

29 JUN 1932

BT. COPY

Newcastle-on-Tyne No 88800.

Rpt. C.11.

Index. No. 33652  
(For London Office only.)

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey <u>Newcastle</u>
having <u>Poop, Bridge &amp; Forecastle</u>					Date of Survey <u>28-6-32</u>
(Type of Superstructures.)					Name of Surveyor <u>Dyke &amp; Johnson</u>
Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	Particulars of Classification <input checked="" type="checkbox"/> 100A.1
<u>ESKDALEGATE</u>	<u>British LONDON</u>	<u>161403</u>	<u>4250</u>	<u>1930-4</u>	
Moulded Dimensions: Length <u>368' 0"</u> Breadth <u>52' 16"</u> Depth <u>27' 54"</u>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>9912</u> tons					
Coefficient of fineness for use with Tables <u>772</u>					

<b>Depth for Freeboard (D)</b>	<b>Depth correction</b>	<b>Round of Beam correction</b>
Moulded depth ... .. <u>27' 54"</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>(27' 54" - 24' 53") 2' 831" = 8' 61"</u>	Moulded Breadth (B) <u>52' 16"</u> x .3048
Stringer plate ... .. <u>03</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{52.272 \times 12}{50} = 12.55$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <u>12' 5"</u>
Depth for Freeboard (D) = <u>28' 57"</u>		Difference = <u>.02</u>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.02}{4} \times \frac{1}{1} = .005$ NIL

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	<u>48' 08"</u>	<u>48' 08"</u>	<u>7' 83"</u>		<u>48' 08"</u>
" overhang ... ..					
R.Q.D. enclosed ... ..					
" overhang ... ..					
Bridge enclosed ... ..	<u>225' 92"</u>	<u>225' 92"</u>	<u>8' 0"</u>		<u>225' 92"</u>
" overhang aft ... ..					
" overhang forward ... ..					
Fore enclosed ... ..	<u>27' 58"</u>	<u>27' 58"</u>	<u>7' 75"</u>		<u>27' 58"</u>
" overhang ... ..					
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" forward ... ..					
Total ... ..	<u>301' 58"</u>	<u>301' 58"</u>			<u>301' 58"</u>

Standard Height of Superstructure 7' 18"  
" " R.Q.D. 39' 87"  
Deduction for complete superstructure 39' 87"  
Percentage covered  $\frac{S}{L} = \frac{48' 08"}{368' 00"} = 13.06\%$   
" "  $\frac{S_1}{L} = \frac{48' 08"}{368' 00"} = 13.06\%$   
" "  $\frac{E}{L} = \frac{48' 08"}{368' 00"} = 13.06\%$   
Percentage from Table, Line A. (corrected for absence of forecastle (if required))  
Percentage from Table, Line B. 77' 72" (corrected for absence of forecastle (if required))  
Interpolation for bridge less than 2L (if required)  
Deduction = 30' 99"

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	<u>46' 80"</u>	1		<u>46' 80"</u>	<u>72' 0"</u>	<u>72' 0"</u>	1		<u>72' 00"</u>
1/4 L from A.P. ... ..	<u>20' 83"</u>	4		<u>83' 32"</u>	<u>31' 5"</u>	<u>31' 32"</u>	4		<u>125' 28"</u>
1/2 L " ... ..	<u>5' 15"</u>	2		<u>10' 30"</u>	<u>8' 0"</u>	<u>7' 83"</u>	2		<u>15' 66"</u>
Amidships ... ..		4					4		
3/4 L from F.P. ... ..	<u>19' 30"</u>	2		<u>20' 60"</u>	<u>14' 0"</u>	<u>14' 06"</u>	2		<u>28' 12"</u>
1/4 L " ... ..	<u>41' 66"</u>	4		<u>166' 64"</u>	<u>56' 5"</u>	<u>56' 25"</u>	4		<u>225' 00"</u>
F.P. ... ..	<u>93' 60"</u>	1		<u>93' 60"</u>	<u>130' 0"</u>	<u>130' 0"</u>	1		<u>130' 00"</u>
Total ... ..				<u>421' 26"</u>					<u>596' 06"</u>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( 75 - \frac{S}{2L} \right) = \frac{421.26 - 596.1}{18} \left( 75 - \frac{409.7}{368} \right) = \frac{174.84}{18} \left( 75 - 1.113 \right) = 9.713 \times 73.887 = 718.8$   
If limited on account of midship superstructure. If limited to maximum allowance of 1 1/2 ins. per 100 ft.

