

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 30653
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

Type of Superstructures: Combined Poop + Bridge and ForecastlePort of Survey Hong KongDate of Survey Oct. 1, 5, 11, 13, 17
1932.Name of Surveyor J. H. MorrisonParticulars of Classification 100 A1J. S. Reg. No. 3 - 11.22.
J. S. Reg. No. 2-31

Ship's Name

(Type of Superstructures.)

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

"HONG KONG"British
Singapore14238561671903Moulded Dimensions: Length 417.0' Breadth 50.0' Depth 31.0'Moulded displacement at moulded draught = 85 per cent. of moulded depth 12150 tonsCoefficient of fineness for use with Tables .774

Depth for Freeboard (D)

Moulded depth ... 31.0'Stringer plate 14" ... 20"06Sheathing on exposed deck 3" (maindeck)03

$$T \left(\frac{L-S}{L} \right) = \frac{25(417-361.5)}{417}$$

Depth for Freeboard (D) = 31.09

Depth correction

(a) Where D is greater than Table depth

(D - Table depth) R =

$$(31.09 - 27.80) \times 5.00 = + 9.87$$

(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) 50.00

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} = \frac{600}{50} = 12.00$$

Ship's Round of Beam = 13"Difference 1.00Restricted to .188

$$\text{Correction} = \frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{1.00}{4} \times (1 - .812) = -.05$$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
<u>+ Bridge</u>					
Poop enclosed ...	<u>274.0</u>	<u>274.00</u>	<u>8.0'</u>		<u>274.00</u>
" overhang ...	<u>1.5</u>	<u>.75</u>			<u>.75</u>
R.Q.D. enclosed ...	<u>✓</u>				
" overhang ...	<u>✓</u>				
Bridge enclosed ...	<u>✓</u>				
" overhang aft ...	<u>✓</u>				
" overhang forward ...	<u>✓</u>				
Fore enclosed ...	<u>31.00</u>	<u>31.00</u>	<u>7.9'</u>		<u>31.00</u>
" overhang ...	<u>56.85</u>	<u>32.85</u>	<u>7.9'</u>		<u>32.85</u>
Trunk aft ...	<u>55.00</u>				
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<u>361.50</u>	<u>338.60</u>			<u>338.60</u>

Standard Height of Superstructure 7.50" " R.Q.D. ✓Deduction for complete superstructure 42.00Percentage covered $\frac{S}{L} = \frac{361.50}{423.50} = 86.68\%$ " $\frac{S_1}{L} = \frac{338.60}{423.50} = 81.20\%$ " $\frac{E}{L} = \frac{338.60}{423.50} = 81.20\%$ Percentage from Table, Line A. 76.79

(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)

$$\text{Deduction} = 42.00 \times .7679 = - 32.25$$

SHEER CORRECTION.

Actual Ht of Poop Deck = 8.00
Standard " " " " = 7.50

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>51.70</u>	<u>1</u>	<u>51.70</u>	<u>41.00</u>	<u>4.00</u>	<u>4.00</u>	<u>1</u>	<u>4.00</u>	<u>4.00</u>
$\frac{1}{4}$ L from A.P. ...	<u>23.01</u>	<u>4</u>	<u>92.04</u>	<u>12.50</u>	<u>8.50</u>	<u>12.50</u>	<u>4</u>	<u>58.00</u>	<u>58.00</u>
$\frac{3}{8}$ L " ...	<u>5.69</u>	<u>2</u>	<u>11.38</u>	<u>0</u>	<u>-2.40</u>	<u>3.00</u>	<u>2</u>	<u>6.00</u>	<u>6.00</u>
Amidships ...		<u>4</u>		<u>-2.25</u>	<u>0</u>		<u>4</u>		
$\frac{3}{8}$ L from F.P. ...	<u>11.38</u>	<u>2</u>	<u>22.76</u>	<u>19.75</u>	<u>17.00</u>	<u>16.37</u>	<u>2</u>	<u>32.74</u>	<u>32.74</u>
$\frac{1}{4}$ L " ...	<u>46.01</u>	<u>4</u>	<u>184.04</u>	<u>53.75</u>	<u>54.00</u>	<u>53.11</u>	<u>4</u>	<u>212.44</u>	<u>212.44</u>
F.P. ...	<u>103.40</u>	<u>1</u>	<u>103.40</u>	<u>111.00</u>	<u>110.15</u>	<u>110.15</u>	<u>1</u>	<u>110.15</u>	<u>110.15</u>
Total ...			<u>465.32</u>					<u>466.33</u>	

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{465.32 - 466.33}{18} \left(.75 - \frac{338.60}{423.50} \right) = \frac{-1.01}{18} \left(.75 - .4334 \right) = -.02$$

If limited on account of midship superstructure.

