

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

GREENOCK REPORT No. 19444

Computation of Freeboard for Steamer, ~~Sailing Ship, Tugboat~~
having POOP, BRIDGE & S.C.

Port of Survey GreenockDate of Survey Dec 5th 1932Name of Surveyor Kenneth Inglis
 Particulars of Classification +100A1.
S.S. G.L. No. 3-11.25.
S.S. Lw. No. 1-29.
PAVLINA

(Type of Superstructures.)

Ship's Name

PAULINEEx STRABO

Nationality and Port of Registry

PANAMANIANPANAMA

Official Number

135,507

Gross Tonnage

4920

Date of Build

191310

Moulded Dimensions: Length 399.75 Breadth 51.75 Depth 30.0
 Moulded displacement at moulded draught = 85 per cent. of moulded depth 11535 tons
 Coefficient of fineness for use with Tables .765

Depth for Freeboard (D)

Moulded depth 30.00Stringer plate04

Sheathing on exposed deck

$$T \left(\frac{L-S}{L} \right) =$$

Depth for Freeboard (D) = 30.04

Depth correction

(a) Where D is greater than Table depth
 (D-Table depth) R = $(30.04 - 26.65) 3$
 $= +10.17''$

(b) Where D is less than Table depth (if allowed)
 (Table depth-D) R = \checkmark

If restricted by superstructures \checkmark

Round of Beam correction

Moulded Breadth (B) 51.75
 Standard Round of Beam = $\frac{B \times 12}{50} = 12.42$
 Ship's Round of Beam = $12\frac{1}{2}$
 Difference .08 excess
 Restricted to
 Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.08}{4} \times .4781 = -.01''$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<u>35.75</u>	<u>35.75</u>	<u>8'-0"</u>		<u>35.75</u>
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed...	<u>129</u>	<u>129.00</u>	<u>8'-0"</u>		<u>129.00</u>
" overhang aft ...					
" overhang forward					
" enclosed <u>open</u> ...	<u>47.75</u>	<u>43.86</u>	<u>8'-0"</u>		<u>43.86</u>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward					
Total ...	<u>212.50</u>	<u>208.61</u>			<u>208.61</u>

Standard Height of Superstructure 7.497" " R.Q.D. \checkmark Deduction for complete superstructure 41.98Percentage covered $\frac{S}{L} = 53.14\%$ " $\frac{S_1}{L} = 52.19\%$ " $\frac{E}{L} = 52.19\%$ Percentage from Table, Line A.
(corrected for absence of forecastle (if required))Percentage from Table, Line B.
(corrected for absence of forecastle (if required)) 38.19

Interpolation for bridge less than 2L (if required)

Deduction = $41.98 \times .3819 = -16.03''$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>49.97</u>	1		<u>49.97</u>	<u>69</u>	<u>69.00</u>	1		<u>69.00</u>
$\frac{1}{4}L$ from A.P. ...	<u>22.23</u>	4		<u>88.92</u>	<u>30</u>	<u>30.02</u>	4		<u>120.08</u>
$\frac{2}{4}L$ " ...	<u>5.50</u>	2		<u>11.00</u>	<u>7.5</u>	<u>7.50</u>	2		<u>15.00</u>
Amidships ...	\checkmark	4			<u>0</u>	\checkmark	4		\checkmark
$\frac{3}{4}L$ from F.P. ...	<u>10.99</u>	2		<u>21.98</u>	<u>14.3</u>	<u>14.32</u>	2		<u>28.64</u>
$\frac{1}{4}L$ " ...	<u>44.47</u>	4		<u>177.88</u>	<u>57.3</u>	<u>57.27</u>	4		<u>229.08</u>
F.P. ...	<u>99.94</u>	1		<u>99.94</u>	<u>132</u>	<u>132.00</u>	1		<u>132.00</u>
Total ...	<u>449.73</u>			<u>449.69</u>					<u>593.80</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{144.11}{18} (.75 - .2657) = -3.88''$
4843

