

# Lloyd's Register of Shipping.

Index. No. **34231**  
(For London Office only.)

-9 SEP

## SURVEYS FOR FREEBOARD.

NEW ORLEANS REPORT No. 4095. A

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~having FULL SCANTLING WITHOUT TONNAGE OPENING.ERRECTIONS - POOP, BRIDGE, AND FORECASTLE.

(Type of Superstructures.)

Port of Survey NEW ORLEANS, LADate of Survey JULY 30th 1932Name of Surveyor F. W. P. A.

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

"VESTVANGEN"NORWEGIAN  
OSLO

✓

24201930  
10Moulded Dimensions: Length 289'-6" Breadth 45'-6" Depth 20'-6"Moulded displacement at moulded draught = 85 per cent. of moulded depth 5044 tonsCoefficient of fineness for use with Tables 76.9 \* ON DEEP LEAD LINE.Particulars of Classification 100 A.1.

Fitted for oil fuel 10-20 - F.P. above 130°F

Depth for Freeboard (D)	<u>20.50</u>
Moulded depth	<u>20'-6"</u>
Stringer plate	<u>11'-06"</u>
Sheathing on exposed deck	
$T \left( \frac{L-S}{L} \right) =$	✓
Depth for Freeboard (D) =	<u>20.56</u>

Depth correction	
(a) Where D is greater than Table depth (D-Table depth) R =	$(20.56 - 19.30) 2.227 = +2.81$
(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)	<u>45'-6"</u>
Standard Round of Beam = $\frac{B \times 12}{50}$	<u>10.92</u>
Ship's Round of Beam	<u>11'-3" = 11.37</u>
Difference	<u>.45</u>
Restricted to	
Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$= \frac{.45}{4} \times .4873 = .05$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	<u>28'-0"</u>	<u>28.00</u>	<u>7'-6"</u>	✓	<u>28.00</u>
" overhang	<u>1'-0"</u>	<u>.50</u>			<u>.50</u>
R.Q.D. enclosed					
" overhang					
Bridge enclosed	<u>84'-0"</u>	<u>84.00</u>	<u>7'-6"</u>	✓	<u>84.00</u>
" overhang aft	<u>4'-0"</u>	<u>3.00</u>			<u>3.00</u>
" overhang forward	<u>2'-0"</u>	<u>1.00</u>			<u>1.00</u>
F'cle enclosed	<u>30'-52"</u>	<u>30.52</u>	<u>7'-6"</u>	✓	<u>30.52</u>
" overhang	<u>1'-40"</u>	<u>1.40</u>			<u>1.40</u>
Trunk aft	<u>2.81</u>				
" forward					
Tonnage opening aft					
" forward					
Total	<u>152.33</u>	<u>148.42</u>			<u>148.42</u>

Standard Height of Superstructure	<u>6.395</u>
" " R.Q.D.	✓
Deduction for complete superstructure	<u>34.63</u>
Percentage covered $\frac{S}{L} =$	<u>52.62%</u>
" $\frac{S_1}{L} =$	<u>51.27%</u>
" $\frac{E}{L} =$	<u>51.27%</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>37.27%</u>
Interpolation for bridge less than 2L (if required)	✓
Deduction = $34.63 \times .3727 =$	<u>-12.91</u>

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>38.95</u>	<u>1</u>		<u>38.95</u>	<u>4'-4"</u>	<u>51.50</u>	<u>51.50</u>	<u>1</u>	<u>51.50</u>
$\frac{1}{8}L$ from A.P. ...	<u>17.33</u>	<u>4</u>		<u>69.32</u>	<u>1'-3"</u>	<u>19.16</u>	<u>19.16</u>	<u>4</u>	<u>76.64</u>
$\frac{2}{8}L$ " ...	<u>4.78</u>	<u>2</u>		<u>8.56</u>	<u>-4"</u>	<u>4.79</u>	<u>4.79</u>	<u>2</u>	<u>9.58</u>
Amidships ...	✓	<u>4</u>		✓	-	✓	✓	<u>4</u>	✓
$\frac{2}{8}L$ from F.P. ...	<u>8.57</u>	<u>2</u>		<u>17.14</u>	<u>-10"</u>	<u>9.33</u>	<u>9.33</u>	<u>2</u>	<u>18.66</u>
$\frac{1}{8}L$ " ...	<u>34.66</u>	<u>4</u>		<u>138.64</u>	<u>2'-1"</u>	<u>37.33</u>	<u>37.33</u>	<u>4</u>	<u>149.32</u>
F.P. ...	<u>77.90</u>	<u>1</u>		<u>77.90</u>	<u>7'-6"</u>	<u>90.50</u>	<u>90.50</u>	<u>1</u>	<u>90.50</u>
Total ...				<u>350.51</u>					<u>396.20</u>

