

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

15 OCT 1934

Index. No. **28142**
(For London Office only.)

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~
having Poop-bridge & fore

Port of Survey Blyth

Date of Survey 9th Oct. 1934

Name of Surveyor P.D. Grandage

Particulars of Classification S.S. No 3 now being carried out.

MARPESSA (Type of Superstructures.)

Ship's Name "ONTARIO"

Nationality and Port of Registry GREEK PIRAEUS

Official Number 5476

Gross Tonnage 1919.8

Date of Build 1919.8

Moulded Dimensions: Length 410.00' Breadth 54.00' Depth 29.75'

Moulded displacement at moulded draught = 85 per cent. of moulded depth see back tons

Coefficient of fineness for use with Tables .808

Depth for Freeboard (D) 29.75

Stringer plate .04

Sheathing on exposed deck T (L-S) =

Depth for Freeboard (D) = 29.79

Depth correction

(a) Where D is greater than Table depth
(D-Table depth) R = (29.79 - 27.33) 3.00
= + 7.38"

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

If restricted by superstructures ✓

Round of Beam correction

Moulded Breadth (B) 54.00

Standard Round of Beam = $\frac{B \times 12}{50}$ = 12.96"

Ship's Round of Beam = 13 1/2"

Difference excess 54"

Restricted to

Correction = $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L})$ = $\frac{54^2}{4} \times .4988$ = -106"

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	43.75'	43.75	8.00'	✓	43.75
" overhang ...	-	-	-	-	-
R.Q.D. enclosed ...	-	-	-	-	-
" overhang ...	-	-	-	-	-
Bridge enclosed ...	114.75	114.75	8.00'	✓	114.75
" overhang aft ...	-	-	-	-	-
" overhang forward ...	-	-	-	-	-
Fore enclosed ...	47.00'	47.00	8.00'	✓	47.00
" overhang ...	-	-	-	-	-
Trunk-aft ...	-	-	-	-	-
" forward ...	-	-	-	-	-
Tonnage opening aft ...	-	-	-	-	-
" forward ...	-	-	-	-	-
Total ...	205.50	205.50			205.50

Standard Height of Superstructure	7.50'
" " R.Q.D.	✓
Deduction for complete superstructure	42.00"
Percentage covered $\frac{S}{L}$	50.12%
" " $\frac{S_1}{L}$	50.12%
" " $\frac{E}{L}$	50.12%
Percentage from Table, Line A.	✓
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B.	36.12%
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	
Deduction =	-15.17"

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	51.00	1		51.00	71"	71.00	1		71.00
1/4 L from A.P. ...	22.69	4		90.76	32"	32.39	4		129.56
3/4 L " ...	5.61	2		11.22	8"	8.10	2		16.20
Amidships ...	✓	4		✓	✓	✓	4		✓
3/4 L from F.P. ...	11.22	2		22.44	18"	18.82	2		27.64
1/4 L " ...	45.39	4		181.56	54"	53.30	4		221.20
F.P. ...	102.00	1		102.00	141"	141.00	1		141.00
Total ...				458.98					606.60

Mean actual sheer aft = Excess

Mean standard sheer aft

Mean actual sheer forward = Excess

Mean standard sheer forward

Length of enclosed superstructure forward of amidships = > 1L

" " aft of " = > 1L

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{147.62}{18} (.75 - .2506) = -4.09"$

If limited on account of midship superstructure. ✓If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Ft.

Depth to Freeboard Deck = 29.79

Summer freeboard = 5.81

Moulded draught (d) = 23.98

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 5.99 = 6"

Addition for Winter North Atlantic Freeboard (if required) = ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ 12257

Tons per inch immersion at summer load water line

 $T =$ 46Deduction = $\frac{\Delta}{40T}$ inches= 6.66
= 6 3/4"

TABULAR FREEBOARD corrected for Plank Deck (if required)

Correction for coefficient

 $\frac{.808 + .68}{1.36} = \frac{1.488}{1.36}$

	+	-
Depth Correction ...	7.38	-
Deduction for superstructures ...	-	15.17
Sheer correction ...	-	4.09
Round of Beam correction ...	-	.06
Correction for Thickness of Deck amidships ...	-	-
Other corrections, scantlings, etc. ...	-	-
	7.38	19.32

Summer Freeboard = 69.68

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

Existing freeboards as reassigned being more favourable than those computed under the Convention

