

Lloyd's Register of Shipping

SURVEYS FOR FREEBOARD - STEAMERS

(Under the Provisions of the U. S. A. Load Line Act of March 2, 1929)

New York Office Index No. 148

Port of Survey Philadelphia

Date of Survey 1st Sept. 1933

Name of Surveyor R. Marshall

30035

S.S. "Birkenhead"	Port of Registry and Nationality. New York U.S.A.	Official Number. 221700	Gross Tonnage. 6960	Date of Build. 1921-10	Particulars of Classification. +100A1. Carr. put in bulk. S.S. Ph. No 2-50
Number in Register Book. 58411	Owner. Standard Transp. Co.	Builder. Moore S.B.C.	Hull No. 166		
Moulded dimensions 425.0 x 57.0 x 33.0 (85% = 28.05)					
Moulded displacement at a moulded draught of 85 per cent. of moulded depth. 156.10 x .995 = 155.35					
Coefficient of fineness for use with tables. 800					

DEPTH FOR FREEBOARD.		CORRECTION FOR DEPTH.		CAMBER
Moulded depth ...	33.00	(a) When D is greater than $\frac{L}{15}$		Standard $\frac{57 \times 12}{50} = 13.68$
Stringer plate625	$(D - \frac{L}{15}) \times R = (33.05 - 28.33) \times 3 = 14.16$		Ship ... 14.00
Sheathing in wells $T(\frac{L-S}{L}) =$	✓	(b) When D is less than $\frac{L}{15}$ (if allowed).		Difference ... 32
		$(\frac{L}{15} - D) \times R =$		Restricted to ... ✓
Depth D =	33.05	If restricted by height of superstructures		Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S}{L}) = \frac{32}{4} \times .5 = 4$

SUPERSTRUCTURES.

	Mean Covered Length S	Effective Length S _e (Uncorrected for Height)	Height.	Correction for Height.	Effective Length.
Poop enclosed ...	105.75	105.00	7.5	✓	105.00
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	40.00	40.00	7.5	✓	40.00
" overhang aft ...	8.00	6.00			6.00
" overhang forward ...	2.00	1.00			1.00
F'cle enclosed ...	41.25	41.25	7.5	✓	41.25
" overhang ...					
Trunks forward ...					
" aft ...					
Tonnage opening ...					

Sheer aft.
56.0 1 56.0
20.0 3 60.0
- 3 -
- 1 -
116.0

Standard Sheer Aft.
52.50 1 52.50
23.34 3 70.02
5.83 3 17.49
- 1 -
140.01

TOTAL = 197.00 194.00 194.00
Length of ship (L) = 425 425 425
% Covered... = 46.35% 45.64% 45.64%
Corresponding %, corrected for absence of forecastle if required } A = Tanker B = 36.64%
Allowance ... = 42.0 x .3664 = -15.39
Correction for Bridge less than 2 L if required } Tanker: does not apply.

SHEER.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	56.00	52.50	56.00	1	56.00
2	20.00	23.34	20.00	4	80.00
3	-	5.83	-	2	-
4	-	-	-	4	-
5	21.75	11.67	21.75	3	43.50
6	64.25	46.66	64.25	4	257.00
F.P. 7	127.00	105.00	127.00	1	127.00

If excess sheer forward and deficient sheer aft:—

Actual sheer aft = 116.0
Standard sheer aft = 140.01 = 82.85%
Actual sheer forward = excess
Standard sheer forward = excess sheer forward

Length of enclosed superstructure L

Forward of amidships = }
Aft of amidships = } Tanker does not apply

Mean effective sheer ... 18) 563.50
Standard sheer .05 L + 5 = 31.30
Difference (Df) = 26.25
Allowance = $Df \times (\frac{S}{2L}) = 5.05 (.75 - .232) = -2.62$
If limited on account of amidship superstructure ... ✓
If limited on account of excess sheer (1 1/2 in. per 100 ft.) ... ✓

DRAFTS.

F. W. ALLOWANCE

TABULAR FREEBOARD (corrected for flush deck if required)

Moulded Depth D = 33'-0"	Displacement = 15060	Corrected for Coefficient $\frac{800 + .68}{1.36} =$	68.65
Stringer Plate = 1/2"	Tons per inch = 49.67		74.70
Freeboard 33'-0 1/2"			
Moulded draught 27'-1 3/4"		Correction for Depth ...	
Addition for keel below base line 2 1/4"	$\frac{15060}{40 \times 49.67} = 7.58$	" Superstructures ...	14.16
Extreme draught 27'-4"		" Sheer ...	15.39
		" Camber ...	2.62
		" Thickness of deck04
		" Scantlings, etc. ...	-
			14.16 18.05 - 3.89
			Summer Freeboard = 70.81

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

Tropical Fresh Water Line (above center of Disc)	14 1/4"	Tropical Fresh Water Freeboard	4'-8 1/2"
Fresh Water Line	7 1/2"	Fresh Water	5'-3 1/4"
Tropical Line	6 3/4"	Tropical	5'-4"
Winter Line (below ")	6 3/4"	Winter	6'-5 1/2"
Winter North Atlantic Line	11"	Winter North Atlantic	6'-9 3/4"

RECEIVED 16 FEB 1933

Note:—The Rules referred to below are the Load Line Regulations of the United States Department of Commerce.
(These should be consulted when completing the report.)

