

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

No. 19374

29 JUN 1932

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Forecastle, Bridge and Raised Quarter deck.

Port of Survey SwanseaDate of Survey 27th June 1932Name of Surveyor J. SellerParticulars of Classification +100 A1

(Type of Superstructures.)

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

"MONKSTONE" SAPPHO
SUSSEX F.M.British
London14748486719235 monthsMoulded Dimensions: Length 189.5 Breadth 30.0 Depth 14.5Moulded displacement at moulded draught = 85 per cent. of moulded depth 1521 tonsCoefficient of fineness for use with Tables .760

Depth for Freeboard (D)

Moulded depth ... 14.50 14-6"Stringer plate04 .40

Sheathing on exposed deck

$$T \left(\frac{L-S}{L} \right) =$$

Depth for Freeboard (D) = 14.54

Depth correction

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

$$(14.54 - 12.63) \times 1.454 = 2.78$$

(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) 30.00Standard Round of Beam = $\frac{B \times 12}{50} =$ 7.20Ship's Round of Beam $7\frac{1}{2} =$ 7.50Difference excess .30

Restricted to

$$\text{Correction} = \frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.30}{4} \times .2349 = (-).02$$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poap enclosed ...	✓				
" overhang ...	✓				
R.Q.D. enclosed ...	<u>106-0"</u>	<u>106.00</u>	<u>4-0"</u>	-	<u>106.00</u>
" overhang ...	✓				
Bridge enclosed ...	<u>13-2"</u>	<u>13.17</u>	<u>11-6"</u>	-	<u>13.17</u>
" overhang aft ...	✓				
" overhang forward ...	<u>9"</u>	<u>.34</u>			<u>.34</u>
F'cle enclosed ...	<u>26-4"</u>	<u>24.10</u>	<u>7-6"</u>	-	<u>24.10</u>
" overhang ...	<u>6"</u>	<u>1.36</u>			<u>1.36</u>
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	<u>146.75</u>	<u>145.00</u>			<u>145.00</u>

Standard Height of Superstructure 6.0" " R.Q.D. 3.596Deduction for complete superstructure 24.95Percentage covered $\frac{S}{L} =$ 77.44" $\frac{S_1}{L} =$ 76.51" $\frac{E}{L} =$ 76.51Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) 71.00Percentage from Table, Line B.
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $.71 \times 24.95 =$ 17.71

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	<u>28.95</u>	1	<u>28.95</u>	<u>76</u>	<u>33.00</u>	1	<u>34.85</u>
$\frac{1}{4}$ L from A.P. ...	<u>12.88</u>	4	<u>51.52</u>	<u>34</u>	<u>13.42</u>	4	<u>64.36</u>
$\frac{2}{4}$ L " ...	<u>3.18</u>	2	<u>6.36</u>	<u>834</u>	<u>3.35</u>	2	<u>8.32</u>
Amidships ...	-	4	-	-	-	4	-
$\frac{3}{4}$ L from F.P. ...	<u>6.37</u>	2	<u>12.74</u>	<u>3</u>	<u>8.47</u>	2	<u>16.94</u>
$\frac{1}{4}$ L " ...	<u>25.77</u>	4	<u>103.08</u>	<u>13</u>	<u>33.97</u>	4	<u>135.88</u>
F.P. ...	<u>57.90</u>	1	<u>57.90</u>	<u>32</u>	<u>76.00</u>	1	<u>76.00</u>
Total ...			<u>260.55</u>				<u>342.35</u>

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{81.80}{18} \left(.75 - \frac{.3872}{2} \right) = (-).165$$

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 = 10.54Summer freeboard = 4.50Moulded draught (d) = 14.04

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 3.51 3 $\frac{1}{2}$ "Addition for Winter North Atlantic Freeboard (if required) = 2"

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ 1486

Tons per inch immersion at summer load water line

T = 12.5Deduction = $\frac{\Delta}{40T}$ inches= 3.57

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.760 + .68}{1.36} = \frac{1.44}{1.36}$ Depth Correction ... 2.78Deduction for superstructures ... 17.41Sheer correction ... 1.65Round of Beam correction02Correction for HEIGHT of Deck amidships 48.00

Other corrections, scantlings, etc. ...

