

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No.  
(For London Office only.)

GRK REPORT No. 19414

Computation of Freeboard for ~~Cargo~~ ~~Steamer~~ ~~Sailing Ship~~ ~~Tanker~~having POOP & ForecastlePort of Survey Greenock

(Type of Superstructures.)

Date of Survey May 25<sup>th</sup> 1932

Ship's Name

Nationality and Port of Official Number

Gross Tonnage

Date of Build

PERMIAN.Panama89551931  
6 moName of Surveyor Kenneth InglisMoulded 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 .803Particulars 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 =  $(36.81 - 31.27) 3$   
 $= 5.54 \times 3 = +16.62$ Moulded Breadth (B) = 63Standard Round of Beam =  $\frac{B \times 12}{50} = \frac{63 \times 12}{50} = 15.12$ Ship's Round of Beam = 15Difference Defect = .12

Restricted to

Correction =  $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{.12}{4} (1 - \frac{31.13}{103}) = +.02$ 

Nothing on exposed deck

 $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 36.81

If restricted by superstructures

## DEDUCTION FOR SUPERSTRUCTURES.

Standard Height of Superstructure 7.50" " R.Q.D. 42.00Deduction for complete superstructure 42.00Percentage covered  $\frac{S}{L} = \frac{31.13}{103} = 31.13\%$ " "  $\frac{S_1}{L} = \frac{31.13}{103} = 31.13\%$ " "  $\frac{E}{L} = \frac{31.13}{103} = 31.13\%$ 

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 =  $42 \times 22.13 = -9.29$ 

## 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>45.00</u>	<u>45.00</u>	1		<u>45.00</u>
1/4 L from A.P. ...	<u>25.32</u>	4		<u>101.28</u>	<u>16.375</u>	<u>109.16</u>	4		<u>28.40</u>
1/2 L ...	<u>6.26</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>
3/4 L from F.P. ...	<u>12.52</u>	2		<u>25.04</u>	<u>0</u>	<u>0</u>	2		<u>0</u>
1/4 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>			<u>149.20</u>

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

If limited to on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 10' ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 36.81Summer freeboard = 8.87Moulded draught (d) = 27.94

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 6.98

Addition for Winter North Atlantic Freeboard (if

required) = 4.64

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 28' - 18066 \text{ tons}$  $\Delta = 28' - 18792$  $\Delta = 29' - 19521$ 

Tons per inch immersion at summer load water line

 $T = 27' - 60.41$  $T = 28' - 60.64$  $T = 29' - 60.83$ Deduction =  $\frac{\Delta}{40 T}$  inches $= \frac{18865}{40 \times 60.64}$  $= 7.75$ 

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{.803 + .68}{1.36} = \frac{1.483}{1.36}$ Depth Correction ... 16.62Deduction for superstructures ... 9.29Sheer correction ... 11.98Round of Beam correction ... .02

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

Summer 2020

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

Tropical Fresh Water Line above Deck

Fresh Water Line

Tropical

Tropical

Tropical Fresh Water Line above Deck

Fresh Water

Tropical

Tropical

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Permian

### HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Description of Hatchway	No.
Upper Deck	1
Dimensions of Hatchway	15' x 15'
COAMINGS	Height above Deck ... 33 Thickness { Sides ... 44 { Ends ... 44 Stiffeners ... Brackets, Stays ...
HATCH BEAMS	Number ... 2 Spacing ... 5' Scantling and Sketch ...  Bearing Surface ...
FORE AND AFTERS	Number ... Spacing ... Unsupported Lengths ... Scantling * and Sketch ...  Bearing Surface ...
HATCH COVERS	Material ... Steel Thickness ... 3 BA plate How fitted ... 7x3 & 40 rounded to cover Bearing Surface ... lumber plates
Spacing of Cleats	lumber plates 24" to 30" apart
Number of Tarpaulins	NONE

\*Are wood fore and afters steel shod at all bearing surfaces? ✓  
Are battens and wedges efficient and in good condition? YES  
Are tarpaulins in good condition and in accordance with rule requirements? YES  
Are lashings provided in accordance with rule requirements? YES

Particulars of fiddle, funnel and ventilator coamings:— Exhausts 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 :—

arrangement of Ventilators in exposed positions on freeboard and superstructure decks

2 at 10" dia. coaming 34" x 32" to pump room.  
 2 at 15" dia. coaming 36" x 35" to hold.  
 1 at 15" dia. coaming 30" x 36" to alleyways.  
 2 at 24" " 30" x 34" to living quarters.  
 2 at 24" " 33" x 40" to pump room.

3 into a Porpoise 6 dia. coaming 30" x 30" to accommodation.  
 all structures constructed in accordance with rules and coaming  
 are closed by wood plugs & canvas covers.

