Lloyd's Register of Shipping.

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

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having _____

(Type of Superstructures.)

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
Alcantara.				

Moulded Dimensions: Length 64.00 Breadth 78 Depth 45.00

Moulded displacement at moulded draught = 85 per cent. of moulded depth 41400 tons

Coefficient of fineness for use with Tables .759

Port of Survey _____

Date ~~of Survey~~ 23. 1. 34.

Name of Surveyor _____

Particulars of Classification _____

Depth for Freeboard (D)

Moulded depth	45.00
Stringer plate	.05
Sheathing on exposed deck $T\left(\frac{L-S}{L}\right)$ = .25 × .0585	.01
Depth for Freeboard (D) =	45.06

Depth correction

(a) Where D is greater than Table depth (D—Table depth) R = (45.06 − 42.67) 3.00 = + 7.17"

(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) 78.00'

Standard Round of Beam $= \frac{B \times 12}{50} =$ 18.72

Ship's Round of Beam = 6.00"

Difference 12.72

Restricted to

Correction $= \frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right)$ = $\frac{12.72}{4}$ × .0684 = +.21

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S_1)	Height	Height Correction	Effective Length (E)
Poop enclosed	52.83	52.83			
„ overhang	5.00	2.50			
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed... ...	405.22	405.22			
„ overhang aft ...	11.78	8.84			
„ overhang forward	1.00	.50			
F'cle enclosed	126.00	126.00			
„ overhang	.67	.33			
Trunk aft					
„ forward					
Tonnage opening aft ...					
„ „ forward					
Total	602.50	596.22			

Standard Height of Superstructure 7'-6"

„ „ R.Q.D. √

Deduction for complete superstructure 42.00"

Percentage covered $\frac{S}{L}$ = 94.15 %

„ „ $\frac{S_1}{L}$ = 93.16 %

„ „ $\frac{E}{L}$ = 93.16 %

Percentage from Table, Line A. ~~(corrected for absence of forecastle (if required))~~ 91.58 %

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

Interpolation for bridge less than ·2L (if required)

Deduction = 42.00 × 91.58 = − 38.46"

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
... ...	74.00	1				1	
From A.P. ...		4				4	
„ ...		2				2	
Amidships ...		4				4	
From F.P. ...		2				2	
„ ...		4				4	
... ...		1				1	
Total ...			666.00				

$\frac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}}$ =

$\frac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}}$ =

$\frac{\text{Length of enclosed superstructure}}{L}$ forward of amidships =

„ „ aft of „ =

Correction $= \frac{\text{Difference between sums of products}}{18}\left(\cdot 75 - \frac{S}{2L}\right) = \frac{666}{18}(\cdot 75 - \cdot 4707) = +10.33$

·2793

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.

Deduction for Winter and Winter North Atlantic Freeboard.

	Ft.
Depth to Freeboard Deck =	45.06
Summer freeboard =	10.53
Moulded draught (d) =	34.53

Deduction for Tropical freeboard and addition for Winter freeboard $= \frac{d}{4}$ inches =

Deduction for Winter North Atlantic Freeboard (if required) =

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 $\frac{.759 + .68}{1.36}$ = 139.10

147.16

	+	−
Depth Correction	7.17	—
Deduction for superstructures	—	38.46
Sheer correction	10.33	—
Round of Beam correction	.22	—
Correction for Thickness of Deck amidships ...	—	.12
Other corrections, scantlings, etc.	—	—
	17.72	38.56

− 20.84

Summer Freeboard = 126.32

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

Tropical Fresh Water Line above Centre of Disc	Tropical Fresh Water Freeboard	
Fresh Water „ „	Fresh Water „	
„ „	Tropical „	
below „	Winter „	
„	Winter North Atlantic „	

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