

# DISCLOSED SECTION **Cloyd's Register of Shipping.** **SURVEYS FOR FREEBOARD.**

30 OCT 1936

Index. No. J-110  
(For London Office only.)

having Complete Superstructure without Tonnage Opening with a forecastle.

(Type of Superstructures.)

Port of Survey Kobe.

Date of Survey while building

Name of Surveyor M.M. Parker.

Particulars of Classification † 100 A 1.  
" with free board."

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
<u>TOKYO MARU.</u>	<u>Japan Osaka.</u>	<u>41929</u>	<u>6486.01</u>	<u>1936-8</u>
Moulded Dimensions: Length <u>420</u> Breadth <u>57.4</u> Depth <u>36.08</u>				
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>14505.37</u> tons				
Coefficient of fineness for use with Tables <u>.687</u>				

Depth for Freeboard (D)				
Moulded depth	...	...	...	<u>36.08</u>
Stringer plate	...	...	...	<u>.06</u>
Sheathing on exposed deck				
$T \left( \frac{L-S}{L} \right) =$				
<u>no sheathing</u>				
Depth for Freeboard (D) = <u>36.14</u>				

Depth correction	
(a) Where D is greater than Table depth (D-Table depth) R =	$(36.14 - 28.00) \times 3 = +24.42$
(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>57.4</u>
Standard Round of Beam = $\frac{B \times 12}{50}$	<u>13.77</u>
Ship's Round of Beam	<u>11.8</u>
Difference	<u>1.97</u>
Restricted to	-
Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$= \frac{1.97}{4} \times .9095 = +.45$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...	<u>4.0</u>		<u>2.85</u>		
„ overhang forward ...	<u>35.82</u>	<u>35.82</u>	<u>7.38</u>	<u>7.38</u>	<u>35.25</u>
Fore enclosed <u>equivalent</u>	<u>38.85</u>	<u>2.20</u>		<u>7.5</u>	<u>2.16</u>
„ overhang ...	<u>8.93</u>				
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward					
Total ...	<u>38.85</u>	<u>38.02</u>			<u>37.41</u>

Standard Height of Superstructure	<u>7.5</u>
„ „ R.Q.D.	-
Deduction for complete superstructure	<u>42</u>
Percentage covered $\frac{S}{L} =$	<u>9.25</u>
„ „ $\frac{S_1}{L} =$	<u>9.05</u>
„ „ $\frac{E}{L} =$	<u>8.91</u>
Percentage from Table, Line A.	<u>4.45</u>
(corrected for absence of forecastle (if required))	-
Percentage from Table, Line B.	-
(corrected for absence of forecastle (if required))	-
Interpolation for bridge less than 2L (if required)	-
Deduction =	<u>42 x .0445 = -1.87</u>

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>52.00</u>	1		<u>52.00</u>	<u>39.4</u>	<u>39.4</u>	1		<u>39.40</u>
$\frac{1}{4}$ L from A.P. ...	<u>23.14</u>	4		<u>92.56</u>	<u>10.68</u>	<u>10.68</u>	4		<u>42.72</u>
$\frac{2}{4}$ L „ ...	<u>5.72</u>	2		<u>11.44</u>	<u>.43</u>	<u>.43</u>	2		<u>.86</u>
Amidships ...	-	4		-	<u>0</u>	-	4		-
$\frac{3}{4}$ L from F.P. ...	<u>11.44</u>	2		<u>22.88</u>	<u>4.02</u>	<u>4.02</u>	2		<u>8.04</u>
$\frac{4}{4}$ L „ ...	<u>46.28</u>	4		<u>185.12</u>	<u>32.80</u>	<u>32.80</u>	4		<u>131.20</u>
F.P. ...	<u>104.00</u>	1		<u>104.00</u>	<u>90.60</u>	<u>90.60</u>	1		<u>90.60</u>
Total ...				<u>468.00</u>					<u>312.82</u>

Mean actual sheer aft = Deficient  
Mean standard sheer aft

Mean actual sheer forward = Deficient (22.54% standard)  
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = 42  
„ „ aft of „ = 112

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{155.18}{18} \left( .75 - \frac{.0462}{.2038} \right) = +6.07$

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	=	<u>36.14</u>
Summer freeboard	=	<u>10.89</u>
Moulded draught (d)	=	<u>25.25</u>

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 6.31 = 160.

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 =  $\frac{\Delta}{40 T}$  inches

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{.687 + .68}{1.36} = \frac{1.367}{1.36} =$

	+	-
Depth Correction	<u>24.42</u>	-
Deduction for superstructures	-	<u>1.87</u>
Sheer correction	<u>6.07</u>	-
Round of Beam correction	<u>0.45</u>	-
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc. (corrected for)	<u>23.48</u>	-
<u>54.42</u>	<u>1.87</u>	

Summer Freeboard = 130.75 = 3320

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

Tropical Fresh Water Line above Centre of Disc	...	<u>319</u>	Tropical Fresh Water Freeboard	...	<u>3001</u>
Fresh Water Line	...	<u>159</u>	Fresh Water	...	<u>3161</u>
Tropical Line	...	<u>160</u>	Tropical	...	<u>3160</u>
Winter Line below	...	<u>160</u>	Winter	...	<u>3480</u>
Winter North Atlantic Line	...	-	Winter North Atlantic	...	-



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway										
Dimensions of Hatchway										
COAMINGS	Height above Deck									
	Thickness									
	Sides									
	Ends									
	Stiffeners									
	Brackets, Stays									
HATCH BEAMS	Number									
	Spacing									
	Scantling and Sketch									
	Bearing Surface									
FORE AND AFTERS	Number									
	Spacing									
	Unsupported Lengths									
	Scantling* and Sketch									
	Bearing Surface									
HATCH COVERS	Material									
	Thickness									
	How fitted									
	Bearing Surface									
Spacing of Cleats										
Number of Tarpaulins										

\*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 fiddley, funnel and ventilator coamings :—

Particulars of Flush Bunker Scuttles :—

Particulars of Companionways :—

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

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

Particulars of Gangway Cargo and Coaling Ports :—

Particulars of Scuppers and Sanitary Discharge Pipes —

30 OCT 1936

Particulars of Side Scuttles :

Particulars of Guard Rails :—

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 ...						
Forward Well ...						

