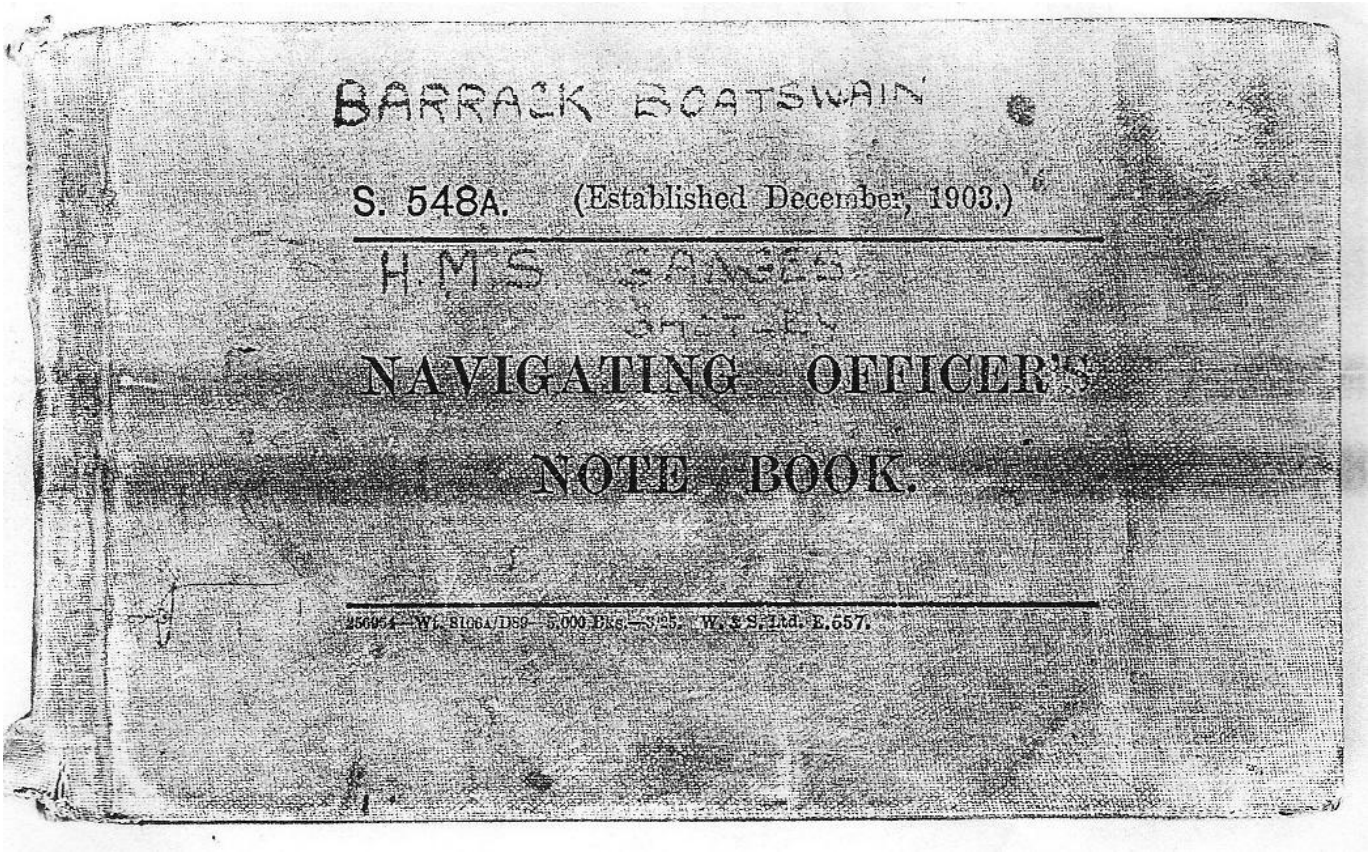
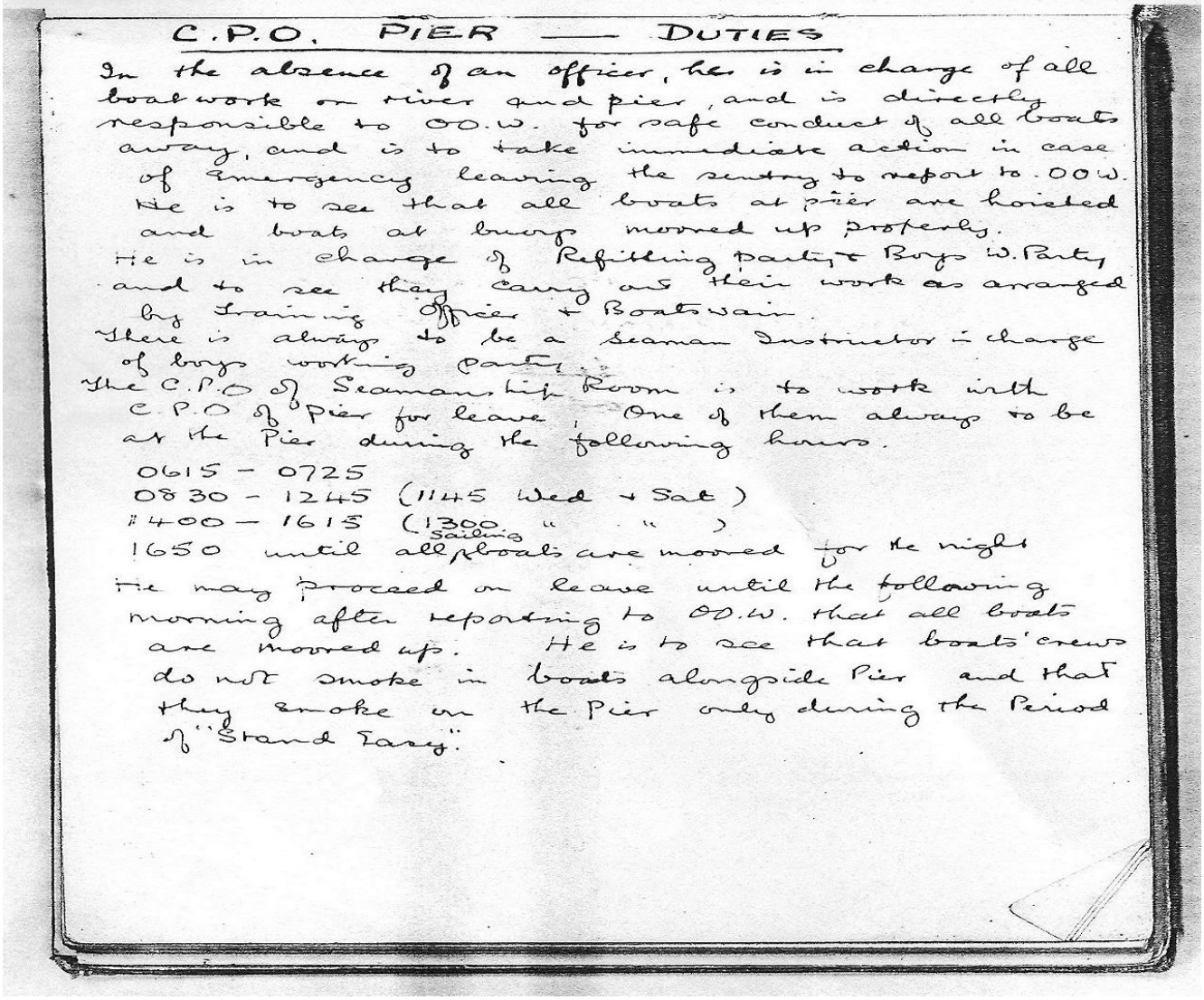