Summer Freeboard = 53.97SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, RAISED OR, Steel Deck:—Tropical Fresh Water Line above Centre of Disc ... 4"Fresh Water Line " " ... 3 $\frac{1}{2}$ "Tropical Line " " ... 3 $\frac{1}{2}$ "Winter Line below " " ... 3 $\frac{1}{2}$ "Winter North Atlantic Line " " ... 5 $\frac{1}{2}$ "Tropical Fresh Water Freeboard ... 3'-11"Fresh Water " " ... 4'-2 $\frac{1}{2}$ "Tropical " " ... 4'-2 $\frac{1}{2}$ "Winter " " ... 4'-9 $\frac{1}{2}$ "Winter North Atlantic " " ... 4'

F-1 JUL 1932

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22 MAY 1932

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS													
Description of Hatchway			No 1		No 2		Hatch		Hatch		Hatch		
Dimensions of Hatchway			34'-10" x 18'-0"		33'-0" x 18'-0"		5'-8" x 18"		29" x 18"		33" x 21"		
COAMINGS	{	Height above Deck	34		34		4'-0"		36"		31"		
		Thickness	Sides	44		44		30		35		35	
			Ends	44		44		30		35		35	
		Stiffeners	7x3x3/8"		7x3x3/8"		7x3x3/8"		7x3x3/8"		7x3x3/8"		7x3x3/8"
Brackets, Stays			3-8x3/8"		3-8x3/8"		4x3x3/8"		4x3x3/8"		4x3x3/8"		
HATCH BEAMS	{	Number	6		6		6		6		6		
		Spacing	4-10 1/2"		4-8 1/2"		4-8 1/2"		4-8 1/2"		4-8 1/2"		
		Scantling and Sketch	Plate 17x8"		Plate 17x8"		Plate 17x8"		Plate 17x8"		Plate 17x8"		
			angles		angles		angles		angles		angles		
Bearing Surface			4		4		4		4		4		
FORE AND AFTERS	{	Number	6		6		6		6		6		
		Spacing	4-10 1/2"		4-8 1/2"		4-8 1/2"		4-8 1/2"		4-8 1/2"		
		Unsupported Lengths	4-10 1/2"		4-8 1/2"		4-8 1/2"		4-8 1/2"		4-8 1/2"		
			Scantling* and Sketch		Plate 17x8"		Plate 17x8"		Plate 17x8"		Plate 17x8"		
Bearing Surface			4		4		4		4		4		
HATCH COVERS	{	Material	White wood		White wood		White wood		White wood		White wood		
		Thickness	2 1/2"		2 1/2"		2 1/2"		2 1/2"		2 1/2"		
		How fitted	F & A		F & A		F & A		F & A		F & A		
		Bearing Surface	3"		3"		3"		3"		3"		
Spacing of Cleats			20" x 23"		20" x 23"		20" x 23"		18" x 15"		13" x 10"		
Number of Tarpaulins			Two		Two		Two		Two		Two		
*Are wood fore and afters steel shod at all bearing surfaces?													
Are battens and wedges efficient and in good condition?													
Are tarpaulins in good condition and in accordance with rule requirements?													
Are lashings provided in accordance with rule requirements?													

Particulars of fiddley, funnel and ventilator coamings:— *Funnel coaming 13" x 25 plate. —*
Steel hinged plates to fiddley gratings —
Ingen Room skylights — steel flanged plates 20 thick (hinged) fitted with glass bulls eyes —
Ventilators 2 to Ingen Room & 2 to Stokerhold, protected by Casings.

Particulars of Flush Bunker Scuttles:— *Two on Raised Quarter Deck. 19" diameter Cast iron Bayonet fitting, strong construction. Securing chains not fitted*

Particulars of Companionways:— *none.*

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

Forecastle Deck *Well Deck* *Raised Quarter Deck*
2- 9" diameter 36" x 25 Coaming *1- 15" diameter x 36" x 375 Coaming* *2- 15" diameter x 36" x 375 Coaming*
2- 9" — " x 36 x 25 "
Wood cover & Canvas covers fitted.

