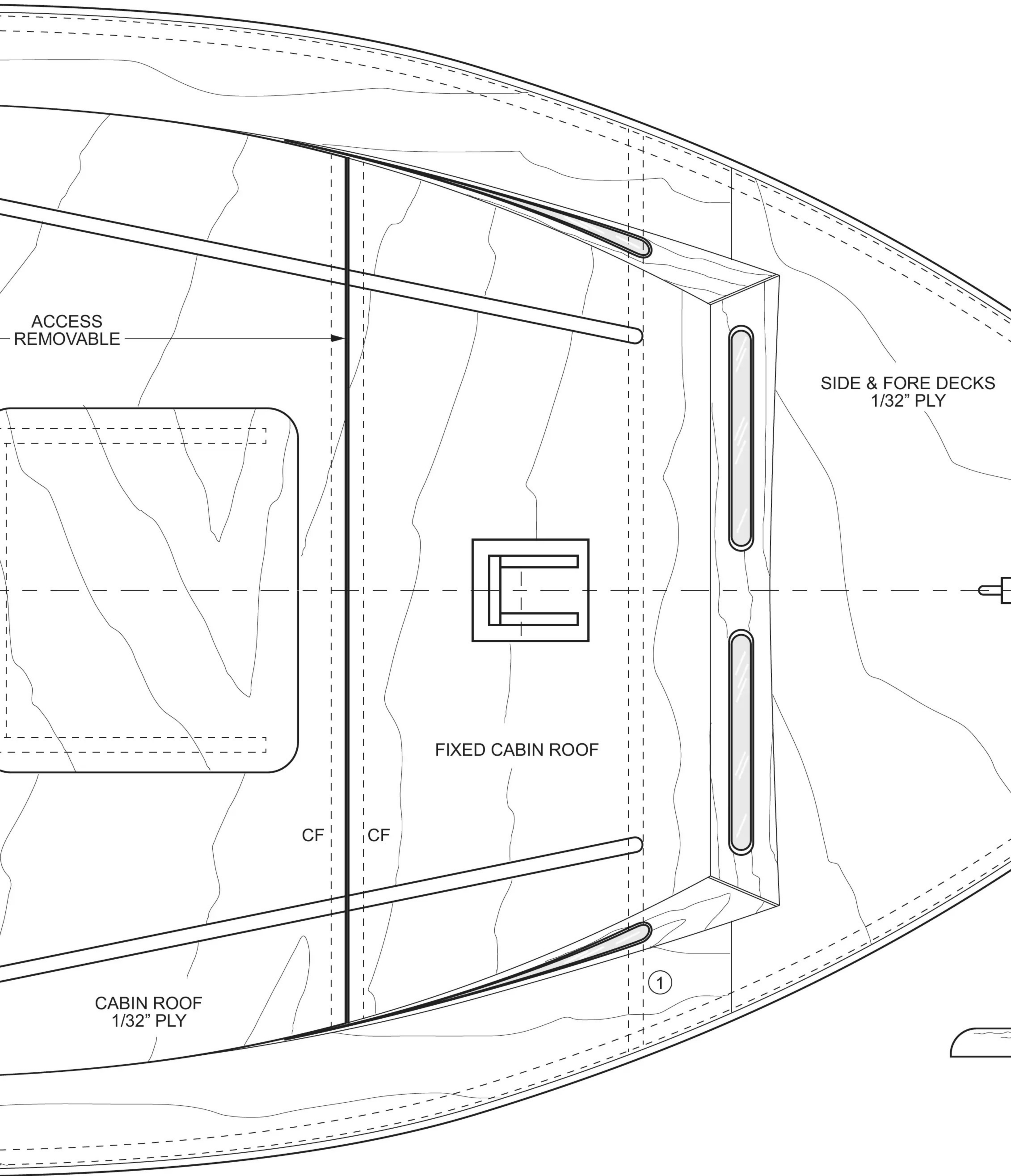
3

2



1/4" x 1/2" SPRUCE
OR PLY INFILL

SECTION A-A THROUGH KEEL BOX
(BEST TO BUILD THIS BOX AROUND THE FIN)