Front Page

Self explanatory, Barrack Boatswain HMS Ganges Shotley



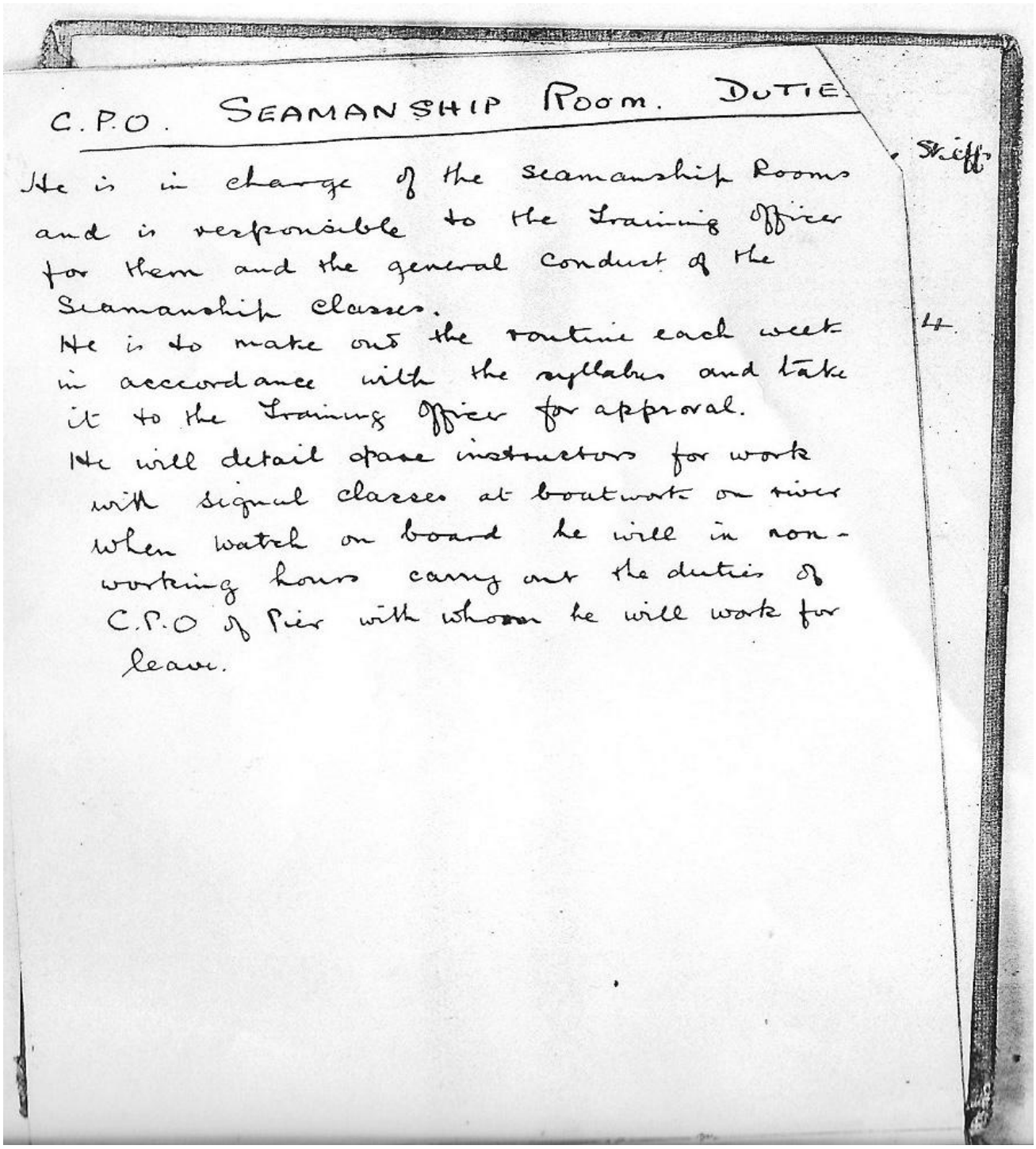
C.P.O. PIER — DUTIES

In the absence of an officer, he is in charge of all boat work on river and pier, and is directly responsible to OO.W. for safe conduct of all boats away, and is to take immediate action in case of emergency leaving the senior to report to OOW. He is to see that all boats at pier are hoisted and boats at buoys moored up properly.
He is in charge of Refilling party & Boys W. Party and to see they carry out their work as arranged by Training Officer & Boatswain.
There is always to be a Seaman Instructor in charge of boys working party.
The C.P.O of Seamanship Room is to work with C.P.O of Pier for leave, One of them always to be at the Pier during the following hours.

0615 - 0725
0830 - 1245 (1145 Wed + Sat)
1400 - 1615 (1300 Sailing " ")
1650 until all boats are moored for the night

He may proceed on leave until the following morning after reporting to OO.W. that all boats are moored up. He is to see that boats' crews do not smoke in boats alongside Pier and that they smoke on the Pier only during the Period of "Stand Easy".

Page 2. Self explanatory. Rigging Party L.Sea King and AB Stonham



C.P.O. SEAMANSHIP ROOM. DUTIES

He is in charge of the seamanship Rooms and is responsible to the Training Officer for them and the general conduct of the Seamanship classes.

He is to make out the routine each week in accordance with the syllabus and take it to the Training Officer for approval.

He will detail spare instructors for work with signal classes at boatwork on river when watch on board he will in non-working hours carry out the duties of C.P.O of Pier with whom he will work for leave.

Skiffs

4.

Page 3.Self eexplanatory.

all B.M.L. screens for canvassing

Canvas.

4 Screens H.G. Battery

1 " Fog Control Battery

Loader Cover — 1.

Gun Covers 10 = No.

Sig Locker 5 = No.

~~Rostrum~~ Bridge Screen 1 = No

Band Stand. Screen.

Timber Rack (outside Pavilion) - 1 = No.

Cycle Screens. 3 = No.

Lifebuoy Cover

Sun Screens. 4 = No. Shooting Battery

Screens 2 = No. Ammunition Room

Boxing Drugget for (Ring) 2 = No.

Fire Escape.

18 Covered way screens = Shop.

Screen for Fire Cart Stowage behind guard house

Page 4. Every piece of canvas in the camp is itemised.

Pier :— Mast + Sail Store

Bamboo Stretcher for accidents

sails mast

30 ft Gig lug .... 4 Sets
32 ft .. .. [illegible] Sets
34 ft Sloop .. 1 ..
~~Sloop Staysail + Trysail for Sloops ft~~ (1 spare)
Storm sails + Staysails for Sloops — 16 Sets

Skiff - Spritsail rig - 1 Set
Whalers, complete Set - 1.
S, Trysails whaler 5.

Galleys new covers
Several Spare Sail covers,

30 ft + 32 ft covers. — 5
whalers covers — 2
Skiff covers — 2

No 16 Cutters Sails mast in Dkyd
No 5 .. .. in Dkyd

Masts — 2 — 30 ft } Sloops
2 — 32 ft

Masts etc. for Spritsail [illegible] 2 Sets Complete
13½ Dinghy Set Complete
Galleys Jibs Complete

> Spare Gear for
> D + E Cutter, [illegible]
> Stretchers etc +
> heavy [illegible] spars
> on Deck [illegible] hand side

BOATS.

		Weight
No 1 to 11.	30ft. Dip Lug.	2 ton 5 cwt
12 & 14	32ft " "	
15, 16, 17.	34ft " "	2 ton 8 cwt
"A"	30ft Sloop	
"B", "C"	32ft "	
"D" "E"	32ft "	
30ft. Gig		1 ton 4 cwt
No 1 to 5	27ft Whalers.	" 1 ton 5 cwt
No. ~~1 & 2~~ 3 all	16ft. Skiffs ~~13½ ft Skiff~~	
No 1 + 2.	36ft. Sailing Pinnace	5 ton 10 cwt
No 1.	Launch	8 ton.

Harbour Launches. 1 + No.

Large Crane Working load 3 ton

Small Crane " " 2 tons

CLEANING BOATS.

	Cutter	Pinnaces	Whalers	Skiff
Collingwood	1 - 11	1	1	
Blake	2 - 12	2	2	
Rodney	3 - 10, E.		3	
Grenville	4 - 14		4	4
Hawke	5. 15, A		5	
Anson	6. 16, B			
Drake	7. 17. C			
Benbow	8, 9, D.			

