

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

KULDIGA

Ship's Name EX	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
PREUSSISCH HOLLAND EX KULDIGA		LONDON DANZIG BRITISH	1974	1908

Port of Survey HAMBURG

Date of Survey 17-1-47

Surveyor's Signature J. E. Cranston

Particulars of Classification EXAMINED L.R.
CONTINUED

Moulded Dimensions: Length 270.5' Breadth 39.4' Depth 18.04'

Moulded displacement at moulded draught = 85 per cent. of moulded depth 3600 tons

Coefficient of fineness for use with Tables .771

DEPTH FOR FREEBOARD (D).				DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth	...	...	... 18.04	(a) Where D is greater than Table depth (D - Table depth) R = (18.08 - 18.03) 2.080 = +.10"	Moulded Breadth (B) 39.4
Stringer plate	...	...	... 0.04	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = .05	Standard Round of Beam = $\frac{B \times 12}{50} =$ 9.46
Sheathing on exposed deck					Ship's Round of Beam = 10"
$T \left(\frac{L-S}{L} \right) =$					Difference .54"
Depth for Freeboard (D) =	18.08 18.04			If restricted by superstructures	Restricted to N/A
					Correction = $\frac{\text{Diff}^\circ}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.54}{4} = .14$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>ON R.Q.D.</i>	24.00 <i>22.50</i>	24.00 <i>22.50</i>	7.0	✓	<i>22.50</i>
" overhang	<i>✓</i>	<i>✓</i>	<i>✓</i>		
R.Q.D. enclosed	103.0 <i>80.50</i>	103.0 <i>80.50</i>	<i>4.0</i>	<i>4.00</i> <i>4.274</i>	<i>75.33</i>
" overhang			<i>✓</i>		
Bridge enclosed					
" overhang aft	<i>167.5</i>	<i>167.5</i>	<i>7.0</i>	✓	<i>167.50</i>
" overhang forward					
F'cle enclosed					
" overhang					
1" trunk aft	<i>✓</i>	<i>✓</i>	<i>✓</i>		
" forward	<i>✓</i>	<i>✓</i>	<i>✓</i>		
Tonnage opening aft	<i>✓</i>	<i>✓</i>	<i>✓</i>		
" " forward	<i>✓</i>	<i>✓</i>	<i>✓</i>		
Total	<i>270.5</i>	<i>270.5</i>			<i>265.33</i>

Standard Height of Superstructure 6.205

" " R.Q.D. 4.274 -

Deduction for complete superstructure 33.05 -

Percentage covered $\frac{S}{L} = \left. \begin{array}{l} S_1 \\ S_2 \end{array} \right\} 100 -$

" " $\frac{S_1}{L} =$

" " $\frac{E}{L} = 98.08 -$

Percentage from Table, Line A. + B 97.64 -

~~(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 = $33.05 \times .9764 = -32.28$

SHEER CORRECTION.

Station	Standard Ordnate	S M	Product	Actual Ordnate	Effective Ordnate	S M	Product
A.P. ...	37.05	1	37.05	48.00 30.9	48.00	1	48.00
$\frac{1}{8}$ L from A.P. ...	16.49	4	65.96	11.0	11.00	4	44.00
$\frac{2}{8}$ L " ...	4.07	2	8.14	—	—	2	—
Amidships ...	—	4	—	—	—	4	—
$\frac{2}{8}$ L from F.P. ...	8.14	2	16.28	10.50 18.0	10.06	2	20.12
$\frac{1}{8}$ L " ...	32.98	4	131.92	48.00 33.5	40.71	4	162.84
F.P. ...	74.10	1	74.10	82.00 80.0	91.48	1	91.48
Total ...			333.45	+9.48			366.44

TION.
 actual Tween Deck ht. = 7.00' -
 Standard " " " = 6.21'
 .79' = 9.48'

Mean actual sheer aft = *Deficient* 7.75
 Mean standard sheer aft =

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

Length of enclosed superstructure forward of amidships =

L		forward of amidships			
" <u>Sheer aft.</u>	ACT	aft of	"	=	Part Running Deck.
578	48.00	1	37.05	48.00	
37.05	11.00	3	49.47	33.00	
16.49	—	3	12.21	—	
4.07	—	1	—	—	
—	—		<u>98.73</u>	81.00	82.04%

.50) = -.46"
 25

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 = Ft. <u>18.08</u> Summer freeboard = <u>5.84</u> Moulded draught (d) = <u>17.564</u> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>4.39"</u> Addition for Winter North Atlantic Freeboard (if required) = <u>4.39 + 2 = 6.49"</u>	Deduction for Fresh Water. Displacement in salt water at summer load water line Δ = NOT CERTIFIED Tons per inch immersion at summer load water line T = Deduction = $\frac{\Delta}{40 T}$ inches = <u>1.25</u>	TABULAR FREEBOARD <small>corrected for Flush Deck (if required)</small> Correction for coefficient $\frac{.771 + .68}{1.36} = \frac{1.451}{1.36}$ <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">+</th> <th style="width: 10%; text-align: center;">-</th> </tr> </thead> <tbody> <tr> <td>Depth Correction</td> <td style="text-align: center;">.10</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Deduction for superstructures</td> <td style="text-align: center;">-</td> <td style="text-align: center;">32.28</td> </tr> <tr> <td>Sheer correction</td> <td style="text-align: center;">-</td> <td style="text-align: center;">.46</td> </tr> <tr> <td>Round of Beam correction</td> <td style="text-align: center;">-</td> <td style="text-align: center;">1.1</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td style="text-align: center;">-</td> <td style="text-align: center;">.74</td> </tr> <tr> <td></td> <td style="text-align: center;">.10</td> <td style="text-align: center;">32.88</td> </tr> </tbody> </table> Summer Freeboard = <u>6.284</u>		+	-	Depth Correction10	-	Deduction for superstructures	-	32.28	Sheer correction	-	.46	Round of Beam correction	-	1.1	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	-	.74		.10	32.88
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~; Steel, Deck :—

Tropical Fresh Water Line above Centre of Disc	... 7"	Tropical Fresh Water Freeboard	minus 0' - 1 3/4"
Fresh Water Line	... 4 1/2"	Fresh Water	0' - 0 3/4"
Tropical Line	... 2 1/2"	Tropical	0' - 2 3/4"
Winter Line below	... 2 1/2"	Winter	0' - 7 3/4"
Winter North Atlantic Line	... 4 1/2"	Winter North Atlantic	0' - 9 3/4"