ACCESS
REMOVABLE

SIDE & FORE DECKS
1/32" PLY

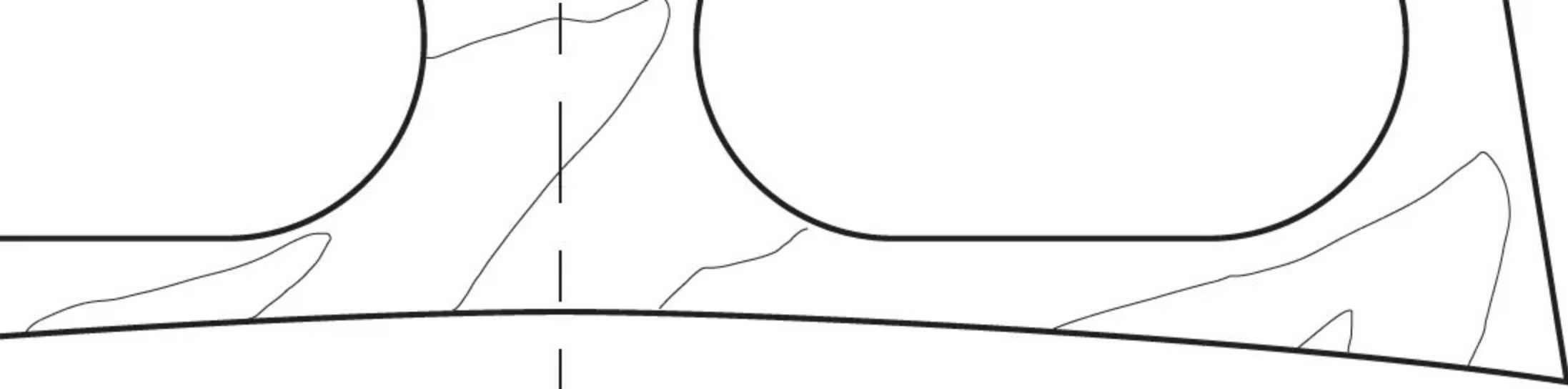
FIXED CABIN ROOF

CF

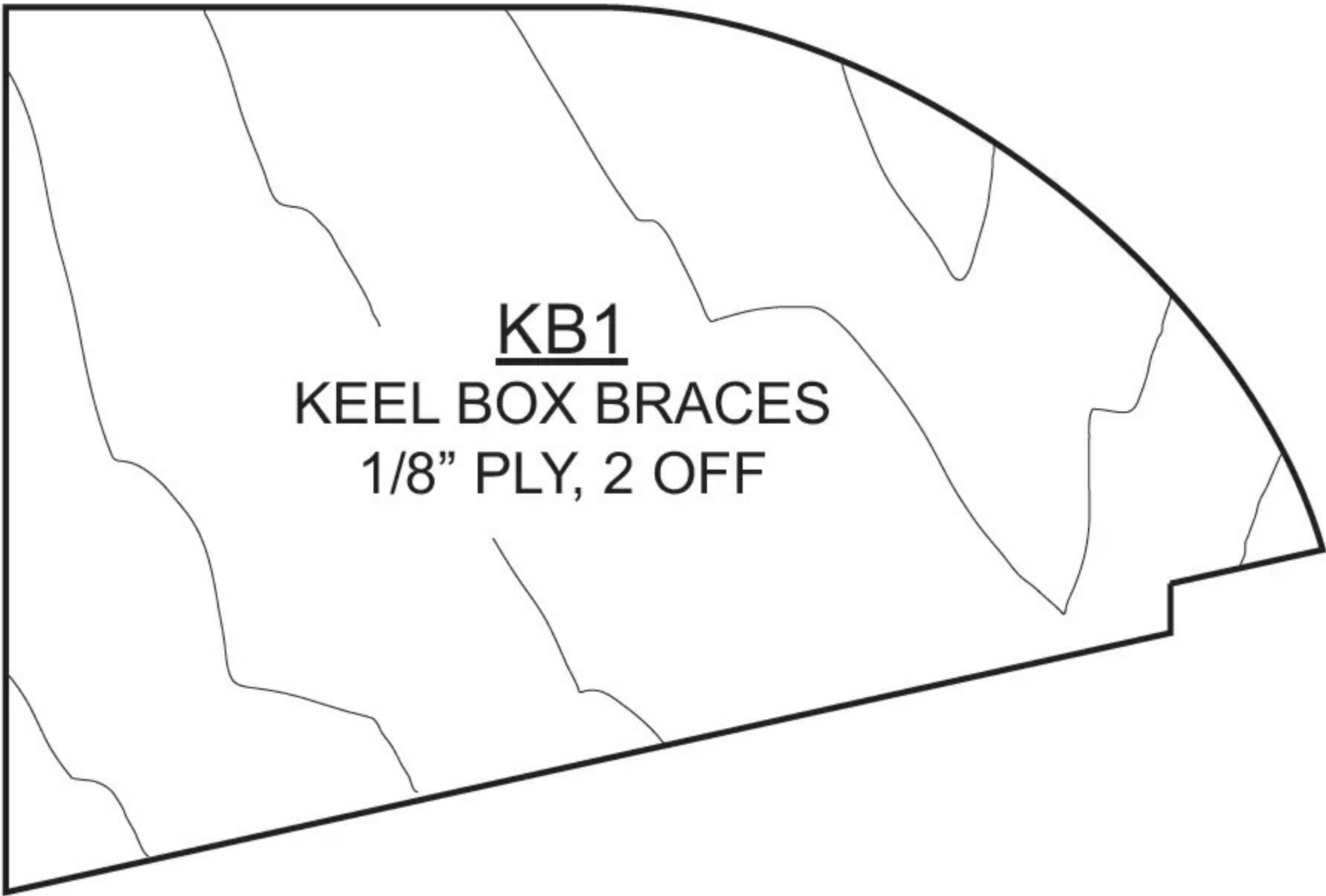
CF