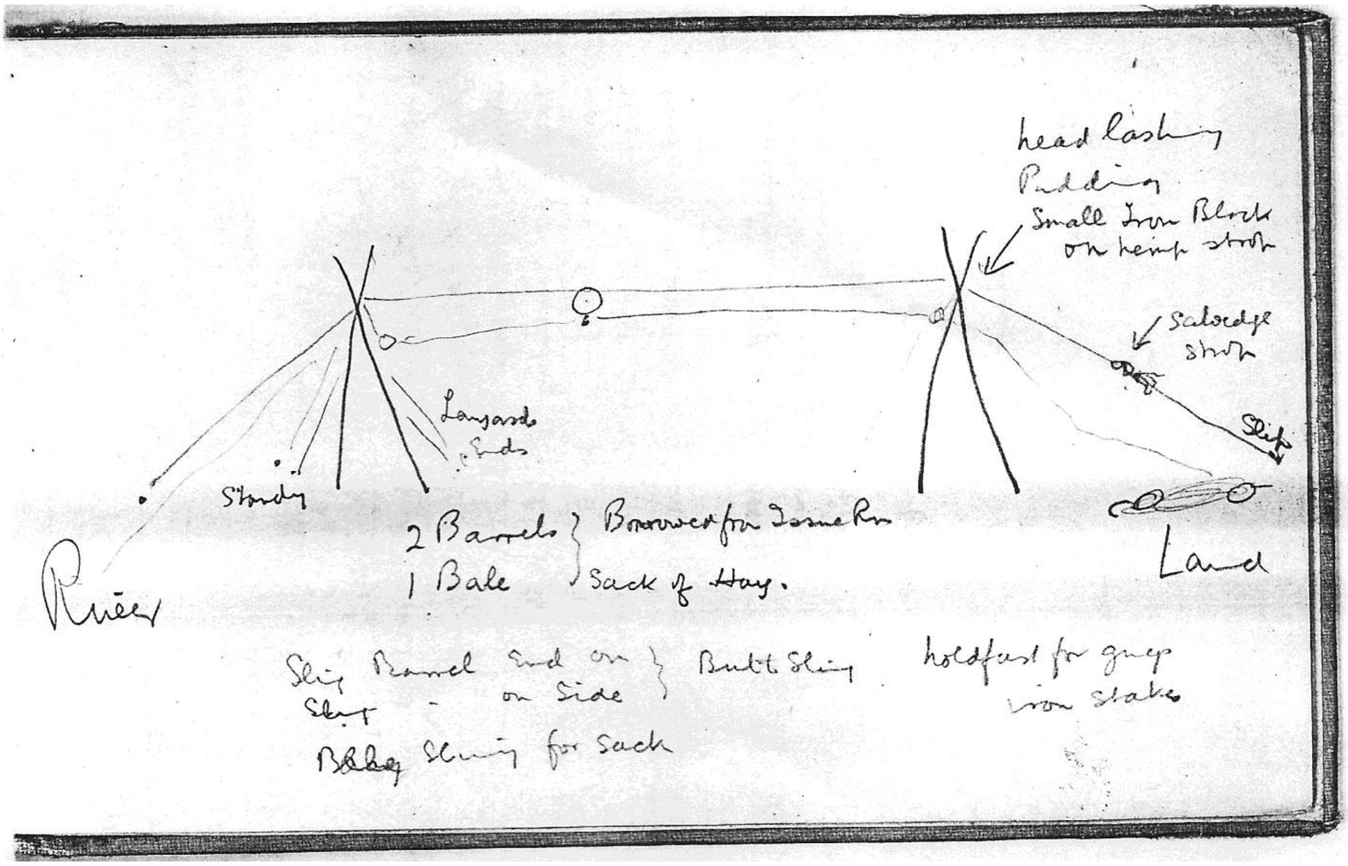
MAST DRILL — REPORT.