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{45.69}{18} \times (.75 - .2631) = -1.24$$

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.

Ft.

Depth to Freeboard Deck = 20.56Summer freeboard = 2.69Moulded draught (d) = 17.87

### Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 4.47 = 4.2= 11.47

### Addition for Winter North Atlantic Freeboard (if

required = 2' = 51"

### Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$  5227

Tons per inch immersion at summer load water line

 $T =$  26.91Deduction =  $\frac{\Delta}{40T}$  inches= 4.86= 4 3/4= 121 1/4

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

Correction for coefficient  $\frac{769+68}{1.36} = \frac{1.47}{1.36}$ 

	+	-
Depth Correction	<u>2.81</u>	✓
Deduction for superstructures	✓	<u>12.91</u>
Sheer correction	✓	<u>1.24</u>
Round of Beam correction	✓	<u>.05</u>
Correction for Thickness of Deck amidships	✓	✓
Other corrections, scantlings, etc.	✓	✓
	<u>2.81</u>	<u>14.20</u>

Summer Freeboard = 32.16

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

Tropical Fresh Water Line above Centre of Disc	<u>9 1/4" = 235 7/8</u>	Tropical Fresh Water Freeboard	<u>1' - 11" = 584 1/2</u>
Fresh Water Line	<u>4 3/4" = 121 1/2</u>	Fresh Water	<u>2' - 3 1/2" = 698 1/2</u>
Tropical Line	<u>4 1/2" = 114 1/2</u>	Tropical	<u>2' - 3 3/4" = 705 1/2</u>
Winter Line below	<u>4 1/2" = 114 1/2</u>	Winter	<u>3' - 0 3/4" = 933 1/2</u>
Winter North Atlantic Line	<u>6 1/2" = 165 1/2</u>	Winter North Atlantic	<u>3' - 2 1/4" = 984 1/2</u>

# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
Description of Hatchway	No. 1	No. 2	No. 3	No. 4	FORW. END BRIDGE SPACE	2 COAL IN BRIDGE	2 ACCESS IN BRIDGE	2 RIDGE DECK	2 BOAT DECK	FO'CASTLE	
Dimensions of Hatchway	32'x20'	34'x20'	34'x20'	32'x20'	6'x12'	2'5'x13'6"	27'x30"	4'x12'	4'x13'	31'x31"	
COAMINGS	Height above Deck	42"	42"	42"	42"	9 1/2"	9 1/2"	9 1/2"	18"	36"	6"
	Thickness	3/16"	3/16"	3/16"	3/16"	1/2"	1/2"	1/2"	1/2"	3/16"	1/4"
	Stiffeners	9x3 1/2 BA.	9x3 1/2 BA.	9x3 1/2 BA.	9x3 1/2 BA.	4 SIDE	4 SIDE	4 SIDE	4 SIDE	4 SIDE	4 SIDE
	Brackets, Stays	2 END	2 END	2 END	2 END						
HATCH BEAMS	Number	6	6	6	6	1	NONE	NONE	1	NONE	NONE
	Spacing	4'-7"	4'-11"	4'-11"	4'-7"	3'-0"			3'-6"		
	Scantling and Sketch	3" NEA PLATE 18" DEEP 4"x3"x44 ANGLES	DITTO	DITTO	DITTO	10x35" 3x2 1/2x5"			10x35" 3x2 1/2x5"		
	Bearing Surface	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"			3 1/2"		
FORE AND AFTERS	Number	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	
	Spacing										
	Unsupported Lengths										
	Scantling* and Sketch										
HATCH COVERS	Material	WOOD	WOOD	WOOD	WOOD	WOOD	WOOD	WOOD	WOOD	STEEL	
	Thickness	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	HINGED COVER 1/4" THICK.
	How fitted	F.F.A.	F.F.A.	F.F.A.	F.F.A.	ATHW.	ATHW.	ATHW.	F.F.A.	F.F.A.	
	Bearing Surface	3"	3"	3"	3"	3"	2 1/2"	2 1/2"	3"	3"	
Spacing of Cleats	24"	24"	24"	24"	24"	24"	24"	24"	24"	24"	
Number of Tarpaulins	2	2	2	2	2	2	2	2	2	2	
*Are wood fore and afters steel shod at all bearing surfaces? <b>NONE</b> Are battens and wedges efficient and in good condition? <b>YES.</b> Are tarpaulins in good condition and in accordance with rule requirements? <b>YES.</b> Are lashings provided in accordance with rule requirements? <b>YES.</b>											

