

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 37376
(For London Office only.)

Computation of Freeboard for *MOTOR COASTER.*
Steamer, Sailing Ship, Tanker
having *POOP AND FORECASTLE.*

Port of Survey *HULL*Date of Survey *DURING CONSTRUCTION*
*AT THORNE.*Name of Surveyor *M. R. B. B. B. B.*Particulars of Classification *100A1.*
"COASTING SERVICE GREAT BRITAIN AND IRELAND"

(Type of Superstructures.)
Ship's Name *SAND* *EMPIRE SKIPPER*
Nationality and Port of Registry *BRITISH GOOLE*
Official Number *169092*
Gross Tonnage *313*
Date of Build *1943*
Moulded Dimensions: Length *140' 0" 33* Breadth *21' 5* Depth *10' 0*
Moulded displacement at moulded draught = 85 per cent. of moulded depth *563*
Coefficient of fineness for use with Tables *.768* *T.P. INCH 6' 36*

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <i>10' 00</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(10.03 - 9.36) 1.079 = +.72</i>	Moulded Breadth (B) <i>21' 5</i>
Stringer plate <i>03 24</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>5.16</i>
Sheathing on exposed deck <i>NIL</i>	If restricted by superstructures	Ship's Round of Beam = <i>6"</i>
$T \left(\frac{L-S}{L} \right) =$		Difference <i>.84</i>
Depth for Freeboard (D) = <i>10' 03</i>		Restricted to
		Correction = $\frac{\text{Diff}^o}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>.84 \times .5936 = -.12</i>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>39' 42</i>	<i>39.42</i>	<i>7' 0</i>	-	<i>39.42</i>
" overhang	-	-	-	-	-
R.Q.D. enclosed	-	-	-	-	-
" overhang	-	-	-	-	-
Bridge enclosed	-	-	-	-	-
" overhang aft	-	-	-	-	-
" overhang forward	<i>17' 62</i>	<i>17.62</i>	<i>6' 0</i>	<i>5/6</i>	<i>14.68</i>
F'cle enclosed <i>E.g. mth</i>	<i>16' 4</i>	<i>16.4</i>	<i>5' 0</i>	-	<i>16.4</i>
" overhang	<i>1' 9</i>	<i>1.9</i>	-	-	<i>1.9</i>
Trunk aft	-	-	-	-	-
" forward	-	-	-	-	-
Tonnage opening aft	-	-	-	-	-
" forward	-	-	-	-	-
Total	<i>57' 04</i>	<i>57.04</i>	-	-	<i>54.10</i>

Standard Height of Superstructure *6' 0*
" " R.Q.D. *✓*
Deduction for complete superstructure *20.03*
Percentage covered $\frac{S}{L} =$ *40.64*
" " $\frac{S_1}{L} =$ *38.55*
Percentage from Table, Line A. *22.27*
(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 = *20.03 \times .2227 = -4.46*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<i>24.03</i>	1		<i>24.03</i>	<i>18'</i>	<i>18.00</i>	1		<i>18.00</i>
$\frac{1}{6}$ L from A.P.	<i>10.69</i>	4		<i>42.76</i>	<i>2 3/4</i>	<i>2.75</i>	4		<i>11.00</i>
$\frac{2}{6}$ L "	<i>2.64</i>	2		<i>5.28</i>	<i>NIL</i>	-	2		-
Amidships	-	4		-	<i>NIL</i>	-	4		-
$\frac{3}{6}$ L from F.P.	<i>5.28</i>	2		<i>10.56</i>	<i>NIL</i>	-	2		-
$\frac{4}{6}$ L "	<i>21.39</i>	4		<i>85.56</i>	<i>6'</i>	<i>6.00</i>	4		<i>24.00</i>
F.P.	<i>48.06</i>	1		<i>48.06</i>	<i>41</i>	<i>41.00</i>	1		<i>41.00</i>
Total				<i>216.25</i>					<i>94.00</i>

Mean actual sheer aft =
Mean standard sheer aft = *Deficient*
Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = *Deficient*
" " aft of " = *Short*

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ *122.25 \left(.75 - \frac{203.2}{2 \times 140.33} \right) = +3.71*
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.