CABIN ROOF
1/32" PLY

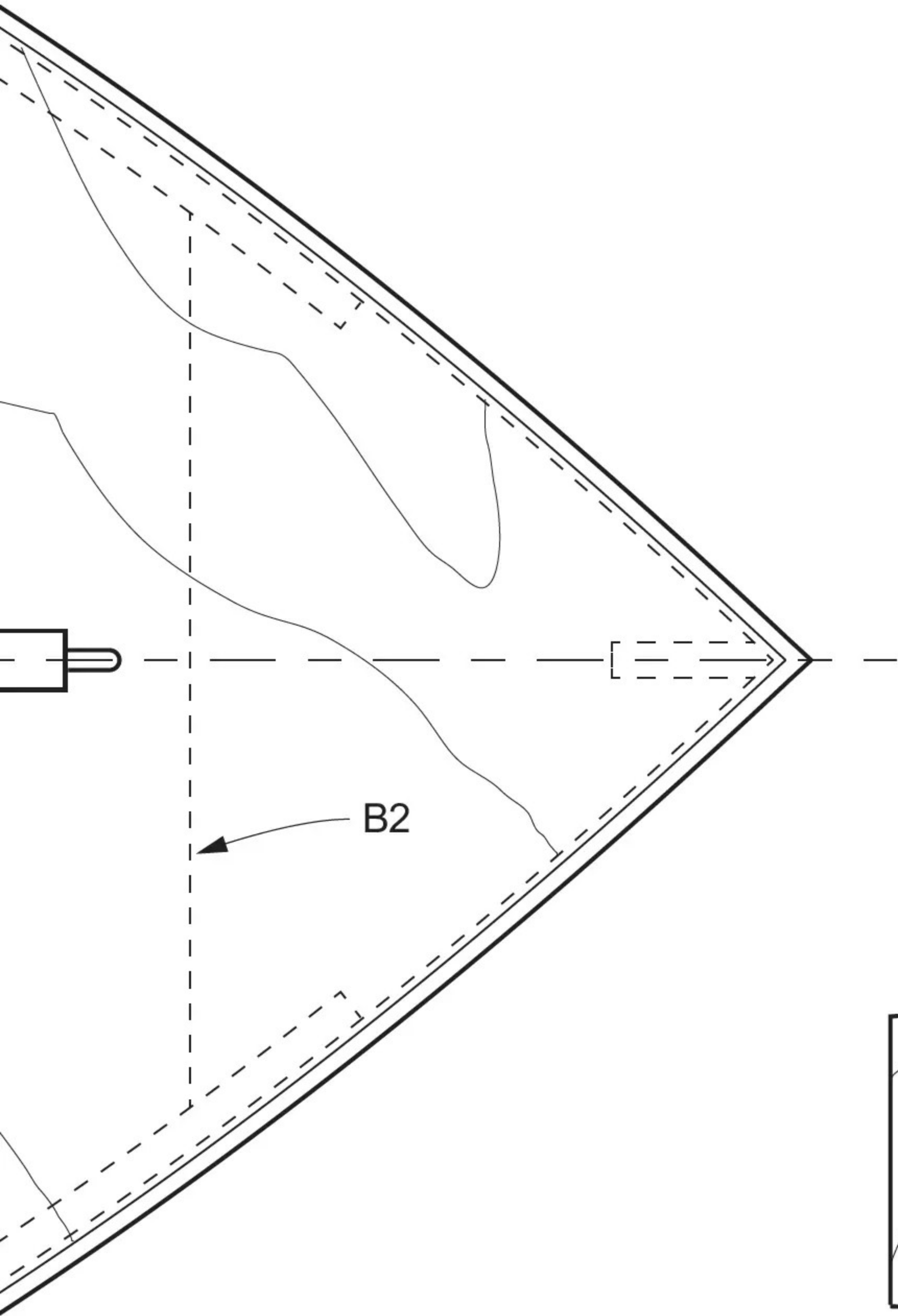
1



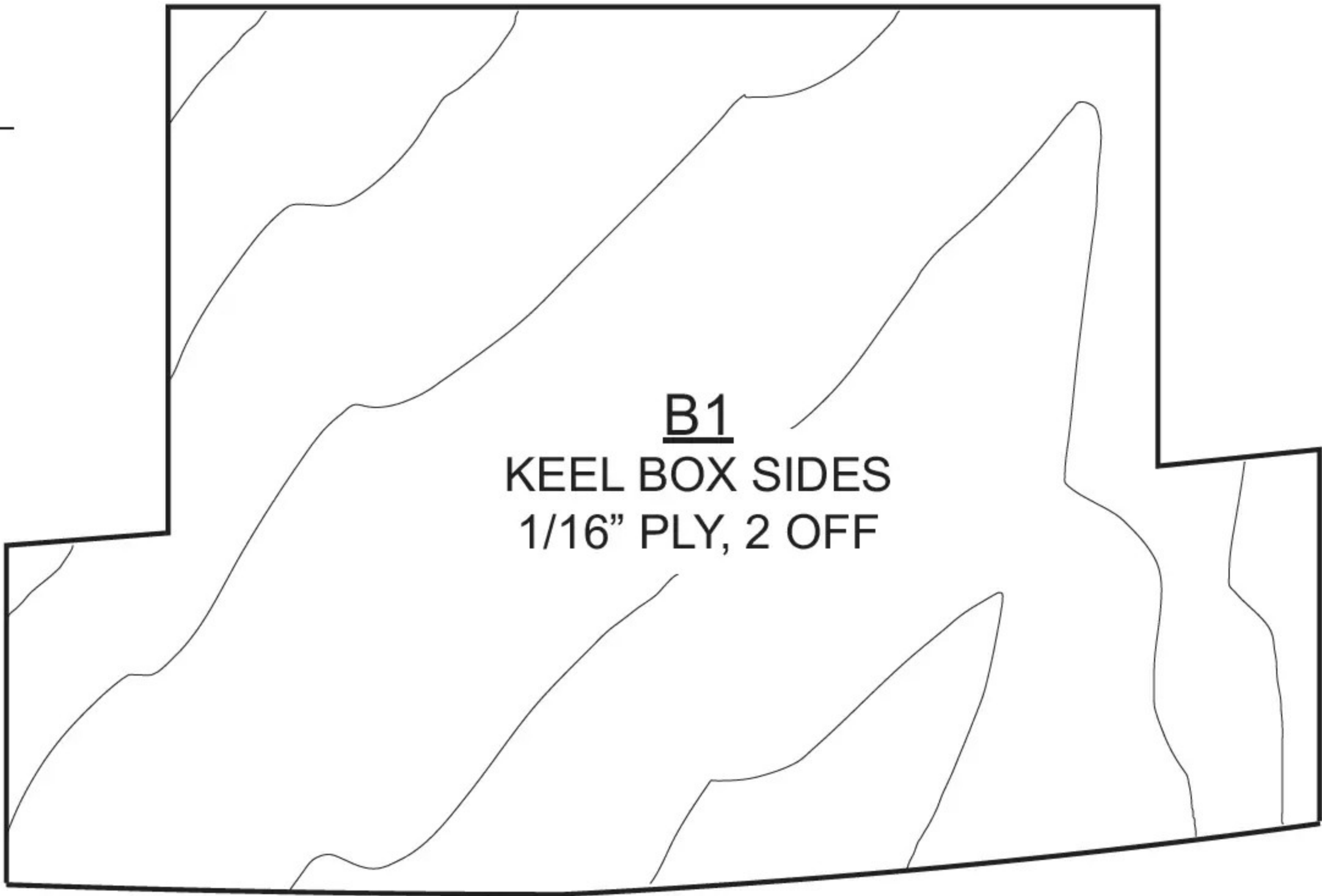
CABIN FRONT
1/16" PLY OR MAHOGANY



KB1