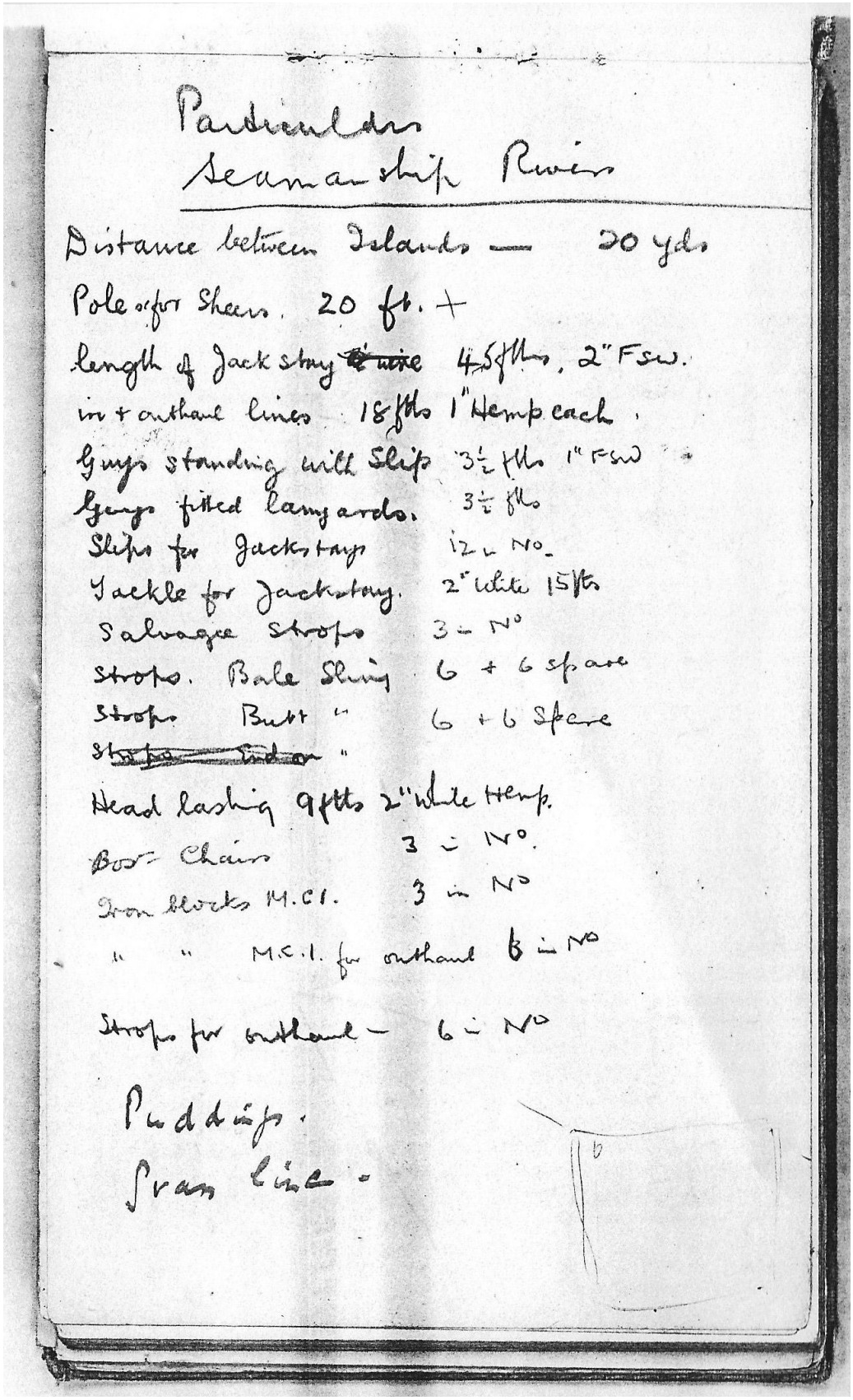
COPIES TO:-

COMMANDER

~~INSTRUCTOR~~ NOTICE BOARD

BOY'S " "


head lashing
Pudding
Small Iron Block
on hemp strop
Salvedge
strop
Slip
Lanyards
2 Barrels
1 Bale
Sack of Hay.
River
Land
Sling Barrel End on
on Side
Butt Sling
holdfast for guys
iron stakes
Sling for Sack



Particulars
Seamanship Rules

Distance between Islands — 20 yds.

Pole for Shears. 20 ft. +

Length of Jackstay ~~twice~~ 45 fths. 2" FSW.

in + outhaul lines 18 fths 1" Hemp each.

Guys standing with Slips 3½ fths 1" FSW

Guys fitted Lanyards. 3½ fths

