

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

No 30990

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~

having Quarter Deck, Bridge, & Forecastle.
(Type of Superstructures.)

Port of Survey Sunderland.

Date of Survey 27th July 1932.

Name of Surveyor D. J. Paton

Ship's Name "HOVE" Nationality and Port of Registry British London. Official Number 133629 Gross Tonnage 435 Date of Build 1913 7 Mo.

Moulded Dimensions: Length 155.5' Breadth 25.0' Depth 11.8"

Moulded displacement at moulded draught = 85 per cent. of moulded depth 750 tons

Coefficient of fineness for use with Tables .681

Particulars of Classification +100 A.I.
SS Sla No 3-12.25
SS SLA No 3-0

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>11.66'</u>	(a) Where D is greater than Table depth (D-Table depth) R = <u>(11.69 - 10.37) 1.196 = + 1.58</u>	Moulded Breadth (B) <u>25.0</u>
Stringer plate <u>32</u> <u>.03'</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>6.0</u>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <u>6.25</u>
Depth for Freeboard (D) = <u>11.69'</u>		Difference <u>.25</u>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.25}{4} (1 - .7621) = -.01$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed	<u>91.5</u>	<u>91.50</u>	<u>3.5</u>		<u>91.50</u>
" overhang					
Bridge enclosed	<u>8.5</u>	<u>8.50</u>	<u>7.0</u>		<u>8.50</u>
" overhang aft					
" overhang forward	<u>15.55</u>	<u>15.55</u>	<u>6.25</u>		<u>15.55</u>
F'cle enclosed	<u>21.5</u>	<u>2.97</u>			<u>2.97</u>
" overhang	<u>5.95</u>				
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	<u>121.50</u>	<u>118.52</u>			<u>118.52</u>

Standard Height of Superstructure	<u>6.0</u>
" " R.Q.D.	<u>3.37</u>
Deduction for complete superstructure	<u>21.55</u>
Percentage covered $\frac{S}{L} =$	<u>78.14</u>
" $\frac{S_1}{L} =$	<u>76.21</u>
" $\frac{E}{L} =$	<u>76.21</u>
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	<u>.7064</u>
Interpolation for bridge less than .2L (if required)	
Deduction =	<u>21.55 + .7064 = 15.22</u>

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<u>25.55</u>	1		<u>25.55</u>	<u>49.0</u>	<u>50.56</u>	1		<u>50.56</u>
$\frac{1}{2}$ L from A.P.	<u>11.37</u>	4		<u>45.48</u>	<u>22.51</u>	<u>22.51</u>	4		<u>90.04</u>
$\frac{2}{3}$ L "	<u>2.81</u>	2		<u>5.62</u>	<u>5.61</u>	<u>5.78</u>	2		<u>11.56</u>
Amidships		4		<u>0</u>	<u>0</u>	<u>0</u>	4		<u>0</u>
$\frac{2}{3}$ L from F.P.	<u>5.62</u>	2		<u>11.24</u>	<u>7.68</u>	<u>7.68</u>	2		<u>15.36</u>
$\frac{1}{2}$ L "	<u>22.74</u>	4		<u>90.96</u>	<u>30.81</u>	<u>30.81</u>	4		<u>123.24</u>
F.P.	<u>51.10</u>	1		<u>51.10</u>	<u>68.0</u>	<u>68.00</u>	1		<u>68.00</u>
Total				<u>229.95</u>					<u>359.42</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{229.95 - 359.42}{18} \left(.75 - \frac{118.52}{2 \times 155.5} \right) = \frac{-129.47}{18} \left(.75 - .3907 \right) = -2.62$

If limited on account of midship superstructure.

