

Vae Victis

Newcastle-on-Tyne No. 88200

10 MAR 1932

Rpt. C.11.

28985

Index. No. 30514  
(For London Office only.)

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having Poop, R.Q.D. and Bridge with forecastle disconnected

Port of Survey Newcastle

Date of Survey 5th Mar. 1932

Ship's Name  
LIGHTFOOT

(Type of Superstructures.)

Nationality and Port of Registry  
British Newcastle

Official Number  
145492

Gross Tonnage  
1894

Date of Build  
1922-7

Name of Surveyor A. Urwin

Moulded Dimensions: Length 267.75 Breadth 37.66 Depth 19.75  
Moulded displacement at moulded draught = 85 per cent. of moulded depth 3768 tons  
Coefficient of fineness for use with Tables .779

Particulars of Classification \*100A1

Depth for Freeboard (D)				Depth correction		Round of Beam correction	
Moulded depth	...	...	...	(a) Where D is greater than Table depth (D - Table depth) R =	(19.75 - 17.85) 2.06	Moulded Breadth (B)	37.66
Stringer plate	...	...	...		4.0	Standard Round of Beam = $\frac{B \times 12}{50}$	9.0
Sheathing on exposed deck	...	...	...	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	9.5
$T \left( \frac{L-S}{L} \right) =$						Difference	.5
Depth for Freeboard (D) =				If restricted by superstructures		Restricted to	
						Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S}{L} \right)$	- .035

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>i</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed	24.08	24.08	7.58		24.08	Standard Height of Superstructure <u>6.18</u>
" overhang						" " R.Q.D. <u>4.24</u>
R.Q.D. enclosed	82.25	82.25	3.75		72.74	Deduction for complete superstructure <u>32.77</u>
" overhang						Percentage covered $\frac{S}{L} = \frac{192.86}{267.75} = .7200$
Bridge enclosed	54.83	54.83	7.0		54.83	" $\frac{S_i}{L} = \frac{191.56}{267.75} = .7154$
" overhang aft						" $\frac{E}{L} = \frac{182.05}{267.75} = .6800$
" overhang forward						Percentage from Table, Line A. <u>✓</u>
F'cle enclosed	24.10	29.1	7.66		29.10	(corrected for absence of forecastle (if required)) <u>✓</u>
" overhang	1.1	.55			.55	Percentage from Table, Line B. <u>59.60</u>
Trunk aft						(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than 2L (if required) <u>✓</u>
Tonnage opening aft						Deduction = -19.53
" " forward						32.77 + 59.60 = -19.53 <u>✓</u>
Total	192.86	191.56			182.05	

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	36.76	1		36.76	40.5	42.0	1		42.0	Mean actual sheer aft = Excess
1/4 L from A.P.	16.37	4		65.48	20.5	19.75	4		79.00	Mean actual sheer forward = Excess
3/4 L "	4.03	2		8.06	5.25	4.94	2		9.88	
Amidships		4		0	0		4			Length of enclosed superstructure forward of amidships = $\frac{27.28}{267.75} = 10.19\%$
3/4 L from F.P.	8.06	2		16.12	10.50	9.18	2		18.36	" " aft of " = 50%
1/4 L "	32.74	4		130.96	37.0	36.75	4		146.92	
F.P.	73.52	1		73.52	84.0	84.0	1		84.0	
Total				330.90					380.16	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{49.26}{18} (.75 - .36) = 1.07$

If limited on account of midship superstructure. ✓

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

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	36.03
Depth to Freeboard Deck = <u>19-9 1/2</u>		$\Delta = 4053$			38.64
Summer freeboard = <u>1-10</u>		Tons per inch immersion at summer load water line		Depth Correction	4.0
Moulded draught (d) = <u>17-11 1/2</u>		T = <u>20.75</u>		Deduction for superstructures	19.53
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{\Delta}{40T}$ inches = <u>4.49 4 1/2</u>		Deduction = $\frac{\Delta}{40T}$ inches = <u>4.88 5"</u>		Sheer correction	1.07
Addition for Winter North Atlantic Freeboard (if required) = <u>2"</u>		Displacement at 18' draft (2" heel) = <u>4068 tons</u>		Round of Beam correction	.03
				Correction for Thickness of Deck amidships	
				Other corrections, scantlings, etc.	
					4.0 20.63 -16.63
					Summer Freeboard = <u>22.01</u>

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

5'	Tropical Fresh Water Line above Centre of Disc	...	9 1/2'	Tropical Fresh Water Freeboard	...	1-0 1/2'
	Fresh Water Line	"	5'	Fresh Water	"	1-5'
	Tropical Line	"	4 1/2'	Tropical	"	1-5 1/2'
3"	Winter Line below	"	4 1/2'	Winter	"	2-2 1/2'
	Winter North Atlantic Line	"	6 1/2'	Winter North Atlantic	"	2-4 1/2'



### PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway ... ..	Nº1	Nº2	Nº3	Nº4	Bridge No.	Up. Deck in bridge	up. Deck in forecabin	Poop Deck	Casing top
Dimensions of Hatchway ... ..	29'0" x 22'10"	28'5" x 25'0"	29'2" x 24'3"	27'5" x 23'2"	2 off. 5'10" x 30'	2 off. 42" x 24"	1 off. 42" x 27"	23' x 23'	12-0 x 5-4½
COAMINGS {	Height above Deck ...	48"	42"	42"	30"	angle	angle	30"	7 x 3 x 40 B.A.
	Thickness { Sides ...	.50"	.50"	.44"	.30"			.30"	
	Ends ...	.44"	.44"	.44"	.30"			.30"	
	Stiffeners ...	7 x 3 x .50	7 x 3 x .50	7 x 3 x .50	7 x 3 x .50				
BRACKETS, STAYS	Brackets, Stays	2	3	2	2				
HATCH BEAMS {	Number ... ..	4	4	4	4				
	Spacing ... ..	5 - 9½"	5 - 8"	5 - 10"	5 - 6"				
	Scantling and Sketch ...	4 x 3 x 40 34" x 40	5 x 3 x 40 34" x 40	5 x 3 x 40 36" x 40	4 x 3 x 40 36" x 40				
	Bearing Surface ... ..	3½"	3½"	3½"	3½"				
FORE AND AFTERS {	Number ... ..								
	Spacing ... ..								
	Unsupported Lengths ...								
	Scantling* and Sketch ...								
HATCH COVERS {	Bearing Surface ... ..								
	Material ... ..	W.P.v	W.P.v	W.P.v	W.P.v	W.P.v	W.P.v	W.T.halib	W.P.v
	Thickness ... ..	3"	3"	3"	3"	2½"	2½"	to limit	2½"
	How fitted ... ..	4 x A	4 x A	4 x A	4 x A	4 x A	4 x A	4 x A	4 x A
SPACING OF CLEATS	Bearing Surface ... ..	3"	3"	3"	3"	2"	3"	3"	3"
Number of Tarpaulins ... ..	24	24	24	24	19				24

\*Are wood fore and afters steel shod at all bearing surfaces? ✓ yes

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 fiddle, funnel and ventilator coamings :—

holders of fiddle, funnel and ventilator coamings:—  
Stockhold grating covered by strong steel hinged covers. Fiddle, funnel, and ventilation in efficient condition. Engine skylight of steel strongly constructed.

Particulars of Flush Bunker Scuttles:—

Particulars of Flush Banker Scuttles:—  
Two flush scuttles 17" <sup>x</sup>diam. with 3" thick cast iron screen in covers situated on winch platform decks in wells (1 forward, 1 aft). Winch platform deck 30" above upper deck.

Particulars of Companionways:—

particulars of Companionways:—  
 One strong steel companion on poop deck 5'-6" length x 4'-6" long x 4'-0" wide riveted to deck. Door opening  
 40" wide x 4'-2" high in after end. Divided door 13/8" thick framed 13" Sill.  
 Two strong steel companions on bridge deck 5'-1" length x 4'-0" long x 2'-6" wide. Doors in after end  
 24" wide x 3'-9" high of 1 1/2" thick framed. 12 1/2" Sill.

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

	One ventilator on forecabin deck, coaming	36" x 12" x .26 to hold.	( <del>not</del> stayed)	one new one mounted on main cabin	X
	" " freeboard	51" x 12" x .26 "	-	q" lugs x 6" diam of C.I. to post cabins	X
2	" " bridge	30" x 6" x .26 to bridge space cabins		One C.I. goose-neck vent., 8" x 10" x 5" diam to poop cabin	X
2	screw down mushroom vents on bridge deck	9" lugs x 6" diam " " of C.I.			
1	goose neck ventilator	9" x 6 11" x 4 1/2" diam " "			
2	ventilators on bridge deck, coaming	30" x 9" x .26 to bridge space	( <del>not</del> stayed) X	All ventilators are constructed in accordance with the rules and coamings are closed w wood plugs and canvas covers.	
2	" " R. Q. D.	42" x 12" x .30 to hold			
1	" " Poop deck,	30" x 6" x .26 to tunnel			

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

2 air pipes on forecastle deck 8 x 10 x 5" diam to fore head.  
1 " " " " " flush with brass screw caps to No. 1 tank.  
2 " " " freeboard deck 36" length x 1 1/2" diam to d.b. tanks.  
2 " " " bridge deck 33" " 1 1/2" " "  
~~no means of closing fitted.~~

