

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having *a Fore castle, and Combined Bridge and Poopdeck*  
*Passenger steamer*  
*CORINTHIA 4* (Type of Superstructures.)

Port of Survey *Amsterdam*

Date of Survey *4 January '33*

Name of Surveyor *H. P. Jonker*

Particulars of Classification *+100 A1*  
*S.S. Ans. No 3. - 4, 23*  
*S.S. Rot. No 2-31.*

Ship's Name *S.S. Orange Nassau* Nationality and Port of Official Number *Holland 338 Amsterdam, Bismar* Gross Tonnage *3701* Date of Build *1911*  
*6 mo*

Moulded Dimensions: Length *103.020*, Breadth *13.41*, Depth *7.925* m  
Moulded displacement at moulded draught = 85 per cent. of moulded depth *6320* tons  
Coefficient of fineness for use with Tables *.679* *.68 lowest allowed*

Depth for Freeboard (D) m/m

Moulded depth ... *7.925*

Stringer plate ... *.013*

Sheathing on exposed deck  
 $T \left( \frac{L-S}{L} \right) = .076 \times .1648$  *.013*

Depth for Freeboard (D) = *7.951*

Depth correction

(a) Where D is greater than Table depth  
(D-Table depth) R = *8.33(7.951 - 6.868) 26.02 = 235*

(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) *13.41* m

Standard Round of Beam =  $\frac{B \times 12}{50} =$  *268*

Ship's Round of Beam = *279* m

Difference *11*

Restricted to

Correction =  $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{11^2}{4} \times .1648 =$  *NIL*

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S) m	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...	<i>66.69</i>	<i>66.69</i>	<i>2.360</i>	-	<i>66.69</i>
„ overhang aft ...					
„ overhang forward ...	<i>19.36</i>	<i>19.36</i>	<i>2.360</i>	-	<i>19.36</i>
Forecastle enclosed ...	<i>10.900</i>	<i>19.36</i>	<i>2.360</i>	-	<i>19.36</i>
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total ...	<i>86.05</i>	<i>86.05</i>			<i>86.05</i>

Standard Height of Superstructure *2.099*

„ „ R.Q.D. *962*

Deduction for complete superstructure *962*

Percentage covered  $\frac{S}{L} =$  *83.52*

„ „  $\frac{S_1}{L} =$  *83.52*

„ „  $\frac{E}{L} =$  *83.52*

Percentage from Table, Line A. *79.66*  
(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 = *-766*

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate m	Effective Ordinate	S M	Product
A.P. ...	<i>1112</i>	<i>1</i>	<i>1112</i>	<i>915</i>	<i>1239</i>	<i>1</i>	<i>1239</i>
$\frac{1}{2}$ L from A.P. ...	<i>494</i>	<i>4</i>	<i>1976</i>	<i>240</i>	<i>550</i>	<i>4</i>	<i>2200</i>
$\frac{3}{4}$ L „ ...	<i>123</i>	<i>2</i>	<i>246</i>	<i>0</i>	<i>138</i>	<i>2</i>	<i>276</i>
Amidships ...		<i>4</i>		<i>0</i>		<i>4</i>	
$\frac{3}{4}$ L from F.P. ...	<i>247</i>	<i>2</i>	<i>494</i>	<i>381</i>	<i>381</i>	<i>2</i>	<i>762</i>
$\frac{1}{2}$ L „ ...	<i>988</i>	<i>4</i>	<i>3956</i>	<i>1184</i>	<i>1184</i>	<i>4</i>	<i>4748</i>
F.P. ...	<i>2224</i>	<i>1</i>	<i>2224</i>	<i>2439</i>	<i>2439</i>	<i>1</i>	<i>2439</i>
Total ...			<i>10008</i>				<i>11664</i>

Mean actual sheer aft = *2423*  
Mean standard sheer aft = *2099*  
Excess *324*

Mean actual sheer forward = *Excess*  
Mean standard sheer forward = *Excess*

Length of enclosed superstructure forward of amidships = *148*  
L

„ „ aft of „ = *.500*

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{1656}{18} (.75 - .4176) = -31$   
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 = *7.938* Ft.  
Summer freeboard = *.770*  
Moulded draught (d) = *7.168*

