

Newcastle-on-Tyne 91867

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Rpt. C.11.

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(For London Office only.)

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having *Shelter deck (with fba) & etc.*

Port of Survey *Newcastle*

Date of Survey *During Construction*

Name of Surveyor *J. Welsh*

Particulars of Classification *Class A. 1st class with full and complete*

(Type of Superstructures.)

Ship's Name *TYNEBANK*

Nationality and Port of Registry *British Glasgow*

Official Number *164039*

Gross Tonnage *4650.79*

Date of Build *1934*

Moulded Dimensions: Length *412'* Breadth *53.75'* Depth *27.08'*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *11045* tons

Coefficient of fineness for use with Tables *.758*

Depth for Freeboard (D)

Moulded depth ... *27.08'*

Stringer plate ... *.03'*

Sheathing on exposed deck  
 $T \left( \frac{L-S}{L} \right) =$

Depth for Freeboard (D) = *27.11'*

Depth correction

(a) Where D is greater than Table depth  
(D - Table depth) R =

(b) Where D is less than Table depth (if allowed)  
(Table depth - D) R = *(27.47 - 27.11) × 3 = -1.08'*

If restricted by superstructures

Round of Beam correction

Moulded Breadth (B) *53.75'*

Standard Round of Beam =  $\frac{B \times 12}{50} =$  *12.90'*

Ship's Round of Beam = *13.1'*

Difference *.10'*

Restricted to

Correction =  $\frac{\text{Diff}}{4} \times (1 - \frac{S}{L}) =$   *$\frac{.10}{4} \times .0092 = \text{Nil}$*

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>i</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>32.0</i>	<i>32.00</i>	<i>8.75'</i>	<i>✓</i>	<i>32.00</i>
" overhang ...	<i>5.0</i>	<i>2.50</i>	<i>8.75'</i>	<i>✓</i>	<i>2.50</i>
R.Q.D. enclosed <i>10.0</i>	<i>10.0</i>		<i>8.75'</i>		
" overhang ...					
Bridge enclosed...	<i>370.0</i>	<i>370.00</i>	<i>8.75'</i>	<i>✓</i>	<i>370.00</i>
" overhang aft ...					
" overhang forward					
F'cle enclosed ...	<i>10.0</i>		<i>7.5'</i>		
" overhang ...	<i>1.0</i>				
Trunk aft ...					
" forward ...					
Tonnage opening aft	<i>5.0</i>	<i>3.75</i>			<i>3.75</i>
" forward					
Total ...	<i>412.0</i>	<i>408.25</i>			<i>408.25</i>

Standard Height of Superstructure *7.5'*

" " R.Q.D. *✓*

Deduction for complete superstructure *42'*

Percentage covered  $\frac{S}{L} =$  *100.00*

" "  $\frac{S_i}{L} =$  *99.08*

" "  $\frac{E}{L} =$  *99.08*

Percentage from Table, Line A. *98.87*  
(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 = *42 × 98.87 = -41.52*

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>51.20</i>	<i>1</i>	<i>✓</i>	<i>51.20</i>	<i>54</i>	<i>72.00</i>	<i>1</i>	<i>✓</i>	<i>72.00</i>
$\frac{1}{8}$ L from A.P. ...	<i>22.785</i>	<i>4</i>	<i>✓</i>	<i>91.14</i>	<i>24</i>	<i>32.04</i>	<i>4</i>	<i>✓</i>	<i>128.16</i>
$\frac{2}{8}$ L " ...	<i>5.63</i>	<i>2</i>	<i>✓</i>	<i>11.26</i>	<i>6.34</i>	<i>7.92</i>	<i>2</i>	<i>✓</i>	<i>15.84</i>
Amidships ...	<i>-</i>	<i>4</i>	<i>✓</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>4</i>	<i>✓</i>	<i>-</i>
$\frac{3}{8}$ L from F.P. ...	<i>11.26</i>	<i>2</i>	<i>✓</i>	<i>22.52</i>	<i>13.2</i>	<i>13.86</i>	<i>2</i>	<i>✓</i>	<i>27.72</i>
$\frac{4}{8}$ L " ...	<i>45.57</i>	<i>4</i>	<i>✓</i>	<i>182.28</i>	<i>48.4</i>	<i>56.07</i>	<i>4</i>	<i>✓</i>	<i>224.28</i>
F.P. ...	<i>102.40</i>	<i>1</i>	<i>✓</i>	<i>102.40</i>	<i>108</i>	<i>126.00</i>	<i>1</i>	<i>✓</i>	<i>126.00</i>
Total ...				<i>460.80</i>	<i>418</i>				<i>594.00</i>