Particulars of Gangway Cargo and Coaling Ports:—

None



Particulars of Scuppers and Sanitary Discharge Pipes —

No scupper pipes from enclosed spaces. *X*  
 All sanitary discharges are led overboard above the freeboard deck and are fitted with cast steel storm valves. *X*

Particulars of Side Scuttles:

Side scuttles 8" diam with hinged deadlights fitted in forecabin, bridge and poop sides  
 " " " " without " " " " forecabin and bridge and bulkheads  
 " " 10" " without " " " " poop front bulkheads *X*  
 All side scuttles of substantial construction *X*

Particulars of Guard Rails:—

Guard rails round forecabin and poop 3'-3" high stanchions 4'-6" apart 2 rails  
 Bulwarks fitted at bridge sides and front 3'-5" high, stanchions 5'-10" apart of 7"x40" rail 6"x3"x40"  
 No freeing ports.

Particulars of Gangways, Lifelines, etc.:—

*None*  
 Suitable provision made for *rigging* lifelines  
 Available for use in any part of the ship which might have to be used by the crew in the regular working of the ship.

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ... (R.Q.D.) ...	81.66	3'-6"	2'-9" x 1'-6"	4	$\frac{16.5}{14.52}$	16.33
Forward Well ...	74.89	4'-0"	2'-9" x 1'-6"	4	$\frac{16.5}{14.52}$	14.98

State position of each freeing port from bridge bulkheads to mainmast edge  
 (F. and A. position and height above deck edge) { After Well:— 13.33', 30.58', 49.16', 66.83' 9" rails  
 Forward Well:— 12.75', 29.5', 42.58', 60.42' 13" rails  
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— fitted with hinged shutters *X*  
 Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.

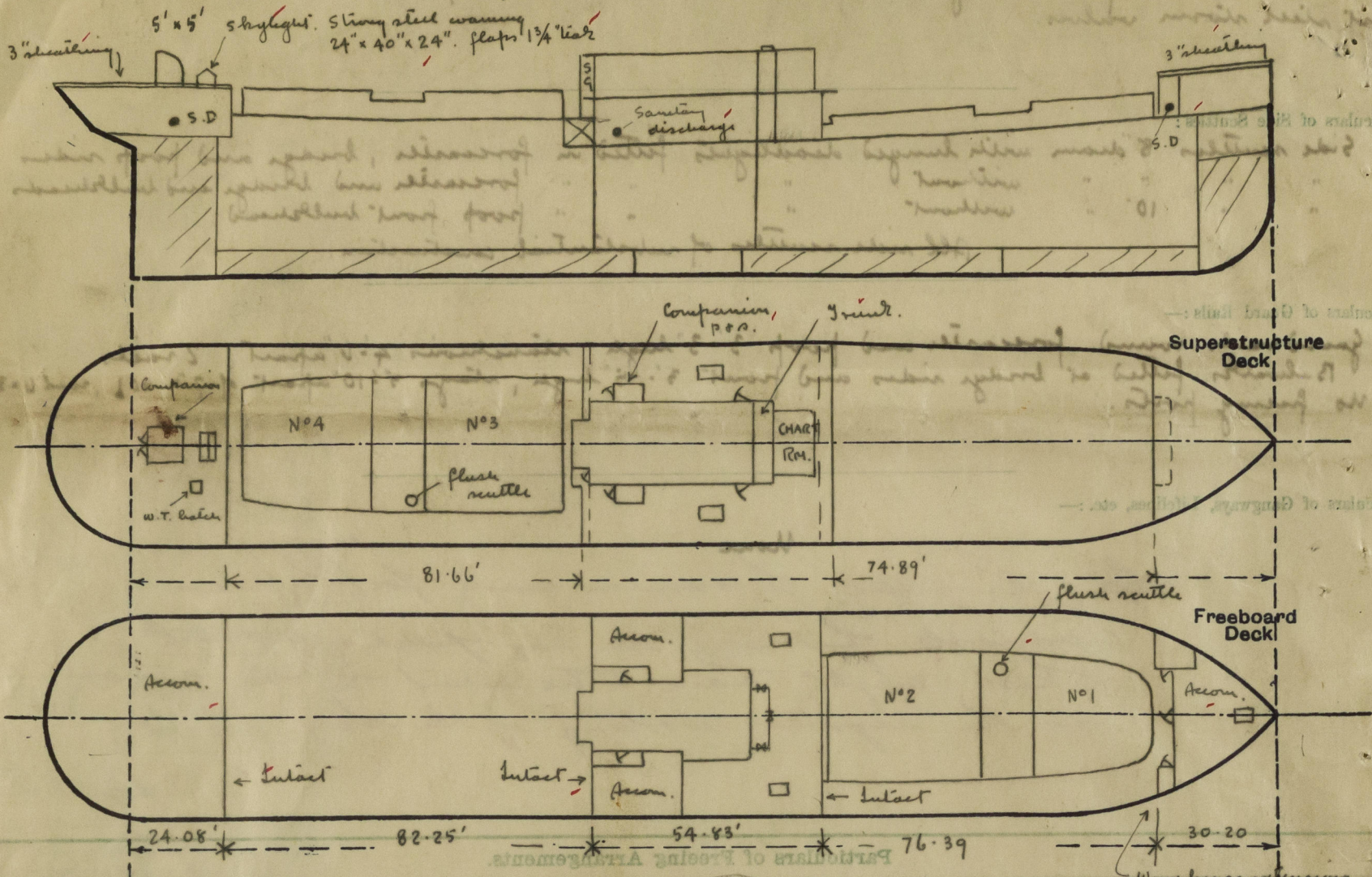
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ...	.34 <i>X</i>	.34 <i>X</i>	5/2 x 3 x .360 <i>A</i>	30" <i>X</i>	None <i>X</i>	None <i>X</i>	✓	✓
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead ...	.44 <i>X</i>	.44 <i>X</i>	6 x 3 1/2 x .30 <i>X</i>	36" <i>X</i>	None <i>X</i>	None <i>X</i>	✓	✓
Bridge, Forward Bulkhead ...	.38 <i>✓</i>	.30 <i>✓</i>	7 x 3 x .50 <i>✓</i>	30" <i>X</i>	Brackets <i>✓</i>	None <i>✓</i>	✓	✓
Forecastle Bulkhead ...	.26 <i>X</i>	.26 <i>X</i>	3 1/2 x 3 1/2 x .38 <i>X</i>	42" <i>X</i>	None <i>X</i>	1. 26" x 5'-2" <i>X</i>	16" <i>X</i>	✓
Trunk, Aft ...	✓							
Trunk, Forward ...	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	✓							
Exposed Machinery Casings on Superstructure Decks ...	.40 <i>X</i>	.30 <i>X</i>	3 x 3 x .38 <i>X</i>	33" <i>X</i>	None <i>X</i>	2. 24" x 4'-6" <i>X</i>	20" <i>X</i>	7'-0" <i>X</i>
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).

