

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Isle of Bermuda</i>	Official Number 224 162650	Nationality and Port of Registry <i>British Hond</i>	Gross Tonnage 22424	Date of Build 1931 - 11	Port of Survey
Dimensions: Length <i>550.0</i> Breadth <i>76.5</i> Depth <i>43.29</i> displacement at moulded draught = 85 per cent. of moulded depth <i>32065</i> tons t of fineness for use with Tables <i>.725</i>					Date of Survey <i>3-2-43</i> Surveyor's Signature Particulars of Classification <i>+100AT with fuel tank</i>

Depth for Freeboard (D).					Depth correction.		Round of Beam correction.	
depth	...	...	...	...	43.29	(a) Where D is greater than Table depth	Moulded Breadth (B)	76.5
ate	...	...	...	...	.03	(D - Table depth) R =	Standard Round of Beam = $\frac{B \times 12}{50}$	18.36
on exposed deck						$(43.34 - 36.67) \times 3 = +20.01$	Ship's Round of Beam	5.00
$\frac{-S}{L_1}$	=	.125	\times	.1856	=	.02	Difference	13.36
Depth for Freeboard (D) =					43.34	(b) Where D is less than Table depth (if allowed)	Restricted to	13.36
						(Table depth - D) R =	Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L_1}\right)$	$\frac{13.36}{4} \times .1928 = +.64$
						If restricted by superstructures		

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
closed					
erhang					
enclosed					
overhang					
nclosed... ..	351.33	351.33	8.25	-	351.33
overhang aft ...					
overhang forward	2.58	1.29	"	-	1.29
closed	88.64	88.64	8.0	-	88.64
erhang	5.36	2.68	"	-	2.68
aft					
forward					
e opening aft ...					
" forward					
Total	447.91	443.94			443.94

Standard Height of Superstructure..... 7.5
 " " R.Q.D.....
 Deduction for complete superstructure..... 42 "
 Percentage covered $\frac{S}{L} = 81.44$
 " " $\frac{S_1}{L} = \left. \begin{array}{l} \\ \end{array} \right\} 80.72$
 " " $\frac{E}{L} =$
 Percentage from Table, Line A. ✓
 (corrected for absence of forecaste (if required))
 Percentage from Table, Line B. 76.19
 (~~corrected for absence of forecaste (if required)~~)
 Interpolation for bridge less than $\cdot 2L$ (if required) ✓
 Deduction = $42 \times .7619 = - 32.00$.

SHEER CORRECTION.

ion	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
...	65.00	1	65.00	49.50	49.50	1	49.50
A.P. ...	28.93	4	115.72	21.72	21.72	4	86.88
...	7.15	2	14.30	5.43	5.43	2	10.86
os ...	-	4	-	-	-	4	-
F.P. ...	14.30	2	28.60	13.67	13.67	2	27.34
...	57.85	4	231.40	54.70	54.70	4	218.80
...	130.00	1	130.00	107.50	107.50	1	107.50
otal ...			585.02				500.88

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

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

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

$$\text{aft of } =$$

} Deficient
 } Sheer Deficient

$$\text{rection} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{8}{2L} \right) = \frac{84.14}{18} (.75 - .4072) = +1.60$$

If limited on account of midship superstructure.

tion for Tropical Freeboard.

on for Winter and Winter North
atic Freeboard.

Depth to Freeboard Deck = 43.44 Ft.

Summer freeboard = 15.21

Moulded draught (d) = 28.23

on for Tropical freeboard and addition for
nter freeboard = $\frac{d}{4}$ inches = 7.06 = 7"

for Winter North Atlantic Freeboard (if
ired) = -

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

= 7"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{725 + 68}{1.36} =$

	+	-
Depth Correction	20.01	-
Deduction for superstructures	-	32.00
Sheer correction	1.60	-
Round of Beam correction ... ..	.64	-
Correction for Thickness of Deck amidships	1.26	-
Other corrections, scantlings, etc. <i>(Break bulk)</i>	70.74	-
	94.25	32.00

Summer Freeboard = 182.50

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

Tropical Fresh Water Line above Centre of Disc	...	...	14"
Fresh Water Line	"	"	7"
Tropical Line	"	"	7"
Winter Line	below	"	7"
Winter North Atlantic Line	"	"	1

Tropical Fresh Water Freeboard	
Fresh Water	"
Tropical	"
Winter	"
Winter North Atlantic	"