Mean actual sheer aft = *72.00*

Mean standard sheer aft = *72.00*

Mean actual sheer forward = *128.16*

Mean standard sheer forward = *128.16*

Length of enclosed superstructure forward of amidships = *L*

" " aft of " = *L*

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - \frac{S}{2L}}{.75} \right) = \frac{133.2}{18} \times .25 = -1.85$

If limited on account of midship superstructure. *✓*

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

Actual height of 'ween deck = *8'-9"*

Standard height of 'ween deck = *9'-0"*

Difference = *3"*

Deduction for Tropical Freeboard.  
Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *27.11'*

Summer freeboard = *2.92'*

Moulded draught (d) = *24.19'*

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = *6.05' = 6.1'*

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$  *11748*

Tons per inch immersion at summer load water line

T = *44.38*

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

= *6.68*

= *6.2*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

*75.24*  
*79.56*

Depth Correction ... *1.08*

Deduction for superstructures ... *41.52*

Sheer correction ... *1.85*

Round of Beam correction ... *-*

Correction for Thickness of Deck amidships ... *-*

Other corrections, scantlings, etc. ... *-*

Summer Freeboard = *35.11*

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

Tropical Fresh Water Line above Centre of Disc ...	<i>12 1/2</i>	Tropical Fresh Water Freeboard ...	<i>1'-10 1/2"</i>
Fresh Water Line " " ...	<i>6 1/2</i>	Fresh Water " " ...	<i>2'-4 1/2"</i>
Tropical Line " " ...	<i>6</i>	Tropical " " ...	<i>2'-5"</i>
Winter Line below " " ...	<i>6</i>	Winter " " ...	<i>3'-5"</i>
Winter North Atlantic Line " " ...	<i>✓</i>	Winter North Atlantic " " ...	<i>✓</i>



## PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
Description of Hatchway		SHELTER DECK					FREEBOARD DECK				
Dimensions of Hatchway		1	2	3	4	5	1	2	3	4	5
COAMINGS	Height above Deck	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	9" L	9" L	9" L	9" L	9" L
	Thickness { Sides Ends	.44	.44	.44	.44	.44					
	Stiffeners	7 x 3 x 40"	do. 3 sides	do. 2 sides	2 sides	4 sides	✓	✓	✓	✓	✓
	Brackets, Stays	2 @ 2"	2 @ 2"	2 @ 2"	2 @ 2"	2 @ 2"					
HATCH BEAMS	Number	Four	Four	Five	Four	Four	Four	Four	Four & 3rd	Four	Four
	Spacing	5'-10" & 11"	6-0	5'-0"	6-0	6-0	5'-10" & 11"	6-0	5'-0"	6-0	6-0
	Scantling and Sketch	4 bars Plating	each 4 1/2 x 3 x .46								
	Bearing Surface	22-11 x .38	17-8 1/2 x .36	16-7 x .34	17-8 1/2 x .36	17-8 1/2 x .36	22 1/2 - 11 1/4 x .38	22 1/2 - 11 1/4 x .38	19 1/2 x 9 1/4 - .36	22 1/2 - 11 1/4 x .38	22 1/2 - 11 1/4 x .38
FORE AND AFTERS	Number										
	Spacing										
	Unsupported Lengths										
	Scantling* and Sketch										
HATCH COVERS	Material	W. P.									
	Thickness	3"									
	How fitted	2 ra									
	Bearing Surface	4 1/2 T3									
Spacing of Cleats		24-120	24-120	24-120	24-120	24	24-120	24	24	24	24
Number of Tarpaulins		3	3	3	3	3	1	1	1	1	1

\*Are wood fore and afters steel shod at all bearing surfaces? *no fore & afters*

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 :—

Fidley funnel & vents in efficient condition  
Stokehold gratings covered by strong steel hinged covers  
Engine room skylight of steel.

