

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tugboat  
having POOP, BRIDGE, and FORECASTLE. Port of Survey London

STANCREST (Type of Superstructures.)  
Date of Survey 23<sup>rd</sup> August 1932

Ship's Name S.S. "SHELDRAKE" Nationality and Port of Registry British London Official Number 130060 Gross Tonnage 462 Date of Build 1920-10  
Name of Surveyor C. H. Stocks

Moulded Dimensions: Length 157<sup>2</sup>/<sub>4</sub> Breadth 24<sup>7</sup>/<sub>4</sub> Depth 13<sup>2</sup>/<sub>2</sub>  
Moulded displacement at moulded draught = 85 per cent. of moulded depth 962 tons  
Coefficient of fineness for use with Tables .762 *See Page 4.*

Particulars of Classification +100 A1.  
10.29 S.S. Lon N. 2-29 ✓

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	13.25	(a) Where D is greater than Table depth (D - Table depth) R = $(13.29 - 10.49) \times 1.211 = +3.39$		Moulded Breadth (B)	24.92
Stringer plate	.04	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Standard Round of Beam = $\frac{B \times 12}{50}$	5.98
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$				Ship's Round of Beam	6 <sup>1</sup> / <sub>4</sub>
Depth for Freeboard (D) =	13.29	If restricted by superstructures		Difference	.27
				Restricted to	
				Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$\frac{.27}{4} \left( 1 - \frac{.5973}{15.027} \right) = -.03$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S)	Height	Height Correction	Effective Length (E)	
Poop enclosed	47.66	47.66	7.0		47.66	Standard Height of Superstructure <u>6.00</u>
.. overhang						.. R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure <u>21.74</u>
.. overhang	9.84					Percentage covered $\frac{S}{L} = \frac{51.68}{50.27}$
Bridge enclosed	9.2	9.84	7.25		9.84	.. $\frac{S_1}{L} = \frac{50.27}{50.27}$
.. overhang aft						.. $\frac{E}{L} = \frac{50.27}{50.27}$
.. overhang forward	20.35					Percentage from Table, Line A. <u>32.38</u>
Fore enclosed	19.56	20.35	7.25		20.35	(corrected for absence of forecastle (if required))
.. overhang	1.28				1.28	Percentage from Table, Line B. <u>36.27</u>
Trunk aft						(corrected for absence of forecastle (if required))
.. forward						Interpolation for bridge less than .2L (if required) $\frac{3.89 \times .0625}{.200} = \frac{32.38}{1.22}$
Tonnage opening aft						Deduction = $21.74 \times .3360 = -7.31$
.. forward						<u>33.60</u>
Total	80.41	79.13			79.13	

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	25.74	1		25.74	15.00	15.00	1		15.00	Mean actual sheer aft = <u>deficient</u>
1/4 L from A.P.	11.45	4		45.80	6.32	6.32	4		25.28	Mean actual sheer forward = <u>deficient</u>
1/2 L	2.83	2		5.66	1.58	1.58	2		3.16	Mean standard sheer forward
Amidships		4					4			Length of enclosed superstructure forward of amidships = <u>2</u>
3/4 L from F.P.	5.66	2		11.32	4.94	4.94	2		9.88	.. aft of .. =
1/4 L	22.91	4		91.64	19.75	19.75	4		79.00	
F.P.	51.48	1		51.48	48.00	48.00	1		48.00	
Total				231.64					180.32	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75 - S}{2L} \right) = \frac{51.32}{18} \left( \frac{75 - 255.4}{2} \right) = +1.41$

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.

Depth to Freeboard Deck	FL	13.29
Summer freeboard		1.25
Moulded draught (d)		12.04

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches =  $\frac{3.01}{4} = .75$

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

2"

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 1044$

Tons per inch immersion at summer load water line

$T = 7.77$

Deduction =  $\frac{\Delta}{40 T}$  inches

$= \frac{1044}{40 \times 7.77} = 3.35 = 3\frac{1}{4}$

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

$\frac{.762 + .68}{1.36} = \frac{1.442}{1.36}$

Correction for coefficient

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

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

1-3

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	...

