

14 DEC 1932

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

N^o 12819.

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~
having POOP BRIDGE FORECASTLE
Salabala Japanese Koku
(Type of Superstructures.)

SHINWA Ship's Name
S/MARU ENGLISH MONARCH
S/MARISTON

Nationality and Port of Registry
British
Shanghai

Official Number
147905

Gross Tonnage
4557

Date of Build
1924

Port of Survey Bristol

Date of Survey Dec 12

Name of Surveyor John L. Gwynne

Particulars of Classification 7-100 A1
S.S. Rot. No. 1.28

Moulded Dimensions: Length 384.5 Breadth 51.75 Depth 29.0
Moulded displacement at moulded draught = 85 per cent. of moulded depth 11040 tons
Coefficient of fineness for use with Tables 788

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	29.00	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	51.75
Stringer plate	0.04	(29.04 - 25.63) 2.958 = 10.09		Standard Round of Beam = $\frac{B \times 12}{50}$	12.42
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	13
Depth for Freeboard (D) =	29.04	If restricted by superstructures		Difference	58
				Restricted to	
				Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{58}{4} \times .5054 = -1.09$

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	33.42	7' 9"	-	33.42	Standard Height of Superstructure <u>7.34</u>
" overhang ...	-	-	-	-	" " R.Q.D.
B.Q.D. enclosed ...	-	-	-	-	Deduction for complete superstructure <u>40.97</u>
" overhang ...	-	-	-	-	Percentage covered $\frac{S}{L} = 49.49$
Bridge enclosed ...	112.00	7' 9"	-	112.00	" " $\frac{S_1}{L} = 49.46$
" overhang aft ...	-	-	-	-	" " $\frac{E}{L} = 49.46$
" overhang forward	-	-	-	-	Percentage from Table, Line A. (corrected for absence of forecastle (if required))
Fore enclosed ...	44.60	7' 9"	-	44.60	Percentage from Table, Line B. (corrected for absence of forecastle (if required)) <u>35.54</u>
" overhang ...	8.25	12	+3.28	12	Interpolation for bridge less than 2L (if required)
Trunk aft ...	-	-	-	-	Deduction = <u>-14.56</u>
" forward ...	-	-	-	-	
Tonnage opening aft ...	-	-	-	-	
" forward	-	-	-	-	
Total ...	190.27	190.14	-	190.14	

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product	
A.P. ...	48.45	1	48.45	64	64.00	1	64.00	Mean actual sheer aft = Excess
$\frac{1}{2}$ L from A.P. ...	21.56	4	86.24	26.86	26.86	4	107.44	Mean actual sheer forward = Excess
$\frac{2}{3}$ L " ...	5.33	2	10.66	6.71	6.71	2	13.42	Mean standard sheer forward
Amidships ...	-	4	-	-	-	4	-	Length of enclosed superstructure forward of amidships = 145
$\frac{2}{3}$ L from F.P. ...	10.66	2	21.32	13.23	13.23	2	26.46	" " aft of " = 146
$\frac{1}{2}$ L " ...	43.12	4	172.48	52.93	52.93	4	211.72	
F.P. ...	96.90	1	96.90	120	120.00	1	120.00	
Total ...	-	-	436.05	-	-	-	543.04	
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{106.99}{18} (.75 - .2474) = -2.99$								If limited to maximum allowance of 1½ ins. per 100 ft.
If limited on account of midship superstructure.								

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 $\frac{7887.68}{1.36} = 1.468$
Depth to Freeboard Deck = 29.04	$\Delta =$	Depth Correction ... 10.09
Summer freeboard = 5.37	Tons per inch immersion at summer load water line	Deduction for superstructures ... 14.56
Moulded draught (d) = 23.67	T =	Sheer correction ... 2.99
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 5.92	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction ... 3.07
Addition for Winter North Atlantic Freeboard (if required) =		Correction for Thickness of Deck amidships ...
		Other corrections, scantlings, etc. ...
		10.09 17.62 - 7.53
		Summer Freeboard = 64.51

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 " " ...