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

Forecastle Deck *Raised Quarter Deck*
1- 4" dia x 15" from Deck. *2- 2 1/2" dia x 5 1/2" from Deck*
2- 2 1/2" x 20" — " — *2- 2 1/2" x 29" —*
not fitted with wood plugs ~~or other means of closing~~

Particulars of Gangway Cargo and Coaling Ports:— *none.*

Particulars of Scuppers and Sanitary Discharge Pipes

1 Portside in Forecastle 4' dia fitted with storm Valve
1 " " Bridge " " " "
1 Starboard aft " " " "

Particulars of Side Scuttles:

In Forecastle Brass frames fitted with hinged deadlights
In Bridge " " without deadlights
In Machinery Casings aft " " " "

Particulars of Guard Rails:-

Forecastle deck 3'-0" high spaced 4'-0" with two rails
Bridge deck 3'-0" " " 5'-0" " " "

Particulars of Gangways, Lifelines, etc.:-

~~None~~ Efficient provision for rigging lifelines.

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
RAISED QUARTER DECK Forward Well	106'-0"	3'-3"	3'-0" x 1'-6"	4	18'0 ff	21 1/4
Forward Well	44'-0"	3'-6"	3'-0" x 1'-6"	3	13'5 ff	11

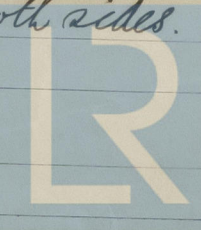
State position of each freeing port (F. and A. position and height above deck edge) } ~~RA 8~~ ~~After Well~~ :- ~~FTD~~ 6'-4" x 18'-7" x 14'-10" x 27'-0" x 12 1/2" above deck.
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:- } Forward Well :- ~~FT~~ 12'-4" x 11'-5" x 4'-8" x 12 1/2" " " "
Additional area where sheer is less than standard. } Each with 4 bars spaced 3 1/2" apart

Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Roop Bulkhead	✓							
Raised Quarter Deck Bulkhead	40	40	4x3x35 OF	36	Brackets TRB	none	✓	4'-0"
Bridge, After Bulkhead	35	35	4x3x30 OF	30	Full height	3'-8" x 23"	18"	7'-6"
Bridge, Forward Bulkhead	35	30	6 1/2 x 3 x 34 BR	30"	Brackets TRB	none + sq	—	11'-6"
Forecastle Bulkhead	30	25	2 1/2 x 7 x 25 OF	30"-28"	Full height	4'-11" x 23	16 1/2	7'-6"
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	30	25	2 1/2 x 7 x 25 OF	22"	Full height	3'-9" x 23"	18"	7'-0"
Exposed Machinery Casings on Superstructure Decks	✓							
Machinery Casings within Superstructures 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).

Roop Bulkhead	✓
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	Wood doors opening from both sides. ✓
Bridge, Forward Bulkhead	See sketch on Page 4 ✓
Forecastle Bulkhead	Wood doors opening from both sides. ✓
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	Stub hinged doors 30 thick opening from both sides. ✓
Exposed Machinery Casings on Superstructure Decks	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships	✓