Slips for Jackstays 12 in No.

Tackle for Jackstay. 2" White 15 fts

Salvage Strops 3 in N°

Strops. Bale Sling 6 + 6 spare

Strops Butt " 6 + 6 Spare

~~Strops Sidar~~ "

Head lashing 9 fths 2" White Hemp.

Bow Chain 3 in N°.

Iron blocks M.C.I. 3 in N°

" " M.C.I. for outhaul 6 in N°

Strops for outhaul — 6 in N°

Paddings.

Spare line.

Page 9 - The comments to achieve clarity are relevant along this row too.

Stress in Span.

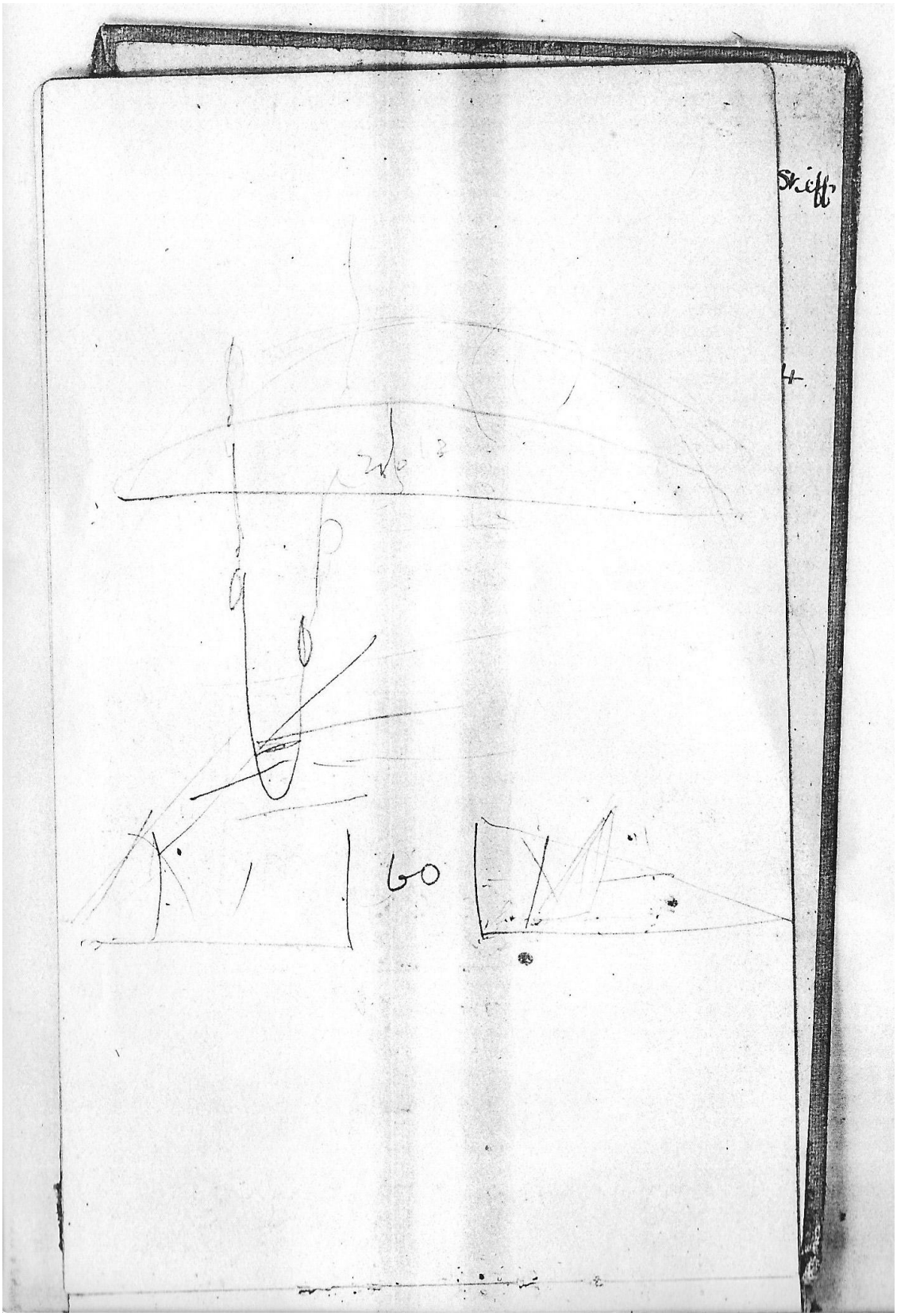
$$\text{Strain in Rope (Tons)} = \frac{\frac{1}{2}\text{ wt hung} \times \frac{1}{2}\text{ length of span}}{\text{sag.}}$$