Ft.
Depth to Freeboard Deck = *10.03*
Summer freeboard = *1.25*
Moulded draught (d) = *8.78*

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = *2.19 = 2 1/4*
Addition for Winter North Atlantic Freeboard (if required) = *✓*

Deduction for Fresh Water.
Displacement in salt water at summer load water line
 $\Delta =$ *589*
Tons per inch immersion at summer load water line
 $T =$ *6.40*
Deduction = $\frac{\Delta}{40T}$ inches = *2.30 = 2 3/4*
MUD DRAFT = EXT. DRAFT T.P. INCH
9' 6 644 6' 52
9' 0 606 6' 43
8' 6 567 6' 36

TABULAR FREEBOARD corrected for Flush Deck (if required)
Correction for coefficient *.768 + .68 = 1.448 / 1.36*

	+	-
Depth Correction	<i>.72</i>	-
Deduction for superstructures	-	<i>4.46</i>
Sheer correction	<i>3.71</i>	-
Round of Beam correction	-	<i>.12</i>
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	<i>4.43</i>	<i>4.58</i>

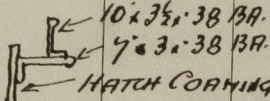
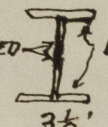
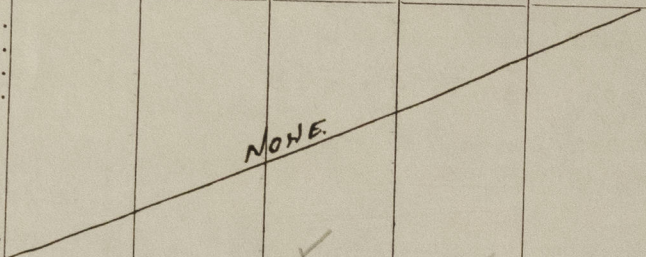
Summer Freeboard = *15.01*

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, *Wood, Steel, Deck: - 1' - 3"*

Tropical Fresh Water Line above Centre of Disc *N. Dr. 2 1/4*
Fresh Water Line " " *N. Dr. 2 1/4*
Tropical Line " " *N. Dr. 2 1/4*
Winter Line below " " *N. Dr. 2 1/4*
Winter North Atlantic Line " " *N. Dr. 2 1/4*

Tropical Fresh Water Freeboard *1' - 0 3/4*
Fresh Water " " *1' - 5 1/4*
Tropical " " *1' - 5 1/4*
Winter " " *1' - 5 1/4*
Winter North Atlantic " " *1' - 5 1/4*

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway				MAIN HATCH.					
Dimensions of Hatchway				77'-0" 14'-0"					
COAMINGS	{	Height above Deck	3'-0" AFTER END		10x3 1/2 x 38 BA.				
		Thickness	2'-9" FORE "		7x3 x 38 BA.				
		Sides	38-38		HATCH COAMING.				
		Ends							
		Stiffeners							
Brackets, Stays				4x2 1/2 x 30 ANGLES SPACED ABOVE DEEP KNEES IN HOLD.					
HATCH BEAMS	{	Number	19		3-10 3/4				
		Spacing							
		Scantling and Sketch							
		Bearing Surface			WELDED 6x4 x 40 TEE BARS JOINED BY 40 PLATES WELDED. BEAMS 1/2 DEEP AT CENTRE " 7/4 " SIDES.				
FORE AND AFTERS	{	Number							
		Spacing							
		Unsupported Lengths							
		Scantling* and Sketch							
Bearing Surface									
HATCH COVERS	{	Material	WHITE PINE						
		Thickness	2 3/8 FINISHED WITH 3/16 STEEL BEARING PLATES.						
		How fitted	FORE AND AFT.						
		Bearing Surface	2 7/8						
Spacing of Cleats				2'-0" APART OF 3x2 1/2 x 30 ANGLES 6' LONG		WELDED TO COAMING.			
Number of Tarpaulins				TWO.					
*Are wood fore and afters steel shod at all bearing surfaces?				NONE.					
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?				2 1/2" GRC. HEMP LASHINGS ARRANGED AT RIGHT ANGLES AT EACH END OF EACH BAY OF COVERS. SECURED TO EYE PLATES WELDED TO HATCH COAMING. LOCKING BAR ALSO FITTED IN CENTRE OF EACH BAY OF COVERS.					