KEEL BOX BRACES
1/8" PLY, 2 OFF



B2



B1
KEEL BOX SIDES
1/16" PLY, 2 OFF

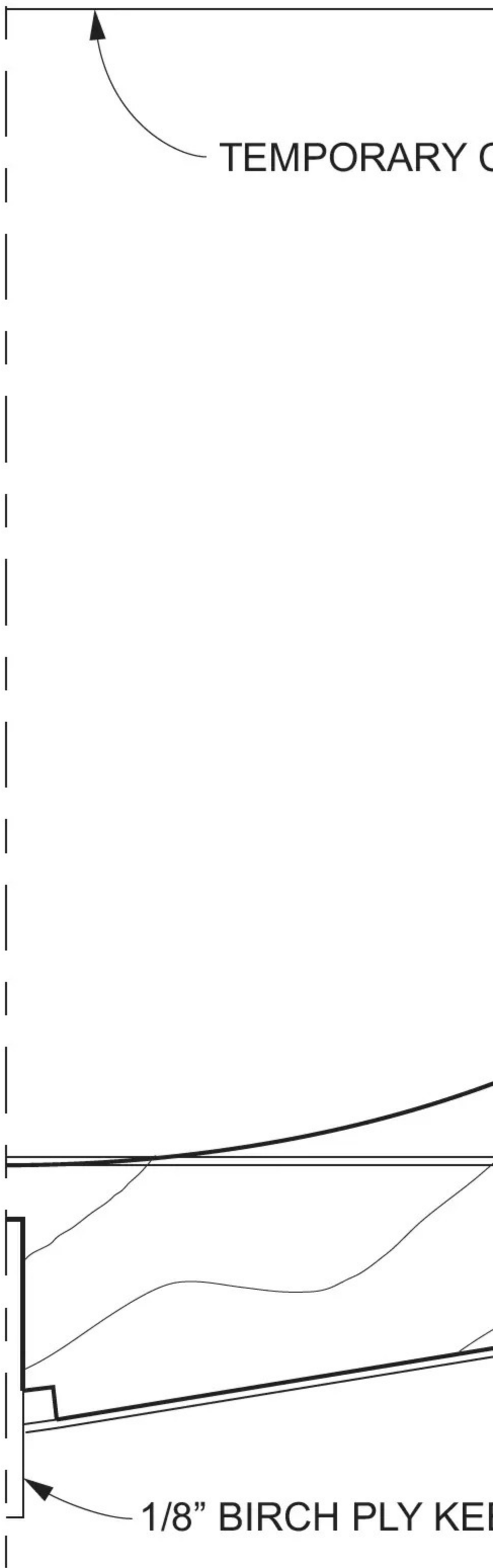
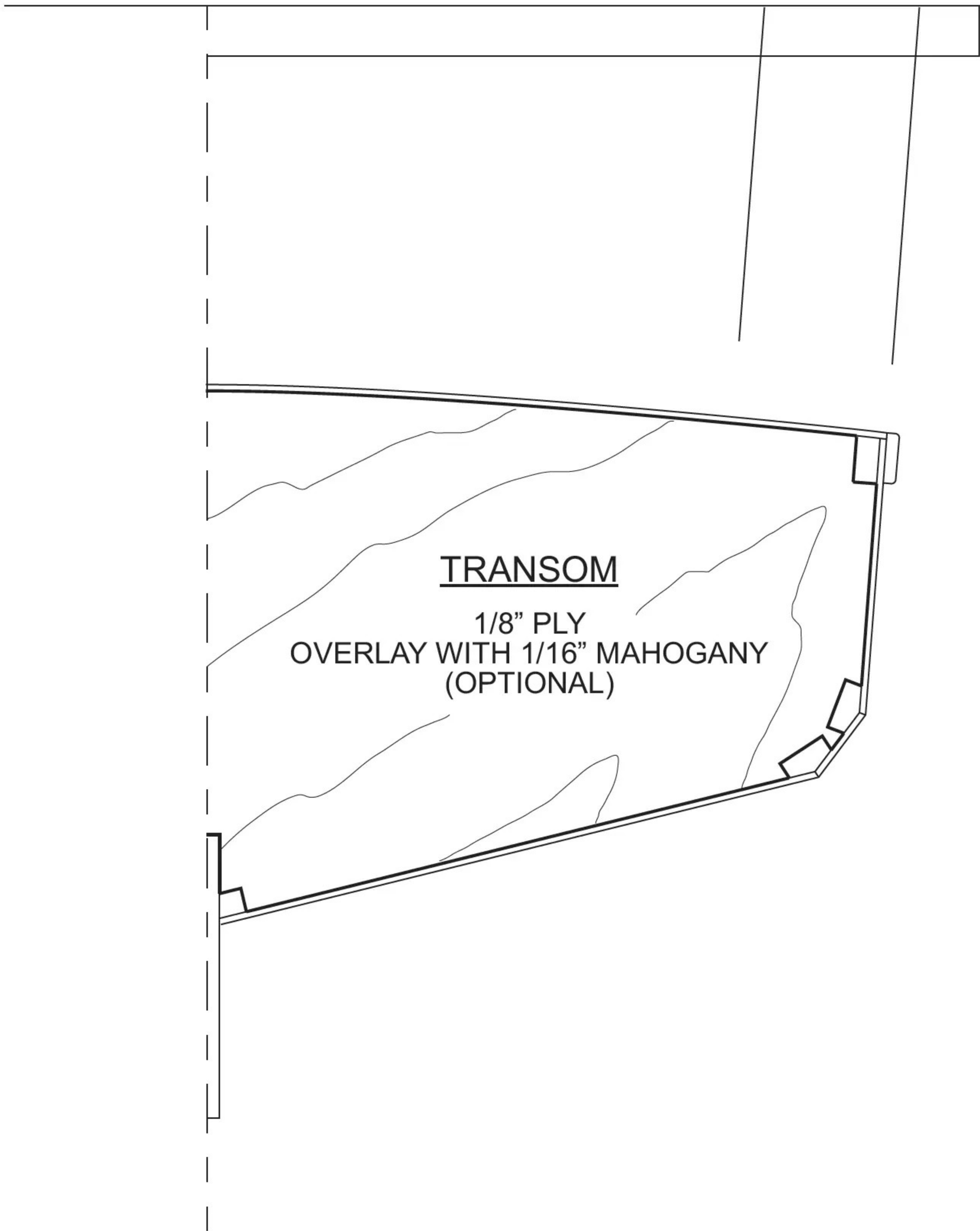