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 = 30.04 Ft.Summer freeboard = 5.52Moulded draught (d) = 24.52

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 6.13 = 6 $\frac{1}{4}$ ''

Addition for Winter North Atlantic Freeboard (if required =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 11307$ $\Delta = 24 = 10819$

Tons per inch immersion at summer load water line

 $T = 25 - 40.83$ $24 - 40.66$ Deduction = $\frac{\Delta}{40T}$ inches $=$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction 10.17Deduction for superstructures 16.03Sheer correction 3.88Round of Beam correction01

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

Summer Freeboard = 66.13

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc
Fresh Water Line " "
Tropical Line " "
Winter Line below " "
Winter North Atlantic Line " "

Tropical Fresh Water Freeboard ...

Fresh Water " " ...

Tropical " " ...

Winter " " ...

Winter North Atlantic " " ...

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	NO 1	NO 2	NO 3	NO 4	NO 5	NO 6	NO 7	NO 8	
Dimensions of Hatchway	UPPER DK 24' 9" x 18'	UPPER DK 30' x 18'	BRIDGE DK 12' x 18'	UPPER DK 27' x 18'	UPPER DK 24' x 18'	POOP DK 6' x 12'	UPPER DK 12' x 18'	UPPER DK 3' 6" x 3' 6"	COAL HATCHES BRIDGE DK 24' x 18'
COAMINGS	Height above Deck ... 33' Thickness ... 1/4" Stiffeners ... 4" Brackets, Stays ... 2 BRACKETS	33' 1/4" 4" NONE	30' 1/4" 4" NONE	33' 1/4" 4" NONE	33' 1/4" 4" NONE	30' 1/4" 4" NONE	30' 1/4" 4" NONE	30' 1/4" 4" NONE	30' 1/4" 4" NONE
HATCH BEAMS	Number ... 4 Spacing ... 60" Scantling and Sketch ... 7"	5 60" 24' x 34'	72 60" 24' x 34'	54 60" 24' x 34'	58 60" 24' x 34'	✓ 60" 24' x 34'	72 60" 24' x 34'	✓ 60" 24' x 34'	COAL HATCHES BRIDGE DK 24' x 18'
FORE AND AFTERS	Bearing Surface ... 3'	3'	3'	3'	3'	3'	3'	3'	COAL HATCHES BRIDGE DK 24' x 18'
HATCH COVERS	Material ... 3" WP Thickness ... 3/4" How fitted ... F4 A Bearing Surface ... 3'	3" WP 3/4" F4 A 3'	3" WP 3/4" F4 A 3'	3" WP 3/4" F4 A 3'	3" WP 3/4" F4 A 3'	3" WP 3/4" F4 A 3'	3" WP 3/4" F4 A 3'	STEEL HINGED COVER 3'	COAL HATCHES BRIDGE DK 24' x 18'
Spacing of Cleats	24	24	24	24	24	24	24	24	COAL HATCHES BRIDGE DK 24' x 18'
Number of Taraulins	2	2	2	2	2	2	2	2	COAL HATCHES BRIDGE DK 24' x 18'

Particulars of fiddle, funnel and ventilator coamings:—
 Fiddle funnel & ventilator coamings efficient.
 Engine room skylight of steel strongly constructed.
 Gratings covered by strong hinged steel covers.

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways:—

None

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—
 2 vents to hold 15" dia. coaming 28' x 38"
 1 " " forepeak 6" " " 21' x 30"
 4 " " holds 15" " " 26' x 38"
 2 " " deep tank 12" " " 30' x 34"
 2 " " hold 15" " " 30' x 38"
 2 " " Bunkers 10" " " 18' x 32"
 2 " " Bunkers 15" " " 30' x 38"
 Ventilators constructed in accordance with the rule & fitted with wood plugs & canvas covers.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—
 1-3" dia. A.P. on forepeak to fore hatch tank 8" high
 1-3" dia. A.P. under forepeak to double bottom 6" high
 2-2" AP on fore well to double bottom 5" high
 2-2" AP on left well " " 26" high
 4-4" AP on Bridge to double bottom 9" high
 2-2" " " " " 4" high
 2-2 1/2" dia. A.P. on Poop to double bottom 9" high
 1-2 1/2" AP " " after peak 9" high
 Air pipes not fitted with canvas covers & wood plugs

Particulars of Gangway Cargo and Coaling Ports:—

None.

