

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for ~~Steamer, Sailing Ship, Tanker~~
having Forecastle, Bridge and Poop.

(Type of Superstructures.)

Ship's Name "MARPESSA" Nationality and Port of Registry Dutch S'vannhage. Official Number ✓ Gross Tonnage 7408 Date of Build 1927-3

Moulded Dimensions: Length 440.0 Breadth 59.0 Depth 32.75
Moulded displacement at moulded draught = 85 per cent. of moulded depth 9.98M 17070 TONNES
Coefficient of fineness for use with Tables 8/4

Port of Survey Singapore
Date of Survey 15th July 32
Name of Surveyor John T. Findlay
Particulars of Classification +100A1
Carryg. Rules in Bulk.
S.S. Reg. No. 1-31

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth ...	<u>32.75</u> ... <u>9.98M</u>	(a) Where D is greater than Table depth (D-Table depth) R =	<u>8.33</u> (<u>9.997 - 8.94</u>) <u>30</u> = <u>264</u>	Moulded Breadth (B)	<u>59.0</u> = <u>17.98M</u>
Stringer plate ...	<u>.66</u> ... <u>.017</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	<u>1.057</u>	Standard Round of Beam = $\frac{B \times 12}{50}$	<u>14.16</u> <u>360</u>
Sheathing on exposed deck T $\left(\frac{L-S}{L}\right) =$		If restricted by superstructures		Ship's Round of Beam	<u>15</u> <u>381</u>
Depth for Freeboard (D) =	<u>9.997</u>			Difference	<u>Excess</u> <u>21</u>
				Restricted to	
				Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right)$	<u>21</u> <u>x .553</u> = <u>-3</u>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	<u>300.22</u>	<u>300.22</u>	<u>7.6</u>	<u>2290</u>	<u>300.22</u>	Standard Height of Superstructure <u>2290</u>
" overhang ...						" " R.Q.D.
R.Q.D. enclosed ...						Deduction for complete superstructure <u>1067</u>
" overhang ...						Percentage covered $\frac{S}{L} =$ <u>45.66</u>
Bridge enclosed... <u>103.60</u>	<u>34.00</u>	<u>103.60</u>	<u>2290</u>		<u>103.60</u>	" " $\frac{S_1}{L} =$ <u>44.70</u>
" overhang aft <u>9.14</u>	<u>3.00</u>	<u>6.85</u>	<u>7.6</u>		<u>6.85</u>	" " $\frac{E}{L} =$ <u>44.70</u>
" overhang forward <u>9.14</u>	<u>3.00</u>	<u>4.57</u>			<u>4.57</u>	Percentage from Table, Line A.
F'cle enclosed ... <u>178.07</u>	<u>58.42</u>	<u>178.07</u>	<u>7.6</u>		<u>178.07</u>	(corrected for absence of forecastle (if required))
" overhang ... <u>12.19</u>	<u>4.00</u>	<u>6.09</u>	<u>2290</u>		<u>6.09</u>	Percentage from Table, Line B. <u>Yards</u> = <u>35.70</u>
Trunk aft ...						(corrected for absence of forecastle (if required))
" forward ...						Interpolation for bridge less than 2L (if required)
Tonnage opening aft ...						Deduction = <u>1067 x .3570</u> = <u>381</u>
" forward ...						
Total ...	<u>61236</u>	<u>59940</u>			<u>59940</u>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	<u>1371</u>	<u>1</u>	<u>1371</u>	<u>52.0</u>	<u>1371</u>	<u>1371</u>	<u>1</u>	<u>1371</u>	<u>1371</u>	Mean actual sheer aft = <u>Deficient</u>
$\frac{1}{2}$ L from A.P. ...	<u>610</u>	<u>4</u>	<u>2440</u>	<u>23.70</u>	<u>602</u>	<u>602</u>	<u>4</u>	<u>2408</u>	<u>2408</u>	Mean actual sheer forward = <u>Deficient</u>
$\frac{2}{3}$ L " ...	<u>151</u>	<u>2</u>	<u>302</u>	<u>6.75</u>	<u>150</u>	<u>150</u>	<u>2</u>	<u>300</u>	<u>300</u>	Length of enclosed superstructure forward of amidships =
Amidships ...		<u>4</u>					<u>4</u>			" " aft of " =
$\frac{2}{3}$ L from F.P. ...	<u>302</u>	<u>2</u>	<u>604</u>	<u>12.0</u>	<u>283</u>	<u>283</u>	<u>2</u>	<u>566</u>	<u>566</u>	<u>Yards</u> <u>Does not apply</u>
$\frac{1}{2}$ L " ...	<u>1220</u>	<u>4</u>	<u>4880</u>	<u>44.75</u>	<u>1134</u>	<u>1134</u>	<u>4</u>	<u>4536</u>	<u>4536</u>	
F.P. ...	<u>2742</u>	<u>1</u>	<u>2742</u>	<u>101.0</u>	<u>2591</u>	<u>2591</u>	<u>1</u>	<u>2591</u>	<u>2591</u>	
Total ...			<u>12339</u>					<u>11772</u>		