1906 freeboards read

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway						BRIDGE DK	POOP	TWEEN DECKS	
	N°1	N°2	N°3	N°4	N°5			N°1, 2, 3 & 5	N°4
Dimensions of Hatchway	24'9" x 19'0"	28' x 19'	14' x 19'	35' x 19'	25'8" x 19'	14' x 19'	9'7"	24' x 19'	9'7"
COAMINGS	Height above Deck	30"	30"	9"	30"	30"	18"	3 1/2" A	18"
	Thickness	44	do	do	do	44	44	4	35
	Stiffeners	7 1/2 x 3 1/2 x 45	2	1	3	2	1	1	1
	Brackets, Stays	2	2	1	3	2	1	1	1
HATCH BEAMS	Number	4	5	4	5	4	4	4	4
	Spacing	4'8"	4'6"	4'6"	5'0"	4'3"	4'6"	4'6"	4'6"
	Scantling and Sketch	7 1/2 x 4 x 3 x 5	15 1/2 x 9	12 1/2 x 8	17 x 9	15 1/2 x 8 1/2	12 1/2 x 8	17 x 8 1/2	17 x 8 1/2
	Bearing Surface	3	3	3	3	3	3	3	3
FORE AND AFTERS	Number	1	1	1	1	1	1	1	1
	Spacing	4'8"	4'6"	4'6"	5'0"	4'3"	4'6"	4'6"	4'6"
	Unsupported Lengths	17'9 1/2	15 1/2 x 9	12 1/2 x 8	17 x 9	15 1/2 x 8 1/2	12 1/2 x 8	17 x 8 1/2	17 x 8 1/2
	Scantling* and Sketch	7 1/2 x 4 x 3 x 5	15 1/2 x 9	12 1/2 x 8	17 x 9	15 1/2 x 8 1/2	12 1/2 x 8	17 x 8 1/2	17 x 8 1/2
HATCH COVERS	Material	2 1/2 P	2 1/2 P	2 1/2 P	2 1/2 P	2 1/2 P	2 1/2 P	2 1/2 P	2 1/2 P
	Thickness	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	How fitted	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	Bearing Surface	3	3	3	3	3	3	3	3
Spacing of Cleats	24"	24"	24"	24"	24"	24"	24"	24"	24"
Number of Tarpaulins	4	4	4	4	4	4	4	4	4
<p>*Are wood fore and afters steel shod at all bearing surfaces? <i>No fore & afters.</i></p> <p>Are battens and wedges efficient and in good condition? <i>Yes.</i></p> <p>Are tarpaulins in good condition and in accordance with rule requirements? <i>Yes.</i></p> <p>Are lashings provided in accordance with rule requirements? <i>Yes.</i></p>									

Particulars of fiddley, funnel and ventilator coamings:—

*Stokehold gratings covered by strong
steel hinges covers. Fiddley & funnel
vents in efficient condition. Engine
& skylights of steel strongly constructed.*

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways:—

None.

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

*1 vent on forecabin all 8' dia coaming 10' high x 25' L forepeak
4 - - - - - 8 1/2' - - - - - 30' - - - - - 5' dia
2 - - - - - 5 1/2' - - - - - 30' - - - - - 5' dia
4 - - - - - 5' on after funnel all 17' dia coaming 36' x 4' dia L holds
1 - - - - - 10' - - - - - 30' x 4' - - - - - funnel
2 - - - - - 9 1/2' - - - - - 30' x 25' - - - - - funnel
1 - - - - - 8' - - - - - 9' x 3' - - - - - stove*

*All ventilators constructed
according to the Rules & coamings
closed with wood plugs & canvas
covers.*

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

*2 W.I. air pipes in fore well 30' high 2 1/2' dia from STB tanks
2 - - - - - on bridge all 17' - - - - - 3' - - - - -
4 - - - - - in after well 27' - - - - - 2 1/2' - - - - -
2 - - - - - - - - - - - 3' - - - - -*

All air pipes have snifting hole on top of bend & are closed with wood plugs & canvas covers.

Particulars of Gangway Cargo and Coaling Ports:—

None.



© 2020

Lloyd's Register
Foundation

Particulars of Scuppers and Sanitary Discharge Pipes —

- 4 Scuppers below the foremast deck fitted with gunmetal storm valves at ship side. (2 ft 2 1/2 in barge space)
- 5 Sanitary discharges above the foremast deck fitted with gunmetal storm valves

Particulars of Side Scuttles:

Side scuttles to crew spaces in the foremast fitted with hinged deadlights. All scuttles of substantial construction.

Particulars of Guard Rails:—

Guard rails on the foremast, barge & poop decks 3'-3" high with two rows of stanchions spaced 5'-0" apart. The bulwarks on foremast deck in wells efficiently constructed & supported.

Particulars of Gangways, Lifelines, etc.:—

~~No provision for gangways or lifelines~~
 Portable 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	102' 9"	4' 0"	4'-0" x 1'-6"	7	42' 0"	20.6' 0"
Forward Well	92' 0" 91.5	4' 0"	4'-0" x 1'-6"	6	36' 0"	18.4' 3"

State position of each freeing port } After Well:— 12' 6" from poop 16' 6" from after bulwark 12' above deck edge.
 (F. and A. position and height above deck edge) } Forward Well:— 12' 6" from foremast 18' 0" from
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Open ports fitted with one bar

Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.