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{48}$  inches = *15 cms*  
Addition for Winter North Atlantic Freeboard (if

Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta = 7057$  m  
Tons per inch immersion at summer load water line  
 $T = 11.7$  m  
Deduction =  $\frac{\Delta}{40T}$  inches = *15 cms*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ... *235*  
Deduction for superstructures ... *766*  
Sheer correction ... *31*  
Round of Beam correction ... *13*  
Correction for Thickness of Deck amidships ...  
Other corrections, scantlings, etc. ...

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: *85%*

Tropical Fresh Water Line above Centre of Disc ... *28%*  
Fresh Water Line „ „ ... *15%*  
Tropical Line „ „ ... *13%*  
Winter Line below „ „ ... *13%*  
Winter North Atlantic Line „ „ ...

Tropical Fresh Water Freeboard ... *57%*  
Fresh Water „ „ ... *70%*  
Tropical „ „ ... *72%*  
Winter „ „ ... *98%*  
Winter North Atlantic „ „ ...

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# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

		HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS			
		N 1	N 2	N 3	N 4
Description of Hatchway		ON FORECASTLE DECK	ON FREEBOARD DECK IN FORWARD WELL	ON BRIDGE DECK	
Dimensions of Hatchway		14'-3 1/2" x 12'-6"	22'-5 1/2" x 14'-0"	14'-3 1/2" x 12'-0"	12'-3" x 12'-0"
COAMINGS	Height above Deck	30"	30"	30"	30"
	Thickness	.40	.44	.40	.40
	Sides	36	44	36	36
	Stiffeners	none	none	none	none
HATCH BEAMS	Number	one	two	one	one
	Spacing	4'-1 3/4"	4'-6"	4'-1 3/4"	6'-1 1/2"
	Scantling and Sketch	3 x 3 x .40 15 x .40 3 x 3 x .40	3 x 3 x .40 3 7/8 x .40 3 x 3 x .40	3 x 3 x .40 15 x .40 3 x 3 x .40	3 x 3 x .40 15 x .40 3 x 3 x .40
	Bearing Surface	3 1/2"	3 1/2"	3 1/2"	3 1/2"
FORE AND AFTERS	Number	three	three	three	three
	Spacing	3'-1 1/2"	3'-6"	3'-0"	3'-0"
	Unsupported Lengths	4'-1 3/4"	4'-6"	4'-1 3/4"	6'-1 1/2"
	Scantling* and Sketch	4 x 4 5 x 6 4 x 4	4 x 4 5 x 6 4 x 4	4 x 4 6 x 5 4 x 4	4 x 4 6 x 5 4 x 4
HATCH COVERS	Material	pine	same	same	same
	Thickness	2 1/2"	same	same	same
	How fitted	athwartships	same	same	same
	Bearing Surface	2	same	same	same
Spacing of Cleats		24"	same	same	same
Number of Tarpaulins		two	same	same	same
*Are wood fore and afters steel shod at all bearing surfaces?		yes			
Are battens and wedges efficient and in good condition?		yes			
Are tarpaulins in good condition and in accordance with rule requirements?		yes			
Are lashings provided in accordance with rule requirements?		yes			

Particulars of fiddle, funnel and ventilator coamings: Fiddle hatch on casing top angle coamings provided with steel hinged covers. Engine room skylight of steel strongly constructed. Fiddle and funnel ventilators in efficient condition.

## Particulars of Flush Bunker Scuttles:

Particulars of Companionways: On Poop deck: steel companion way steel doors 47 x 49 sill 9", steel companion way wood doors 31 x 39 x 1 1/4 teak sill 9" above wood deck. Companion way in after bulkhead mild steel deckhouse on bridge deck: steel door 30 x 42 sill 5 1/2" above wood deck and teak door 30 x 42 sill 5 1/2" above wood deck. All doors to companion way capable of being operated from both sides. On Foreboard deck in Fore Castle Bulkhead to lower deck: Steel W.T. door 28 x 42 sill 9 1/2" above wood deck manipulated from both sides.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks: Ventilators on Foreboard deck in forward well 36 x 18 diam x .40, on Superstructure decks 36 x 18 diam x .40 and 36 x 9 diam x .36 gooseneck ventilators 10 x 4 diam.

