

11 JUN 1932

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Mch. No. 7591.

Compilation of Freeboard for Steamer, *Sailing Ship, Tug*

Being *SHELTER DECK WITHOUT TONNAGE OPENING*

Port of Survey *MANCHESTER*

Date of Survey *JUNE 8<sup>th</sup> & 9<sup>th</sup> 1932*

Name of Surveyor *A. R. GIBBS*

Particulars of Classification *+100 A1*

Ship's Name *"MANCHESTER REGIMENT"*

Nationality and Port of Registry *BRITISH MANCHESTER*

Official Number *146830*

Gross Tonnage *4930*

Date of Build *1912-13*

Moulded Dimensions: Length *450.0'* Breadth *54.45'* Depth *21.0' UPPER DECK 21.0' SHELTER DECK*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *14552* tons

Coefficient of fineness for use with Tables *.756*

Depth for Freeboard (D) *41.00*

Depth correction

(a) Where D is greater than Table depth (D-Table depth) R = *(41.04 - 30.00) 3 = +33.12*

(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) *57.75*

Standard Round of Beam =  $\frac{B \times 12}{50} = \frac{13.87}{50}$

Ship's Round of Beam = *14*

Difference *.13*

Restricted to

Correction =  $\frac{\text{Diff}}{4} \times (1 - \frac{S}{L}) = \frac{.13}{4} (1 - 0.466) = .03$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>e</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Fore enclosed <i>Deck</i> ...	<i>42.00</i>	<i>42.00</i>	<i>4.67</i>	<i>✓</i>	<i>42.00</i>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<i>42.00</i>	<i>42.00</i>			<i>42.00</i>

Standard Height of Superstructure *7.50'*

" " R.Q.D. *✓*

Deduction for complete superstructure *42.00*

Percentage covered  $\frac{S}{L} = \frac{42.00}{450.00} = 9.33\%$

" "  $\frac{S_e}{L} = 9.33\%$

" "  $\frac{E}{L} = 9.33\%$

Percentage from Table, Line A. *4.67%*  
(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 =  $42.00 \times 0.0467 = -1.96$

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>55.00</i>	<i>1</i>	<i>55.00</i>	<i>9"</i>	<i>9.00</i>	<i>1</i>	<i>9.00</i>	<i>1</i>	<i>9.00</i>
$\frac{1}{2}$ L from A.P. ...	<i>24.47</i>	<i>4</i>	<i>97.88</i>	<i>0</i>	<i>0</i>	<i>4</i>	<i>0</i>	<i>4</i>	<i>0</i>
$\frac{1}{2}$ L " ...	<i>6.05</i>	<i>2</i>	<i>12.10</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>0</i>	<i>2</i>	<i>0</i>
Amidships ...	<i>—</i>	<i>4</i>	<i>—</i>	<i>0</i>	<i>0</i>	<i>4</i>	<i>—</i>	<i>4</i>	<i>—</i>
$\frac{1}{2}$ L from F.P. ...	<i>12.10</i>	<i>2</i>	<i>24.20</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2.00</i>
$\frac{1}{2}$ L " ...	<i>48.95</i>	<i>4</i>	<i>195.80</i>	<i>5</i>	<i>5</i>	<i>4</i>	<i>20.00</i>	<i>4</i>	<i>20.00</i>
F.P. ...	<i>110.00</i>	<i>1</i>	<i>110.00</i>	<i>14"</i>	<i>14</i>	<i>1</i>	<i>14.00</i>	<i>1</i>	<i>14.00</i>
Total ...			<i>494.98</i>				<i>45.00</i>		<i>45.00</i>

Mean actual sheer aft = *Deficient*

Mean standard sheer aft = *Deficient*

Mean actual sheer forward = *Deficient*

Mean standard sheer forward = *Deficient*

Length of enclosed superstructure forward of amidships = *202.00*

" " aft of amidships = *248.00*

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( \frac{75 - S}{2L} \right) = \frac{449.98}{18} \left( \frac{75 - 0.466}{2} \right) = +17.58$$

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 = *41.04*

Summer freeboard = *11.75*

Moulded draught (d) = *29.37*

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches =  $\frac{29.37}{4} = 7.34$

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 16270$

Tons per inch immersion at summer load water line

$T = 52.5$

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

= *7.74*

= *7.74*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{756 + 0.52}{1.36} = 1.436$

