

1147

Builders' Name and No. of Ship *Sir Jas. Laing & Sons Ltd*
N° 667

Owners *~~Tankers, Ltd~~ M.O.T. LONDON.*
TANKERS LTD, BROOK HOUSE, 113 PARK LANE LONDON W.1.

Port and Date of Survey *North Shields - December 1931*

Name of Surveyor *George Buchanan*
& W.H. Stephenson 6/1936

Names of Sister Ships

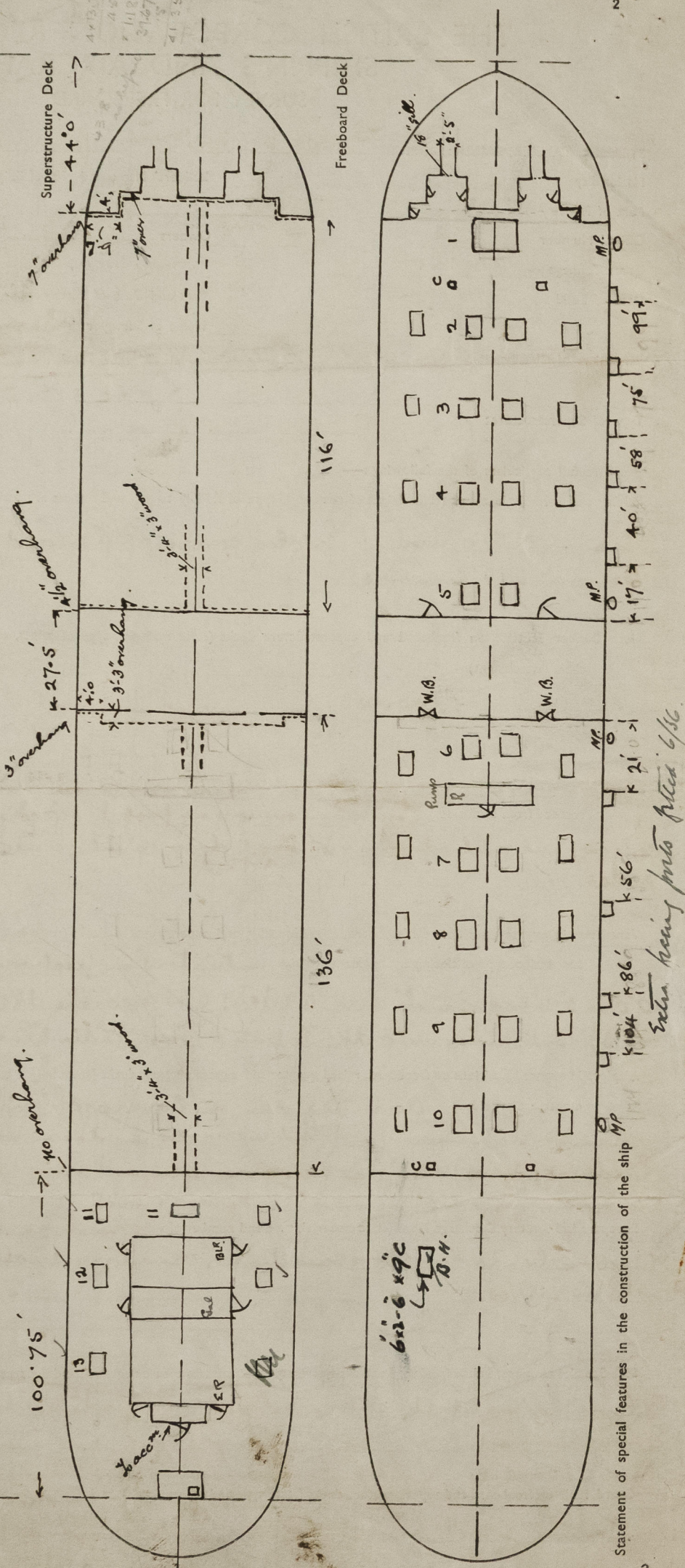
Guard Rails on freeboard and superstructure decks (state type and where fitted)

hatchways with fixed stanchions and permanent rod. Along permanent gangway between superstructures with fixed stanchions and one wire.
(see sketch)

002374-002384-0036^y

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatches, extent and thickness of deck sheathing, gangway, and any other openings, etc., which would affect the strength of the ship are to be shown on the following sketches.

The Freeboard Report has been compared with the approved plans and found in order.



COMPUTATION OF FREEBOARD.