Particulars of fiddley, funnel and ventilator coamings:— **NO FIDDLER OPENINGS. FUNNEL STEPS ON TOP OF CASING WITH NO OPENINGS. VENTILATORS TO MACHINERY SPACES STRONGLY CONSTRUCTED 7'-6" ABOVE CASING. ENGINE ROOM SKYLIGHTS ALL OF STEEL WITH COVERS PERMANENTLY ATTACHED.**

Particulars of Flush Bunker Scuttles:— **NONE.**

Particulars of Companionways:— **NONE.**

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:— **NONE ON FREEBOARD DECK. THOSE ON SUPERSTRUCTURE DECKS ARE OF STEEL STRONGLY CONSTRUCTED COAMINGS RIVETED TO DECK AND DECK STIFFENED, PROPERLY STAYED AND SUPPORTED. HEIGHT OF COAMINGS 12'-0" X 50" AND ARE FITTED WITH CONLS SECURED TO PLATE AND HAVE CANVAS COVERS.**

*means of closing provided*

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:— **ALL OF SUBSTANTIAL CONSTRUCTION. 6'-2" HIGH IN WELLS STAYED TO BULWARKS AND 2'-3" HIGH ON ERECTIONS.**

**NO MEANS PROVIDED FOR CLOSING SAME.**

*means of closing provided*

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



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Particulars of Scuppers and Sanitary Discharge Pipes — THERE ARE NO SANITARY DISCHARGE PIPES FROM SPACES BELOW THE FREEBOARD DECK.

5 - 8" IN WAY OF BRIDGE 2'0" BELOW FREEBOARD DECK FROM ACCOMMODATION IN MIDSHIP HOUSE, SCUPPERS ETC.  
2 - 6" 2'0" BELOW FREEBOARD DECK FROM TOILETS IN BRIDGE SPACE.  
2 - 4" 2'0" BELOW FREEBOARD DECK FROM ACCOMMODATION IN POOP.

ALL FITTED WITH NON RETURN VALVES.

Particulars of Side Scuttles: NONE BELOW FREEBOARD DECK.  
THOSE IN ERECTIONS FITTED WITH DEADLIGHTS.

Particulars of Guard Rails: — FORECASTLE — 3 TIER RAIL 42" HIGH STANCHIONS SPACED 48"  
POOP — 3 TIER RAIL 44" HIGH STANCHIONS SPACED 60"  
BRIDGE — SOLID BULWARKS 44" HIGH STANCHIONS SPACED 5'0" (SUPPORTS FOR BOAT DECK) AT FORWARD AND AFTER ENDS 3 TIER RAIL 44" HIGH STANCHIONS SPACED 42"  
WELLS — SOLID BULWARKS 7'0" HIGH STANCHIONS SPACED 6'0" WITH INTERMEDIATE ANGLE STIFFENERS.  
MIDSHIP HOUSE — SOLID BULWARKS 44" HIGH STANCHIONS SPACED 5'0" AFTER END 3 TIER RAIL 44" HIGH STANCHIONS SPACED 4'0".