Depth Correction ... *33.12*

Deduction for superstructures ... *1.96*

Sheer correction ... *17.58*

Round of Beam correction ... *03*

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

Summer Freeboard = *140.48*

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

Tropical Fresh Water Line above Centre of Disc ... *15*

Fresh Water Line " " " " " " *7.74*

Tropical Line " " " " " " *7.74*

Winter Line below " " " " " " *7.74*

Winter North Atlantic Line " " " " " " *—*

Tropical Fresh Water Freeboard ... *11-8 3/4*

Fresh Water " " " " " " *10-5 3/4*

Tropical " " " " " " *11-1*

Winter " " " " " " *11-1 1/2*

Winter North Atlantic " " " " " " *12-4*



### PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway	No. 1	No. 2	No. 3	No. 6	No. 4	HATCH TO FORE PEAK	HATCH TO CH. LUGGER	STEEL HATCH TO TONNAGE WELL (NON STAKE)	HATCH TO POOL ON TONNAGE WELL (TONNAGE)	
Dimensions of Hatchway	24'0" x 16'0"	36'0" x 36'0"	15'0" x 30'0"	37'0" x 30'0"	25'0" x 30'0"	5'9" x 3'9"	3'0" x 3'8"	4'6" x 16'0"	3'0" x 3'8"	
COAMINGS										
Height above Deck	3'1"	3'1"	3'1"	3'1"	3'1"	8'3" L	3'3" L	3'0"	5' L	
Thickness	50	50	50	50	44	✓	✓	36	✓	
Stiffeners	44	44	44	44	44	✓	✓	✓	✓	
Brackets, Stays	9-3/4 L-5	9-3/4 L-5	10-3/4 L-5	9-3/4 L-5	9-3/4 L-5	✓	✓	NONE	✓	
	4-3/4 L-2	4-3/4 L-2	4-3/4 L-2	7-3/4 L-2	4-3/4 L-2	✓	✓	NONE	✓	
	3-3' beams	3-3' beams	3-3' beams	3-3' beams	3-3' beams	✓	✓	NONE	✓	
HATCH BEAMS										
Number	5	4	2	5	2					
Spacing	4'6"	5'2"	3'0"	4'6"	4'0"					
Scantling and Sketch										
	13-3-36	16-3-36	18-3-36	16-3-36	15-3-36	NONE	NONE	NONE	NONE	
	3-3-36	4-3-44	4-3-44	4-3-44	4-3-44					
Bearing Surface	3'	3'	3'	3'	3'					
FORE AND AFTERS										
Number										
Spacing										
Unsupported Lengths										
Scantling and Sketch										
Bearing Surface										
HATCH COVERS										
Material	N.P.					N.P.	N.P.	Angles	N.P.	
Thickness	3/4"					3/4"	3/4"	Steel	3/4"	
How fitted	T.A.					T.	T.	Weather	T.	
Bearing Surface	3'					2'	2'	Light	2'	
								Cover		
Spacing of Cleats	24'					NONE	NONE	16 to 21	8 cleats	
Number of Tarpaulins	2					NONE	NONE	2	2	

\*Are wood fore and afters steel shod at all bearing surfaces? ✓  
 Are battens and wedges efficient and in good condition? YES-EXCEPT WHERE STATED  
 Are tarpaulins in good condition and in accordance with rule requirements? YES-EXCEPT WHERE STATED  
 Are lashings provided in accordance with rule requirements? YES-DOES FOR LASHINGS PROVIDED ON ALL MAIN CARGO HATCHWAYS.

Particulars of siddley, funnel and ventilator coamings :—

Stokehold Gratings covered by Strong Angled Steel Covers  
Tunnel and Filling Vents in efficient condition  
E. R. Skylight of Steel Strongly constructed.

Particulars of Flush Bunker Scuttles:—

Моле.

Particulars of Companionways :—

Steel trunk to tunnel on freeboard 23" with hinges Steel Door  
operates from both sides - opening 4'-4" x 3'-30" full.

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

Forecastable Heats.