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <u>27' 57"</u> Summer freeboard = <u>3' 35"</u> Moulded draught (d) = <u>24' 22"</u> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = $\frac{24' 22"}{4} = 6' 05" = 6"$ Addition for Winter North Atlantic Freeboard (if required) =	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta = 10,359$ Tons per inch immersion at summer load water line $T = 37.67$ Deduction = $\frac{\Delta}{40T}$ inches = $\frac{10,359}{40 \times 37.67} = 6.87 = 6 \frac{3}{4}$	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient <u>772 + 68 = 840</u> Depth Correction ... .. <u>8' 61"</u> Deduction for superstructures ... .. <u>30' 99"</u> Sheer correction ... .. <u>3' 31"</u> Round of Beam correction ... .. <u>✓</u> Correction for Thickness of Deck amidships ... .. Other corrections, scantlings, etc. ... .. Summer Freeboard = <u>40' 29"</u>
--	---	--

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

Tropical Fresh Water Line above Centre of Disc ... ..	12 1/4	Tropical Fresh Water Freeboard ... ..	2 3 1/2
Fresh Water Line " " ... ..	6 3/4	Fresh Water " " ... ..	2 9 1/2
Tropical Line " " ... ..	6	Tropical " " ... ..	2 10 1/4
Winter Line below " " ... ..	6	Winter " " ... ..	2 10 1/4
Winter North Atlantic Line " " ... ..	6	Winter North Atlantic " " ... ..	2 10 1/4

30 JUN 1932

10m, 231

RECEIVED 31 JUL 1932

RECEIVED 31 OCT 1934

RECEIVED 30 JUN 1932

# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS																	
Description of Hatchway	UPPER DECK										BRIDGE DECK				POOP		FORE STORE
	Nº1	Nº2	Nº3	Nº3A	Nº4	Nº5	Nº6	Nº2	Nº3	Nº4	Nº6	U.D	B.D	PEAK	AFT.		
Dimensions of Hatchway	29.3	32.8	27.8	13.6	35.5	28.0	16.4	30.3	28.0	30.3	14.0	21.2	16.3	3.5	2.5		
COAMINGS	Height above Deck	42"	9"	9"	9"	42"	9"	36"	36"	36"	30"	9"	30"	9"	19"		
	Thickness	44	3	3	3	44	44	44	44	44	44	3	44	3	38		
	Stiffeners	8x3x50	50	50	50	50	8x3x50	7x3x50	7x3x50	7x3x50	7x3x50	50	✓	50	✓		
	Brackets, Stays	R.I.	2	2	2	2	2	2	2	2	2	2	✓	2	✓		
HATCH BEAMS	Number	4	5	3	2	5	4	2	4	5	4	2	✓	✓	✓		
	Spacing	5'-11"	5'-6"	4'-5"	4'-6"	5'-11"	5'-7"	5'-6"	6'-1"	4'-10"	6'-1"	4'-10"					
	Scantling and Sketch	21x38	21x38	18x40	18x40	18x40	22x39	18x40	16x34	14x34	16x34	11x31					
	Bearing Surface	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"					
FORE AND AFTERS	Number																
	Spacing																
	Unsupported Lengths																
	Scantling* and Sketch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
HATCH COVERS	Material	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.		
	Thickness	3	3	2½	2½	2¾	2¾	2¾	2½	2½	2½	2½	2½	2½	2½		
	How fitted	F&A	F&A	F&A	F&A	F&A	F&A	F&A	F&A	F&A	F&A	F&A	-	-	-		
	Bearing Surface	3	3	3	3	3	3	3	3	3	3	3	3	2½	2½	3"	
Spacing of Cleats	24	24	24	24	24	22	22	24	22	23	24	24	24	14"	16"		
Number of Tarpaulins	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/> Yes Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/> Yes Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> Yes Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/> Yes																	

*Locking bars fitted to no 1 Hatchway at hold 16/12/41.*

Particulars of fiddle, funnel and ventilator coamings:—  
*Openings in fiddle tops fitted with hinged steel covers & securing clips.  
 Funnel & E&B space ventilators are on top of casing & in good condition.  
 Engine room skylight of steel.  
 Machinery casings 8'-6" above top of Bridge deck.*

