

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having a **POOP-BRIDGE AND FORECASTLE.**

Port of Survey **PIRAEUS.**

Date of Survey **12th & 27th Janr. 1935**

Name of Surveyor **Wm. Rennie.**

Particulars of Classification **+100 A1**

Ship's Name **T.W.S. POLONIA** (P)

Nationality and Port of Registry **POLISH. Italian. Gdynia**

Official Number **7500**

Date of Build **1910-9**

Gross Tonnage **14855** tons

Moulded Dimensions: Length **450'0"** Breadth **56'0"** Depth **34'0"**

Moulded displacement at moulded draught = 85 per cent. of moulded depth **(28'9") 14942** tons

Coefficient of fineness for use with Tables **719**

Depth for Freeboard (D) **34'00"**

Depth correction (a) Where D is greater than Table depth (D-Table depth) R = $\frac{(34'08 - 29'97) \times 3}{4'11} = +12'33$

Depth correction (b) Where D is less than Table depth (if allowed) (Table depth-D) R = $\frac{4'11}{4} = +10'27$

Round of Beam correction

Moulded Breadth (B) **56'0"**

Standard Round of Beam = $\frac{B \times 12}{50} = 13'44$

Ship's Round of Beam = **14"**

Difference **56**

Restricted to $\frac{Diff}{4} \times (1 - \frac{S_1}{L}) = \frac{56}{4} \times 295 = 4095$

Correction = $\frac{Diff}{4} \times (1 - \frac{S_1}{L}) = 4095$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	70.25	70.25	8'0"	✓	70.25
" overhang ...	4.50	2.25			2.25
R.Q.D. enclosed ...					
" overhang ...	67.25	67.25	8'0"	✓	67.25
Bridge enclosed ...	199.75	199.75	8'0"	✓	199.75
" overhang aft ...	137.00	102.75			102.75
" overhang forward ...	68.18	68.18	8'0"	✓	68.18
F'cle enclosed ...	84.00	68.18	8'0"	✓	68.18
" overhang ...	12.32	6.16			6.16
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	1359.50	316.82			316.82

Standard Height of Superstructure	7.5
" " R.Q.D.	✓
Deduction for complete superstructure	42
Percentage covered $\frac{S}{L} = 79.98$	✓
" " $\frac{S_1}{L} = 70.50$	✓
" " $\frac{E}{L} = 70.50$	✓
Percentage from Table, Line A.	✓
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B. 63.61	✓
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	✓
Deduction = $42 \times 63.61 = -26.72$	✓

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	54.95	1	54.95	39.00	39.00	1	39.00
$\frac{1}{8}$ L from A.P. ...	24.45	4	97.82	17.25	17.25	4	69.00
$\frac{3}{8}$ L " ...	6.045	2	12.09	6.00	6.00	2	12.00
Amidships ...	-	4	-	0.0	-	4	-
$\frac{5}{8}$ L from F.P. ...	12.09	2	24.18	9.25	9.25	2	18.50
$\frac{7}{8}$ L " ...	48.91	4	195.64	33.75	33.75	4	135.00
F.P. ...	109.90	1	109.90	78.00	78.00	1	78.00
Total ...	494.55		494.58				351.50

Mean actual sheer aft = Deficient

Mean standard sheer aft

Mean actual sheer forward = Deficient

Mean standard sheer forward

Length of enclosed superstructure forward of amidships = } Sheer Deficient

" " aft of " = }

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(\frac{75 - S}{2L} \right) = \frac{143.08}{18} \left(\frac{75 - 3999}{3501} \right) = +2.78$$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **34'04"**

Summer freeboard = **9'14"**

Moulded draught (d) = **24'90"**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Tons per inch immersion at summer load water line

Deduction = $\frac{\Delta}{40T}$ inches

= **6'68"**

= **170"**

TABULAR FREEBOARD corrected for Plush Deck (if required)

Correction for coefficient $\frac{719 + 68}{1.36} = \frac{1.399}{1.36} =$

	+	-
Depth Correction ...	12.33	-
Deduction for superstructures ...	-	26.72
Sheer correction ...	2.78	-
Round of Beam correction ...	-	0.04
Correction for Thickness of Deck amidships ...	-	0.48
Other corrections, scantlings, etc. ...	32.43	-
Summer Freeboard =	47.54	27.24