State position of each freeing port ... { After Well :—  
 (F. and A. position and height above deck edge) { Forward Well :—  
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :—  
 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 ...								
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ...								
Bridge, Forward Bulkhead ...								
Forecastle Bulkhead ...								
Trunk, Aft ...								
Trunk, Forward ...								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ...								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...								
Deckhouses on Flush Deck Ships ...								

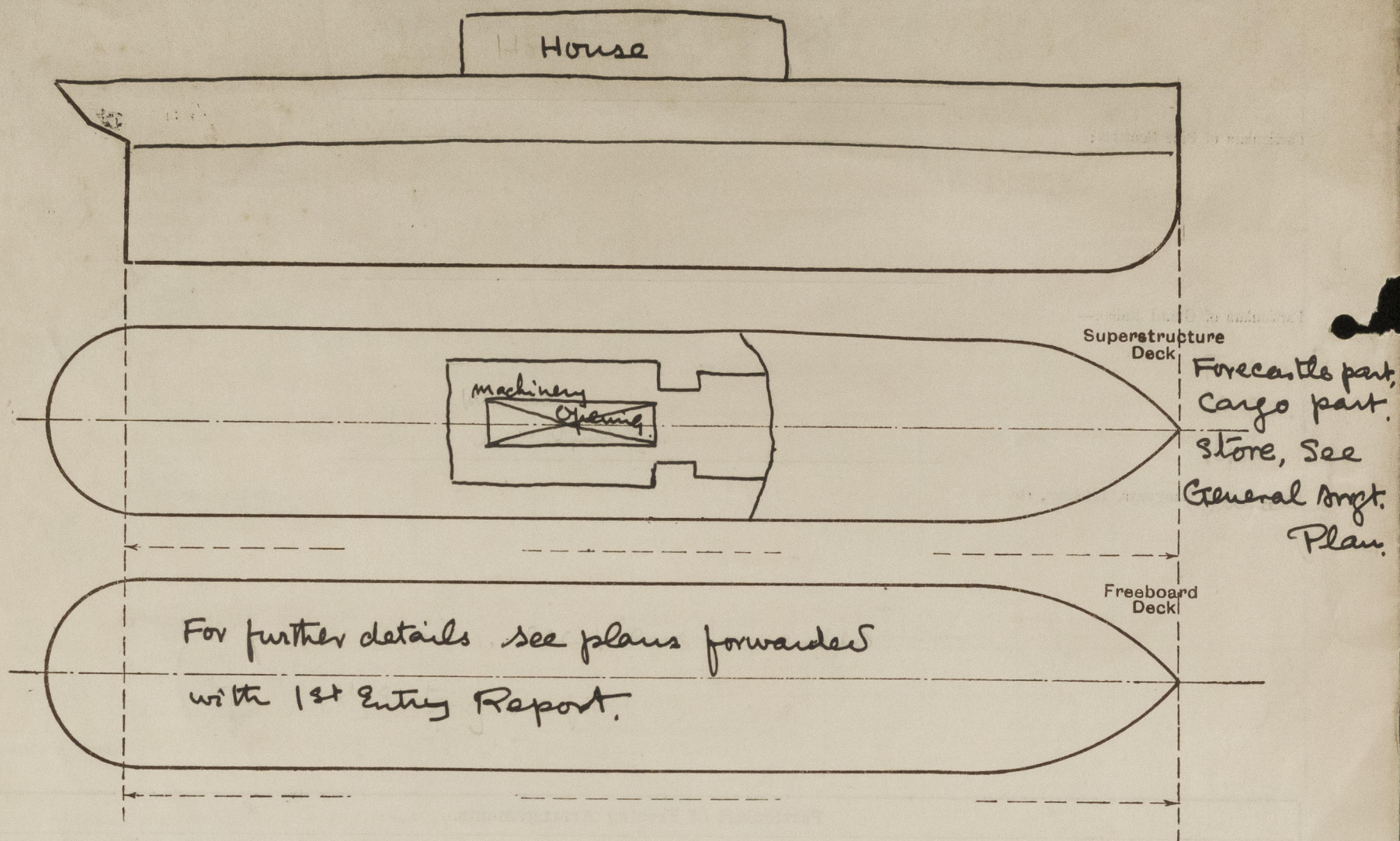
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead ...	
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead ...	
Bridge, Forward Bulkhead ...	
Forecastle Bulkhead ...	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	
Exposed Machinery Casings on Superstructure Decks ...	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	
Deckhouses on Flush Deck Ships ...	

Stormboards in riveted channels to Cargo Spaces, steel hinged doors & stores, etc. Hinged steel doors in Machinery Casings.



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:—

Builder's name and yard number No. 217. Mitani Bussan Kaisha.

Names of sister ships No 216. Canberra Maru.

Owners Setten Shosen Kab. Kaisha. (Osaka Shosen Kab. Kaisha, Mgr.)

Fee £

Received by me



© 2020

Lloyd's Register  
Foundation