Particulars of Flush Bunker Scuttles:—

*NONE*

Particulars of Companionways:—

*Steel hooded companionway (to crew's accom.) on poop deck. riveted to deck.  
 Sill. 22" above steel deck.  
 Solid teak door 4'-0" x 28½" x 1½"*



Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

POOP DECK			BRIDGE DECK			FORECASTLE		
2-12" dia to poop. Coaming, 30"x34"	2-12" dia to tween decks	Coaming 33"x34"	2-12" " " lower bunker	33"x34"	1-15 dia to hold coaming, 30"x36"	1-6" " " upper peak	30"x36"	
1-8" " " funnel, " 30"x30"	2-18" " " tween dk + hold	30"x40"	4-18" " " " (derneck table supports)		All vents secured to steel decks with rivets 4 dia apart, & fitted with wood plugs and canvas covers. ✓			
6-6" " " Accom. " 30"x30"	2-18" " " " " (derneck posts)		2-18" " " " " (derneck posts)					
2-14" " " Hold. (derneck posts)	2-5" " " lower bunker (swan necks)							

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

POOP DECK		BRIDGE DECK		FORECASTLE	
1. SWAN NECK, 2½" dia	27" above deck to A.P. Tank.	4 " " " "	8" " " " DB "	1 " " " "	18 " " " " F.P. "

*Efficient closing appliances provided*

Particulars of Gangway Cargo and Coaling Ports:—

*NONE.*



© 2021

Lloyd's Register Foundation

Particulars of Scuppers and Sanitary Discharge Pipes. —

Scuppers to Upper Bridge space fitted with brass storm valve.  
SANITARY DISCHARGES are fitted with brass storm valves. ✓

Particulars of Side Scuttles:

Sidelights to accommodation spaces are of strong construction and fitted with hinged dead lights. ✓

Particulars of Guard Rails:—

POOP 3'-4" high, 3 tier; stanchions 4'-9" apart.  
BRIDGE 3'-3" " 3 " " 5'-0" "  
FORECASTLE 3'-4" " 3 " " 4'-10" "

Bulwarks abreast of Engineer's House & Officers quarters. efficiently stiffened.

Particulars of Gangways, Lifelines, etc.:-

Permanent Gangway at height of bridge deck over after well.  
27" wide 2½" thick - Channel bar supports 11'-0" apart, bracketed at top & connected to hatch side stiffener and deck.  
Wires each side of gangway 3'-0" high rope through stanchions 8'-0" apart.

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ... ..	32.66	3'-6"	13.67 x .73	One.	9.98	9.8
Forward Well ... ..	33.75	3'-6"	14.5 x .71	One.	10.3	9.9.
State position of each freeing port ... .. } After Well:— From bridge end to freeing port 5'-0" 14" above deck (F. and A. position and height above deck edge) } Forward Well:— " front " 5'-1" 14 " " State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— c/o						
Additional area where sheer is less than standard. ✓						

Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ... ..	.44	.38	6 x 3 x .45 L	31"	legged.	2-4'-0" x 3'-0"	20"	✓
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ... ..	.25	.25	Plate flange 3	39"	None.	2-4'-0" x 3'-0"	20"	✓
Bridge, Forward Bulkhead ... ..	.44	.40	9 x 3 x .40 L	30"	legged.	None.	✓	✓
Forecastle Bulkhead ... ..	.25	.25	Plate flange 3"	43"	None.	1-5'-1" x 4'-1"	18"	✓
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ... ..	.30	.30	3 x 3 x .30 L	31"	None	4'-6" x 1'-10"	18"	8'-6"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	.30	.30	3 x 3 x .30 L	31"	None.	4'-6" x 1'-10"	19"	8'-3"
Deckhouses on Flush Deck Ships ...								