Mean actual sheer aft = Success
Mean standard sheer aft = Success

Length of enclosed superstructure forward of amidships = 14
" " aft of " = 50

at U. R.Q.D. = 3.50
S.D. " = 3.37
.13 = 1.56"

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.681 + .68}{1.36}$
Depth to <u>R.Q.</u> Deck = <u>46.915.19</u>	$\Delta =$	Depth Correction <u>1.58</u>
Summer freeboard = <u>3.66</u>	Tons per inch immersion at summer load water line	Deduction for superstructures <u>15.22</u>
Moulded draught (d) = <u>8.03</u>	T =	Sheer correction <u>2.62</u>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>2.01</u> = <u>2" 3"</u>	Deduction = $\frac{\Delta}{40 T}$ inches = <u>2" 3"</u>	Round of Beam correction <u>.01</u>
Addition for Winter North Atlantic Freeboard (if required) = <u>4" 5"</u>		Correction for Thickness of Deck amidships <u>42.00</u>
		Other corrections, scantlings, etc. <u>43.58</u>
		Summer Freeboard = <u>42.014</u>

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

Tropical Fresh Water Line above Centre of Disc	Tropical Fresh Water Freeboard
Fresh Water Line " "	Fresh Water " "
Tropical Line " "	Tropical " "
Winter Line below " " <u>2" 3"</u>	Winter " "
Winter North Atlantic Line " "	Winter North Atlantic " "

Hove

Particulars of fiddley, funnel and ventilator coamings :—

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways :—

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

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

Particulars of Gangway Cargo and Coaling Ports :—

Particulars of Scuppers and Sanitary Discharge Pipes :—

Particulars of Side Scuttles:—

Particulars of Guard Rails :—

Particulars of Gangways, Lifelines, etc. :—


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	✓	.25	diaphragms 40 x 30 3/4"	30"		4 side lights 9 1/2" dia.	22" above R. Q. D.K.	7'-0"
Bridge, Forward Bulkhead	Vertical plating	.36	5 x 3 x 40 BA	2'-3"	Brackets top & bottom.	5 x 9" Side lights	5'-1"	7'-0"
Forecastle Bulkhead <i>Sidehouses companion way, Gate.</i>	✓	.25	2 1/2 x 2 1/2 x .25	2'-2"	none.	3'-9" x 22"	16"	6'-3"
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Trunk board or Raised Quarter Decks ...	18" x .36	.25	3 1/2" x 2 1/2" x .30 L	28"	Brackets at tops & beams.	2 x 4'-8" x 24" 2 x 2'-0" x 24" 1 x 4'-8" x 24" 1 x 4'-7" x 23"	18" 16"	7'-0"
Exposed Machinery Casings on Super- structure Decks	✓							
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).