Length on summer load line 424.42 Moulded Breadth 56'-8" Moulded Depth 33'-0" Depth of Keel 1'-02"
Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth 15477 Tons
Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times 85} = .803$
Displacement and tons per inch immersion in salt water at summer load line 14245
Moulded depth 33'-0" Deduction for Fresh Water $\frac{\Delta}{40T} = 7.63 = 7\frac{1}{2}$ inches
Stringer Plate .64 Round of Beam Correction
Sheathing on exposed deck T $(\frac{L-S}{L})$ none
Rise of floor (in sailers) 33.053
Depth for Freeboard (D) 28.295
Table Depth 28.295
Depth Correction 4.7583 14.27
If restricted by superstructures

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)	
Poop	100.75	nil	7'-6"	100.75	-	100.75	Standard Height of Superstructure 7'-6"
Raised Quarter-Deck							" " R.Q.D.
Bridge	27.5	A 4.7	7'-6"	28.83	-	28.83	Percentage covered S/L = .4027
Forecastle	44.0	4.7	7'-6"	41.35	-	41.35	" " E/L = .4016
Trunk Aft							" " from Table line A, B, (corrected for absence of forecastle if required)
Forward							Percentage from Table by interpolation for Bridge less than .2L if required =
Tonnage Opening Aft							Deduction =
Forward							Percentage from Table for Tankers (or Timber ships) = 31.6%
Totals				170.93		170.43	Deduction = $42 \times 31.6\% = 13.09$

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product	Mean Actual sheer aft	Mean Actual sheer forward
A.P.	62	52.44	62	1	62	$\frac{21.44}{17.48} = 1.23$	$\frac{39.74}{34.96} = 1.14$
1/2 L from A.P.	28	23.34	28	4	112		
1/2 L from A.P.	8 1/2	5.77	8.5	2	17		
Amidships	0	0	0	4	0		
1/2 L from F.P.	13 1/2	11.54	13.5	2	27		
1/2 L	53	46.68	53	4	212		
F.P.	120	104.88	120	1	120		
				18	550		
Effective Mean Sheer					30.55		
Standard " " .05L + 5					26.22		
Difference					4.33 excess		

Sheer Correction = Difference $\times (\frac{S}{75} - \frac{S}{2L}) = 4.33 \times (\frac{75}{75} - \frac{201}{549}) = 2.377$ off
If limited on account of midship superstructure =
to maximum allowance of 1 1/2 ins. per 100 ft. =

TABULAR FREEBOARD corrected for flush deck if required = 68.505	
Correction for co-efficient = $68.505 \times \frac{1.423}{1.26} = 74.70$	
Depth correction 14.27	
Deduction for superstructures 13.09	
Sheer correction 2.38	
Round of Beam correction .01	
Correction for thickness of deck amidships	
Other corrections, scantlings, etc.	
Summer Freeboard in inches = 73.51	
Additional allowance for superstructures on Timber carrying ships = 80.24	
Summer Timber Freeboard in inches = 66.78	
Depth to Freeboard Deck in feet 33.053	
Summer Freeboard in feet 6.126	
Moulded Draught (d) 26.927 = 26'-11"	
Addition for Keel 1	
Extreme draught 27'-0"	
Deduction for Tropical and addition for Winter freeboard d/4 = 6.732	
Addition for Winter North Atlantic (if required) 10.976	
Deduction for Tropical Timber Freeboard d/4 = 1.66	
Addition for Winter " " d/3 = 9.01	
N.A. Timber Freeboard (if required)	

SUMMER FREEBOARD recommended amidships from centre of disc to top of deck line, (wood steel) 6'-1 1/2"	Corresponding Freeboard 7'-2 1/4"
TROPICAL FRESH WATER LINE above centre of disc 1'-2 1/2"	4'-11"
FRESH WATER LINE " " 7 1/2"	5'-6"
TROPICAL LINE " " 7"	5'-6 1/2"
WINTER LINE below " " 6 1/2"	6'-8"
WINTER NORTH ATLANTIC LINE " " 11"	7'-0 1/2"
SUMMER TIMBER FREEBOARD recommended amidships from centre of disc to top of deck line	
TROPICAL FRESH WATER Timber line above centre of disc	Corresponding Freeboard
FRESH WATER " " " " "	" "
TROPICAL " " " " "	" "
WINTER " " below " " "	" "
WINTER NORTH ATLANTIC " " " " "	" "

	Coaming	Plating	Stiffeners	Spacing	End Attachments	No. and size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	6'x6'x4"	.46	9'x3'x465	30"	Bolt lap + Bolt	None	-	-
R.Q.D. "								
Bridge Aft Bulkhead	30	30	4" flanges	34"	-	2 @ 3'-1"	16"	-
" Forward "	42	4	9'x3 1/2'x6 BA	30"	Bolt lap + Bolt	2 @ 4'-6"x2'-6"	24"	-
Forecastle Bulkhead	26	26	3'x3'x76	33"	-	6 @ 4'-11"x2'-5"	16"	-
Trunk, Aft								
" Forward								
Exposed Machinery Casings on Freeboard R.Q. Decks	36	30	3 1/2'x3 1/2'x36	30"	-	1 @ 4'-6"x2'	24"	6'-7 1/2"
Exposed Machinery Casings on superstructure decks	32	25	3 1/2'x2 1/2'x24	30"	-	3 @ 5'x2'	14"	7'-0"
Machinery Casings within Superstructures not fitted with Cl. 1. closing appliances								
Deckhouses on flush deck ships								