CABIN GRAB RAILS
1/4" x 1/8" PLY OR MAHOGANY

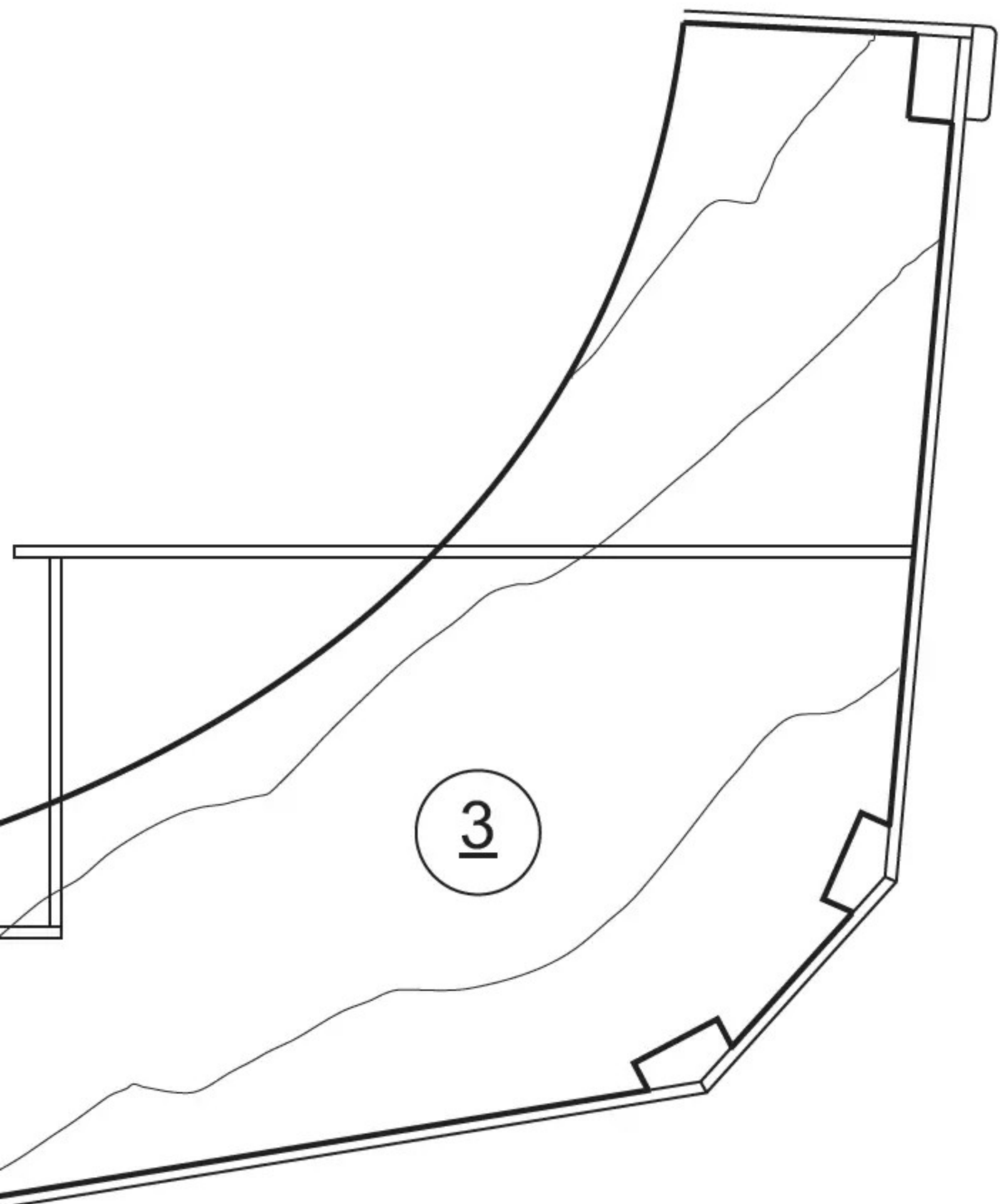
500

400

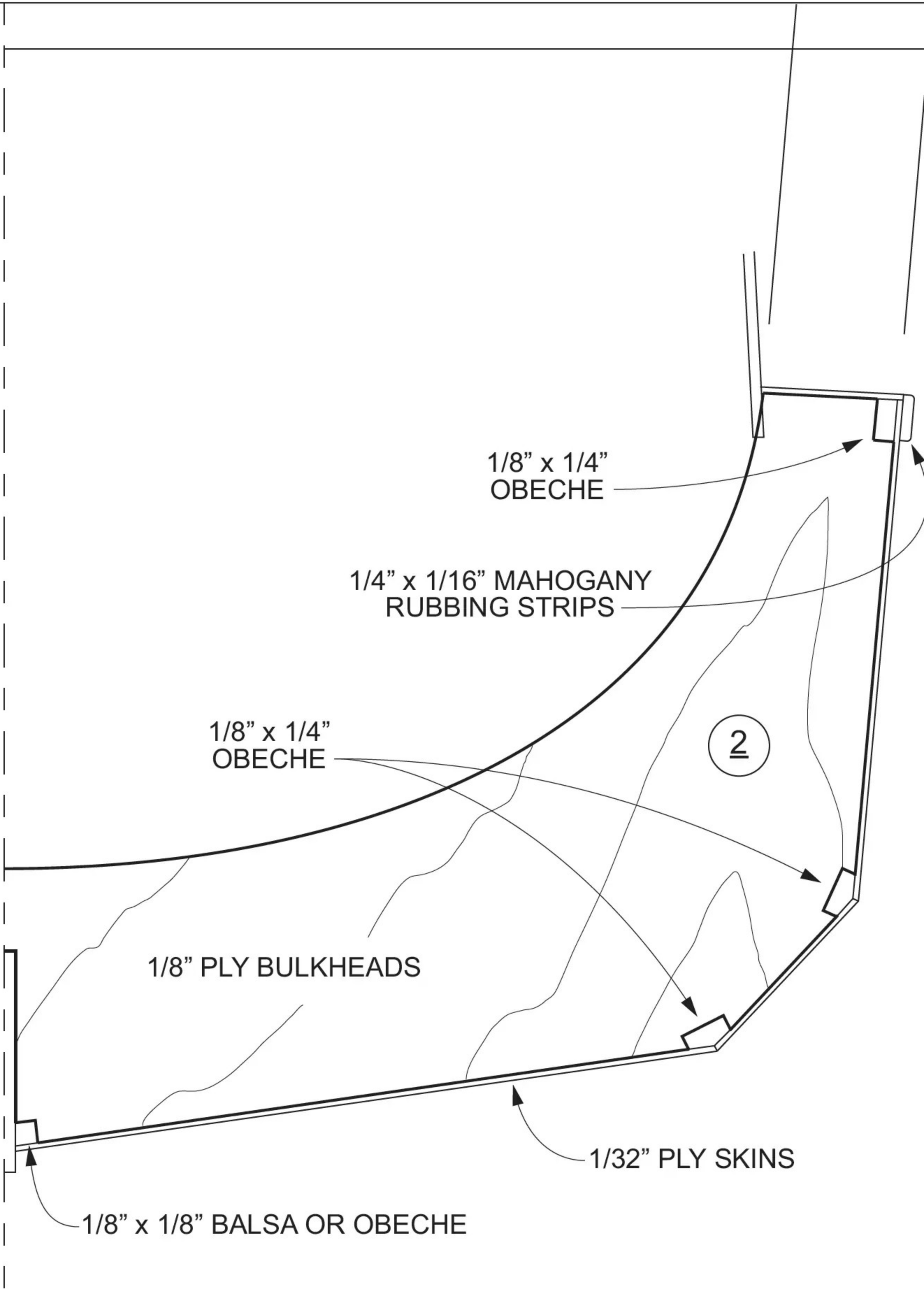
300



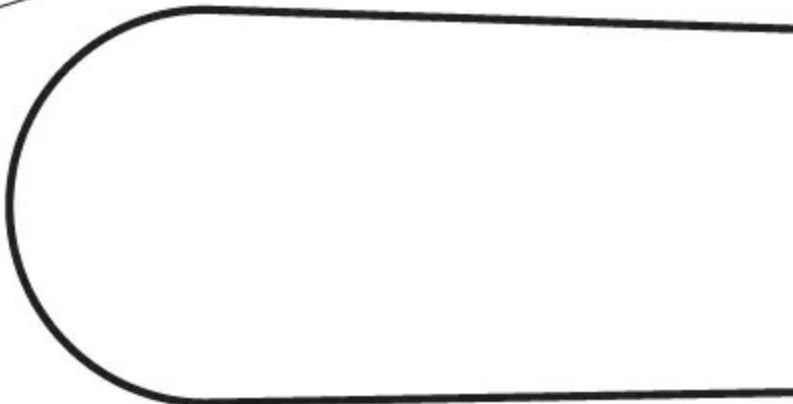
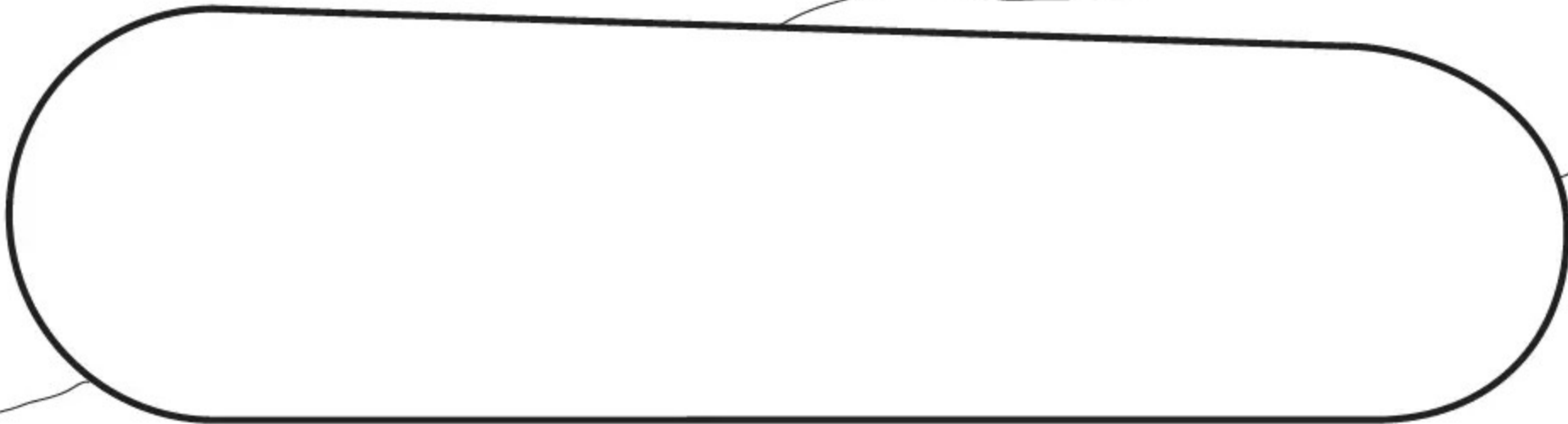
CROSS BEAMS