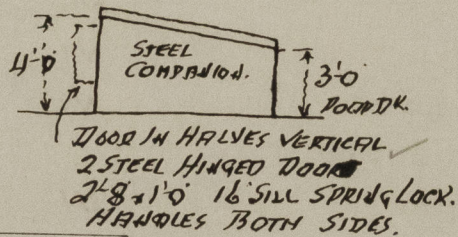
Particulars of fiddley, funnel and ventilator coamings:—

CASING TOP PLATED OVER '24 ✓
 2 ENGINE ROOM VENTILATORS 10" DIAM ✓
 ENGINE ROOM STEEL SIVYLIGHT WITH 2 HINGED STEEL FLAPS ✓
 WITH QUADRANTS NO LIGHTS. FLAPS 2'-6" x 1'-3".
 OVAL FUNNEL 4'-6" x 3'-0" ✓

Particulars of Flush Bunker Scuttles:— ON POOD DECK TO GALLEY / SCUTTLE WOOLLEN'S NO 1 14" DIA. WITH CHAIN. → *plated over See Cir (contd)*
 / MANHOLE TO AFTER PEAK IN TPOD SPACE ON MAIN DECK. } MANHOLES 18"x12" WITH 30 STEEL COVER
 / " • FORE " • FPLE " " " " } SECURED BY 9/16 STUDS 4" APART.

Particulars of Companionways:— STEEL COMPANION ON POOP DECK TO CREW SPACE.

ENTRANCE TO OFFICERS ACCOMMODATION,
AND ENGINE ROOM BY STEEL HINGED DOORS
IN CASING SIDES. SLIDING STEEL COVER TO
EACH COMPARTMENT. SPRING LOCKS HANDLES
BOTH SIDES.



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

ON MAIN DECK TO HOLD AT FORE END OF HATCH 13 DIA. COAL VENTILATOR 3'0" HIGH x .34 10FF
 11 HATCH SHEET - - - - - 13' . . . 2'6' . x .34 10FF } SUPPLIED WITH WOOD PLUGS
 AT POOP FRONT } AND CANVAS COVERS
 ON POOP DECK TO ACCOMMODATION PASSENGERS 6' . . . 3'0' . x .30 20FF }
 " " " " 11 OFF 5" HATCH ROOM VENTILATORS COARINGS 7" HIGH x .35 THICK. ✓

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

AIR PIPE TO FORE STEAK TANK ON FORECASTLE DECK 3" GOOSE NECK 16" TO MOUTH
 " " AFTER " POOD " 3' " " 16" " " FISHED WITH GRAUZE.
 " " OIL FUEL TANKS ON ENGINE CRASING TOP 3' " " 16' " " ✓
 " " DRYING ROOM ON POOD DECK 2" " " 16' " " ✓