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{567}{18} \left(.75 - \frac{2283}{5217} \right) = +16 \frac{1}{2} \text{ ins.}$$

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.		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	<u>15,210</u>	Correction for coefficient	$\frac{814 + .68}{1.36} = \frac{1.494}{1.36}$	<u>1841</u>
Depth to Freeboard Deck =	<u>9.997</u>	Tons per inch immersion at summer load water line	<u>15960 lines</u>	Depth Correction ...	<u>264</u>	
Summer freeboard =	<u>1.919</u>	T = <u>54.04</u> = <u>21.76</u> tons per inch	<u>16215 lines</u>	Deduction for superstructures ...	<u>16</u>	
Moulded draught (d) =	<u>8.078</u>	Deduction = $\frac{\Delta}{40T}$ inches	<u>186</u>	Sheer correction ...	<u>3</u>	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{48}$ inches =	<u>168</u>			Round of Beam correction ...		
Addition for Winter North Atlantic Freeboard (if required) =	<u>110</u>			Correction for Thickness of Deck amidships		
				Other corrections, scantlings, etc. ...		
					<u>280</u>	<u>384</u>
						<u>- 104</u>
						Summer Freeboard = <u>1919</u>

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

Tropical Fresh Water Line above Centre of Disc ...	<u>36</u>	Tropical Fresh Water Freeboard ...	<u>192</u>
Fresh Water Line " " ...	<u>19</u>	Fresh Water " " ...	<u>156</u>
Tropical Line " " ...	<u>17</u>	Tropical " " ...	<u>173</u>
Winter Line below " " ...	<u>17</u>	Winter " " ...	<u>175</u>
Winter North Atlantic Line " " ...	<u>28</u>	Winter North Atlantic " " ...	<u>209</u>
			<u>210</u>

31 AUG 1932

MARKING FORM
RECEIVED 6 NOV 1939

11 JAN 1936

MARKING FORM
RECEIVED 3 OCT 1932
-4 OCT 1932

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	<i>Forehold.</i>	<i>MAIN.</i>	<i>WING</i>	<i>Access to</i>	<i>Hanger</i>	<i>Sullage No.</i>	<i>Cum Bkr.</i>		
Dimensions of Hatchway	<i>Fore DK.</i>	<i>CENTRE</i>	<i>TANKS</i>	<i>Top Deck</i>	<i>Forehold</i>	<i>No. 1</i>	<i>(1)</i>		
	<i>9'0" x 10'0"</i>	<i>6'0" x 4'0"</i>	<i>6'0" x 4'0"</i>	<i>5'0" x 3'0"</i>	<i>3'0" x 3'0"</i>	<i>1'6" x 1'6"</i>	<i>3'9" x 1'8"</i>		
COAMINGS { Height above Deck	<i>2'-10"</i>	<i>10" BA</i>	<i>10" BA</i>	<i>10" BA</i>	<i>10" BA</i>	<i>10" BA</i>	<i>10" BA</i>		
{ Thickness { Sides	<i>.45</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>		
{ Ends	<i>.45</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>		
Stiffeners	<i>10" 3" x 5" BA</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>		
Brackets, Stays	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>		
HATCH BEAMS { Number	<i>Small superstructure hatch on forehold</i>								
{ Spacing	<i>3'0" x 3'0" x 10" BA & 50 coaming</i>								
{ Scantling and Sketch	<i>8 1/4 bolts spaced 18" apart</i>								
Bearing Surface	<i>All these hatches are gastight.</i>								
FORE AND AFTERS { Number									
{ Spacing									
{ Unsupported Lengths									
{ Scantling* and Sketch									
Bearing Surface									
HATCH COVERS { Material	<i>Steel</i>	<i>Steel</i>	<i>Steel</i>	<i>Steel</i>	<i>Steel</i>	<i>Steel</i>	<i>Steel</i>		
{ Thickness	<i>.55</i>	<i>.65</i>	<i>.65</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>	<i>.50</i>		
{ How fitted	<i>Hinged &</i>	<i>Hinged</i>	<i>Hinged</i>	<i>Hinged</i>	<i>Hinged</i>	<i>Hinged</i>	<i>Hinged</i>		
{ Bearing Surface	<i>8 1/4 bolts</i>	<i>8 1/4 bolts</i>	<i>8 1/4 bolts</i>	<i>Spanned</i>	<i>Spanned</i>	<i>Spanned</i>	<i>Spanned</i>		
Spacing of Cleats	<i>16"</i>	<i>15"</i>	<i>18"</i>						
Number of Tarpaulins	<i>✓</i>								

