EQUIV. DEPTH.
STANDARD VESSEL.

009083 - 009093 - 0092

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

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

Port of Survey _____

Date of Survey ____ 18.10.48

Surveyor's Signature ____ J.H.W.

Moulded Dimensions : Length 205.00 Breadth 34.50 Depth 13.74

Particulars of Classification _____

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

Coefficient of fineness for use with Tables ___ .68

DEPTH FOR FREEBOARD (D).

Moulded depth 13.74

Stringer plate ... ... .02

Sheathing on exposed deck

$T\left(\dfrac{L-S}{L}\right)=$

Depth for Freeboard (D) = 13.76

DEPTH CORRECTION.

(a) Where D is greater than Table depth

$(D \div \text{Table depth}) R =$

$\left(\dfrac{13.76 - 13.67}{0.09}\right) 1.577 = + 0.14''$

(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)

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

Ship's Round of Beam ... Say = Standard

Difference

Restricted to

Correction = $\dfrac{\text{Diff}^e}{4} \times \left(1 - \dfrac{S_1}{L}\right)$ = NIL.

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
„ overhang					
R.Q.D. enclosed					
„ overhang ...					
Bridge enclosed		ACTUAL ERECTIONS.			
„ overhang aft ...					
„ overhang forward ...					
F'cle enclosed					
„ overhang ...					
Trunk aft					
„ forward ...					
Tonnage opening aft ...					
„ „ forward...					
Total	110.21	88.76			88.76

Standard Height of Superstructure ____ 6.00

„ „ R.Q.D. ____

Deduction for complete superstructure ____ 26.50

Percentage covered $\dfrac{S}{L}$ = 53.76

„ „ $\dfrac{S_1}{L}$ = 43.30

„ „ $\dfrac{E}{L}$ = 43.30

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

Percentage from Table, Line B. ____ 30.30
(corrected for absence of forecastle (if required))

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

Deduction = $26.50 \times .3030 = -8.03''$

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	STANDARD			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 / Mean standard sheer aft =

Mean actual sheer forward / Mean standard sheer forward =

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

„ „ aft of „ =

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

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.

Ft.

Depth to Freeboard Deck = 13.76

Summer freeboard = 1.34

Moulded draught (d) = 12.42

Deduction for Tropical freeboard and addition for

Winter freeboard = $\dfrac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required)=

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

$T =$

Deduction = $\dfrac{\Delta}{40\,T}$ inches

=

TABULAR FREEBOARD corrected for Flush Deck (if required) ____ 23.95

Correction for coefficient ____ NIL. ____ 23.95

			+	–
Depth Correction			0.14	
Deduction for superstructures ...				8.03
Sheer correction				
Round of Beam correction ...				
Correction for Thickness of Deck amidships ...				
Other corrections, scantlings, etc. ...				
			0.14	8.03

-7.89

JHW 18.10.48

Summer Freeboard = 15.06

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

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

1.34

EQUIV. DEPTH = 13.74'

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

$$D = 12.42 + \frac{15.92}{12} + \frac{(D - 13.67)\,1.577}{12}$$

$$12D = 149.04 + 15.92 + 1.577D - 21.56.$$

$$10.423D = 143.40$$

$$D = 13.76$$

$$
\begin{array}{r}
149.04 \\
15.92 \\
\hline
164.96 \\
21.56 \\
\hline
143.40
\end{array}
$$

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____