

30 MAY 1932

33960

Index. No.
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

GRK REPORT No. 19414

Computation of Freeboard for ~~Steamer, Sailing Ship, Tanker~~having Poop & Forecastle.Port of Survey Greenock.

(Type of Superstructures.)

Date of Survey May 25th 1932

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

PERMIAN.Panama.89551931
6 moName of Surveyor Kenneth Inglis.Moulded Dimensions: Length 469 Breadth 63 Depth 36' 9"Moulded displacement at moulded draught = 85 per cent. of moulded depth 21164. tonsCoefficient of fineness for use with Tables .803 ✓Particulars of Classification ✝ 100.A.1.Carrying petroleum in bulk.

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Moulded depth ... 36' 9"(a) Where D is greater than Table depth
(D - Table depth) R = (36.81 - 31.27) 3 ✓
= 5.54 x 3 = +16.62Moulded Breadth (B) = 63
Standard Round of Beam = $\frac{B \times 12}{50} = \frac{63 \times 12}{50} = 15.12$ Stringer plate71"(b) Where D is less than Table depth (if allowed)
(Table depth - D) R =Ship's Round of Beam = 15"

Sheathing on exposed deck

Difference Defect = .12 $T \left(\frac{L-S}{L} \right) =$

Restricted to

Depth for Freeboard (D) = 36.81 ✓

If restricted by superstructures

Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.12}{4} \left(1 - \frac{31.13}{106.08} \right) = +.02$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <u>SIZE 103.08</u>	<u>106.08</u>	<u>106.08</u>	<u>8' 0"</u>		<u>106.08</u>
.. overhang ...					
R.Q.D. enclosed					
.. overhang					
Bridge enclosed...					
.. overhang aft					
.. overhang forward					
F'cle enclosed ...	<u>39.92.</u>	<u>39.92</u>	<u>7' 6"</u>		<u>39.92</u>
.. overhang ...					
Trunk aft ...					
.. forward ...					
Tonnage opening aft					
.. forward					
Total ...	<u>146.00</u>	<u>146.00</u>			<u>146.00</u>

Standard Height of Superstructure 7.50

R.Q.D.

Deduction for complete superstructure 42.00Percentage covered $\frac{S}{L} = \frac{31.13}{106.08} = 31.13\%$ $\frac{S_1}{L} = 31.13\%$ $\frac{E}{L} = 31.13\%$

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. Tanker 22.13%

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 42 x 22.13 = -9.29 ✓

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	<u>56.90</u>	1	<u>56.90</u>	<u>45.0</u>	<u>45.00</u>	1	<u>45.00</u>
L from A.P. ...	<u>25.32</u>	4	<u>101.28</u>	<u>30.25</u>	<u>109.16</u>	4	<u>28.40</u>
L " ...	<u>4.26</u>	2	<u>12.52</u>	<u>0</u>	<u>0</u>	2	<u>0</u>
Amidships ...		4		<u>0</u>	<u>0</u>	4	<u>0</u>
L from F.P. ...	<u>12.52</u>	2	<u>25.04</u>	<u>7.5</u>	<u>0</u>	2	<u>0</u>
L " ...	<u>50.64</u>	4	<u>202.56</u>	<u>24.75</u>	<u>79.25</u>	4	<u>0.80</u>
F.P. ...	<u>113.80</u>	1	<u>113.80</u>	<u>75</u>	<u>75.00</u>	1	<u>75.00</u>
Total ...			<u>512.10</u>				<u>149.20</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{362.9}{18} \left(.75 - \frac{1556}{146} \right) = +11.98$ ✓

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Freeboard.

to Freeboard Deck = 36.81 ✓Freeboard = 8.87 ✓Moulded draught (d) = 27.94 ✓

Tropical freeboard and addition for

Freeboard = $\frac{d}{4}$ inches = 6.98 ✓

Winter North Atlantic Freeboard (if

= 4.69 4.4

Deduction for Fresh Water.

Displacement in salt water at

summer load water line

 $\Delta = 28.18792$

Tons per inch immersion at

summer load water line

 $T = 28.60.41$ Deduction = $\frac{\Delta}{40T}$ inches= 1886540 x 60.64= 4.75 4.4

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.803 + .68}{1.36} = \frac{1.483}{1.36}$

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. ...