86.94

89.45

86.94

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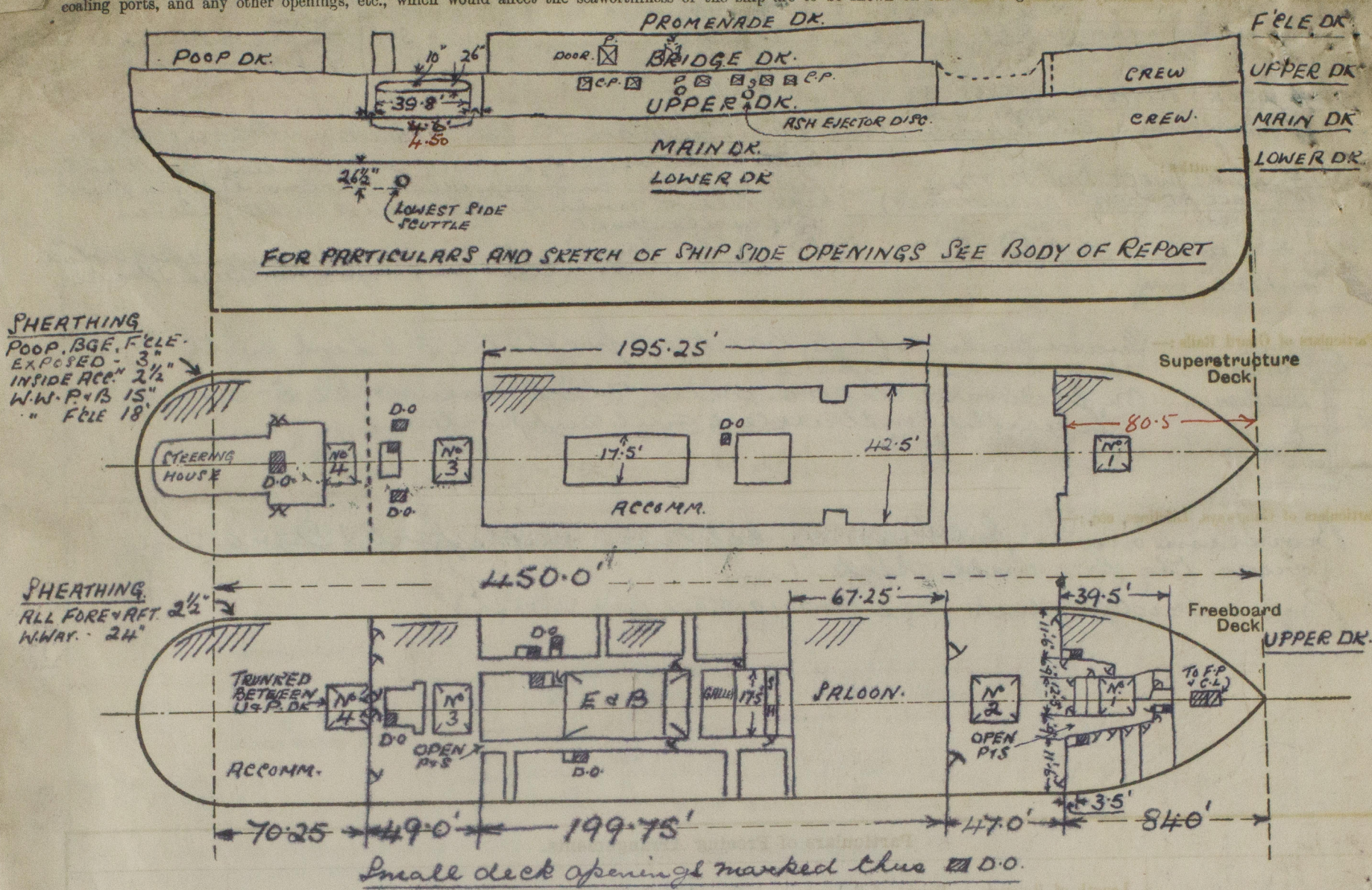
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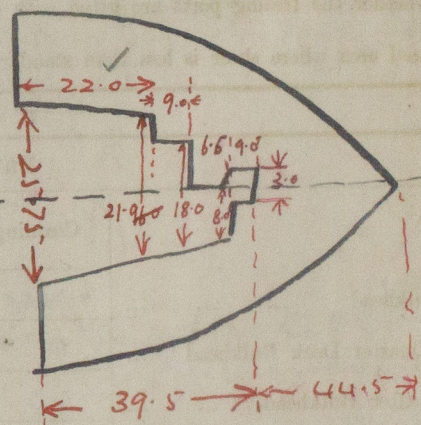
Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



State any special features in the construction of the ship:—

Fore Peak Hatch on Lbd. - 3'-5" x 3'-5" } Coam. 18' x 36' Rest 2 5/8", Covers 3", Eff. Battg. crngl.
Chain Locker " " " 3'-8" x 3'-8"

DRAFT.	DISPLACEMENT. EXT. TONS.	TONS PER INCH.
24'-0"	12,055	47.25
25'-0"	12,625	47.45
26'-0"	13,200	47.70



Vessel measured up afloat.

$$\begin{aligned} & \text{File } 84.00 \\ & \text{Recess } 22 \times \frac{25.75 + 21.9}{2} = 514 \\ & \quad \checkmark 9.0 \times \frac{21.0 + 18}{2} = 175 \\ & \quad \checkmark 6.5 \times \frac{9 + 8}{2} = 55 \\ & \quad \checkmark 9.0 \times 3 = 27 \\ & \quad \hline & \quad 771 \\ & \quad \checkmark \frac{771}{48.75} = 15.82 \end{aligned}$$

$$\begin{aligned} & 15.82 = \text{recess} \\ & 68.18 \text{ equivalent} \\ & \text{File length at centre} = 80.50 \\ & \text{Equiv. midship} = 68.18 \\ & \text{equivalent length} = 12.32 \end{aligned}$$

W.R.

Builder's name and yard number Barclay, Curle & Co. Ltd., Glasgow. Lard N° 4482.

Names of sister ships ✓

Owners Gdynia American Shipping Lines, Ltd.

Fee £ 30 : 12 : 0
STAMPS 10 : 0 W.R.
Received by me



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