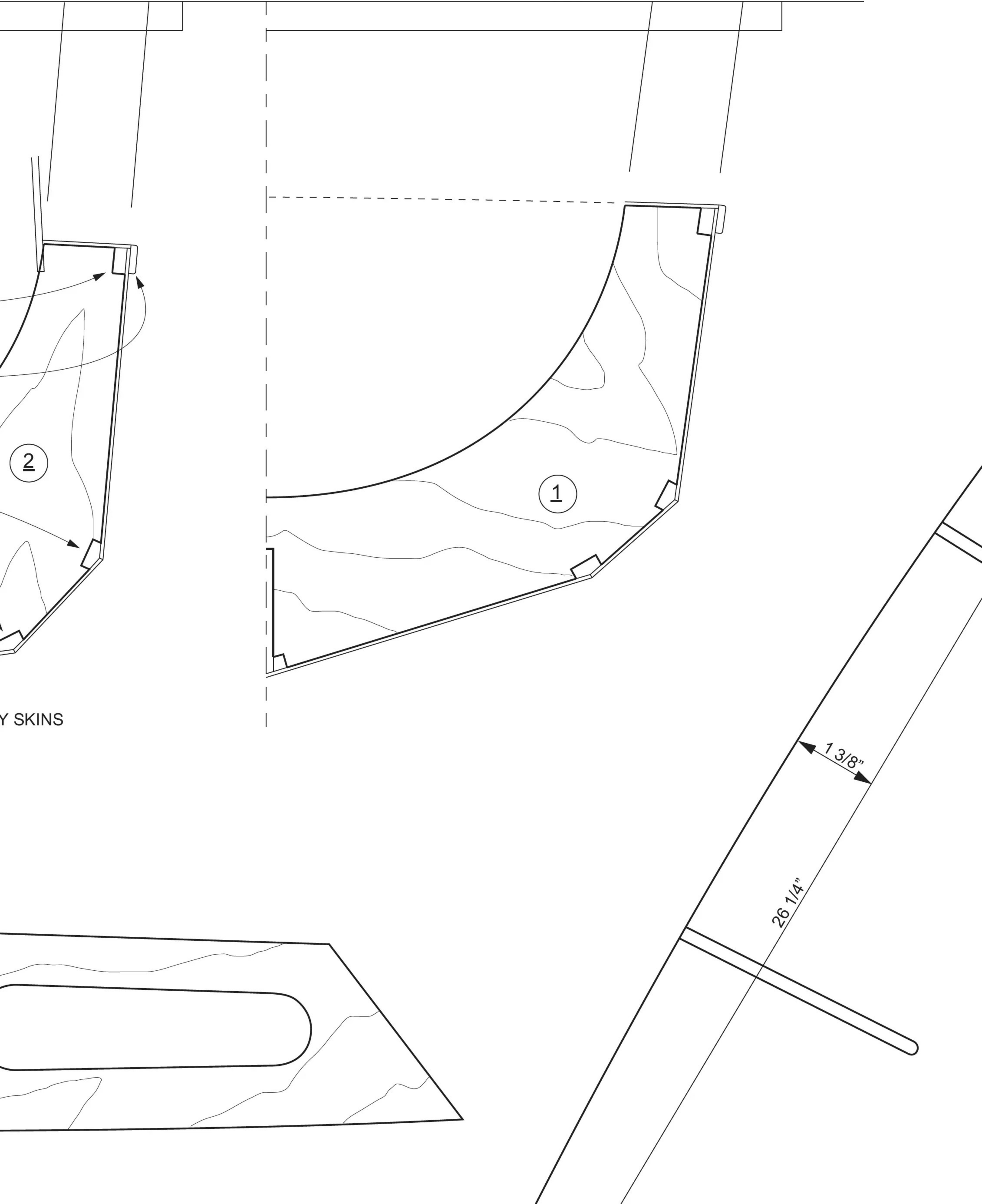
EL



CABIN SIDES
1/16" PLY OR MAHOGANY, 2 OFF



BUILDING BOARD



Model Boats

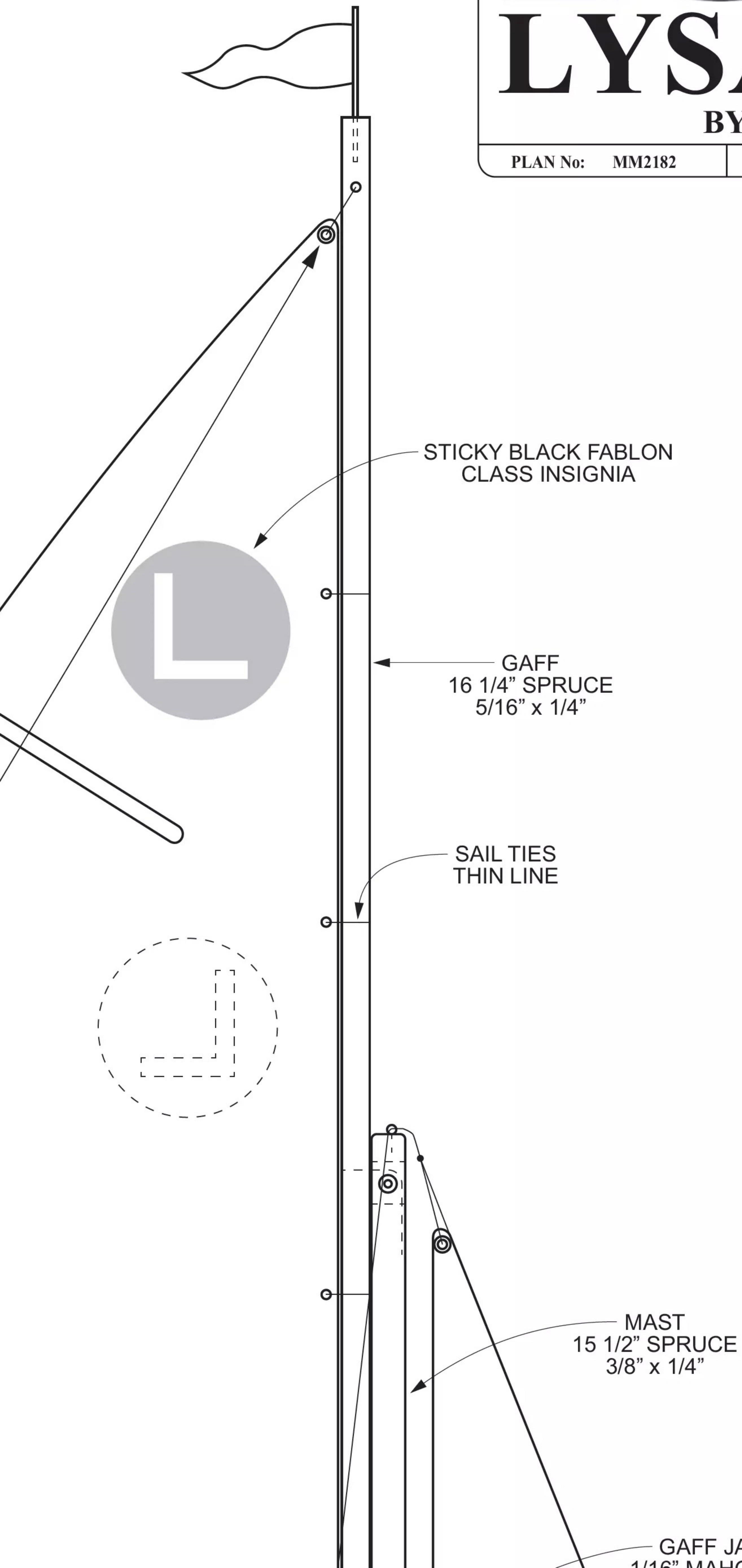
LYSANDER

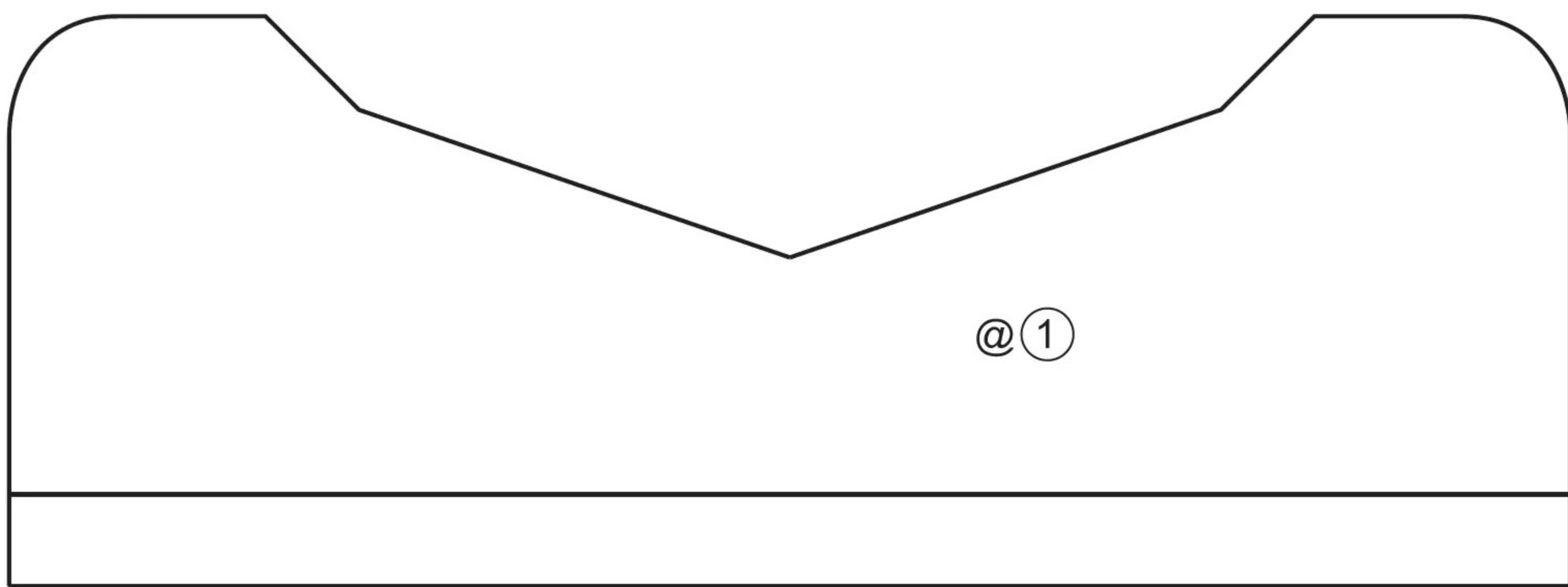
BY RAY WOOD

PLAN No: MM2182

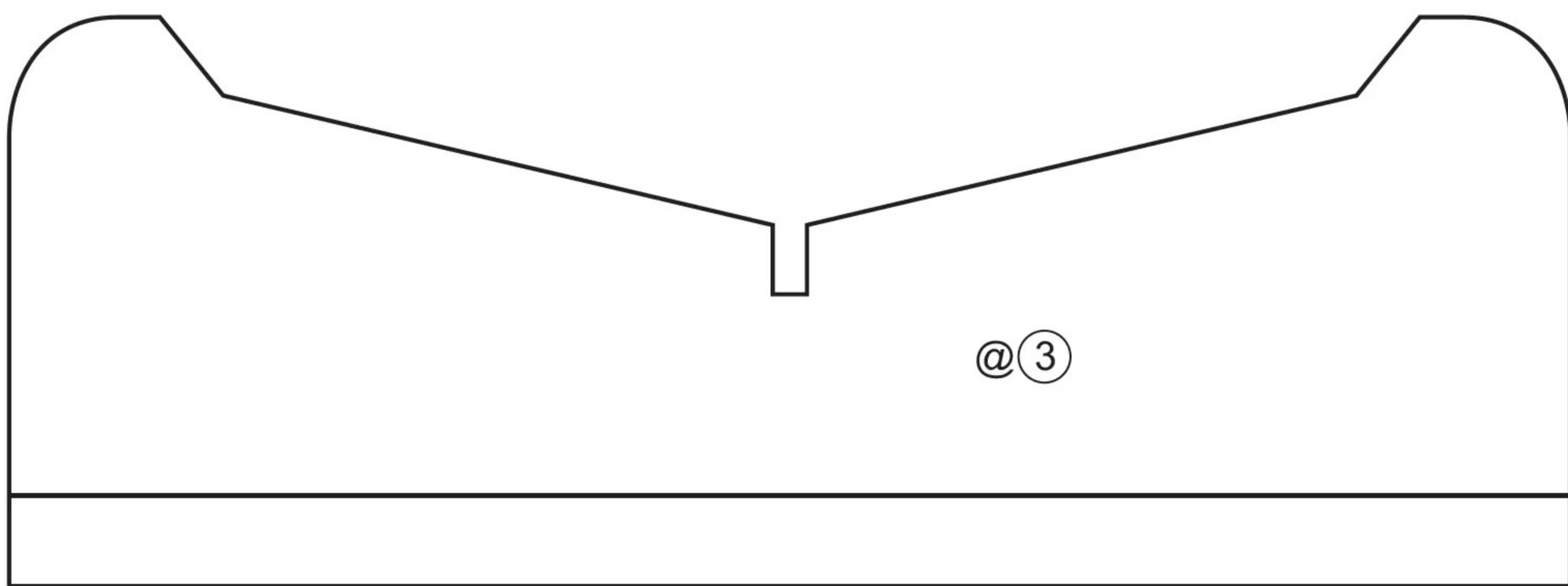
No. OF SHEETS: 2 OF 2

First published in
Model Boats September 2025