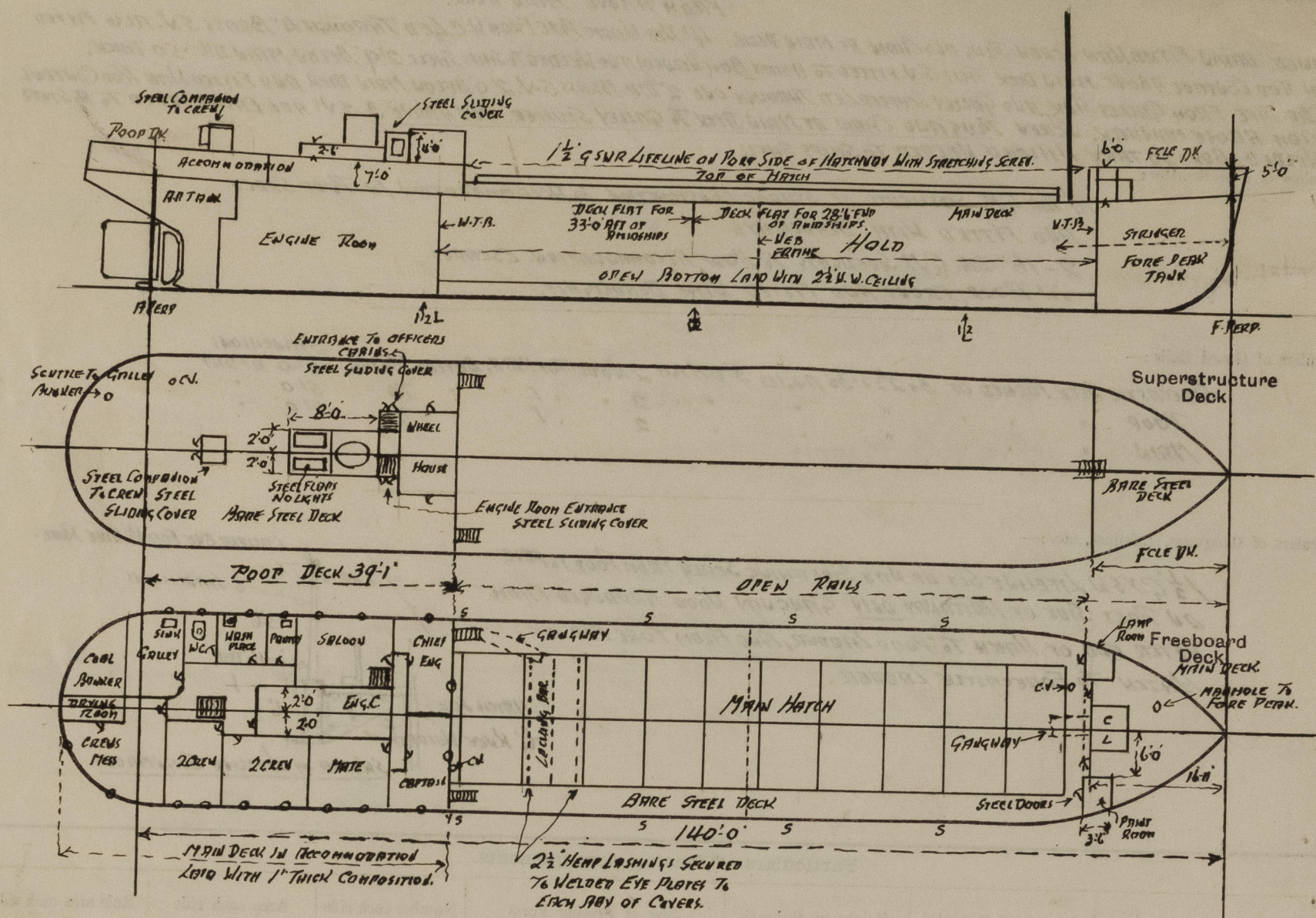
SUPPLIED WITH WOOD PLUGS WITH CHAIN.

Particulars of Gangway Cargo and Coaling Ports:—

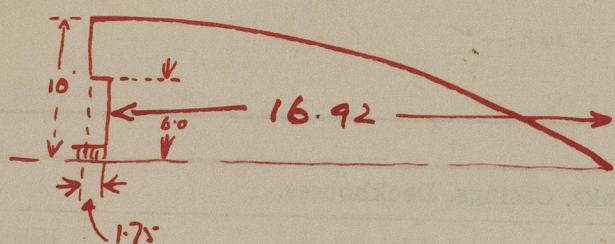
NONE FITTED.

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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:-



File. $\frac{4 \times 1.75}{10} = .70$
 $\frac{16.92}{17.62}$

Builder's name and yard number RICHARD DUNSTON LTD THORNE YARD N° 395.

Names of sister ships "EMPIRE TOWNSMAN" HULL FAB REPORT NO 1986.

Owners MINISTRY OF WAR TRANSPORT.

Fee £ Will be charged with first entry.

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