Mean actual sheer aft = different - 72.20%Mean standard sheer aft = BalanceMean actual sheer forward = BalanceMean standard sheer forward = Balance

Length of enclosed superstructure forward of amidships =

L

aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

" aft of " =

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

Tropical Fresh Water Line above Centre of Disc ... 13 ...Fresh Water Line " " ... 6 1/2 ...Tropical Line " " ... 6 1/2 ...Winter Line below " " ... 6 1/2 ...Winter North Atlantic Line " " ... 6 1/2 ...

Tropical Fresh Water Freeboard ...

Fresh Water " " ...

Tropical " " ...

Winter " " ...

Winter North Atlantic " " ...

5 - 2 1/4"4 1/2 - 1 1/4"4 - 7 3/4"4 - 7 3/4"5 - 8 3/4"5 - 8 3/4"5 - 8 3/4"5 - 8 3/4"5 - 8 3/4"5 - 8 3/4"5 - 8 3/4"

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

Description of Hatchway	On Forecastle		On Main Deck		On Prop. Bridge		On Main Deck		On Main Deck	
	Hatchways on Foreboard and Superstructure Decks	Hatchways on Foreboard and Superstructure Decks	Hatchways on Foreboard and Superstructure Decks	Hatchways on Foreboard and Superstructure Decks	Hatchways on Foreboard and Superstructure Decks	Hatchways on Foreboard and Superstructure Decks	Hatchways on Foreboard and Superstructure Decks	Hatchways on Foreboard and Superstructure Decks	Hatchways on Foreboard and Superstructure Decks	Hatchways on Foreboard and Superstructure Decks
Dimensions of Hatchway	11'-2" x 10'	2'-6" x 2'-6"	11'-2" x 10'	4'-0" x 2'-14"	11'-2" x 12'	26'-9" x 12'	11'-2" x 12'	5'-2" x 4'-3"	5'-3" x 3'-6"	4'-6" x 2'-2"
COAMINGS	Height above Deck	3' 4"	2' 0"	3' 3"	3' 3"	3' 3"	9"	6"	5"	3' 4"
	Thickness	4' 4"	4' 20"	4' 4"	4' 4"	4' 4"	9' 3' 10' 20"	3" Wood	8' 20"	8' 20"
	Stiffeners	7' 1/2 x 3' 3/2	✓	7' 1/2 x 3' 3/2	10' 3' 1/2	7' 3' 1/2	7' 1/2 x 3' 10' 20"	✓	✓	✓
	Brackets, Stays	BA	✓	BA	BA	BA	BA	✓	✓	✓
HATCH BEAMS	Number	None	None	None	None	None	None	None	None	None
	Spacing	None	None	None	None	None	None	None	None	None
	Scantling and Sketch	None	None	None	None	None	None	None	None	None
	Bearing Surface	None	None	None	None	None	None	None	None	None
FORE AND AFTERS	Number	one	None	one	three	three	three	three	None	None
	Spacing	5'-0"	5'-0"	5'-0"	3'-6"	3'-0"	3'-0"	3'-0"	None	None
	Unsupported Lengths	10'-8"	10'-8"	10'-8"	10'-8"	10'-8"	10'-8"	10'-8"	None	None
	Scantling* and Sketch	10' x 9 1/2"	10' x 9 1/2"	10' x 9 1/2"	10' x 6 1/2"	10' x 6 1/2"	10' x 7"	10' x 7"	None	None
HATCH COVERS	Material	Wood	Hinged steel plate	Wood	Wood	Wood	Wood	Wood	Hinged Wood	Companion hatches to 2nd deck, no covers.
	Thickness	3"	3"	3"	3"	3"	3"	3"	1" thick	1" thick
	How fitted	across	across	across	across	across	across	across	across	across
	Bearing Surface	4' x 3"	4' x 3"	4' x 3"	4' x 3"	2' 1/2 x 4"	2' 1/2 x 4"	3"	1" thick	1" thick
Spacing of Cleats	2' 4"	2' 4"	2' 4"	2' 4"	2' 4"	2' 4"	2' 4"	2' 4"	2' 4"	2' 4"
Number of Tarpaulins	3	3	3	3	3	3	3	3	3	3

Particulars of fiddle, funnel and ventilator coamings:-

Stokehold gratings covered by strong steel hinged covers.
Fidley & funnel ventilators in efficient condition.
Engine skylight of steel strongly constructed.

Particulars of Flush Bunker Scuttles:-

Four scuttles on bridge deck of cast steel, fitted with bayonet joints, attached by chain. (23" dia)

one companion inside fore-castle, leading to crew's quarters below freeboard deck, enclosed by fore-castle, door of panelled wood 1 1/2" thick (panel 1" thick), sill 13", can be operated from both sides.