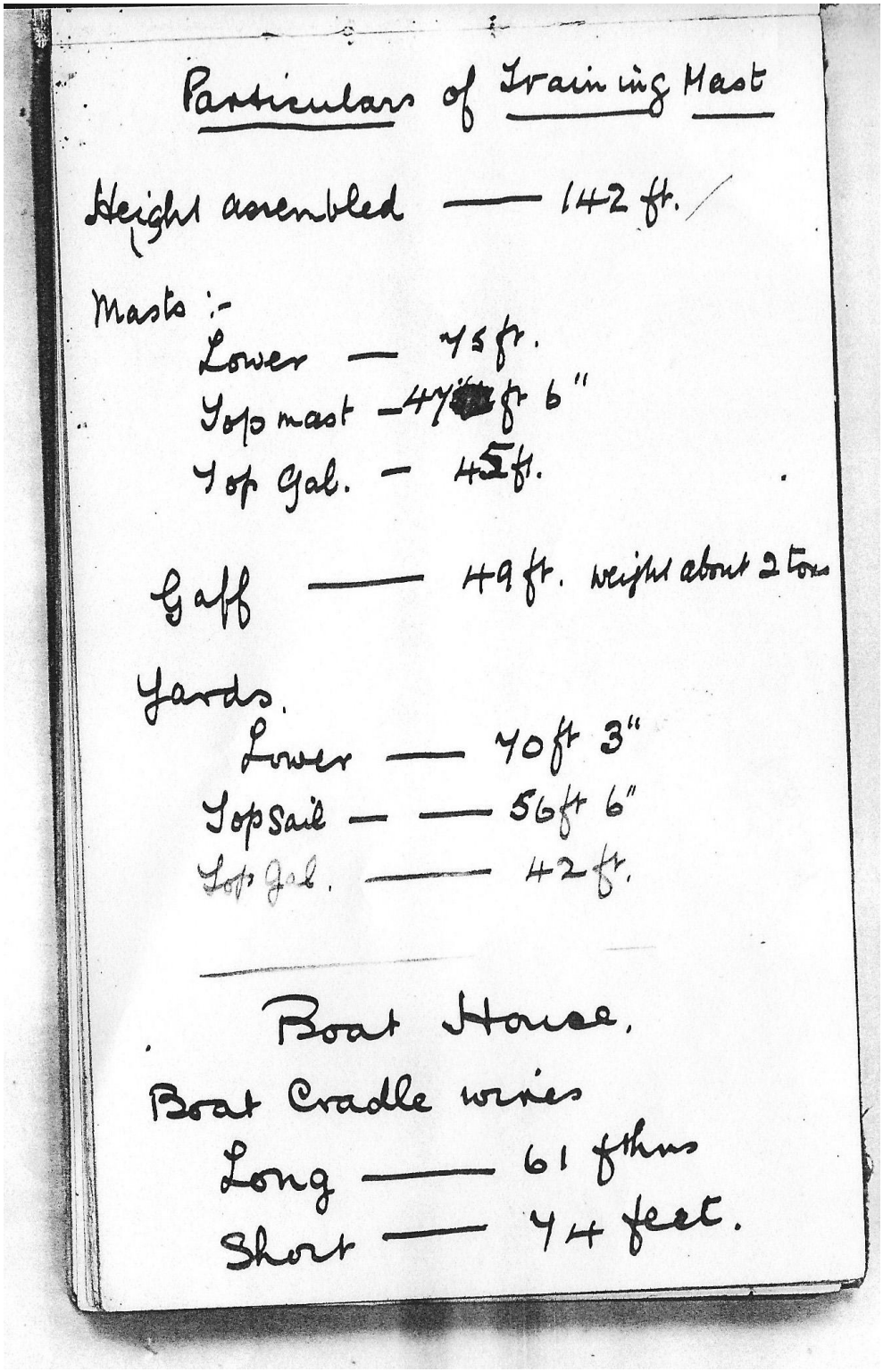
$$\text{Breaking wt} = \frac{2 \times \text{B.S. of Rope} \times \text{sag}}{\frac{1}{2}\text{ length of rope}}$$

Breaking wt to be ÷ by 6 for safe working wt.