All ventilators are provided with wooden hatches and canvas covers as required. All gooseneck ventilators are provided with canvas covers for closing the openings.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks: Airpipes to tanks in forward well on Foreboard deck: 3'-0" x 2" diam. On Superstructure deck: airpipes 12 to 6" x 2" diam.

All airpipes are provided with canvas covers for closing the openings.

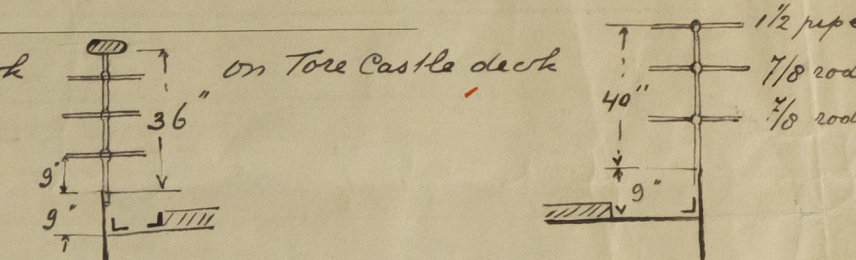
Particulars of Gangway Caisson and Coaling Ports: On S.B. and P.S. between Bridge deck and Foreboard deck: four W.T. coaling ports 2'-6" x 2'-6" height above foreboard deck edge 12" strongly constructed and one W.T. cargo door 3'-0" x 3'-0" height above foreboard deck edge 12" strongly constructed.

ORANGE NASSAU

Particulars of Scuppers and Sanitary Discharge Pipes: Foreboard deck in way of forward well discharged through ship side by scupper pipes 3 1/2" diam. All sanitary pipes discharged through ship side below foreboard deck and are provided with storm valves.

Particulars of Side Scuttles: Side scuttles to spaces below superstructure deck are fitted with dead light in fore and after ship permanently attached. Amidships portable dead lights stowed adjacent to the side scuttles. Side scuttles in forward lower deck below foreboard deck are fitted with dead lights permanently attached.

Particulars of Guard Rails: Open rail on Bridge deck on Fore Castle deck.



Particulars of Gangways, Lifelines, etc.:

Lifelines fitted in forward well for protection of the crew.

## 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	5'-2"	4'-0"	3'- x 1.75	3	15 3/4 ft <sup>2</sup>	11.9 ft <sup>2</sup>

State position of each freeing port (F. and A. position and height above deck edge): After Well: height above deck edge 12". Forward Well: height above deck edge 12". State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: shutters fitted.

Additional area where sheer is less than standard.