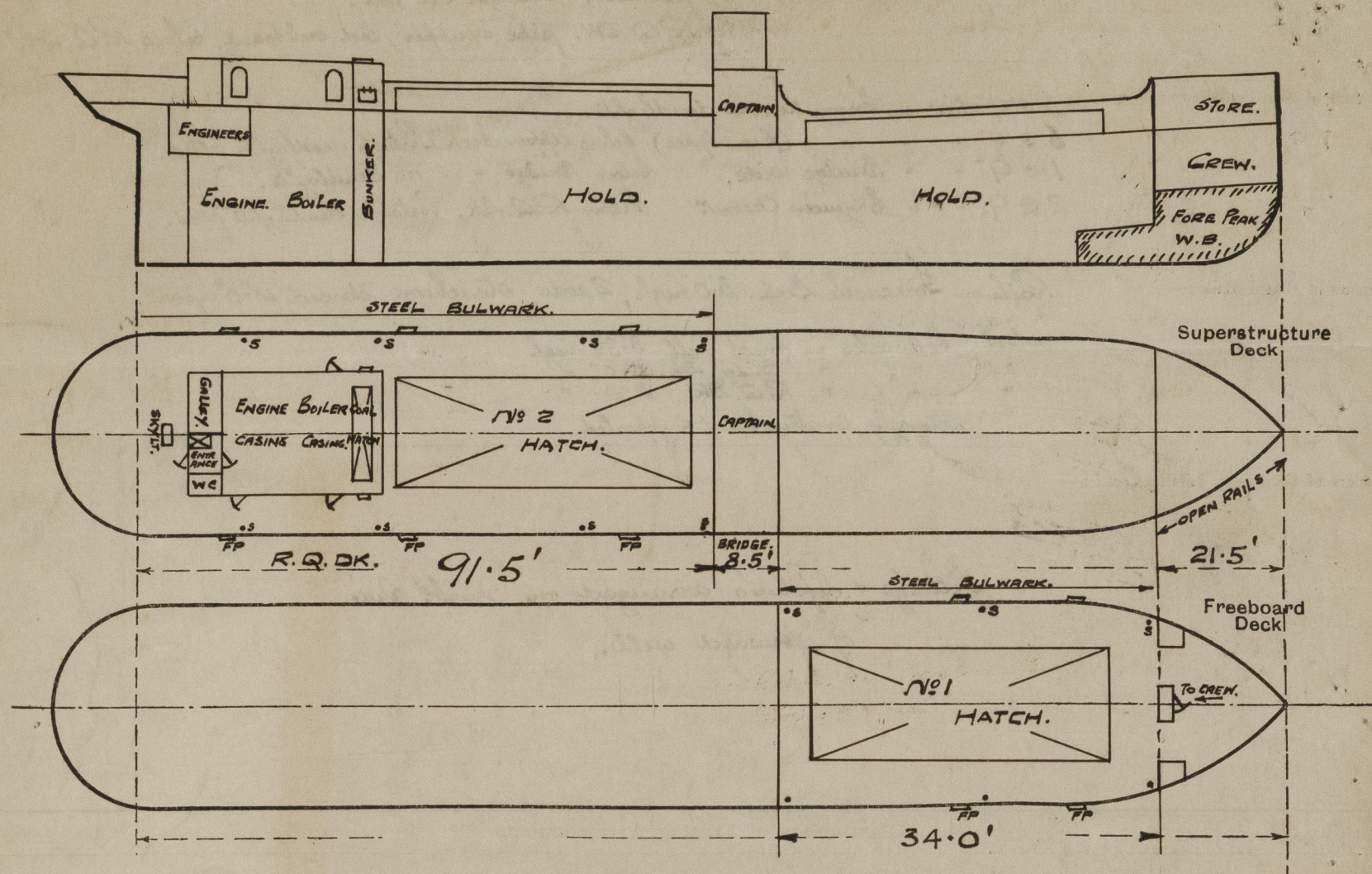
Poop Bulkhead					
Raised Quarter Deck Bulkhead ...					
Bridge, After Bulkhead	Sidelight	slightly constructed	operated inside	} No openings no openings	
Bridge, Forward Bulkhead	Sidelight				
Forecastle Bulkhead					
Exposed Machinery Casings on Deck					
boarded Raised Quarter Decks ...					
Exposed Machinery Casings on Super- structure Decks					
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances					
Deckhouses on Flush Deck Ships ...					

Leak Door 1 1/2" Chuck with 3/4" Panel. To Open Accomms operated both Sides.

Two steel doors .25 Plate, Operated both sides. To Sidley.
 one " " .25 " " outside only. To Bunkers.
 one " " .25 " " operated both sides. To Engine room
 one Leak door 1 1/2" with 3/4" Panels. To Engineers Accomms.
 One " " " " " " To Engine room. from Engineers Accomms entrance

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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 shewn on the following sketches:—



Stairlight on R.Q.DK. to Engineers Accom.
1'-10" x 3'-0" x 21 1/2" high
25 steel.

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

The vessel has been examined in Dry Dock.
The Decks, hatchways & hatches, Ventilators & Coamings
Air Pipes, bulwarks, & General Equipment have been
found in Good Condition.

Builder's name and yard number

Ordrossan Dry Dock & S. B. Coy. Ltd.

Names of sister ships

Owners

Stephenson Clarke & Assoc^d Coys Ltd.

Fee £

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Received by me



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