Particulars of Gangways, Lifelines, etc.: — BOARDS ARE PROVIDED WHICH ARE SECURED TO LADDERS FROM POOP, BRIDGE AND FORECASTLE AND TO THE HATCHWAYS, SOCKETS ARE ALSO FITTED TO THE HATCH COAMINGS TO TAKE PORTABLE STANCHIONS FOR DERRICK RESTS AND FOR SECURING LIFE LINES. MASTER WILL ARRANGE LIFE LINES WHEN REQUIRED.

Particulars of Freeing Arrangements.

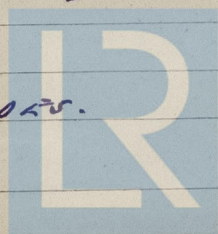
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ... ..	74'-0"	7'-0"	26" x 33"	4	23.76 sq	15 sq
Forward Well ... ..	70'-0"	7'-0"	26" x 33"	4	23.76 sq	14 sq
State position of each freeing port ... .. { After Well: — 5'-0" FROM BRIDGE 6'-3" FROM POOP } 14' ABOVE DECK. (F. and A. position and height above deck edge) { Forward Well: — 3'-4" FROM FORECASTLE 4'-0" FROM BRIDGE } State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: — SHUTTERS WITH 2 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 ... ..	7/16"	7/16"	6" x 3' BA.	30"	BRACKET.	NONE	"	7'-6"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ... ..	3/8"	3/8"	5" x 3' LS	30"	NONE	36" x 48"	24"	7'-6"
Bridge, Forward Bulkhead ... ..	1/2"	1/2"	8" x 3' BA.	30"	BRACKET.	36" x 63"	15"	7'-6"
Forecastle Bulkhead ... ..	1/4"	1/4"	4" x 2 1/2' LS	24"	NONE	36" x 48"	24"	7'-6"
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ... ..	1/4"	1/4"	3 1/2" x 2 1/2' LS	24"	BRACKET TOP.	30" x 63"	15"	7'-6"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	7/16"	5/16"	3 1/2" x 2 1/2' LS	24"	NONE	NONE		7'-6"
Deckhouses on Flush Deck Ships ...								