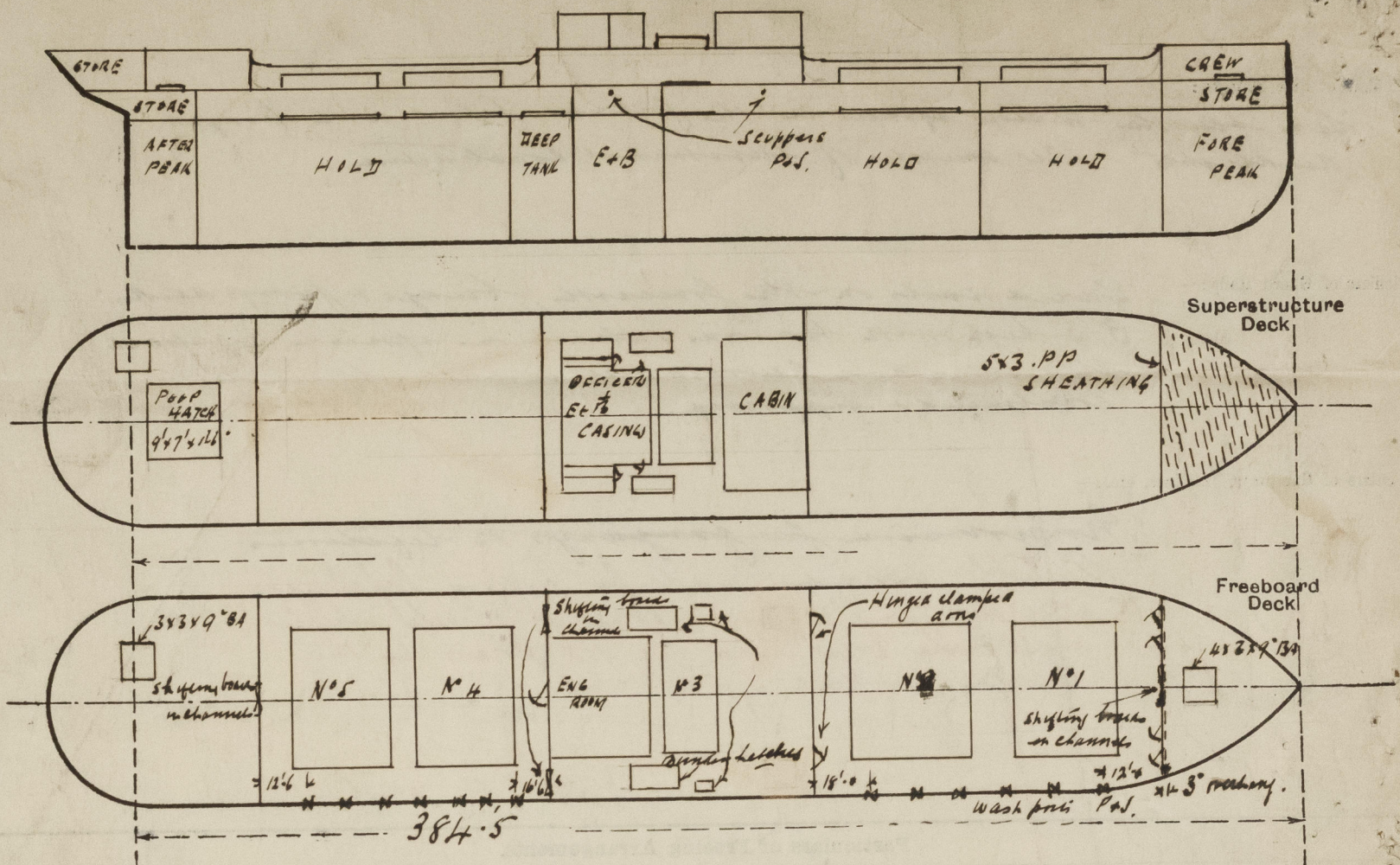
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	28' x 35'	.35	6 x 3 1/2 x 35	30"	Brackets top & bottom	6' x 4'	18"	7' 9"
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead	31' x 26'	.35	3 x 3 x 3	30"	None	5' 6" x 4'-0"	19"	7' 9"
Bridge, Forward Bulkhead	26' x 4'	.4	9 x 3 1/2 x 4 04	30"	Brackets top & bottom	4'-4" x 2'-6"	18"	7' 9"
Forecastle Bulkhead	✓	.35	3 x 2 1/2 x 3	30"	None	3' 6" x 5'-6"	19"	7' 9"
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	31' x 35'	.35	3 x 3 x 3	30"	None	5'-0" x 2'-0"	29"	7' 9"
Exposed Machinery Casings on Superstructure Decks	33' x 30'	.30	4 x 3 x 30	30"	None	5'-0" x 2'-0"	15"	8'-0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓	.30	4 x 3 x 30	30"	-	24' x 18'	24"	7' 9"
Deckhouses on Flush Deck Ships ...	✓							

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

Poop Bulkhead	2 1/2" Sliding boards full height in channels permanently attached to bulkhead
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	2 1/2" Sliding boards full height in channels permanently attached to bulkhead. Steel hinges door to engine room operated from both sides.
Bridge, Forward Bulkhead	Steel hinges door operated from outside only & clamped.
Forecastle Bulkhead	2 1/2" Sliding boards full height in channels permanently attached to bulkhead. Hinges & fastenings door to lamp room & carpenter's room.
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	Steel hinges door (L & R) operated from both sides.
Exposed Machinery Casings on Superstructure Decks	Steel hinges door operated from both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	Steel hinges & latching door operated from both sides.
Deckhouses on Flush Deck Ships ...	✓

Marston

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:—

This survey has been held afloat and is therefore confined to an examination of the means for closing the openings in the deck side of the vessel

Owner

Builder's name and yard number *Mess. Rungfors N° 744*

Names of sister ships

Owners *W. S. Miller & Co.*

Fee £ *12* : *15* : *0*
Exp: *2* : *0*

Received by me