*Are wood fore and afters steel shod at all bearing surfaces?
 Are battens and wedges efficient and in good condition?
 Are tarpaulins in good condition and in accordance with rule requirements?
 Are lashings provided in accordance with rule requirements?

Particulars of fiddle, funnel and ventilator coamings:—

Ventilator	All fiddle gratings fitted with hinged steel storm covers.
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Ventilatore

2-36" dia x 48" diam x $\frac{3}{8}$ " slot holes 8R. 2-11 $\frac{1}{2}$ " dia x 48" diam x $\frac{3}{8}$ " slot holes
8-24" dia x 45" " x $\frac{3}{8}$ " 4Room.
15-8" dia x 16" " x $\frac{1}{2}$ " } Accom.
7-12" dia x 16" " x $\frac{1}{2}$ " }

Particulars of Flush Bunker Scuttles:— *none*

Particulars of Companionways:— on Roofs Deck. Companion way down to the deck spaces aft.
 Stair - 7'-6" high x 4'-6" deep x 3'-0" wide, fitted with steel weather tight door, opened from both sides. Sill = 16". Door 24" x 5'-0"

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

Freecastle Head.

1-12" Vent. x 17" Coam x 30. F.P. spans. 1-8" Vents x 18" Coam x 30 M.V. accom. 2-23" Vents x 48" Coam x 40. Accom.
 1-11 1/2" " x 22" " x 30" 1-12" " x 24" " x 30 Porphyranes 1-8" Vents x 15" " x 30. Accom.
 19- 8" " x 18" " x 33 Accom. spans. 2-35" dia x 5'-0" Coam x 48"
 2-13" " x 34" " x 35 F.Hold. Bmsketted to deck. All vents filled with permanent stoppers also steel covers and canvas covers.

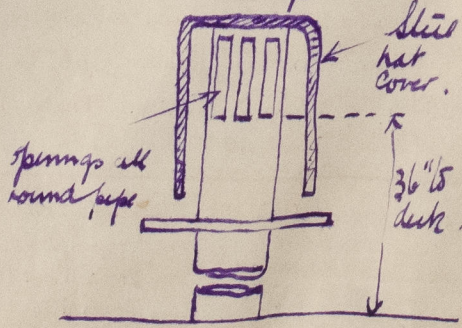
Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

All air pipes fitted with wooden plugs canvas covers, patent air vents fitted with canvas covers only. (See sketch).

Graded 8-4" GN x 12" high. Apr. 1941. 4x4" am. paper 36" high Patient Tpts.

Inc. Dk. 3. Air Pipes 56" high patent w/ro 4" Corp. Dk. 4-8" x 36" high G.N.
1-2" x 36" " 41r
Pump R. 2 " " " " " 4" 3-4" x 10" " 5N.

Particulars of Gangway Cargo and Coaling Ports :—



Particulars of Scuppers and Sanitary Discharge Pipes :—

itary Discharge Pipes :— All scuppers and sanitary discharges below freeboard deck and from spaces above fwd deck but where passing through fwd deck ~~downboard~~ are fitted with strong efficient non-return or storm valves.