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways :—

2 Compansions to crew quarters aft in strongly constructed steel deck house.  
Door solid beam operated from both sides. Sill 16 above deck.

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

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—									
1 m Fele	3-6 x 9"	dra x .32	to Peak	2 @ 3-7 x 6"	dra x .32	to Bulkheads at fore and Casings	} wood plugs will be provided if canvas covers		
2 "	8-0 x 17"	x .38	to hold well stayed bdk	2 @ 6-3 x 8"	" x .32	to Bulkheads. no bdk or stays			
2 "	8-0 x 17"	x .38	with 3 bdk bdk	2 @ 9-0 x 18"	x .40	to hold supported by Post deck			
2 "	" x 13"	x .34	"	2 @ 8-3 x 18"	x .40	"			
2 "	12-6 x 18"	x .40	stay to sk house	2 @ 8-3 x 13"	x .34	"			
2 "	9-0 x 16"	x .38	do.	1 @ 7-0 x 8"	x .30	to tunnel } 3 bdk bdk.			
1 "	4-0 x 8"	x .32	to store. not bdk or stayed	2 @ 8-0 x 18"	x .40	to hold. }			
2 "	12-6 x 13"	x .34	to hold protected by Casings front.	2 @ 8-3 x 9"	x .32	to bulk }			
2 "	Passing thro' bdk 8" dra x 3/16"	to sk turn dks.		2 @ 3-9 x 6"	x .32	to crew. }	no bdk or stays		
Particulars of Ventilators in exposed positions on freeboard, raised quarter, or superstructure decks:—									

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

on Feb head

1 @ 3 1/2 dia x 20"	to mouth	to fore peak
1 @ 6 - x 21	"	to No. 1 C.D. with gauge
4 @ 6 - x 21	"	to No 2 - "
2 @ 4 - x 20	"	to BR tank open end
2 @ 3 1/2 - x 20.	"	to aft C.D. with gauge
2 @ 6 - x 21	"	"
2 @ 3 1/2 - x 20	"	"

wood plugs ~~would be~~  
supplied to the water  
or dry tanks & gauge  
to the others & canvas covered

Particulars of Gangway Cargo and Coaling Ports :—

None.