1-6" 2020



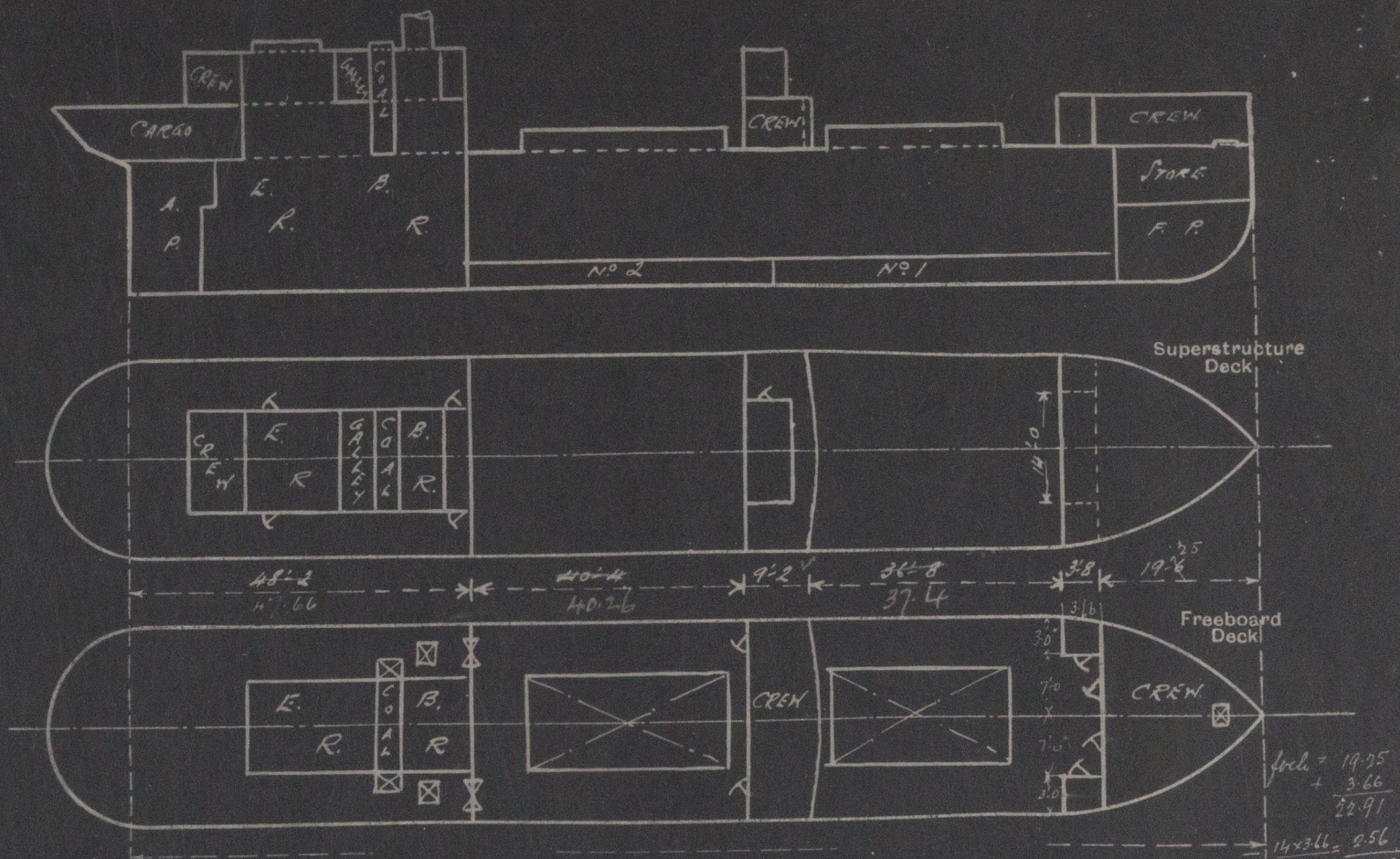
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File



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:—



2 1/2" Wood deck on Forecastle & Bridge Decks.

Bridge = 10.17  
 9.17  
 1.0 = .27  
 + 9.17  
 9.54

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

From Draft Scale on board:—

Draft	Draft	T.P.I.
11-0	930	7.70
12-0	1025	7.77
12-3	1045	7.78

Survey held afloat whilst loading.

Grossing appliances on Casings, Superstructures & Companionways  
 to be overhauled & placed in order.

Builder's name and yard number.

Ben & Colby Bros Yard No 105.

Names of sister ships



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