Summer

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

Tropical Fresh Water Line above

Fresh Water Line

Tropical Line

Winter Line

Tropical Fresh Water Freeboard

Fresh Water

Tropical

Winter

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS			
Description of Hatchway	...	No 1	
Dimensions of Hatchway	...	UPPER DK 15' x 15'	
COAMINGS	Height above Deck	...	33
	Thickness Sides	...	44
	Thickness Ends	...	44
	Stiffeners	...	✓
HATCH BEAMS	Brackets, Stays	...	✓
	Number	...	2
	Spacing	...	5'
	Scantling and Sketch	...	11" 3 1/2 x 3 x 42 11" 13 x 38
FORE AND AFTERS	Bearing Surface	...	
	Number	...	
	Spacing	...	
	Unsupported Lengths	...	
HATCH COVERS	Scantling* and Sketch	...	
	Bearing Surface	...	
	Material	...	Steel
	Thickness	...	3/4" thick 3 BA Shods
HATCH COVERS	How fitted	...	Winged 2" x 4" riveted to cover
	Bearing Surface	...	4" lumber
	Spacing of Cleats	...	4" lumber
	Number of Tarpaulins	...	24" to 30" up
<p>*Are wood fore and afters steel shod at all bearing surfaces? ✓</p> <p>Are battens and wedges efficient and in good condition? YES</p> <p>Are tarpaulins in good condition and in accordance with rule requirements? YES</p> <p>Are lashings provided in accordance with rule requirements? YES</p>			

Particulars of fiddle, funnel and ventilator coamings:— Exhaust from Engines & fiddle of strong construction: Engine room skylight of steel of substantial construction. No fiddle gratings fitted.

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways :—

None

Paragraph of Ventilators in exposed positions on freeboard and superstructure decks:

2 at 10" dia, coverings	36" x 32" to pump room.	3 vents on Port 2 nd to dia. coverings 30" x 32" to accommodation. all ventilators constructed in accordance with rules and coverings are closed by wood flaps & canvas covers.
2 at 15" dia, coverings	36" x 36" to hold.	
2 at 5" dia, coverings	30" x 36" to dayways.	
2 at 24"	30" x 34" to living quarters.	
	33" x 40" to pump room.	

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

[illegible]

Position of Hungary Large and Coaling Ports:—

None

Particulars of Scuppers and Sanitary Discharge Pipes — Stinger bar cut for scuppers on freeboard deck.
Sanitary discharge pipes fitted with cast steel storm valves at ship's side & efficient at the inner end.

Side scuttles under forecastle fitted with hinged deadlights.
Side scuttles under poop deck, which are 12" dia, are not fitted with deadlights.
as substantial construction.

Columns of Guard Rails: - On foreboard deck, two ball stanchions 4'4" high & 4'6" apart fitted with two long steel chains.
On poop deck: - 43" high with 3 rods & stanchions spaced 4'6" high.
Fore deck: - 43" high with 2 rods & stanchions spaced 4'6" high.

particulars of Gangwas, Lifelines, etc. :—

Crew berthed in poop. A steel wire lifeline is fitted on each side of the upper deck, extending from Poop to Forecastle bulkheads.

Particulars of Freeing Arrangements.

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	✓					
Forward Well	✓					
State position of each freeing port						