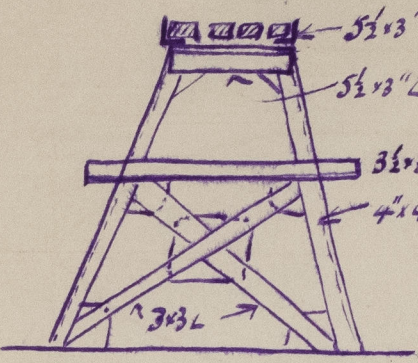
Particulars of Side Scuttles :—

All deadlights in the castle & poop spaces are fitted with hinged deadlights.



Particulars of Guard Rails :—

on Lucastes head, braced on poop.
 Top rail 3'-6" high intermediate rails spaced 14"
 running stanchions spaced about 4'-6" apart.

Particulars of Gangways, Lifelines, etc.:—



Height 7'-6" Spaced about 8'0" apart.
3" wood planks on top
Permanent hand rails on each side
3'-6" high, centre intermediate rail, slats 4'-8"
from Lock Rd to Bridge & from Bridge to Poop.

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	15'-0" ^{2 1/2}	3'-6"	Dat. 5'-6" x 2'-0"  3 at 3'-8" x 1'-11"  1 at 2'-11 1/2" x 1'-11".	14	133.5 sq ft.	132.1
Forward Well	98'-0" ^{3 1/2}	3'-6"	Tot. 5'-6" x 2'-0". 1 at 2'-11 3/4" x 1'-11"	8	80.92.	85.7

* State position of each freeing port. ... } After Well:— 13 1/2" above sags of deck.
 (F. and A. position and height above deck edge) } Forward Well:— 13 1/2" above deck edge.
 * State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— See sketch.
 * Additional area where sheer is less than standard. 1/2 Horizontal bars 2 on large ports 8" space.
 3 Vertical bars on smaller ports 9"