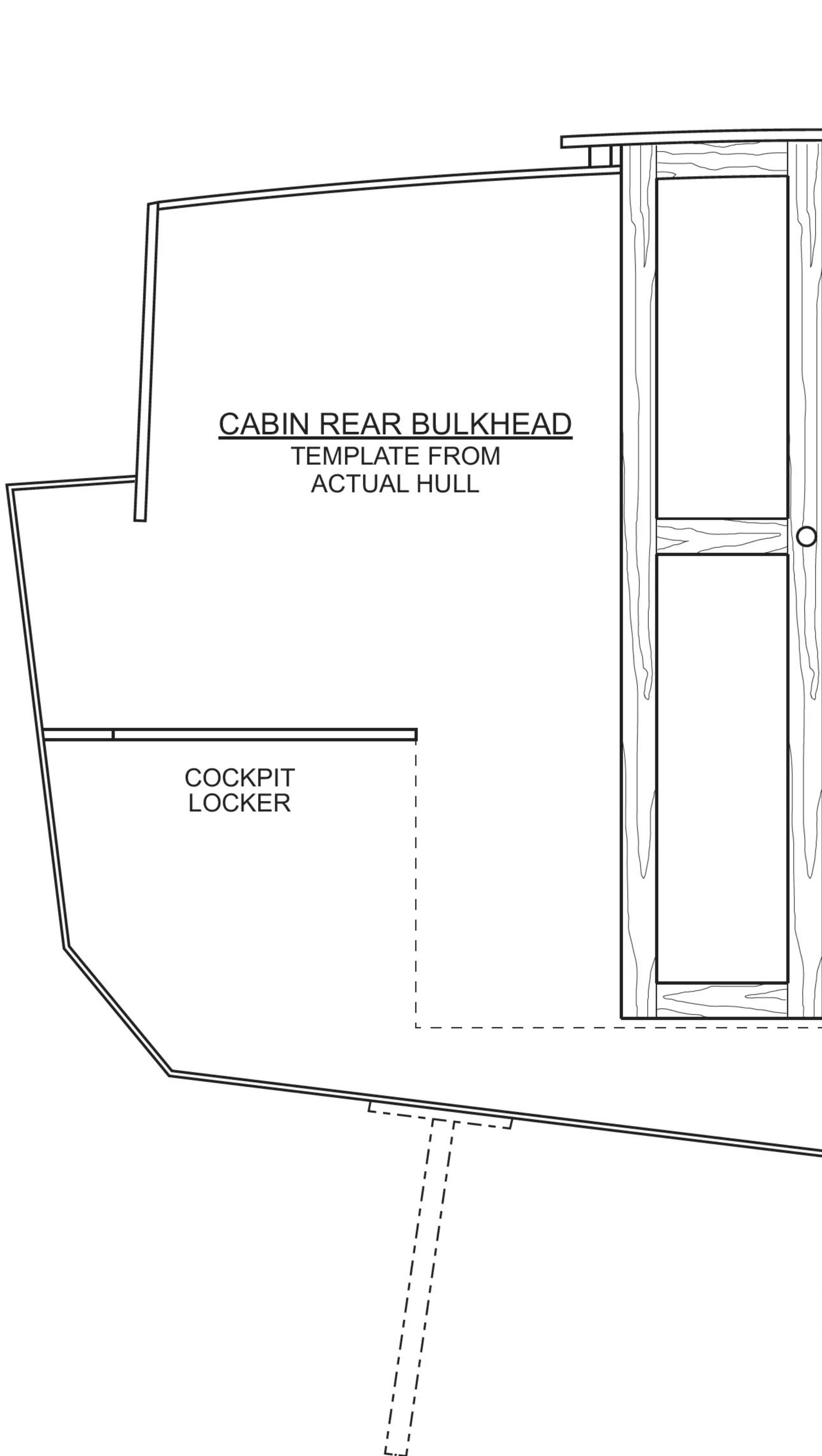
CONSTRUCTION STAND
NOT TO SCALE - BASE DIMENSIONS 9" x 12"
PLY, MDF OR SIMILAR



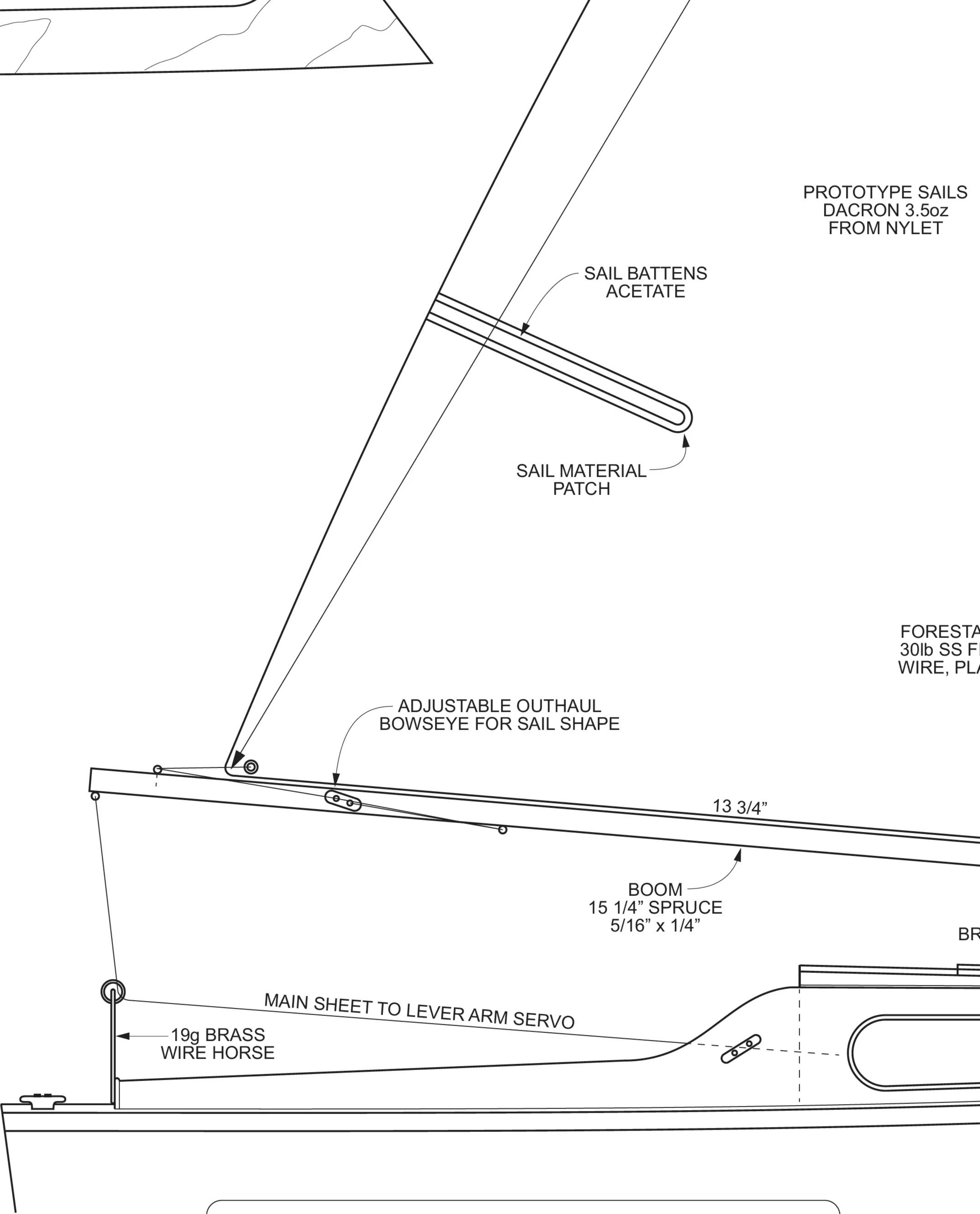
PLEASE VISIT WWW.SARIKHOBBIIES.COM TO VIEW ALL AVAILABLE PLANS

PLEASE NOTE, THIS PLAN IS COPYRIGHT OF KELSEY MEDIA.
NO PART OF THIS PLAN MY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS,
ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR ANY INFORMATION STORAGE
RETRIEVAL SYSTEM WITHOUT PRIOR PERMISSION IN WRITING FROM THE PUBLISHER.



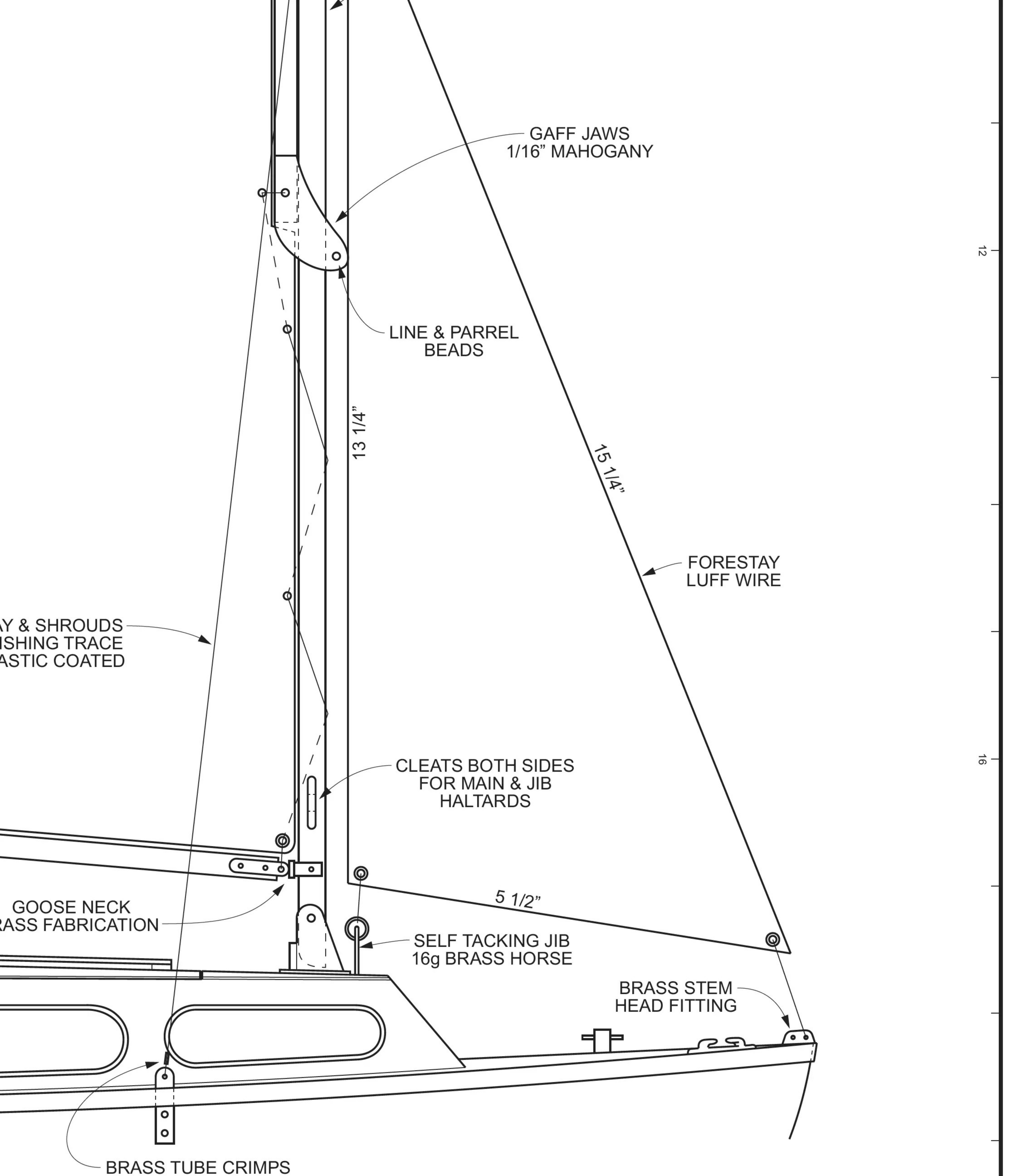


PROTOTYPE SAILS
DACRON 3.5oz
FROM NYLET



FORESTA
30lb SS F
WIRE, PLA

NOTE: SAIL ARRANGEMENT DRAWN AT REDUCED SIZE
ENLARGE BY 167% FOR FULL SIZE



PROTOTYPE SAILS BY TIM ROWE, MALLORCA