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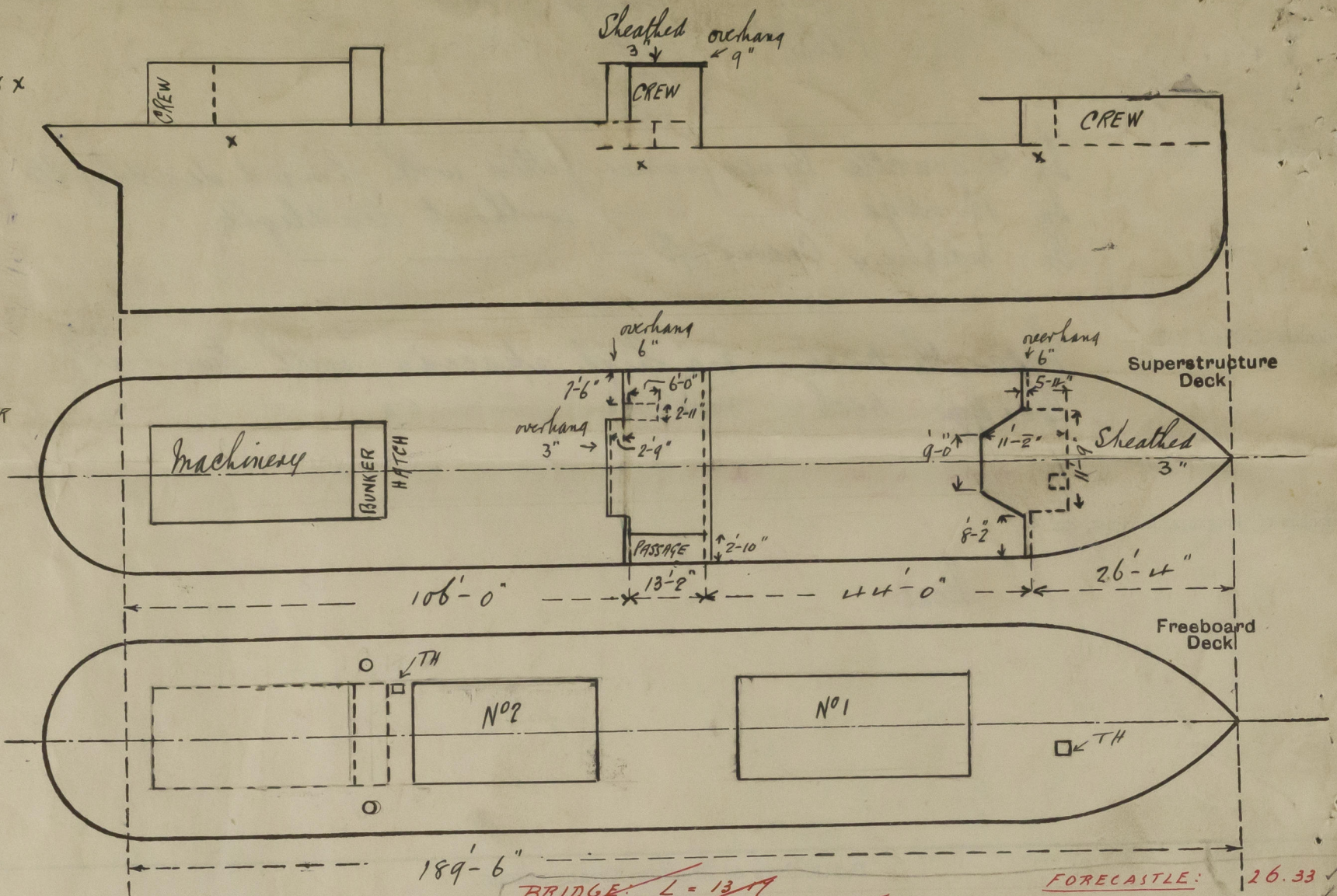
Monkstone