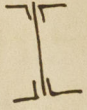
Tropical Fresh Water Line above Centre of Disc	<u>12 1/4" = 3 1/4"</u>
Fresh Water Line	<u>6 3/4" = 1 3/4"</u>
Tropical Line	<u>5 3/4" = 1 1/4"</u>
Winter Line below	<u>5" = 1 1/4"</u>
Winter North Atlantic Line	<u>✓</u>

Tropical Fresh Water Freeboard	<u>4-9 1/2" = 4 5/8"</u>
Fresh Water	<u>5-3" = 4 3/4"</u>
Tropical	<u>5-1 1/4" = 4 1/2"</u>
Winter	<u>6-2 3/4" = 4 3/4"</u>
Winter North Atlantic	<u>✓</u>

87.8

16-10-34

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS															
UPPER DECK							BRIDGE			FOLE		UPPER DV		CASING	
Description of Hatchway	...	...	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 3.	2 COAL HATS	2 TO PEAK	2 COAL HATS	2 ESCAPE HATS	2 TOP COAL HAT	...	...
Dimensions of Hatchway	...	...	31'6"x21'	31'6"x21'	15'9"x17'	31'6"x21'	31'6"x21'	15'9"x17'	40"	38"	38"	2-4	2-8	4-4	...
COAMINGS	{	Height above Deck	36"	36"	12"	36"	36"	30"	30"	18"	18"	9"	9"	6"	...
		Thickness Sides	.50"	.50"	.50"	.50"	.50"	.50"	.40"	.36"	.38"	Jag 3/8"	.36"	L 4x3	...
		Stiffeners 7"x5"x3"x40"	S.E.	S.E.	.50"	.50"	.50"	.50"	.40"	.36"	.38"	-	-	-	...
		Brackets, Stays 7"x3"x40"	3s. & 2E	3s. & 2E.	-	3s. & 2E.	3s. & 2E.	-	-	-	-	-	-	-	...
HATCH BEAMS	{	Number	5	5	3	5	5	3							...
		Spacing	5'3"	5'3"	3'11"	5'3"	5'3"	3'11"							...
		Scantling and Sketch		17 1/2"x36"	17 1/2"x36"	14"x40"	17 1/2"x36"	17 1/2"x36"	14 1/2"x36"						...
		Bearing Surface	SEE SKETCH ON BACK	3"	3"	3"	3"	3"							...
FORE AND AFTERS	{	Number													...
		Spacing													...
		Unsupported Lengths Scantling* and Sketch													...
		Bearing Surface													...
HATCH COVERS	{	Material	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	...
		Thickness	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	2 1/2"	...
		How fitted	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	F.A.	3	...
		Bearing Surface	4"x3"	4"x3"	4"x3"	4"x3"	4"x3"	4"x3"	4"x3"	4"x3"	4"x3"	4"x3"	4"x3"	2 1/2"	...
Spacing of Cleats	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Number of Tarpaulins	...	...	...	...	...	...	...	...	...	...	...	...	...	...

*Are wood fore and afters steel shod at all bearing surfaces? *Yes. Requires to be repaired.*

Are battens and wedges efficient and in good condition? *Not yet seen.*

Are tarpaulins in good condition and in accordance with rule requirements? *Yes.*

Are lashings provided in accordance with rule requirements? *Yes.*

Particulars of fiddley, funnel and ventilator coamings:

- Fiddley gratings are fitted with hinged steel covers. ✓
- E. R. skylight is steel. ✓
- E. B. vents are being repaired.

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways :—

Poof decks - Steel companion with hinged steel door operating both sides.
Sill 9" above wood deck. ✓

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—			
Yoke deck:-	2 @	24 dia Coaming	36" x 40"
	1 @	12 "	33" x 30"
Wells	8 @	24 "	36" x 40"
	2 @	12 "	24" x 26"
Bridge	2 @	24 "	36" x 40"
	1 @	6 "	19" x (40" x 30")
Pooh	2 @	24 "	32" x 38"
	3 @	10 "	34" x 30"

Ventilators are in accordance with Rule Requirements. ✓
Wood plugs & canvas covers are fitted
~~being overhauled & put in order.~~

Wood plugs ~~being~~
are fitted.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

1. Main beams of Air Ripes in exposed positions on treeboard, raised quarter, or superstructure decks:—
 Jode deck:— 1 @ 3" dia X 2-11" to mouth & 2 @ 3" dia X 8" to mouth.
 Wells:— 1 @ 3" dia X 38" " " "
 2 @ 3½" X 22" " " "
 2 @ 3" X 32" " " "
 Bridge:— 8 @ 6" X 5½" " & 1 @ 4" dia X 4½" to mouth
 Poof:— 2 @ 3½" X 6" " " "

Particulars of Gangway Cargo and Coaling Ports:—

None.