Two companions on freeboard deck leading to 2nd deck, enclosed by steel deck house, doors of panelled wood 1 1/2" thick (panels 1" thick), sills 12", can be operated from both sides.

Particulars of Companionways:- one steel companion 6'-0" x 3'-6" x 7'-8" high on freeboard deck in fore well leading to 2nd deck, door of panelled wood 1 1/2" thick (panels 1" thick), sill 13 1/2", can be operated from both sides.

Two companions in Bridge deck leading to enclosed bridge space, doors of wood 1 3/4" thick (panels 1 1/8" thick), sills 12", can be operated from both sides.

one companion in Bridge deck leading to enclosed bridge space, doors of panelled wood 1 1/2" thick (panels 1" thick), sill 18", can be operated from both sides.

Two companions in Poop deck leading to enclosed poop space, doors of panelled wood 1 1/2" thick (panels 1" thick), sills 18", can be operated from both sides.

Two wood companions on Poop deck leading to enclosed poop, 6' x 4' x 5'-0" high, with 8" steel coaming, sill 13", doors of solid wood 1" thick & sliding top, can be operated from both sides.

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

Fore-castle 1-20" dia, coaming 17' x 7/20" to Hold 4-12" " " 30' x 6/20" " " 2-14" " " 17' x 6/20" " Crew Space 4-12" " " 17' x 6/20" " " 4-C.I. goose neck 4 1/2" dia x 6" high to room.

Fore Well 4-18" dia, coaming 30' x 7/20" to holds. 2-20" " " 12 1/2' x 6/20" to tween decks 2-12" " " 24' x 6/20" to holds.

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

On Fore-castle 1-C.I. 21 1/2" high x 4" dia from fore peak 3-Steel 20" " x 3" " } from D.B. tanks 2-19" " " x 3 1/2" " } from D.B. tanks 1-C.I. 22 1/2" " " x 3 1/2" " }

Fore Well 4-Steel 30" high x 4" dia } from D.B. tanks 1-Steel 30" " " x 3" " } from D.B. tanks 1-C.I. 30" " " x 3" " }

Particulars of Gangway Cargo and Coaling Ports:- Two W.T. cargo doors, 17' x 15', between freeboard & 2nd deck in way of No 2 hold, 3'-4" x 3'-2", efficiently constructed.

one W.T. cargo door, S. Side, between freeboard & 2nd deck in way of aft hold, 3'-1" x 2'-6", efficiently constructed.

Three W.T. cargo doors, 2 S. & 1 P., in bridge sides, 3'-10" x 3'-2", efficiently constructed.

Four W.T. coaling doors, 2 P & 2 S, in bridge sides, 2'-1" x 1'-11", efficiently constructed.

All above doors closed with eyebolts & strongbacks & lashed.

2020 Lloyd's Register Foundation

Hong Kheung

Particulars of Scuppers and Sanitary Discharge Pipes —

All Scuppers & Sanitary discharge pipes fitted with gunmetal storm valves, at ship's side with efficient traps or wood plugs at inner ends.

Particulars of Side Scuttles:

all side scuttles below freeboard deck fitted with hinged deadlights, sill of lowest scuttle 27" below freeboard deck amidships.
Side scuttles to crew's spaces in fore-castle fitted with hinged deadlights.
Side scuttles in combined bridge & poop spaces not fitted with deadlights.
all scuttles of substantial construction.

Particulars of Guard Rails:—

Guard rails on fore-castle, bridge & poop 3'-6" high, with 3 rods & stanchions spaced 4'-9" apart on fore-castle, and 3 rods & teak top rail with stanchions spaced 4'-3" on bridge & poop.
Steel bulwarks on freeboard deck in fore-well, 4'-3" high, efficiently constructed & supported.

Particulars of Gangways, Lifelines, etc.:—

None

Suitable provision is made for lifelines

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	57'-0" 55'-7 1/2"	4'-3"	2'-6" x 1'-3"	3 Port 4 Stbd	9.375 P. 12.40 S.	12.2 P.
State position of each freeing port } After Well:— (F. and A. position and height above deck edge) } Forward Well:— 13 1/2"						
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Hinged steel shutters.						
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	1 1/2"	1 1/2"	6 1/2 x 3 x 8/20 B A	29"	Brackets	3'-6" x 3'-3"	38"	8'-0"
Fore-castle Bulkhead	7/20"	6/20"	2 1/2 x 2 x 6/20 angle	39"	Takes Top & Both angles	5'-1" x 2'-1"	13"	7'-9"
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓							
Exposed Machinery Casings on Super-structure Decks	8/20"	6/20"	4 x 2 1/2 x 6/20 angles	42 1/2"	Takes Top & Both angles	5'-6" x 2'-6"	14"	9'-0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	8/20	6/20	2 5/8 x 2 1/8 x 6/20 angles	33"	None	6'-0" x 2'-0"	4"	8'-0"
Deckhouses on Flush Deck Ships ...	✓							