1 Ventilation	12 dia.	=	30	Coaming	=	30	To Floor, Senses
2	10	=	30		=	30	
2	8	=	15		=	30	
2	24	=	33		=	35	Holz

On Hospital Tap.  
2 Vents. 18" dia = 38% covering = 35 To Deep Sand  
1 " 12" = 37% " = 30 " Th. R<sub>2</sub>

ON STEERING BEAR HOUSE  
2 VENTS. 12 dia = 30" opening = .30 To June 10<sup>th</sup>

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

ON FORECAST NO 2  
2-4 A.E.S. paper to Fall Road 6 to month  
1-2 A.E.S. Colfax 37  
2-4 paper to No 12.5, Jan - T  
ON PROPOSED DECA  
2-4 A.E.S. paper to No 12.5 Jan - T. closely by Woodplng.  
2-4 A.E.S. No 2 - T.  
2-4 A.E.S. No 2 - RT - T.  
2-4 A.E.S. No 3 - P - T.

On Wednesday Dec  
 4 Ventilators, 34 dia. x 36, Coaming x 35 To Hold.  
 18. " x 36 " x 35 " Nap Tanks  
 32. " x 36 " x 40 " Hold.  
 12. " x 36 " x 30 " Tank One

All ventilators are strongly constructed and are closed by wood plugs and canvas covers.

1-6 and paper to Deep Tank 18 To mouth *Close by wood play*  
 2-4 No 3 D.B. Apt. - T. *and sniffing hole*  
 2-4 No 4. Apt. - T. *Killed*  
 2-4 No 2. Apt. - T.  
 2-4 Coffin and 75 To mouth *near wood play*  
 2-4 No 5 D.B. Tank 75 *in sniffing hole.*  
 2-4 No 6 Apt. - T.  
 2-4 No 6 Apt. - T. *Close by wood play*  
 2-4 No 7 Apt. - T. *Seems cap*  
 2-4 No 8 Apt. - T.  
 2-4 No 8 1st in Scudap 75 To mouth  
 2-4 A.C.F. Not seen 31 46 mouth

45. Our paper  
marks T as  
TIROS' patent valves  
means of closing  
wood plugs -  
~~are not complete~~

Particulars of Gangway Cargo and Coaling Ports:—

[illegible]



Particulars of Scuppers and Sanitary Discharge Pipes —

1. N. C. Discharge from enclosed Forecastle, below Foreboard Deck, fitted with brass storm valve  
1. Scupper "Other accommodation in deckhouses on Foreboard Deck" fitted with S. Valve fitted

Particulars of Side Scuttles:

Side Scuttles are fitted to "Crew Accommodation" in Forecastle of strong construction  
are equipped with permanent hinged deadlights.

Particulars of Guard Rails:—

Strong Steel Bulwarks are fitted round Foreboard Deck full length and are  
supported by 6" B. I. Stays spaced about 5'6" apart. Bulwarks are 3'8" in height.  
9 freeing ports are fitted in Bulwarks on P. & S. sides (9 P. 9 S.) each 4'0" x 9" and 11" above  
deck edge.

Particulars of Gangways, Lifelines, etc.:—

Efficient lifelines provided for the protection of the  
crew in getting to & from their quarters.  
None

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Starboard Well ... ..	408'		4'0" x 9"	12	63	
Foreboard Deck Full Length		3'8"	4'0" x 9"	9	24 sq ft	63 sq ft
Forward Well ... ..						

State position of each freeing port ... .. } After Well:—  
(F. and A. position and height above deck edge) } Forward Well:—  
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— None  
Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.