Particulars of Scuppers and Sanitary Discharge Pipes :—

W.B. & bath discharges below feed deck are fitted with storm-valves.
There are 3 scuppers P.S. from bridge space fitted with plate covers.

Particulars of Side Scuttles :—

Stripped dead-lights are fitted in the bow & fore spaces.

Particulars of Guard Rails :—

Poop, bridge & fore decks:- 3 tier rails 3'6" high. Stanchions spaced about 4'6" apart.
 Wells:- bulwarks 3'8" high. Rail 6" x 3" x .30" B.A.
 Stanchions 6" x 3" x .34" B.A. Sp. 6'-9" apart.

Particulars of Gangways, Lifelines, etc. :—

~~None fitted~~

Manila lifelines fished on both sides of the well decks.

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	103' 4"	3' 8"	13.5' x .62'	3	25 ϕ	20.6 ϕ
Forward Well	101' 2"	3' 8"	13.5' x .62'	3	25 ϕ	20.2 ϕ

State position of each freeing port { After Well:— 13' 6" — 40' 6" & 67' 6" from bridge end. }
(F. and A. position and height above deck edge) { Forward Well:— 41' 0" — 41' 0" & 68' 0" }
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— " fore & aft } 12" above decks.

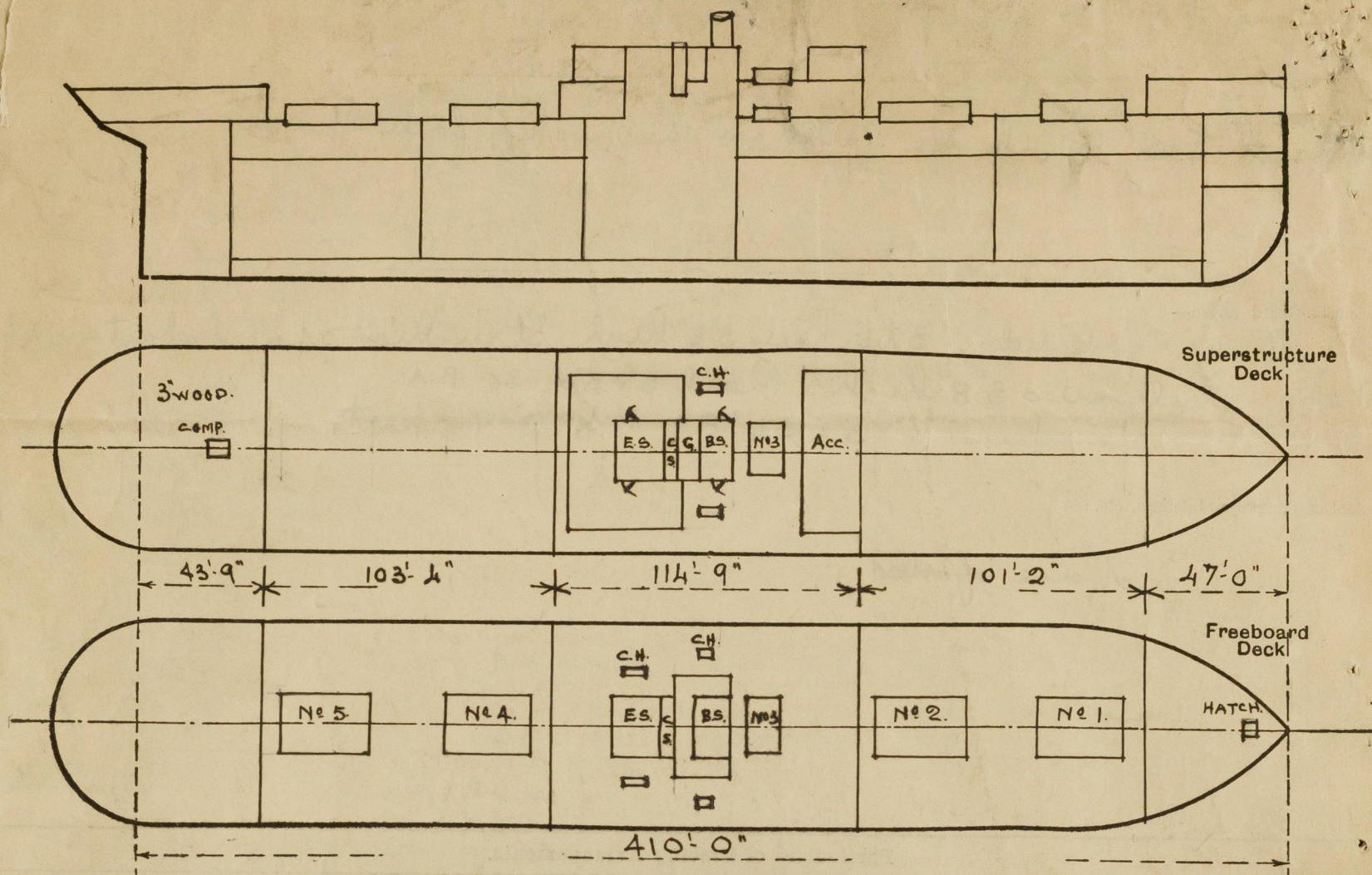
Additional area where sheer is less than standard.