Is the poop or raised quarter deck connected with the bridge? No
Has the poop or raised quarter deck an efficient steel bulkhead at the fore end? Yes
Give particulars of the means of closing the openings in this bulkhead (Rules 43 and 44) Two hinged steel water tight doors
Has the bridge an efficient steel bulkhead at the fore end? Yes
Give particulars of the means of closing the openings in this bulkhead Two hinged steel water tight doors
Has the bridge an efficient steel bulkhead at the after end? Yes
Give particulars of the means of closing the openings in this bulkhead Two hinged steel water tight doors
Has the forecastle an efficient steel bulkhead at the after end? No open
Give particulars of the means of closing the openings in this bulkhead
Are the engine and boiler openings covered by a bridge, poop, raised quarter-deck, or enclosed by a strong steel deckhouse? Covered by poop
If the openings are not so protected, are the exposed parts of the casing efficiently constructed? ✓
Give thickness of plating, scantlings and spacing of stiffeners
Are Rules Nos. 19, 20, 21 and 22 complied with (where applicable)? Yes. Hinged steel door in machy. casing 20" sill

Particulars of bulkheads of erections:

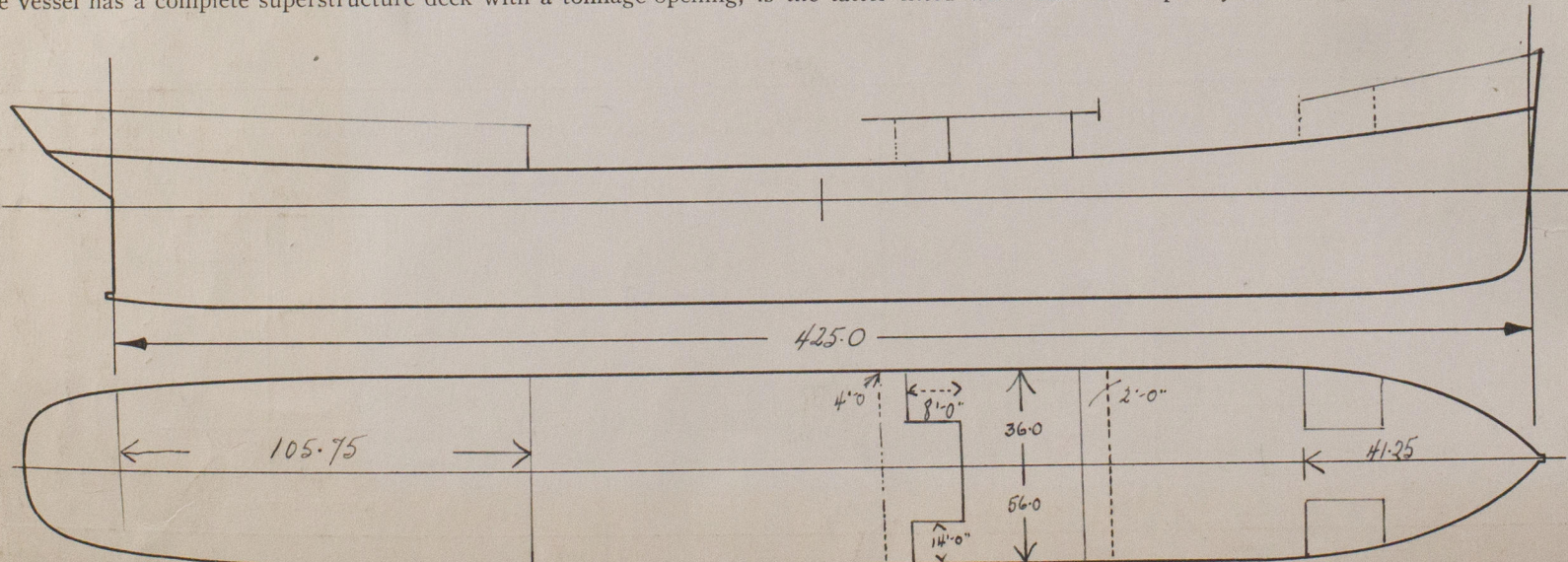
	Poop or Raised Quarter-Deck bulkhead	Bridge front bulkhead	Bridge after bulkhead	Forecastle bulkhead
Thickness of bulkhead plating	<u>7/16"</u>	<u>Coaming 1/2" Bulkhd 7/16"</u>	<u>3/8"</u>	<u>✓</u>
Scantlings of stiffeners	<u>L 10 x 3 3/8 x 3 3/8 x .43</u>	<u>L 8 x 3 1/2 x 3 1/2 x .48</u>	<u>L 5 x 3 x 3/8"</u>	<u>Open</u>
Spacing of stiffeners, and if bracketed	<u>24" to 36"</u>	<u>36" Bracketed</u>	<u>36" not bracketed</u>	
Height of sills of openings above deck	<u>21"</u>	<u>22 1/2"</u>	<u>18 1/2"</u>	<u>✓</u>