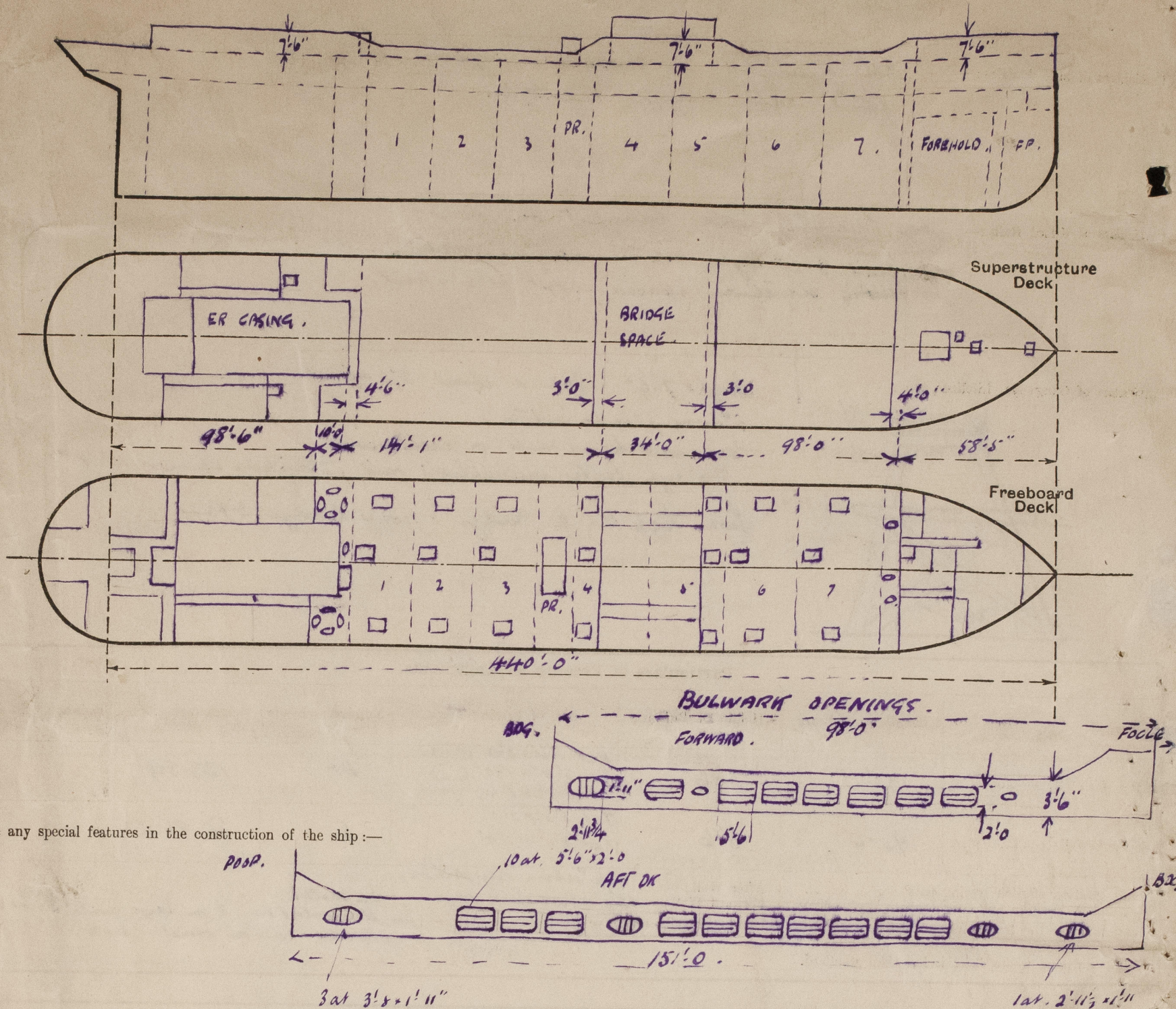
Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	44	44	10" x 3½" x 50	28"	Bolt 4 to 5 Bottom	4'6" x 2'7"	2'4"	7'6"
Raised Quarter Deck Bulkhead ...	44	44	6 x 3 x 50	30"	Bolt 4 to 5 Bottom	4'3" x 2'3" 4'6" x 3'3"	27"	7'6"
Bridge, After Bulkhead	44	44	8½ x 3½ x 5 BA	30"	" " "	4'6" x 27"	23½"	7'6"
Bridge, Forward Bulkhead	44	44	4 x 4 x 40	30"	" 1st BR	4'6" x 24" 4'6" x 21"	25"	7'6"
Forecastle Bulkhead	44	30						
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks	44	44	10 x 3½ x 5-13 to 33 x 45	34"	Bolt 5 to 6	5'0" x 24"	16"	12'0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
P. Room Casings A. Deck Deckhouses on Flush Deck Ships ...	44	44	4 x 2½ x 40	26"	Bolt 5 to 6	4'6" x 27"	18"	7'6"

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

Poop Bulkhead	...	Steel hinged Gas tight door, Operates from both sides. Clips	✓
Raised Quarter Deck Bulkhead	...	Steel hinged G.T door, Operates from both sides. Hand clips one steel plate door, bolted with hook bolts.	✓
Bridge, After Bulkhead	...	Steel hinged G.T door. Suffered. Operates both sides Hand clips	✓
Bridge, Forward Bulkhead	...	Steel doors. Jammed from both sides, ordinary locks. Pump Room. Steel G.T door. Operates from both sides. Hand clips	✓
Forecastle Bulkhead	...	Steel weather tight door. Operates from both sides. Ordinary locks.	✓
Exposed Machinery Casings on Free-board or Raised Quarter Decks	...	Room Comp. after 1st.	
Exposed Machinery Casings on Super-structure Decks	...	Decks on Flag Deck Ships	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...		

MARPESSA

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:—

The examination for International Load Line freeboard was held with the vessel in dry dock in conjunction with the examination for annual docking and consisted of examination of decks, casings, ventilators their coverings, hatches hatchways air sounding pipes, scuppers, portlights, bulkheads with their stiffening, openings & means of closing same, companionways, guardrails & gangways, bulwarks & freeing ports. Stern measured.

Builder's name and yard number: Rotterdam Droogd Maats.

Names of sister ships

Owners: Nederl Indische Tankstoomvaart Maats.

Fee \$ 305/-
\$ 10/-

Received by me



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Lloyd's Register
Foundation