

34271

Rpt. C.11.

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No. ~~14840~~  
(For London Office only.)

25 NOV 1932

Computation of Freeboard for <del>Steamer</del> , Sailing Ship, Tanker				Port of Survey <u>SOUTHAMPTON</u>	
having <u>FOCASTLE, BRIDGE &amp; POOP</u>				Date of Survey <u>28. Nov. 1932.</u>	
(Type of Superstructures.)				Name of Survey <u>J. Anderson &amp; L.R. Home</u>	
Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	
<u>SAGONA</u>	<u>NORWEGIAN</u> <u>XIANSAND</u>		<u>7554</u>	<u>1929</u>	
Moulded Dimensions: Length		Breadth	Depth	Particulars of Classification <u>+100 A1</u>	
Moulded displacement at moulded draught = 85 per cent. of moulded depth				Carrying Petroleum in Bulk.	
Coefficient of fineness for use with Tables					

<b>Depth for Freeboard (D)</b>	<b>Depth correction</b>	<b>Round of Beam correction</b>
Moulded depth ... ..	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B)
Stringer plate ... .. <u>19%</u>		Standard Round of Beam = $\frac{B \times 12}{50} =$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Ship's Round of Beam = <u>360%</u>
Depth for Freeboard (D) =	If restricted by superstructures	Difference
		Restricted to
		Correction = $\frac{\text{Diff}^a}{4} \times \left( 1 - \frac{S_1}{L} \right) =$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ... ..	<u>97'</u>		<u>7'-6"</u>			Standard Height of Superstructure
" overhang ... ..	<u>4'</u>					" " R.Q.D.
R.Q.D. enclosed ... ..						Deduction for complete superstructure
" overhang ... ..						Percentage covered $\frac{S}{L} =$
Bridge enclosed ... ..	<u>34'-6"</u>		<u>7'-6"</u>			" " $\frac{S_1}{L} =$
" overhang aft ... ..						" " $\frac{E}{L} =$
" overhang forward ... ..						Percentage from Table, Line A. (corrected for absence of forecastle (if required))
F'cle enclosed ... ..	<u>52'-3"</u>		<u>7'-6"</u>			Percentage from Table, Line B. (corrected for absence of forecastle (if required))
" overhang ... ..						Interpolation for bridge less than 2L (if required)
Trunk aft ... ..						Deduction =
" forward ... ..						
Tonnage opening aft ... ..						
" " forward ... ..						
Total ... ..						

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ... ..		1					1			Mean actual sheer aft =
$\frac{1}{6}$ L from A.P. ... ..		4					4			Mean standard sheer aft =
$\frac{2}{6}$ L " ... ..		2					2			Mean actual sheer forward =
Amidships ... ..		4					4			Mean standard sheer forward =
$\frac{2}{6}$ L from F.P. ... ..		2					2			Length of enclosed superstructure forward of amidships =
$\frac{1}{6}$ L " ... ..		4					4			" " aft of " =
F.P. ... ..		1					1			
Total ... ..										

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

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 =          Ft.  
Summer freeboard =           
Moulded draught (d) =           
Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches =           
Addition for Winter North Atlantic Freeboard (if required) =         

**Deduction for Fresh Water.**

Displacement in salt water at summer load water line  
 $\Delta =$   
Tons per inch immersion at summer load water line  
 $T =$   
Deduction =  $\frac{\Delta}{40T}$  inches =         

**TABULAR FREEBOARD** corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction ... ..		
Deduction for superstructures ... ..		
Sheer correction ... ..		
Round of Beam correction ... ..		
Correction for Thickness of Deck amidships ... ..		
Other corrections, scantlings, etc. ... ..		
Summer Freeboard =		

### 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 " " ... ..	Winter " " ... ..
Winter North Atlantic Line " " ... ..	Winter North Atlantic " " ... ..



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

Description of Hatchway	HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS								97RD. 12 AFT.	8
	STORE FOCASTLE WEATHERDECK	FOCASTLE FREE DECK	HOLD W. D.	FOCASTLE F. D.	POOP	TRUNK	OF BUNKER	CARGO	Manholes	
Dimensions of Hatchway	2'4"x2'0"	3'8"x3'8"	13'6"x9'9"	11'0"x8'0"	3'6"x2'7"	3'5"x2'9"	3'4"x2'4"	5'11"x3'7"	18'x15"	
COAMINGS	Height above Deck	24"	9'3"x3'6"	33"	9'6"x3'6"	21'2"	2'0"	2'9"	35"	11"
	Thickness	5/16"	✓	✓	✓	✓	✓	✓	✓	✓
	Sides	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Stiffeners	✓	✓	✓	✓	✓	✓	✓	✓	✓
HATCH BEAMS	Brackets, Stays	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Number	...	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...	...
	Scantling and Sketch	Strong steel	7" x 3/4" x 1/2"	Strong steel	Strong steel	Strong steel	Strong steel	Strong steel	Strong steel	Strong steel
FORE AND AFTERS	Bearing Surface	Secured	none	Secured	by	Secured	Secured	Secured	by	Secured
	Number	...	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...	...
	Unsupp'd Lengths	...	...	...	...	...	...	...	...	...
HATCH COVERS	Material	...	Wood	Wood	Wood	Wood	Wood	Wood	Wood	Wood
	Thickness	...	2 1/2"	3"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	How fitted	...	fra.	fra.	fra.	fra.	fra.	fra.	fra.	fra.
	Bearing Surface	...	3"	3"	3"	3"	3"	3"	3"	3"
Spacing of Cleats	...	...	18"	21"	15"	15"	15"	15"	15"	15"
Number of Tarpaulins	...	...	2	2	2	2	2	2	2	2

Particulars of fiddle, funnel and ventilator coamings:—

Fiddle gratings fitted with hinged steel covers.  
Funnel ventilator coamings in efficient condition.

