

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

now *Admussen* of Tallinn

Computation of Freeboard for Steamer, Sailing Ship, Tanker						Port of Survey <u>Grazdenath</u>	
having <u>Poop, Bridge &amp; Forecastle.</u>						Date of Survey <u>23.3.32.</u>	
(Type of Superstructures.)							
Ship's Name <u>DUDDINGSTON.</u>		Nationality and Port of Registry <u>British</u> <u>Lith</u>	Official Number <u>-</u>	Gross Tonnage <u>-</u>	Date of Build <u>1909.</u>	Name of Surveyor _____	
Moulded Dimensions:	Length	Breadth	Depth		Particulars of Classification _____		
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons							
Coefficient of fineness for use with Tables _____							
<b>Depth for Freeboard (D)</b>				<b>Depth correction</b>		<b>Round of Beam correction</b>	
Moulded depth ... ..	<u>21.12</u>	(a) Where D is greater than Table depth (D-Table depth) R =			Moulded Breadth (B)		
Stringer plate ... ..	<u>.04</u>		<u>+ 4.50.</u>		Standard Round of Beam = $\frac{B \times 12}{50} =$		
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =			Ship's Round of Beam =		
T ( $\frac{L-S}{L}$ ) =	<u>-</u>				Difference		
Depth for Freeboard (D) =	<u>21.16</u>	If restricted by superstructures			Restricted to		
					Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right) =$	<u>- .13.</u>	

## 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 ...					
„ overhang forward					
F'cle enclosed ... ..					
„ overhang ... ..					
Trunk aft ... ..					
„ forward ... ..					
Tonnage opening aft ...					
„ „ forward					
Total ... ..					

Standard Height of Superstructure 6.368

„ „ R.Q.D. ✓

Deduction for complete superstructure 34.46

Percentage covered  $\frac{S}{L} = 44.48$

„ „  $\frac{S_1}{L} = 46.44$

„ „  $\frac{E}{L} = 46.44$

Percentage from Table, Line A.  
(corrected for absence of forecastle (if required))

Percentage from Table, Line B. Lumber. 64.23.  
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 34.46 x .6423 = - 23.14.

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...		1				1	
$\frac{1}{6}$ L from A.P. ...		4				4	
$\frac{2}{6}$ L „ ...		2				2	
Amidships ...		4				4	
$\frac{2}{6}$ L from F.P. ...		2				2	
$\frac{1}{6}$ L „ ...		4				4	
F.P. ...		1				1	
Total ...							

Mean actual sheer aft = *Excess*

Mean actual sheer forward = *Excess*

Mean standard sheer aft =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

L

„ „ aft of „ =

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = - .39$$

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 = 21.16 ✓

Summer freeboard = 2.04 ✓

Moulded draught (d) = 19.12 ✓

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = 4.78 = 4 <sup>3</sup>/<sub>4</sub> ✓

Addition for Winter North Atlantic Freeboard (if required) =  $\frac{2}{3}$  = 6.37 = 6 <sup>1</sup>/<sub>4</sub> ✓

**Deduction for Fresh Water.**

Displacement in salt water at summer load water line

Δ =

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  $\frac{.800 + .68}{1.36}$

	+	-
Depth Correction ...	4.50 ✓	-
Deduction for superstructures ...	✓	23.14 ✓
Sheer correction ...	✓	.39 ✓
Round of Beam correction ...	✓	.13 ✓
Correction for Thickness of Deck amidships ...	✓	-
Other corrections, scantlings, etc. ...	✓	-
	4.50	23.69

Summer Freeboard = 24.62

7. WINTER SUMMER FREEBOARD amidships ~~from Centre of Disc~~ to top of Deck Line, Wood, Steel, Deck:

TROPICAL		TROPICAL		TROPICAL		TROPICAL	
LINE	DEPTH	LINE	DEPTH	LINE	DEPTH	LINE	DEPTH
Tropical Fresh Water Line above Centre of Disc	540	Tropical Fresh Water Line above Centre of Disc	540	Tropical Fresh Water Line above Centre of Disc	540	Tropical Fresh Water Line above Centre of Disc	540
Fresh Water Line	419	Fresh Water Line	419	Fresh Water Line	419	Fresh Water Line	419
Tropical Line	419	Tropical Line	419	Tropical Line	419	Tropical Line	419
Winter Line	140	Winter Line	140	Winter Line	140	Winter Line	140
Winter North Atlantic Line	165	Winter North Atlantic Line	165	Winter North Atlantic Line	165	Winter North Atlantic Line	165

10m,2,31

007746-007753-0120

✓ HAZING EGEM

10 AUG 1953

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