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

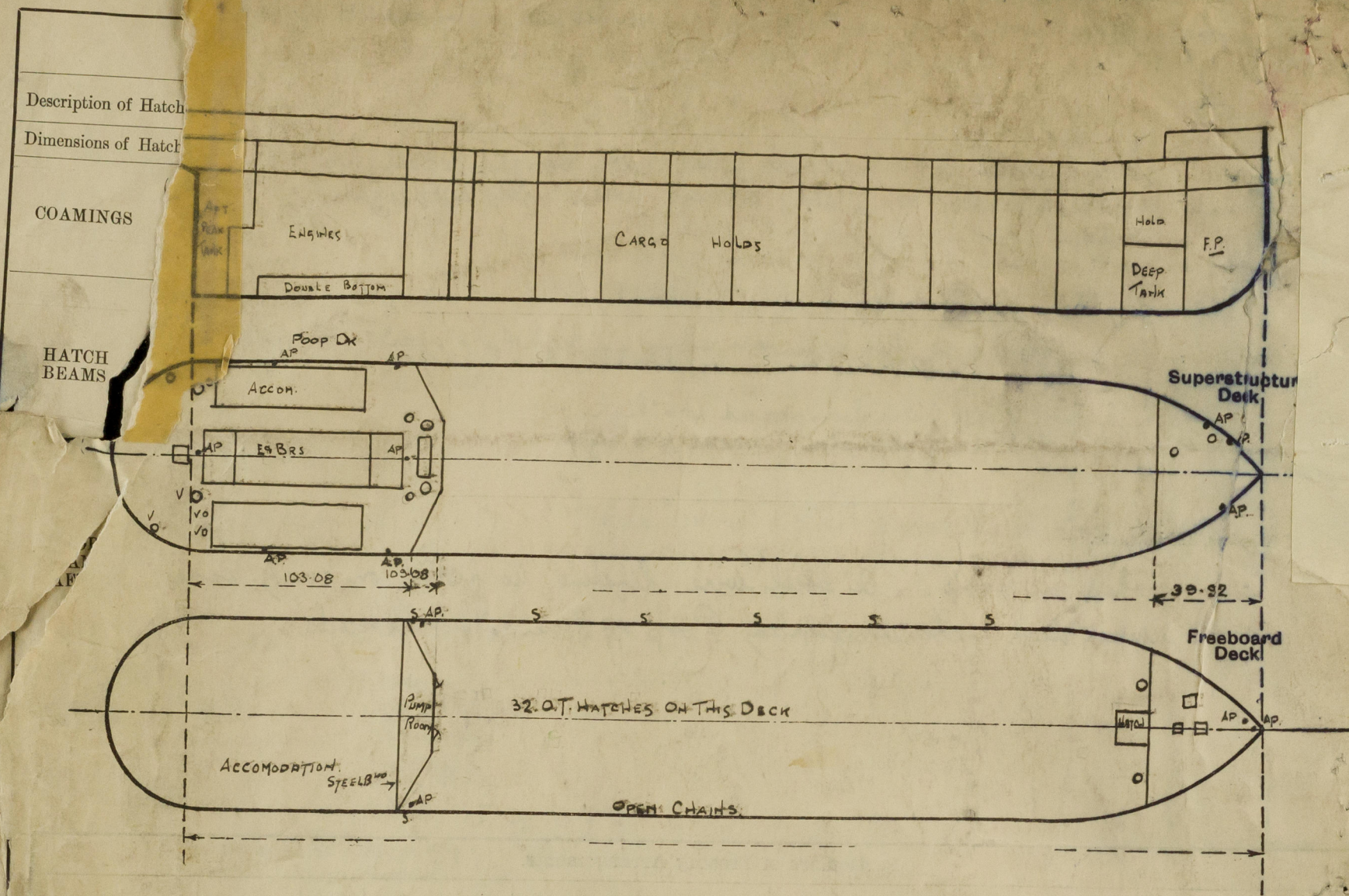
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	44	40	10 x 3 1/2 x 40	30"	Bracketed into bottom	5' 3" x 24"	18"	8'-0"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead	30	30	3 x 2 1/2 x 30	33	None	60" x 48"	18"	7'-6"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free- board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super- structure Decks	35	30	3 x 3 x 35	34	Bracketed into	5' 3" x 24"	15"	7'-0"
Machinery Casings when Superstruc- tures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships ...								

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

[illegible]

bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and 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 has been surveyed afloat.*
This vessel was completed and handed over to the Owners in June of last year but has never gone into service and is still lying at Scott's basin. It is indefinite when she will be employed.

Builder's name and yard number. *Scott's L. B. & Co. No 531.*

Names of sister ships. *M. V. Brunswick.*

Owners. *Atlantic Oil Shipping Co.*

Fee £ *16 3 0* Received by me.



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