

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having *Prop. Bridge & Forecastle.*

Port of Survey

HULL (Goole)

(Type of Superstructures.)

Date of Survey

20th July 1932.

Ship's Name

"Deanne"

Nationality and Port of Registry

Br. Goole

Official Number

146343

Gross Tonnage

1046

Date of Build

1924

Name of Surveyor

C. Knoffart.

Moulded Dimensions: Length

240'

Breadth

34'

Depth

16'4"

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

2182

tons

Coefficient of fineness for use with Tables

.674 lowest 68

Particulars of Classification

100 A1

S.S. 100 No. 1-18

Depth for Freeboard (D)

Moulded depth ... 16'3.3 16'4"

Stringer plate ... 0.4 .45"

Sheathing on exposed deck

 $T \left(\frac{L-S}{L} \right) = \frac{35 \cdot 19}{12 \cdot 7875} \times 3282 = 02$

Depth for Freeboard (D) =

16.39

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R = $(16.39 - 16) 1846 = .72$ (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)

34

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

8.16

Ship's Round of Beam =

8.2

Difference

.34

Restricted to

Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) =$

.04

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>Exposed</i> ...	25.15				
" overhang ...	38	25.15	8'		25.15
R.Q.D. enclosed ...	12.85	6.42			6.42
" overhang ...					
Bridge enclosed <i>then aft.</i> ...	84.5				
" overhang aft ...	88	63.37	8'		63.37
" overhang forward ...					
Fore enclosed ...	3.75	1.87			1.87
" overhang ...					
Trunk aft ...	79.832	28.99	8'		28.99
" forward ...	15.175				
Tonnage opening aft ...					
" forward ...					
Total ...	161.25	125.80			125.80

Standard Height of Superstructure

6.0

R.Q.D.

Deduction for complete superstructure

30

Percentage covered $\frac{S}{L} =$

67.18

" $\frac{S_1}{L} =$

52.42

" $\frac{E}{L} =$

52.42

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $30 \times 3842 = 1153$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	34.00	1		34.00	22.25	22.25	1		22.25
$\frac{1}{4}$ L from A.P. ...	15.13	4		60.52	8.25	8.29	4		33.16
$\frac{3}{4}$ L " ...	3.74	2		7.48	2.00	2.07	2		4.14
Amidships ...		4			0		4		
$\frac{3}{4}$ L from F.P. ...	7.48	2		14.96	6.50	6.61	2		13.22
$\frac{1}{4}$ L " ...	30.26	4		121.04	26.25	26.46	4		105.84
F.P. ...	68.00	1		68.00	60.00	60.00	1		60.00
Total ...				306.00					238.61

Correction = Difference between sums of products $\left(\frac{75 - S}{2L} \right) =$ $\frac{67.39}{18} (75 - 33.59) = +1.55$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck =

16.66

Summer freeboard =

2.04

Moulded draught (d) =

14.62

Deduction for Tropical freeboard and addition for

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

3.65 33/4

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Tons per inch immersion at summer load water line

T =

15.5

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

.674 + .68

30.30

Depth Correction ...

.72

Deduction for superstructures ...

1153

Sheer correction ...

1.55

Round of Beam correction ...

.04

Correction for Thickness of Deck amidships ...

3.33

Other corrections, scantlings, etc. ...

-

Actual Str in way of making

.27

Wood Sh. 3.5 lbs. 74

3.26

580 11.57 - 5.77

Summer Freeboard = 24.53

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

2-0 1/2

Tropical Fresh Water Line above Centre of Disc ...

Fresh Water Line

Tropical Line

Winter Line

Winter North Atlantic Line

below

33/4

Tropical Fresh Water Freeboard ...