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways:—

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

Forecastle: one 12", two 12", 1 turn mid, all with 36" coamings. Poop: 4, 11 1/2" with 2'-9" coamings.  
Foredeck: one 8" with 36" coamings. Canvas covers and wood plugs provided.  
Aft deck: one 12" p.s. 38" coamings.  
one 9" p.s. 38" coamings.

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

Forecastle: one 6" A.P. 2'-2" high. Poop: 4, 8 3/4" G.N.A.R. 13" to lip.  
Canvas covers provided. 8" dia. ... 10" ...

Particulars of Gangway Cargo and Coaling Ports:—

Particulars of Scuppers and Sanitary Discharge Pipes:—

2 W.C. S. side. Poop 4" W.I. pipes connected to G.M. Storm Valves.

Particulars of Side Scuttles:—

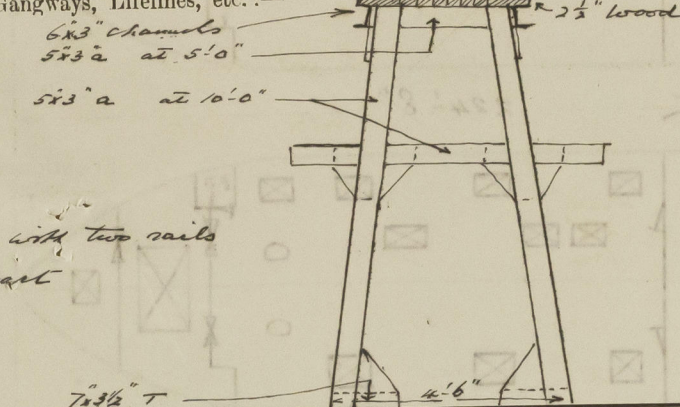
Dead lights fitted in poops.

Particulars of Guard Rails:—

Forecastle 3'-6" stanchions, with 3 rails, 3'-9" apart.

Poop 3'-6" stanchions, with 3 rails, 3'-6" apart.

Particulars of Gangways, Lifelines, etc.:—



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	155'-4"	3'-6"	3'-5" x 1'-6 1/2"	6	31.6	Cargo 31.07
Forward Well	103'	3'-6"	3'-5" x 1'-6 1/2"	4	21.1	20.6

State position of each freeing port (F. and A. position and height above deck edge):  
After Well: 2, 2'-6", 4'-0", 6'-3", 8'-0", 10'-6", 12'-6".  
Forward Well: 5'-3", 30'-3", 53'-0", 78'-0".  
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— no shutters, 2 transverse bars.  
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 ... ..		4"	10' x 3 1/2"	23"	b. top b. bot.	4'-9" x 2'-1"	15"	7'-6"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ... ..		4"	6 1/2" x 3"	30"	do	4'-6" x 3'-0 1/2"	21"	7'-6"
Bridge, Forward Bulkhead ... ..		4"	9' x 3 1/2"	30"	do	4'-6" x 3'-0 1/2"	21"	7'-6"
Forecastle Bulkhead ... ..	5/16"	5/16"	6' x 3"	30"	b. top	4'-6" x 3'-0 1/2"	22 1/2"	7'-6"
Trunk, Aft ... Pump House ...		5/16"	6' x 3"	36"	b. top.	4'-10" x 2'-2"	19"	7'-6"
Trunk, Forward ... ..								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ...		5/16"	10' x 3 1/2" 5' x 3' 2"	23" 30"	b. top. b. top.	5'-4" x 2'-0" 5'-2" x 2'-1"	14" 12 1/2"	7'-6"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..								
Pump House Deckhouses on Flush Deck Ships ...		1/4"	4' x 3' 2"	27"	b. top.	5'-11" x 2'-2 1/2"	18 1/2"	7'-6"

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	2 W.T. Steel doors opp. both sides.
Raised Quarter Deck Bulkhead	hinged W.T. Steel door opp. both sides.
Bridge, After Bulkhead	2 substantial reinforced steel plates fitted with strong hooked bolts.
Bridge, Forward Bulkhead	2 W.T. Steel doors opp. both sides.
Forecastle Bulkhead	2 substantial reinforced steel plates fitted with strong hooked bolts.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	hinged bulkhead 5'-11" x 2'-2" reinforced steel door, opp. both sides, all 9"
Exposed Machinery Casings on Superstructure Decks	4 hinged steel doors opp. both sides, 4, 17 1/2" bulk doors opp. both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	hinged W.T. doors opp. both sides.
Deckhouses on Flush Deck Ships	hinged W.T. doors opp. both sides.