Particulars of weather deck hatchways. (In case of complete superstructure vessels having tonnage openings, give, in addition, particulars of 2nd deck hatchways, and also of those in bridge spaces closed by Class 2 appliances, or in open bridges).

Position and Size.	<u>No. 1 8'-8" x 14'-0"</u>		<u>20 O.T. Hatches 6'-0" x 4'-0"</u>		<u>10 O.T. Hatches 4'-0" x 2'-4"</u>		<u>Hatches on Poop 6'-0" x 6'-0"</u>			
Item.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.
COAMING. Height above top of DECK	<u>24"</u>		<u>8"</u>		<u>8"</u>		<u>18"</u>			
Thickness	Sides.....	<u>.44</u>	<u>L 8 x 3 1/2 x 7/16</u>		<u>L 8 x 3 1/2 x 7/16</u>		<u>.38</u>			
	Ends.....	<u>.44</u>	<u>-</u>		<u>-</u>		<u>.38</u>			
SHIFTING BEAMS OR WEB PLATES.	Number.....	<u>1</u>	<u>-</u>		<u>-</u>		<u>-</u>			
	Section and Scantlings.....	<u>11 12 x 3/8</u>	<u>-</u>		<u>-</u>		<u>-</u>			
	Material.....	<u>11 L 3 x 3 x 7/16</u>	<u>-</u>		<u>-</u>		<u>-</u>			
* FORE AND AFTERS.	Number.....	<u>-</u>	<u>-</u>		<u>-</u>		<u>-</u>			
	Section and Scantlings.....	<u>-</u>	<u>-</u>		<u>-</u>		<u>-</u>			
	Material.....	<u>-</u>	<u>-</u>		<u>-</u>		<u>-</u>			
HATCHES Thickness	<u>Steel 3/8"</u>		<u>17/32"</u>		<u>17/32"</u>		<u>3"</u>			
Remarks.....	<u>wood</u>		<u>Steel Stiffener</u>		<u>Steel Stiffener</u>		<u>wood</u>			

* The depth of Fore and Afters should be stated from the underside of the hatches in all cases.

Are Rules 12, 13, 14, 15, 16, 17, 18 complied with as far as practicable? Yes
Are hatchway coamings stiffened in accordance with Rule 9? Yes
Length of bulwarks in wells—forward: 116' feet; aft: 118' feet.
Area of freeing ports required by regulations (Rules 30 and 100) forward: Open rails for half length of exposed deck sq. ft.; aft: length of exposed deck sq. ft.
No. Ft. x Ft.
Particulars of freeing ports fitted { forward well } None = _____ sq. ft.
on each side of vessel { after well } None = _____ sq. ft.
Are Rules 23 and 24 complied with as far as practicable? Yes
Are air pipes to tanks in accordance with Rule 25? Yes
Are all scuppers and sanitary discharge pipes in accordance with Rule 27? Yes
In oil tankers, what is the extent of the fore and aft gangway? All fore & aft Are the crew berthed in the forecastle? (Rule 96). No
Is the gangway strong and efficiently braced fore and aft? Yes State spacing of supports 9.5 feet average
In oil tankers, are the bulwarks open for at least half the length of the exposed portion of the weather deck? (Rule 100). Yes
Are Rules Nos. 95, 97, 98 and 99 complied with as far as practicable? Yes
If the vessel has a complete superstructure deck with a tonnage opening, is the latter fitted with efficient temporary covers? ✓



Indicate thickness and extent of any deck covering, and extent of erections, with dimensions, showing overhang (if any).
Indicate position of scuppers from tonnage-exempted spaces above freeboard deck.

Sister vessels: "Gargoyles" "Vacuum"

Fee: \$90.00

Expenses (if any) \$3.00

(Signed)

O. Warbitt
Surveyor to Lloyd's Register of Shipping.

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Foundation