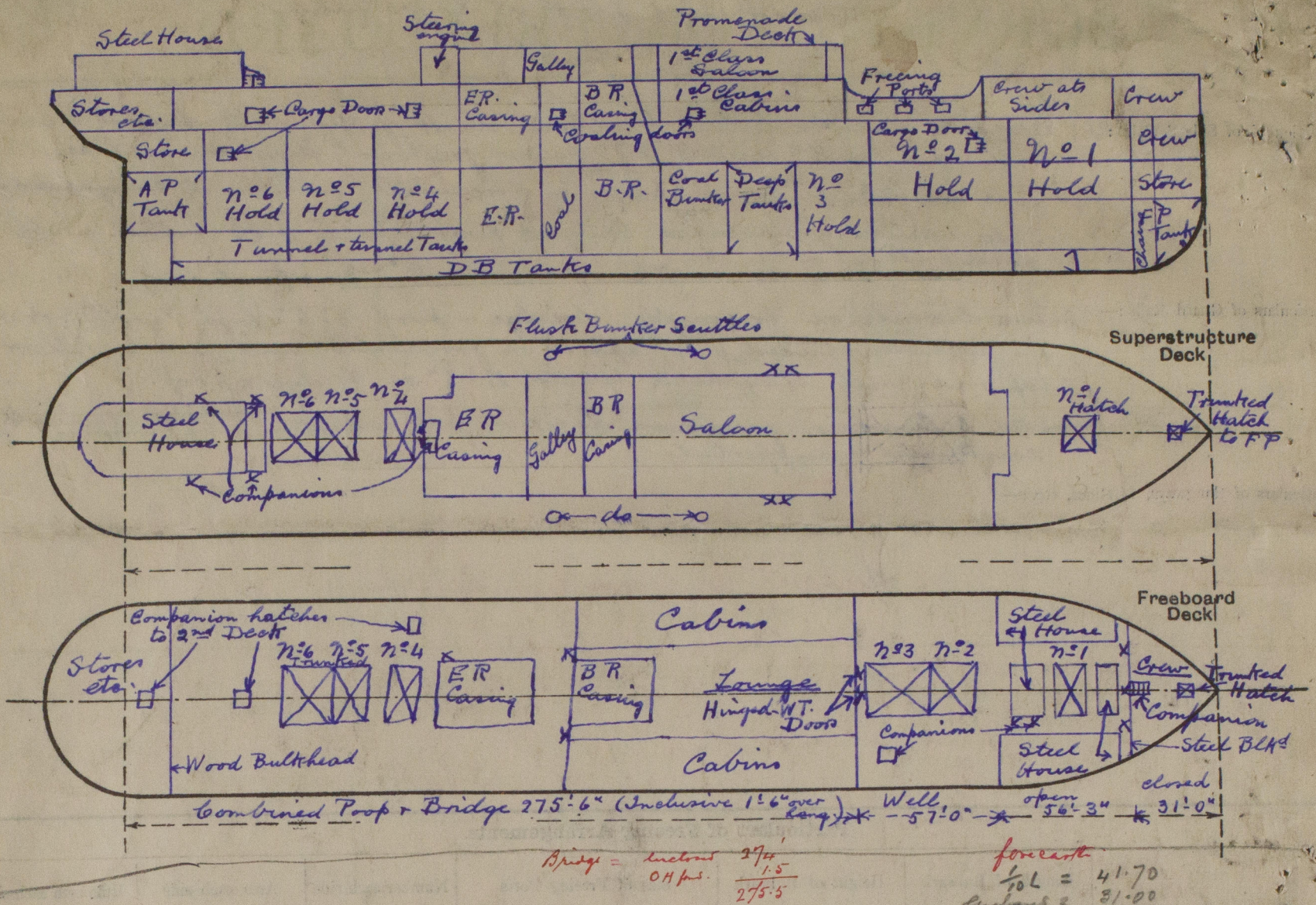
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	✓
Bridge, Forward Bulkhead	2-Hinged W.T. doors fastened with snugs & bolts. (Ventilation purposes only)
Fore-castle Bulkhead	Hinged panelled wood doors 1 1/2" thick (panels 1" thick) Can be operated from both sides.
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Super-structure Decks	Hinged steel doors, can be operated from both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	Hinged grill door, can be operated from one side only.
Deckhouses on Flush Deck Ships ...	✓

W992-0226 1/2

Hong Kheung

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:—

Vessel surveyed in Dry Dock, Condition survey only.

OUT

Builder's name and yard number Reiherst's Schiffsw. Hamburg.

Names of sister ships

Owners Ho Hong S.S. Co (1932) Ltd

Fee \$ 437.00

Received by me 22/10/32



© 2020

Lloyd's Register Foundation