

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

21 APR 1934

Index No. 19548

No. 103705

26 NOV 1935

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Raised Quarter Deck, Bridge & Funnel

Port of Survey Glasgow Dock near Lancaster

Date of Survey 18.4.34

Name of Surveyor W.S. Shields

Particulars of Classification * 100 A1
SS in m3-2,20
SS in m2-28

THIRD (Type of Superstructures.) Belfast

Ship's Name Carlingford Nationality and Port of Registry British Official Number 126961 Gross Tonnage 345 Date of Build 1908

Moulded Dimensions: Length 144.83 Breadth 24 Depth 11.5

Moulded displacement at moulded draught = 85 per cent. of moulded depth not available tons

Coefficient of fineness for use with Tables 70.7

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	11.5	(a) Where D is greater than Table depth		Moulded Breadth (B)	24'-0"
Stringer plate	.03	(D-Table depth) R = $(11.53 - 7.66) \times 1.114$		Standard Round of Beam = $\frac{B \times 12}{50}$	5.76"
Sheathing on exposed deck		= 2.08"		Ship's Round of Beam	6"
T $\left(\frac{L-S}{L} \right) =$		(b) Where D is less than Table depth (if allowed)		Difference	24" excess
		(Table depth-D) R =		Restricted to	
Depth for Freeboard (D) =	11.53	If restricted by superstructures		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$= \frac{24}{4} \times .4322 = - .03$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	-				
" overhang ...	-				
R.Q.D. enclosed ...	50.9	50.75	3.9	✓	50.75
" overhang ...	-				
Bridge enclosed ...	12.3	12.25	7.0	✓	12.25
" overhang aft ...	-				
" overhang forward ...	-				
Fore enclosed open ...	24.08	19.24	7.0	✓	19.24
" overhang ...	1.10				
Trunk aft ...	-				
" forward ...	-				
Tonnage opening aft ...	-				
" " forward	-				
Total ...	87.00	82.24			82.24

Standard Height of Superstructure	6'-0"	✓
" " R.Q.D.	3.298'	-
Deduction for complete superstructure	20.48"	-
Percentage covered $\frac{S}{L} =$	60.07%	✓
" " $\frac{S_1}{L} =$	56.78%	✓
" " $\frac{E}{L} =$	56.78%	✓
Percentage from Table, Line A.		
(corrected for absence of forecastle (if required))	41.49%	✓
Percentage from Table, Line B.		
(corrected for absence of forecastle (if required))		
Interpolation for bridge less than 2L (if required)		
Deduction = $20.48 \times .4149$	- 8.50"	✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	24.48	1		24.48	36	32.00	1		32.00
$\frac{1}{8}L$ from A.P. ...	10.89	4		43.56	18	13.82	4		55.28
$\frac{2}{8}L$ " ...	2.69	2		5.38	5	3.45	2		6.90
Amidships ...	✓	4		✓	0	✓	4		✓
$\frac{3}{8}L$ from F.P. ...	5.39	2		10.78	6	5.78	2		11.56
$\frac{4}{8}L$ " ...	21.79	4		87.16	29	23.11	4		92.44
F.P. ...	48.96	1		48.96	57	53.00	1		53.00
Total ...				220.32					251.40

Correction = $\frac{\text{Difference between sums of products}}{18} = \frac{30.86}{18} = 1.71$ (75 - 30.03) = - .77

If limited on account of midship superstructure. $\frac{.035}{.200} \times .77 = -.14$

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	=	11.50
Summer freeboard	=	.71
Moulded draught (d)	=	10.79

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = $2.69 = 2\frac{3}{4}$

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

T =

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction	2.08	-
Deduction for superstructures	-	8.50
Sheer correction	-	.13
Round of Beam correction	-	.03
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	2.08	8.66
Summer Freeboard =	8.534	