## Particulars of Superstructures, Trunks, Casings, Deckhouses.

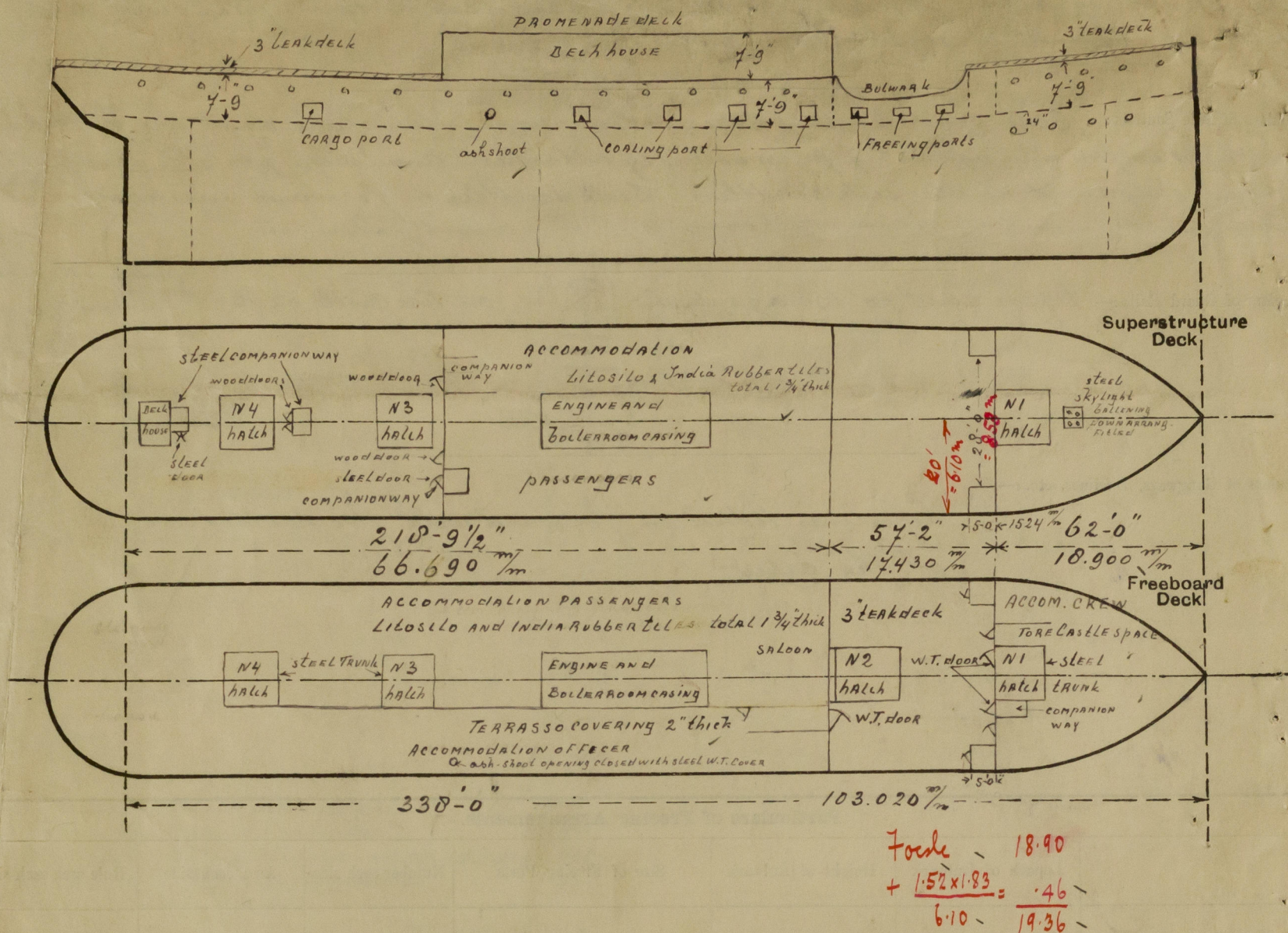
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead								
Raised Quarter Deck Bulkhead								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead	12 x .42	.38	8 x 3 1/2 x .50	30"	lags on top and bottom	3'-0" x 6'-0"	9 1/2"	4'-9"
Forecastle Bulkhead	12 x .36	.32	3 1/2 x 2 1/2 x .32	30"	none	2'-2" x 6'-0"	9 1/2"	4'-9"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								above PROMENADE 7'-9" deck
Exposed Machinery Casings on Superstructure Decks	9 x .30	.24	4 x 3 1/2 x .40 at after edge 3 1/2 x 3 x .36	2'-6 1/2"	continuous	none		3'-0" above bottom
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	Steel W.T. hinged door capable of being manipulated from one side.
Forecastle Bulkhead	Steel hinged doors capable of being operated from both sides.
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	



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 vessel has been examined in dry dock

Scale of displacement sent herewith

Builder's name and yard number *Kon. Maats. de Schelde (Yard N° 139)*

Names of sister ships

Owners *Koninkl. Nederlandsche Stoomboot Maatschappij*

Fee *£ 142* :—

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