Particulars of Scuppers and Sanitary Discharge Pipes — Stringer bar cut for scuppers on Weather deck.
 Sanitary discharge led overboard above the waterline & fitted with way setting valve at the ship's side & efficient trap at inner end.

Particulars of Side Scuttles:

All side scuttles in ship's side of substantial construction & fitted with hinged deadlights.

Particulars of Guard Rails:—

Fore & Poop Inwales 3'-3" high and stanchions 4'-6" apart.
 Bridge Bulwark at sides, 35" high substantially constructed & fitted with 2 freeing ports 20" x 12" fitted with hinged shutters. Inwale & stanchions fitted at ends.

Particulars of Gangways, Lifelines, etc.:—

None provided.

Suitable provision is made for rigging lifelines available for use in any part of the ship which might have to be used by the crew in their regular working of the ship.

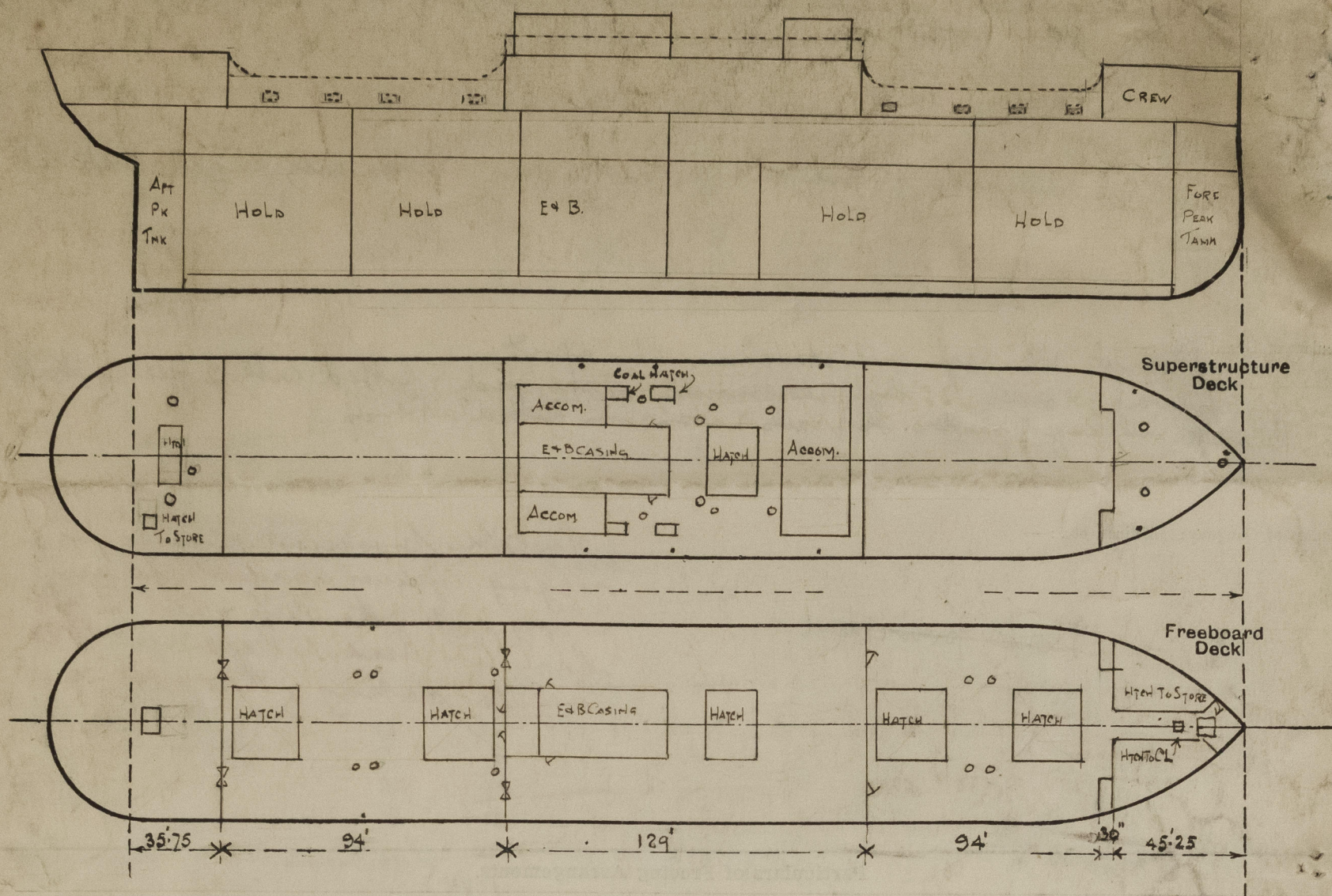
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	94	47"	36 x 23	4	23.04 sq ft	18.5 sq ft
Forward Well	94	47"	36 x 23	4	23.04 sq ft	18.8 sq ft