Fresh Water

Tropical

Winter

Winter North Atlantic

2-4 1/4

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway		...	...	...	No 1	No 2	No 3		
Dimensions of Hatchway		...	...	...	15'4" x 11'	24'11" x 11'	24'11" x 11'		
COAMINGS	Height above Deck ... Thickness { Sides ... { Ends ... Stiffeners ... Brackets, Stays ...	...	...	...	30"	30"	30"		
		...	...	...	.44	.44	.44		
		...	...	...	.44	.44	.44		
		...	...	...	BA. 4" x 3" x 4.5, 9" front.	same	same		
HATCH BEAMS	Number ... Spacing ... Scantling and Sketch ... Bearing Surface ...	...	...	...	2 even	4 even	4 even		
		...	...	...	1 1/2" x 3"	Same	Same		
		...	...	...	9" x 3"	Same	Same		
		...	...	...	3" x 3" x 4"	3	3		
FORE AND AFTERS	Number ... Spacing ... Unsupported Lengths ... Scantling* and Sketch ... Bearing Surface ...	...	...	...	none	none	none		
						
						
						
HATCH COVERS	Material ... Thickness ... How fitted ... Bearing Surface ...	...	...	...	Red Wood	Same	Same		
		...	...	...	3"				
		...	...	...	1/2"				
		...	...	...	2 1/2" + 3"				
Spacing of Cleats		...	...	...	24"				
Number of Tarpaulins		...	...	...	3				

*Are wood fore and afters steel shod at all bearing surfaces? *yes*

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 fiddley, funnel and ventilator coamings:— Stakehold gratings covered by strong steel hinged covers.
Fiddley & funnel vents & coamings in efficient condition.
Engine skylight of steel, strongly constructed with wooden lids.
Bunker Hatch on casing top 12' x 5' 10" with 3" coaming. Fitted with 3" thick wood
hatches - fore & aft. 1 tarpaulin. cleats 27" & 30" spacing - battens good.

Particulars of Flush Bunker Scuttles:— 2 Cast Steel 18" dia on foreboard Deck within Bridge Space
- bayonet joint - no chains.

Particulars of Companionways:— 1 Steel companionway 4' x 2' x 6' on Bridge Deck (aft end of Inch Casing) leading to Open Bridge Space. Fitted teak wood door 1½" thick - sill 12" - Spring lock opening both sides. /

1 Steel companionway on Poop Deck 5'3" x 3' x 4'3" high (Sliding wood top) leading to Open Poop Space. Sill 3". Fitted teak wood door 1½" thick, Spring lock opening both sides. /

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—									
4	Yents on Forecastle Deck	6" (14"x6" oval)	by 5" high	led to	Upper Peak				
2	"	Fore Well	15" dia	" 3'3" x 4	Fore Hold Space				
2	"	"	16" "	" 3'1" x 4	Main " "				
1	"	Tr. Deck (within Br. Space)	16" "	" 2'1" x 4	Aft				
2	"	Roofs Deck	6" "	" 2'6" x 25	Roofs Space accom.				
1	"	"	6" "	" 2'6" x 25	Tunnel Space.				
1	"	"	16" "	" 2'6" x 35	Aft Hold				
2	"	"	6" (14"x6" oval)	" 3" "	Roofs Sp. accom.				