Poop Bulkhead ...	Intact bulkhead <i>X</i>
Raised Quarter Deck Bulkhead ...	No openings
Bridge, After Bulkhead ...	Intact bulkhead <i>X</i>
Bridge, Forward Bulkhead ...	Intact bulkhead <i>X</i>
Forecastle Bulkhead ...	1 1/2" framed lead door operated from both sides <i>X</i>
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Superstructure Decks ...	Strong steel hinged doors operated from both sides <i>X</i>
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	✓
Deckhouses on Flush Deck Ships ...	✓



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:—



File eqm. bld.

$$\frac{3.67 \times 5}{16.67} = 1.1$$

Under deck cargo arrangement not required.

Wing house extension  
3'-8" long x 5'-0" wide  
mean depth of hull 33'-4"

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

Particulars of Superstructures, Trunks, Casings, Deckhouses							
Position of Bulkhead	Coaming	Plating	Thickness	Spacing	End Attachments	Size of Openings	Height of Bulkhead
Prop Bulkhead	34	34	5/16" x 3/16"	30	None	None	18"
Raised Quarter Deck Bulkhead	44	44	5/16" x 3/16"	30	None	None	18"
Bridge After Bulkhead	38	38	5/16" x 3/16"	30	None	None	18"
Bridge Forward Bulkhead	38	38	5/16" x 3/16"	30	None	None	18"
Forecastle Bulkhead	38	38	5/16" x 3/16"	30	None	None	18"
Trunk Aft	38	38	5/16" x 3/16"	30	None	None	18"
Trunk Forward	38	38	5/16" x 3/16"	30	None	None	18"
Exposed Machinery Casings on Deck	38	38	5/16" x 3/16"	30	None	None	18"
Exposed Machinery Casings on Superstructure	38	38	5/16" x 3/16"	30	None	None	18"
Machinery Casings within Superstructure	38	38	5/16" x 3/16"	30	None	None	18"
Trunks not fitted with Class I Coaming	38	38	5/16" x 3/16"	30	None	None	18"
Appliances	38	38	5/16" x 3/16"	30	None	None	18"
Deckhouses on Finke Deck Ships	38	38	5/16" x 3/16"	30	None	None	18"

Builder's name and yard number

Messrs John Brown & Sons Ltd.

Names of sister ships

Owners

Messrs The Hill Steam Ship Co. Ltd. (Wilmington & Everett Myns)

Fee £

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Received by me