State position of each freeing port:— After Well:— 6.30.48.466 ft aft of Br. End } 12" above deck edge.
 (F. and A. position and height above deck edge) Forward Well:— 6.30.48.466 ft fwd of Br. End }
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— fitted with steel hinged shutters & bars
 Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	30	25	6 1/2 x 3 x 40 Ang	29"	None	68 x 42	18"	
Raised Quarter Deck Bulkhead								
Bridge, After Bulkhead	30	25	3 x 3 x 30	30"	None	68 x 42	18"	
Bridge, Forward Bulkhead	44	40	8 x 3 1/2 x 54 BA	30"	Bolted to top	63 x 44	18"	
Forecastle Bulkhead	30	25	3 x 2 1/2 x 26	30"	None	60 x 23	18"	
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								
Exposed Machinery Casings on Superstructure Decks	34	30	4 x 3 x 30	30"	Bolted at top	60 x 23	18"	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	34	30	4 1/2 x 3 x 35	36"	none at bottom	60 x 23	18"	
Deckhouses on Flush Deck Ships								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	2 hinged openings fitted with channels & boards 3" thick full height channels riveted to bulkhead.
Raised Quarter Deck Bulkhead	
Bridge, After Bulkhead	2 hinged openings fitted with channels & 3" boards full height channels riveted to bulkhead.
Bridge, Forward Bulkhead	2 hinged W.T. doors manipulated from outside only, fitted with toggles 15" apart.
Forecastle Bulkhead	open at centre, & steel doors to sidehouses with 18" coaming.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	
Exposed Machinery Casings on Superstructure Decks	steel doors 18" coaming can be manipulated from both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	steel door 66" x 24" with 18" coaming, can be manipulated from both sides.
Deckhouses on Flush Deck Ships	✓

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 shewn on the following sketches:—



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

This vessel's name has now been changed from 'Strabo' to 'Pauline' and the port of Registry is Panama.

The vessel is engaged on international trade & no timber line is required.

The vessel has now been surveyed in dry dock where she has been repaired on account of damage.

The vessel is leaving on Dec 6th for the Bristol Channel where the freeboard will be placed on the vessel's side & verified.

The superintendent stated that the Owner is now M Glivier, Algiers, and that the managers are "The Anglo Maritime Shipping Co. 124 Fenchurch Street London", to whom the assignment letter should be sent.

Builder's name and yard number at MacMillan & Son Ltd Dumbarton No 451

Names of sister ships ☒

Owners

M Glivier, Algiers

Fee £

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Received by me



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