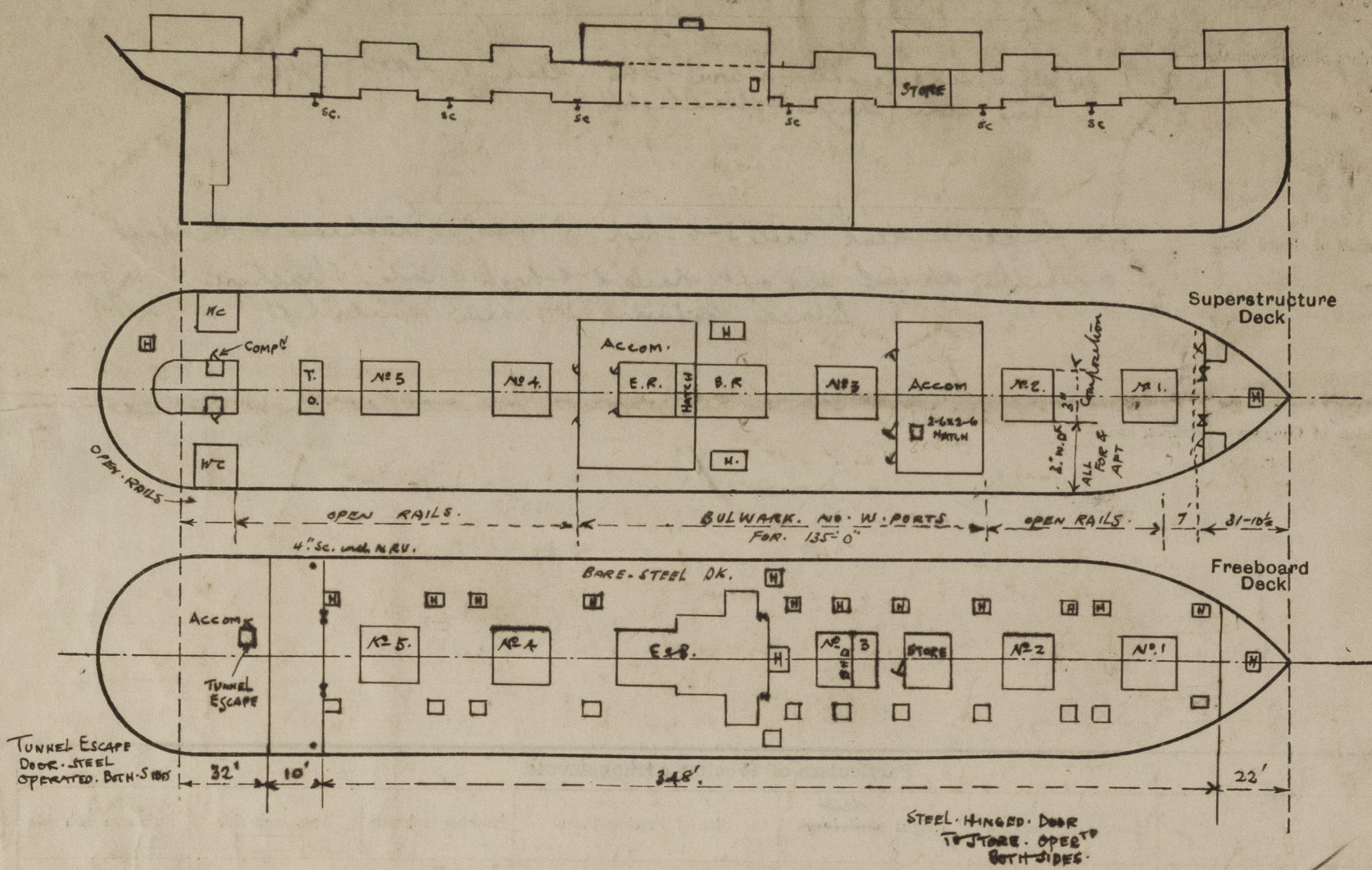






*Lynebank*

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 shewn on the following sketches:—



3" wood deck fixed all fore aft on Fb. & L.  
from ship's side waterline bar to line of hatches  
with 3" of Putnam Compulsion under line of hatches

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

Exhume depth at 24' = 11548 & T.P. 1" 44.3  
23' = 11018 " 44.1  
22' = 10491 " 43.9.

File head Hatch 3-11 x 3-0. 2" coaming x 7/20. W.P. covers 2 1/2" ashwaalish 2 1/2 inch. cleats to web, being all round  
Hatch under fore hatch 4 x 4'. 10" Ba. coaming do. do. now 14" from corner  
Shell's deck bunker hatches. Two. 10 x 4'. Coaming 3 1/2 x 26. do. cleats 24"  
Hatch right aft to poop side 34 x 36. coaming 3 1/2 x 7/20. do. cleats 22"  
Tonnage opening on sh. Aft. 5' x 22'. Coaming 9" Ba. Ring bolts & lashing under side. Covers W.P. 3" 3/4. 3 1/2 inch.  
22" Escape hatches on Fb. deck 30 x 20; 30 x 23 1/2 & 30 x 23. 9" Ba. coaming. Wound wood covers 3" W.P. 2 1/2 inch. cleats 13" from corners 10"  
2 Bunker hatches on Fb. deck fore end casing. 4-1 x 5-0. Coaming 9" Ba. Covers 3" W.P. also, rest 2 1/2 inch cleats 19-24" but 13" from corner  
Casing top hatch and one in center 4 x 4'  
Coal hatch. 5-6 x 16-0. Coaming 7 1/2 x 7/20. Rest 2 1/2" Covers W.P. 2 1/2 ashwaalish cleats 6" from corners 20-24" apart.

Builder's name and yard number

*John Readhead & Son Ltd. Smith Shields.*  
*No. 506*

Names of sister ships

Owners

*Bank Line Ltd (Andrew Weir & Co Glasgow & London)*

Fee £

Received by me

*will be charged with 1st Aug*

*[Signature]*



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