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 trap  
at the inner end.

Portlights of No. 2 Scuttles: Side scuttles under forecastle fitted with hinged deadlights.  
Side scuttles under poop deck, which are 2" dia, are not fitted with deadlights.  
All are of substantial construction.

On freeboard deck, two ball stanchions 44" 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: 45" high with 2 rods & stanchions spaced 4'-6" high.

## Particulars of Gangwan, 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

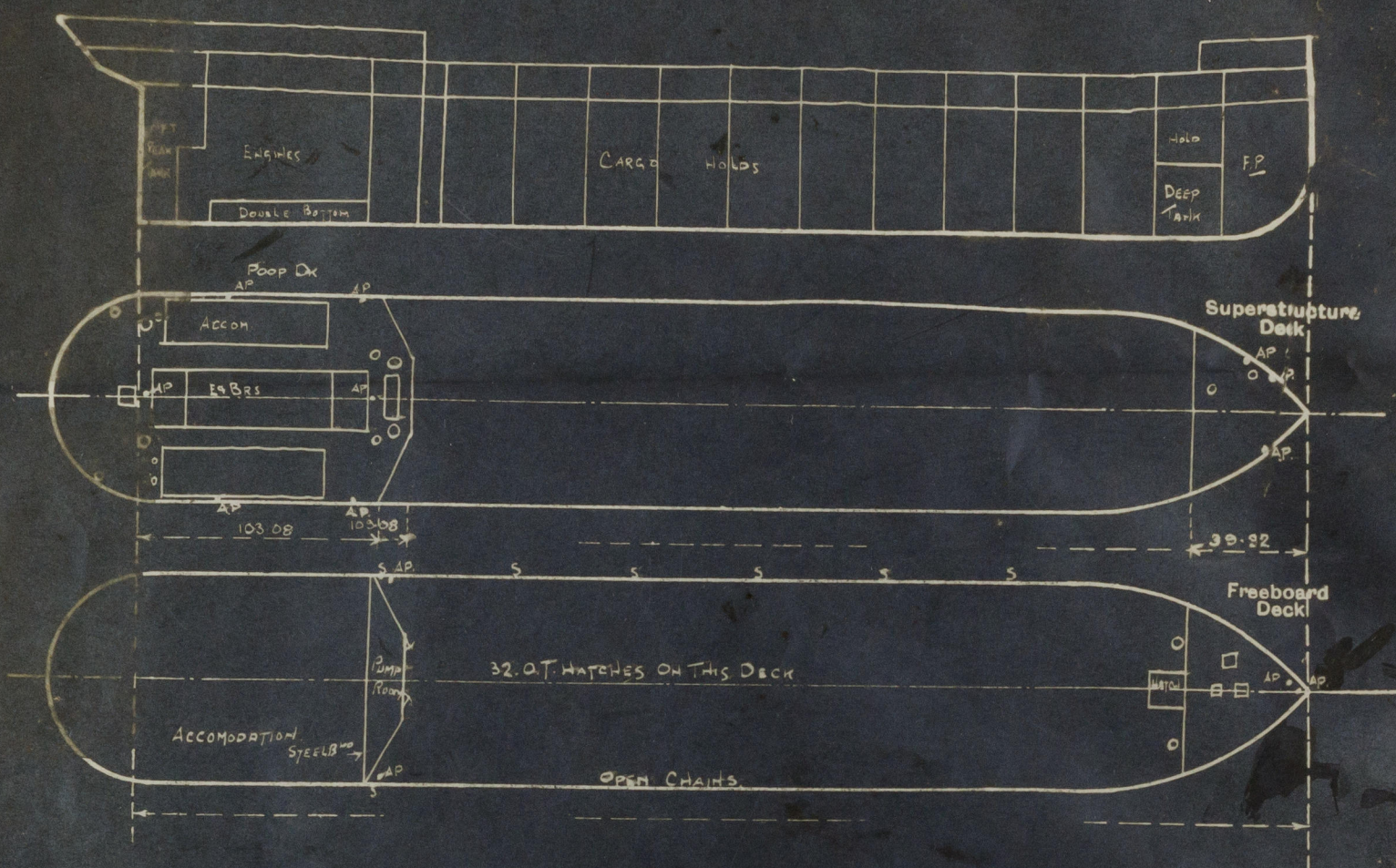
State position of each freeing port ... } After Well :—  
(P. and A. position and height above deck edge) } Forward Well :—  
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :—  
Additional area where sheer is less than standard.

## Particulars of Superstructures, Trunks, Casings, Deckhouses

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



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:— 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 Scotts & Co. Ltd. No 531.

Names of sister ship M. V. Brunswick.

Owners Atlantic Oil Shipping Co.

Fee £ 16 3 0

Received by me



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