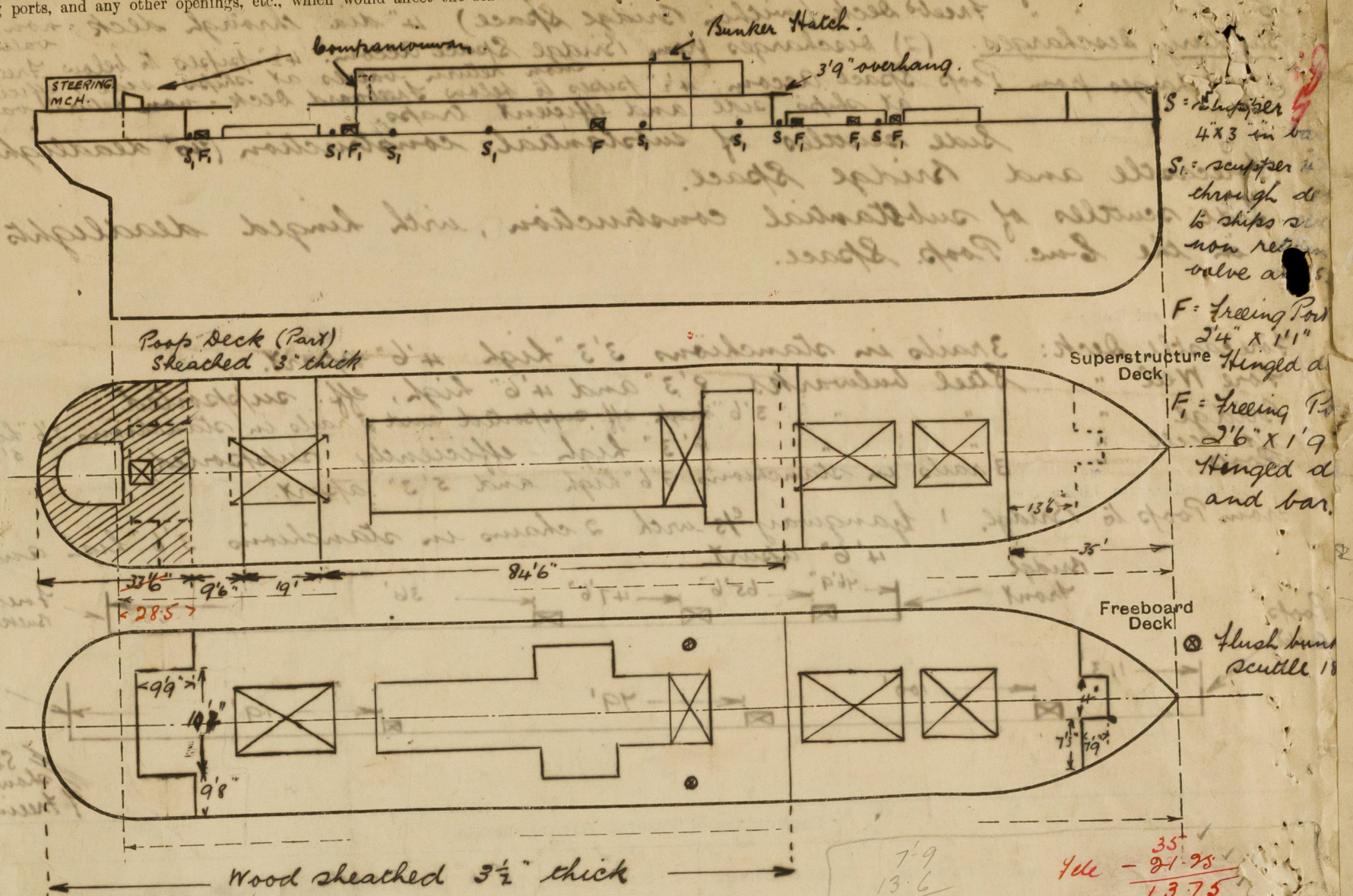
Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—		Poop Deck		Forecastle Deck		Fore Peak Tank	
1	"	"	"	3"	12"	"	No 1 D.B.
"	"	"	"	3"	18"	"	"
"	"	"	"	3"	19"	"	No 2 "
1	"	"	"	3"	15"	"	Aft Peak "
2	"	"	"	3"	16"	"	No 4 D.B.
1	"	"	"	3"	3"	" (Screw top).	No 3 D.B.
1	"	"	"	3"	14"	"	No 3 "
1	"	"	"	3"	18"	"	Fore Tank in Bridge Space

Particulars of Gangway Cargo and Coaling Ports:—

None.

Seame.

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:—

None.

7'9
13'6
21'3

4de - 35' - 21'75
13'75

+ 7'75 x 7'75
9'75

Eggs enclosed

AL = 24

diff 4 17'8786

3'66
19'83
23'49

overhang 35'
24'
11'

allow 5'5'
28'99

Builder's name and yard number *Vickers Ltd, Barrow.*

Names of sister ships *"Don", "Hebble", "Rye" etc done*

Owners *London, Midland & Scottish Rly. Co. Ltd.*

Fee £ *8 : 10*

Expenses: *6/8*

Received by me



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