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

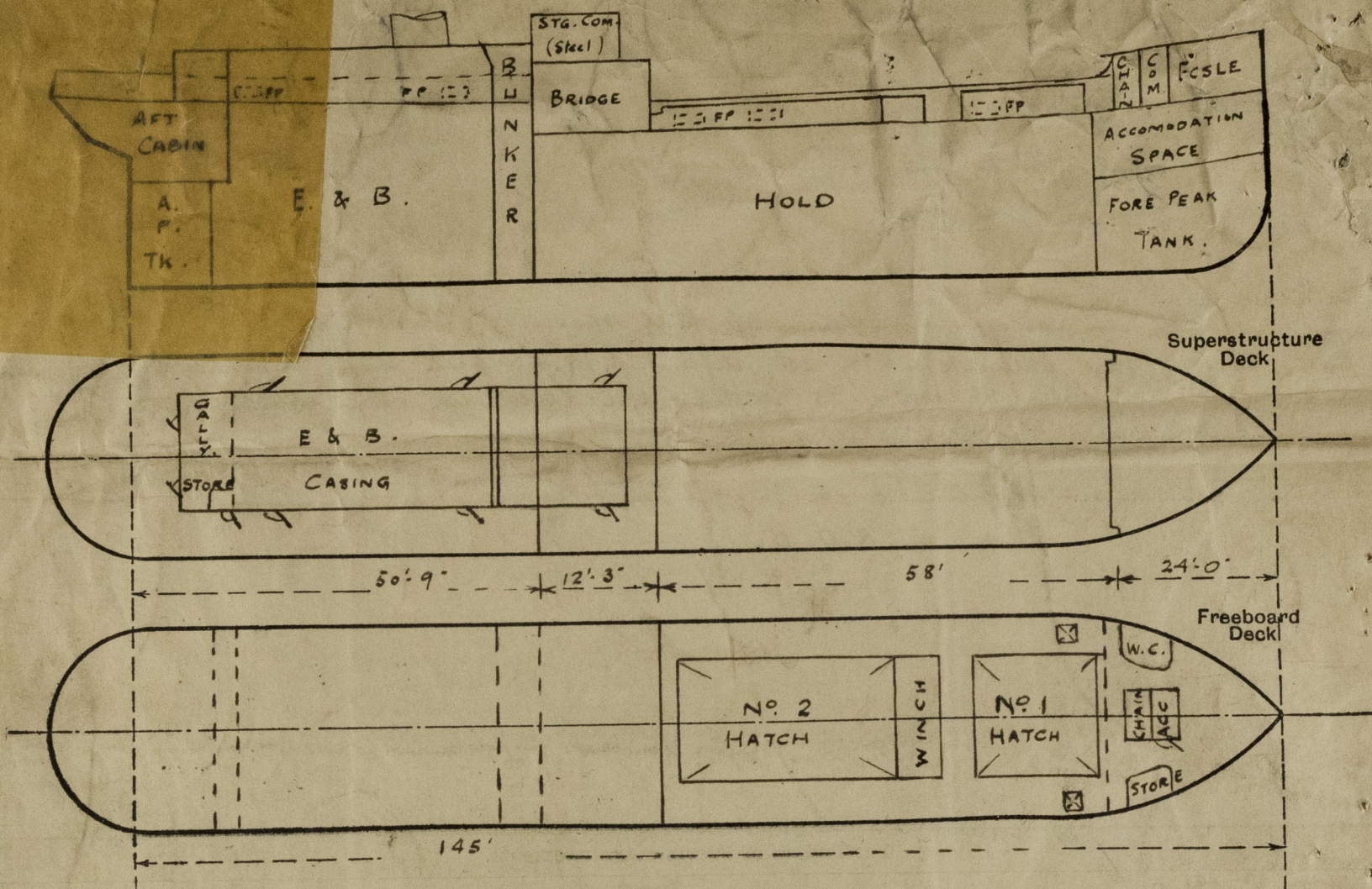
Tropical Fresh Water Line above Centre of Disc	...
Fresh Water Line	"
Tropical Line	"
Winter Line	below
Winter North Atlantic Line	"

Tropical Fresh Water Freeboard	...
Fresh Water	"
Tropical	"
Winter	"
Winter North Atlantic	"

Lloyd's Register
Foundation

Carlingford

Superstructure, bulwarks, 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 shewn on the following sketches:



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

It is proposed to renew the aft bulkhead of bunker and fit same one frame aft of original, in a vertical line with aft side of hatch.
Decks are woodsheathed (3") in way of accommodation spaces and over forecabin deck.
Vessel in dry dock for Special Survey 2nd No 3 and freeboard.

DMIT

Builder's name and yard number *The Dublin Dockyard Co., Dublin. Yard No. 60.*

Names of sister ships *S.S. Shullin*

Owners *J. Seelys, Liverpool.*

Fee £ *5 2 0*

Received by me

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