If parts are at unequal angles the part nearest the vertical takes most strain.

When the parts are 120° apart, each part takes the strain equal to the wt. supported.
The nearer the parts are to the vertical the less strain in them, but as the angle increases over 120° the strain increases largely.


Skiff
4
160



Particulars of Training Mast

Height assembled —— 142 ft.

Masts :-

Lower — 75 ft.

Top mast — 47 ft 6"

Top Gal. — 45 ft.

Gaff —— 49 ft. weight about 2 tons

Yards.

Lower —— 70 ft 3"

Top Sail — —— 56 ft 6"

Top Gal. —— 42 ft.

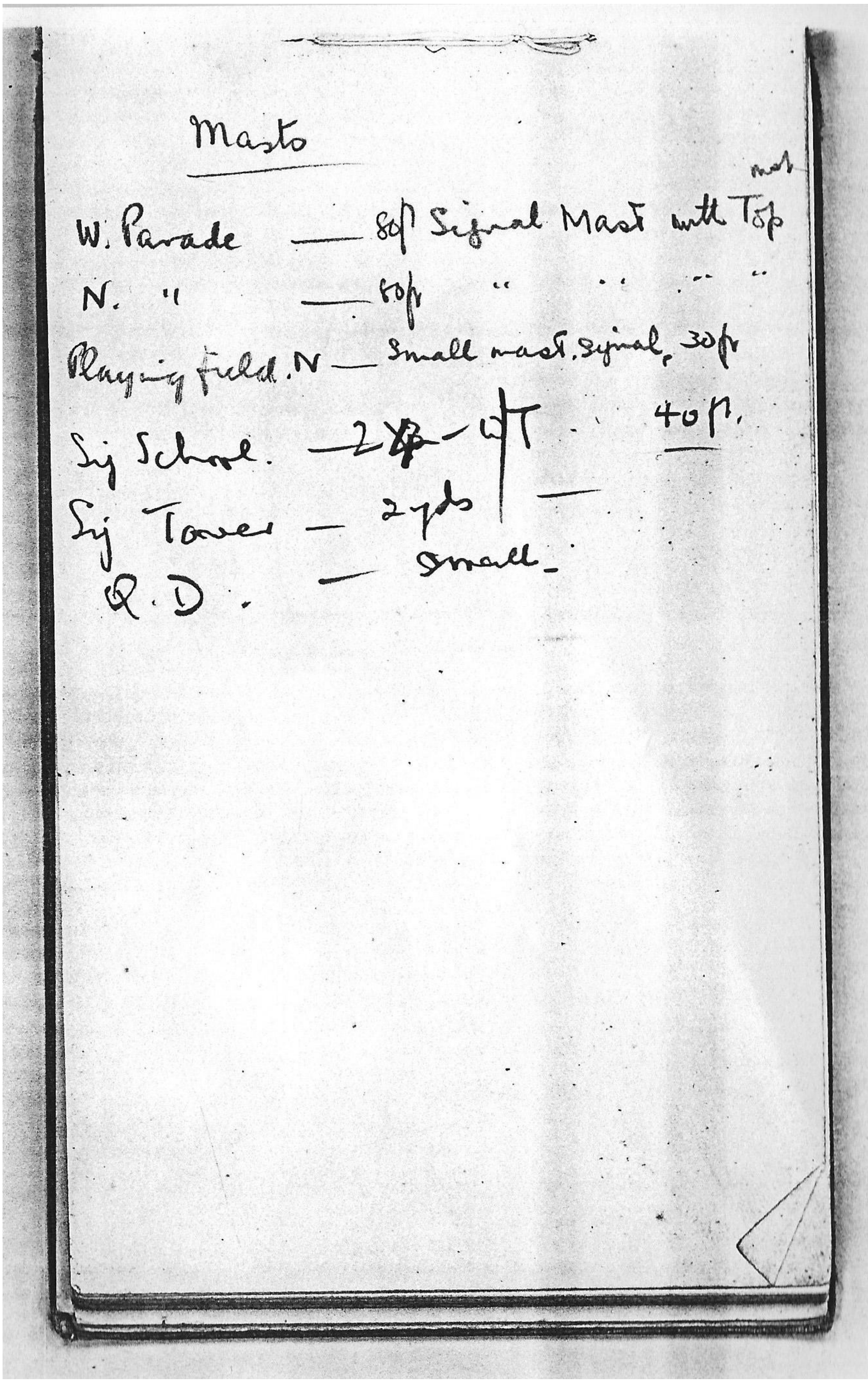
Boat House.

Boat Cradle wires

Long —— 61 fthms

Short —— 74 feet.

Page 12. Same as for Page 9. This frame shows that 25.5 feet where sunk into the Suffolk t*erra firma t*o anchor the bottom section [metal] of the mast to avoid any azimuth circular movement.



Masts

W. Parade — 80ft Signal Mast with Top mast
N. " — 80ft " " " "
Playing field. N — Small mast, signal, 30ft
Sig School. — 2 ~~4~~ — W/T . 40ft.
Sig Tower — 2 yds —
Q.D. — Small

Page 13 - The story of Ganges at Shotley - then scroll down the page to approximately half way down, you will see an animated GIF of the period 1911-12 which shows you where these masts were.

Strength of Spars

Where T = thrust in tons
R = mean radius of spar in inches
L = Length of spar in feet

then :- $$T = \frac{4R^4}{L^2}.$$

The Constant 4 is safe for all ordinary kinds of wood. But for strong woods such as Oak, Mahogany etc it may be increased to 6 without danger.