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:—

Sanitary
overcharges x

TH =
THICKENING
PLATES

FLUSH BUNKER
SCUTTLES



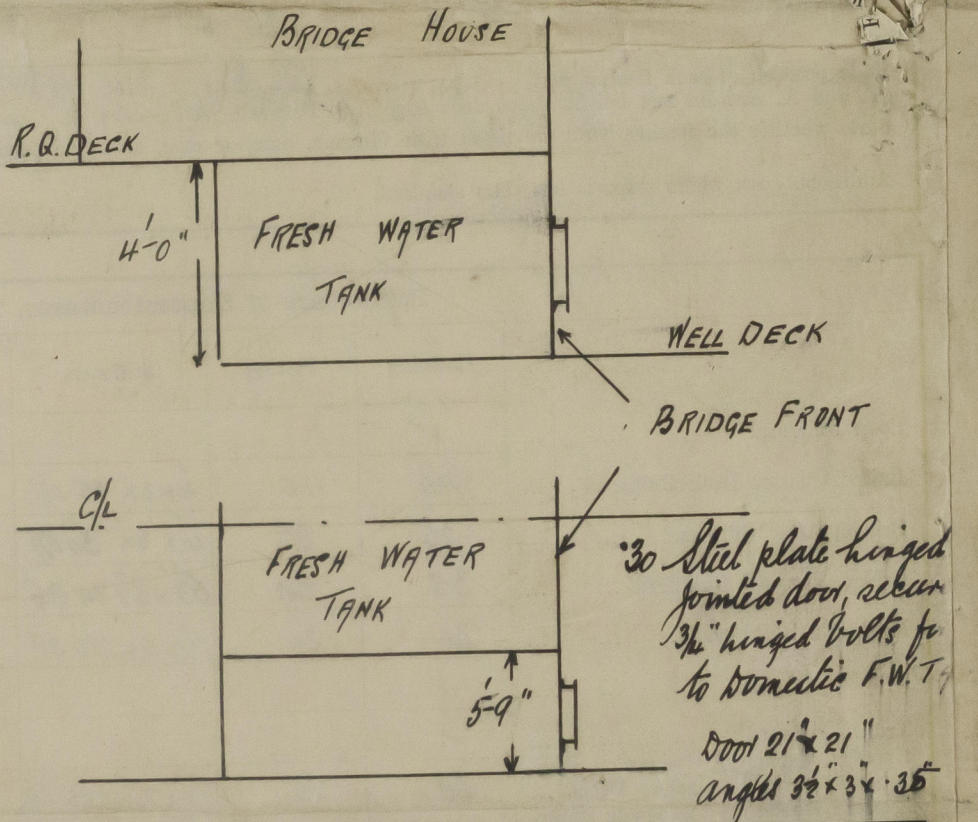
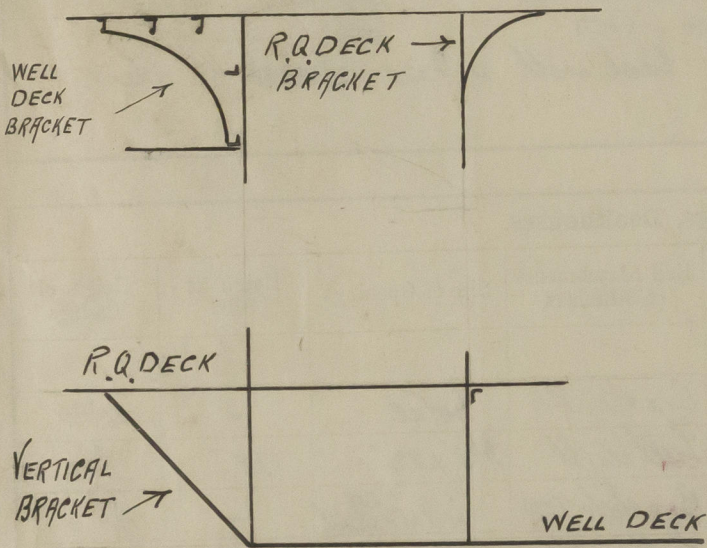
Particulars taken when vessel
was lying afloat.

$$\begin{array}{r} \text{BRIDGE L} = 13' \\ 6 \times 2.92 \\ 30 \\ \hline .58 \text{ O.H.} \\ \hline 12.59 \end{array}$$

$$\begin{array}{r} \text{FORECASTLE:} \\ 11.95 \times 5.33' \\ 28.08' \\ \hline 26.33 \\ 2.23 \\ \hline 24.10 \end{array}$$

OMT.

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



Builder's name and yard number Hansen SB & Ship Repairing Co. Ltd.

Names of sister ships

Owners S & R Steamships Ltd (Stone & Rolfe Ltd).

Fee £ 6 : 16 : 0

Received by me

OMT.



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