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

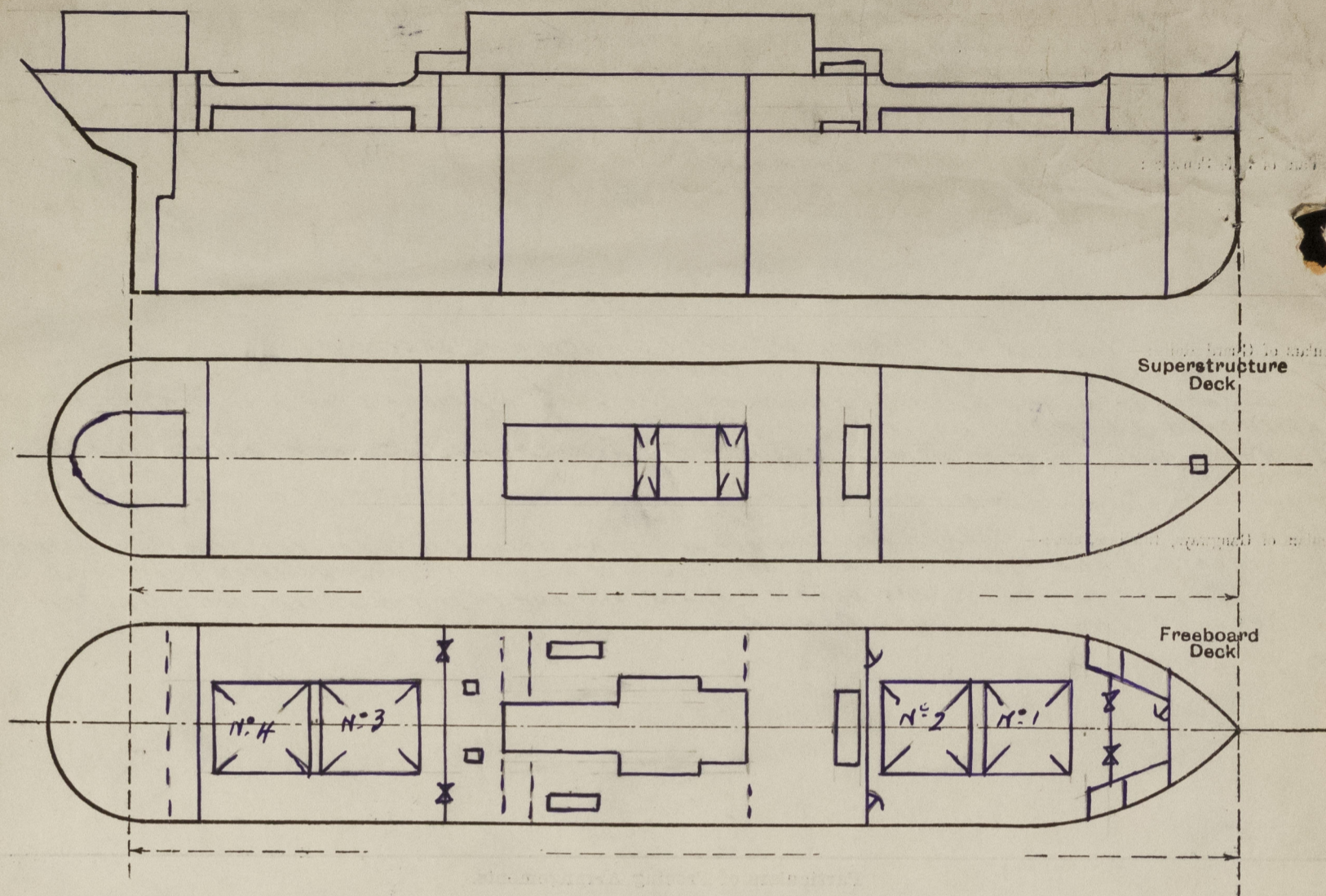
Poop Bulkhead ... ..	NONE.
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead ... ..	WOOD BOARDS FITTED IN CHANNELS 3 1/2" THICK AND STEEL PLATES SECURED BY HOOK BOLTS.
Bridge, Forward Bulkhead ... ..	2 W. T. STEEL DOORS MANIPULATED FROM BOTH SIDES. OPENINGS CLOSED BY WOOD BOARDS FITTED IN CHANNELS 3 1/2" THICK AND STEEL PLATES SECURED BY HOOK BOLTS.
Forecastle Bulkhead ... ..	
Trunk Bulkhead ... ..	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	
Exposed Machinery Casings on Superstructure Decks ... ..	STEEL DOORS MANIPULATED FROM BOTH SIDES.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	NO OPENINGS.
Deckhouses on Flush Deck Ships ...	



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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:—



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

	Tons
Loaded Draught	Deadweight Salt water
20'0"	4125
19'0"	3800
18'0"	3475
17'0"	3150
16'0"	2825
15'0"	2500
14'0"	2175
13'0"	1850

Particulars of present freeboard of vessel obtained from certificates.  
Freeboard measured from the deck line at the level of the surface of the steel deck on main deck.

Freeboard in fresh water (summer)	2'-5"
Freeboard in Tropical waters (fine season)	2'-6½"
Summer freeboard (centre of circle)	2'-9½"
Winter freeboard	3'-0½"
Freeboard North Atlantic (winter)	3'-2½"
Summer freeboard corresponding to B of T's.	2'-10½"

Wood cargo freeboard measured from the deck line at the surface of the steel deck on main deck.

Wood cargo freeboard in fresh water (summer)	1'-9½"
Wood cargo summer freeboard	2'-2"
Wood cargo winter freeboard	2'-5"
Wood cargo freeboard North Atlantic (winter)	2'-7"

Vessel examined afloat none of the requirements of a Special Periodical survey complied with S.S. No.1 not due until 1934-10

Builder's name and yard number The International Shipbuilding & Engineering Co, Ltd. No. 65

Names of sister ships "DALVANGEN" "LINDVANGEN" "NORDVANGEN" "AUSTVANGEN" and "SORVANGEN"

Owners Skibsaktieselskapet Karaibien (Gorrissen & Co. A/S Managers)

Fee £ : : Received by me

Expenses; \$ 2.00



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