Well Seasoned wood	— Constant	12
Oregon Pine	— "	10-12
Fir	— "	8-10
Larch	— "	6-8

3" equal $\frac{9}{8} \times \frac{8}{10} = 3" = 18$ cents.

2" sind. $\frac{2 \times 8}{10} \times \frac{8}{10}$ $\frac{32}{100}$ .32 = 4 cents.

Weights of Rope

Hemp — $\frac{1}{5}$th Circumference^2 lbs/fthm

Tarred Hemp $\frac{1}{4}$th " " "

Coir $\frac{1}{5}$th " " "

Weight of Wire

.45 Circumference^2 lbs/fthm.

Weight of Chain

d^2 expressed in $\frac{1}{8}$th of inch lbs/fthms.

Weight of Chain Cable

$6d^2$ cwts per shackle.

Safe Working Strain of Rope.

White Hemp. $\frac{C^2}{8}$ Tons

Tarred Hemp $\frac{C^2}{18}$ Tons

Non Service Rope $\frac{C^2}{20}$ Tons

Manilla $.85\ \frac{C^2}{8}$ Tons

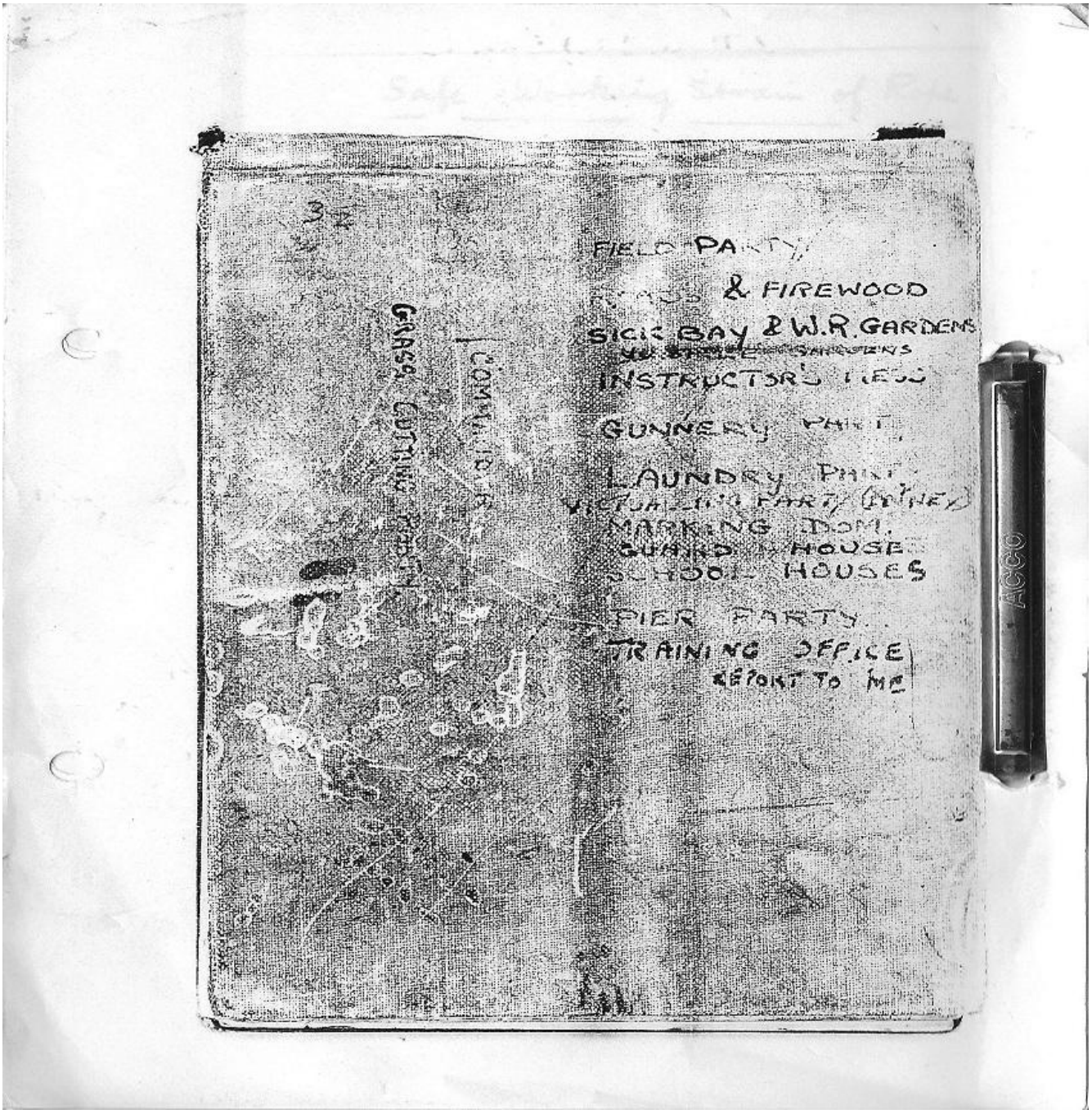
Coir $\frac{C^2}{35}$

Safe Working Strains of Wire

Rigging Wire $C^2 \times .5$ tons

M.S. Wire $C^2 \times .4$ tons

Breaking strain may be considered 5 to 6 times working strain



Back Page.

Various working parties.

Field Party, Roads and Firewood, Sick Bay and Wardroom Gardens,
Something [?] Tree Gardens, Instructors Mess, Gunnery Party,
Laundry Party, Victualling Party [Annexe], Marking DOM,
Guard House, School Houses, Pier Party, Training Office
Report to me Commander, Grass Cutting Party