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	44"	44"	6" x 3½" x 42"	30"	—	2) 5'4" x 26"	14"	
Raised Quarter Deck Bulkhead ...	—							
Bridge, After Bulkhead	40"	34"	6" x 3½" x 40"	27"	—	<div><div>1) 5'11" x 39" 2) 5'6" x 37"</div></div>	20"	
Bridge, Forward Bulkhead	46"	42"	8" x 3½" x 3½" x 42"	30"	Lugs.	2) 5'6" x 36"	18"	
Forecastle Bulkhead	30"	30"	6½" x 3" x 42"	30"	—	<div><div>2) 5'6" x 37" 2) 5'6" x 27"</div></div>	19"	
Trunk, Aft	—							
Trunk, Forward	—							
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	—							
Exposed Machinery Casings on Super-structure Decks	36"	30"	4" x 3" x 38"	27"	—	4) 5'0" x 24"	19"	8'5"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	36"	36"	4" x 3" x 38"	27"	—	—	—	
Deckhouses on Flush Deck Ships ...								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

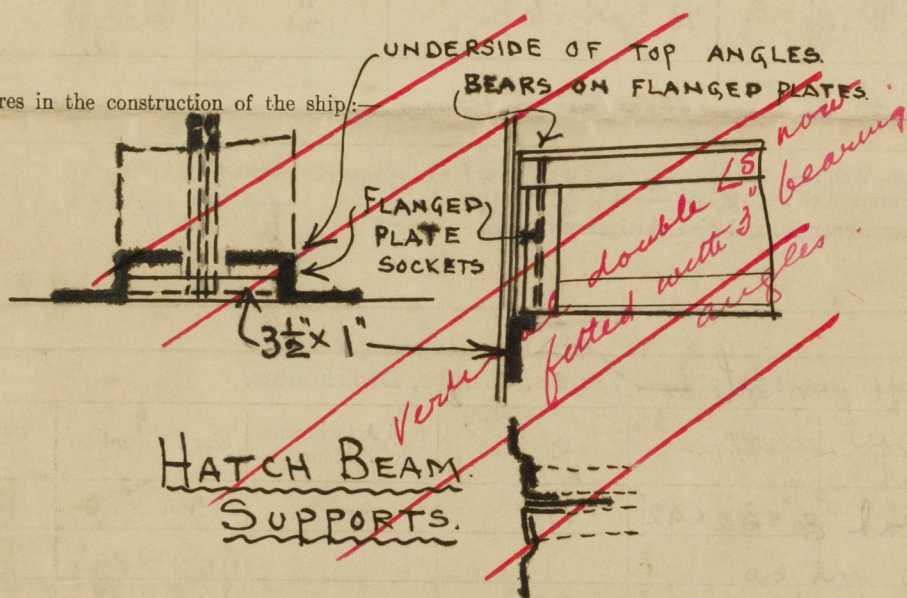
Poop Bulkhead	✓	2 hinged steel doors - operating outside only.
Raised Quarter Deck Bulkhead ...		
Bridge, After Bulkhead		3 hinged steel doors - operating both sides & 2 plates with 12 hook bolts.
Bridge, Forward Bulkhead		2 " " " " " " "
Forecastle Bulkhead		2 F.H.R. channels with 2½" boards & 2 hinged steel doors - operating both sides.
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓	
Exposed Machinery Casings on Super-structure Decks		4 hinged steel doors - operating both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓	
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:—



DFT.	Disp.	T.P.I.
24'-2½"	12280	46
21'-10"	11000	45.5
18'-1½"	9000	44.8
15'-1"	7500	43.8

State any special features in the construction of the ship:



Builder's name and yard number J. Coughlan & Sons

Names of sister ships S.S. "Maryland"

Owners Rethymnis & Kulukundis, Ltd.

Fee £ 16 : 0 : 0

Received by me



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