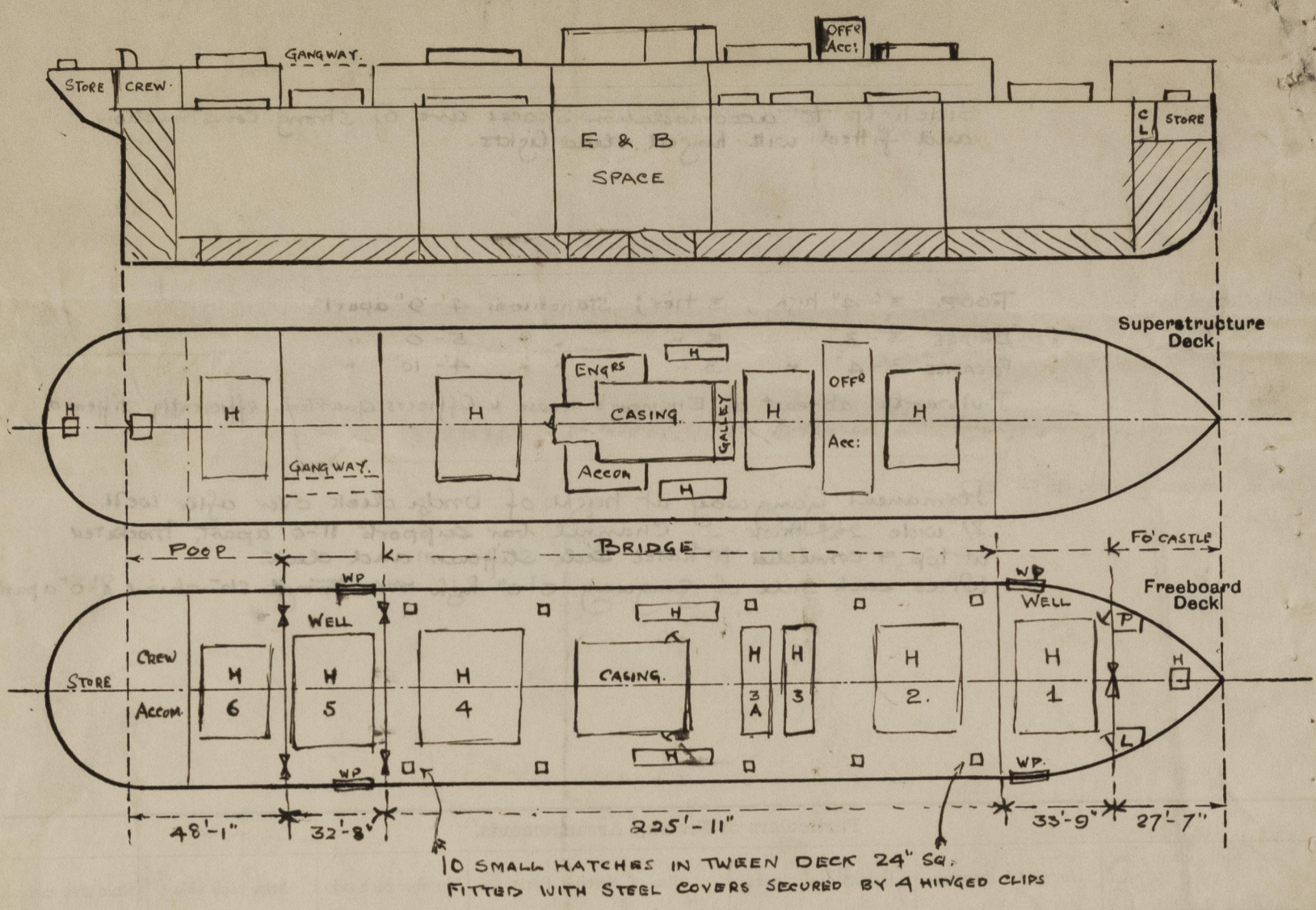
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead ... ..	Weather boards 3" fitted in rivetted channels, full height. ✓
Raised Quarter Deck Bulkhead ...	ditto.
Bridge, After Bulkhead ... ..	Weather boards 3" fitted in rivetted channels, full height. ✓
Bridge, Forward Bulkhead ... ..	No openings
Forecastle Bulkhead ... ..	Weather boards 3" fitted in rivetted channels, full height. ✓
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	None
Exposed Machinery Casings on Superstructure Decks ... ..	Steel hinged doors operated both sides. ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	ditto.
Deckhouses on Flush Deck Ships ...	✓

See later C11/C12

*Essex*

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:— *Timber assignment not required*

*This Vessel has been surveyed afloat*

Builder's name and yard number *The Burntisland S.B. Co. Ltd. No 160.*

Names of sister ships *Skeldergate (No 159).*

Owners *Tumbull & Son. Shipping Co. Ltd.*

Fee £ *12* : *15* : *0* . *1* Received by me