PARTICULARS OF CLOSING APPLIANCES (state if capable of being manipulated from both sides)

Poop Bulkhead no openings

R.Q.D. "

Bridge Aft Bulkhead Hinged steel doors with turnbuckles worked from both sides

" Forward "

Forecastle Bulkhead 2 passages 2' wide with 18" sills, 2 wood doors and 4 steel doors with 16" sills, all worked from both sides

Exposed Machinery Casings on Freeboard R.Q. Decks Pump room 6'-7 1/2' high, door aft 4'-6"x2' with 18" sills, worked both sides

Exposed Machinery Casings on superstructure decks 2 B.R. Room, Gallery + E.R. steel; 1/2 access aft end wood 4'9"x2'-0" with 16" sills, all worked from both sides

Machinery Casings within superstructures not fitted with Cl. 1. Closing Appliances

Deck houses on Flush Deck ships

	Length of Bulwark	Height of Bulwark	No. and size of Freeing Ports each side	Area each side	Rule Area
After Well	136	3-6	18 in. side, 4'-9" x 2'-0"		
Forward Well	116	3-6	18 in. side, 4'-9" x 2'-0"		
State fore and aft position and height above deck to bottom of port, for each port			After Well " bridge front " aft " " " 13' + 13 1/2' above deck		
State whether freeing ports are fitted with shutters, bars or rails, and give particulars			ports open with L.W.D. guard rails.		
Give particulars of freeing port area, etc., on superstructure decks			Poop + Fore = open rails. Bridge = house for full length.		

2 1/2 x 2 1/2 ft. R.P. corner
with 3 turnbuckles.



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TABULAR FREEBOARD ~~corrected for flush deck if required~~ = 68.505 ✓
 Correction for co-efficient = 68.505 × $\frac{1.422}{1.25}$ ✓ = 74.70 DRAUGHTS AND SEASONAL CORRECTIONS

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PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

No.	Location	Access	Remarks
1	Main Tank Hatchways	→ Summer	→ Cofferdams
2	Fore Hatchways	→	→ Hatch

Number and description of Hatchway from forward	Dimensions of Hatchway	COAMINGS	HATCH BEAMS	FORE AND AFTERS	HATCH COVERS	Number of Cleats	Number of Tarpaulins
1	9'-6" x 12'	Height } steel above deck Thickness { sides ends Stiffeners Brackets or Stays	1				
2	2'-8" x 3'-6"		4'-9"				
3	7'-2" x 11'-3"		7'-2" x 11'-3"				
4	3'-6" x 5'-6"		3'-6" x 5'-6"				
5	6'-0" x 10'-0"		6'-0" x 10'-0"				
6	6'-0" x 10'-0"		6'-0" x 10'-0"				
7	6'-0" x 10'-0"		6'-0" x 10'-0"				
8	6'-0" x 10'-0"		6'-0" x 10'-0"				
9	6'-0" x 10'-0"		6'-0" x 10'-0"				
10	6'-0" x 10'-0"		6'-0" x 10'-0"				
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100	6'-0" x 10'-0"		6'-0" x 10'-0"				

Surveyors are to note that wood fore and afters are to be steel shod at all bearing surfaces.]

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Gangways and Lifelines

Gateway *plus* between Superstructures (See Skiton)

Gangway, Cargo and Coaling Ports in sides of ship

SUPPLEMENTARY REQUIREMENTS FOR STEAMER CARRYING TIMBER DECK CARGOES

Do Superstructures and Machinery Casings comply with rules?

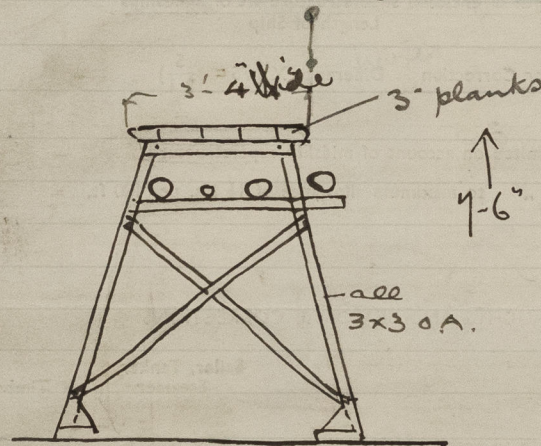
Is provision made for protection of steering gear, and is emergency steering gear provided?

Are efficient uprights, sockets and lashings provided according to rules?

State particulars of longitudinal subdivision in double bottom

State particulars of Bulwarks and Rails

Approval date of plans and full particulars of arrangements for stowing and securing timber



gangway between
superstructures.
gangway efficiently braced.

superf. 6' to 7 feet apart,

The scantlings and protective arrangements being in accordance with the Freeboard rules it is submitted that the freeboard be assigned

Passed at a meeting of the Committee of Management of the British Corporation Register of Shipping and Aircraft

on the 17th June 1936

Chief Surveyor.

Aircraft
Lloyd's Register
Foundation
Secretary.

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