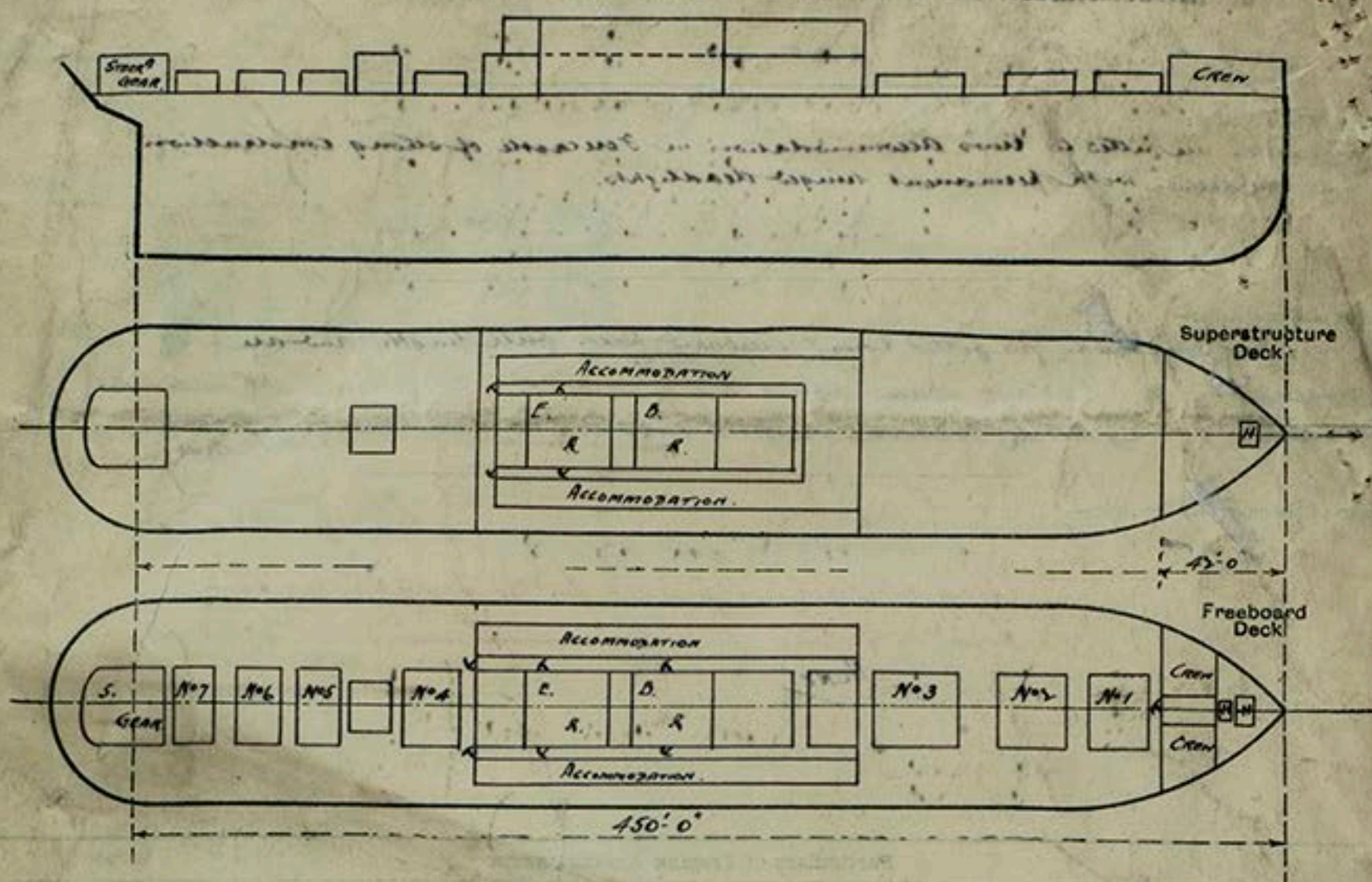
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ... ..				✓				
Raised Quarter Deck Bulkhead ...				✓				
Bridge, After Bulkhead ... ..				✓				
Bridge, Forward Bulkhead ... ..				✓				
Forecastle Bulkhead ... ..	38	34	3 x 3 - 34	31	None	1-2'4" x 4'7"	2'4"	4'6" to 4'6"
Trunk, Aft ... ..				✓				
Trunk, Forward ... ..				✓				
Exposed Machinery Casings on Fore- board or Raised Quarter Decks ...	34	34	4 x 3 - 36	36	Cuts at Top	2'8" x 20" - 1 4'9" x 24" - 4	19"	4'6"
Exposed Machinery Casings on Super- structure Decks ... ..	34	34	4 x 3 - 36	36	Cuts at Top	4'9" x 24"	15"	4'6"
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances ... ..								
Deckhouses on Flush Deck Ships ...				✓				

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

Poop Bulkhead ... ..	✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead ... ..	✓
Bridge, Forward Bulkhead ... ..	✓
Forecastle Bulkhead ... ..	1 1/2" Hinged Wood door operates from both sides
Exposed Machinery Casings on Fore- board or Raised Quarter Decks ...	Hinged Steel Doors operated from both sides
Exposed Machinery Casings on Super- structure Decks ... ..	Hinged Steel Doors operated from both sides
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances ... ..	✓
Deckhouses on Flush Deck Ships ...	Hinged Steel Doors operated from both sides to Accommodation alleyways



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:—

*Vessel Surveyed afloat for Convention Tugsboats purposes only. VESSEL LAID UP.*

Builder's name and yard number: *James S. B. Co. Ltd. - Haverton Hill-on-Tees No. 18*

Names of sister ships:

Owners: *Manchester Tugs Ltd*

Fee: *15 6 0*

Received by me