

PRELIMINARY

Rpt. C.11 (Comp.)

For LONDON OFFICE ONLY

LLOYD'S REGISTER OF SHIPPING
SURVEYS FOR FREEBOARD
(COMPUTATION FOR ~~SLEAVER, SYLING, SINT~~, TANKER)Received
Index No.
Govt. Copy
Owners CII

Ship's Name Sasibo Y.S. No 200	Official Number 3028	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 32.9 M. Breadth 18.50 M. Depth 18.50 M.	Freeboard Length 245 M. 6 1/2 R.S.	Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing)	tons	Surveyor's Signature	Date of Survey 6.10.58
Coefficient of fineness for use with Tables 0.830	Particulars of Classification +100 A.1. Contemplated C.P.I.B.				

DEPTH FOR FREEBOARD (D). M. Moulded depth ... 18.500 Stringer plate 38 m/m ... .038 Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ NIL Depth for Freeboard (D) = 18.538	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = 8.33 (18.538 - 16.333) 30 = + 551 m/m (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) 32.9 M. Standard Round of Beam = $\frac{B \times R}{50} =$ 658 m/m Ship's Round of Beam = 614 m/m Difference 44 Restricted to Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{44}{4} \times .6944 = + 8 m/m$
---	---	---

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed EQUIV. ... 46.029	46.029	2.600	—	46.029
" overhang ...				
R.Q.D. enclosed ...				
" overhang ...				
Bridge enclosed ...				
" overhang aft ...				
" overhang forward ...				
F'cle enclosed ... 28.855	28.855	2.570	—	28.855
" overhang ...				
Trunk aft ...				
" forward ...				
Tonnage opening aft ...				
" forward ...				
Total ... 74.884	74.884			74.884

Standard Height of Superstructure **2.29 m**
" " R.Q.D. —
Deduction for complete superstructure **1067 m/m**
Percentage covered $\frac{S}{L} =$ } **30.56**
" " $\frac{S_1}{L} =$ }
" " $\frac{E}{L} =$ }
Percentage from Table, Line A. **TANKER 21.56**
(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 = **.2156 x 1067 = - 230 m/m**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	2295	1	2295	477	885	1	885
1/4 L from A.P. ...	1020	4	4080	0	3	4	32
1/2 L " ...	255	2	510	0	0	2	0
Amidships ...	0	4	0	0	0	4	0
3/4 L from F.P. ...	510	2	1020	0	0	2	0
1/4 L " ...	2039	4	8156	0	0	4	0
F.P. ...	4590	1	4590	636	636	1	636
Total ...			20651				1553

Mean actual sheer aft =
Mean standard sheer aft = } **Deficient**
Mean actual sheer forward =
Mean standard sheer forward = }
Length of enclosed superstructure forward of amidships = } **Def. Tanker**
" " aft of " = }
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ **$\frac{19098}{18} \left(.75 - \frac{1528}{5972} \right) = + 634 m/m$**
If limited on account of midship superstructure. — If limited to maximum allowance of 1 1/2 ins. per 100ft. —

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

REVISED 1962

18.538	Depth to Freeboard Deck = 18.538	Displacement in salt water at summer load water line
4.754	Summer freeboard = 4.754	$\Delta =$
13.784	Moulded draught (d) = 13.784	Tons per inch immersion at summer load water line
	Keel allowance =	T =
	Extreme draught =	Deduction = $\frac{\Delta}{40 T}$ inches
45.22	Deduction for Tropical freeboard and addition for = 4468	
	Winter freeboard = $\frac{d}{4}$ 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 = $\frac{\Delta}{40 T}$ inches

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

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

3563 **3414**
3956 **3791**Summer Freeboard = **4919** **4154**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	"

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.

Deck Lambs:-

$$\begin{aligned}
 .660 \times 1.200 &= .792 \\
 .5 \times \frac{(660 + 490)}{450} \times 6.9 &= 3.968 \\
 .5 \times 8.050 \times .490 &= 1.972 \\
 \hline
 &6.732 \text{ m}^2 \\
 \frac{2}{3} \times 16.450 &= 10.968 \\
 \hline
 &= 614 \text{ mfm equiv lambs.}
 \end{aligned}$$

Length Poop:-

$$\begin{aligned}
 @ \text{ side} &= 45.040 \text{ m.} \\
 \text{Plus } \frac{10.400 + 32.70}{2} \times \frac{1.500}{32.70} &= .989 \\
 \hline
 \text{Equiv L} &= 46.029 \text{ m.}
 \end{aligned}$$

Aft Sheer:-

$$\begin{aligned}
 \text{Ht poop front @ side} &= 2.600 \text{ m.} \\
 \text{Ht poop @ 2/3 @ side} &= 2.700 - (185-183) = 2.698 \text{ m.} \quad \left. \begin{array}{l} \text{Poop line dkt hts increasing aft.} \end{array} \right\} \\
 \begin{array}{l} \text{(a) Ht @ poop front @ side} = 2.600 \text{ m.} \\ \text{Std. ht.} = 2.290 \text{ m.} \\ \therefore \text{excess poop ht} = .310 \text{ m.} \end{array} & \left. \begin{array}{l} \therefore \text{new sheer @ A.T.} \\ \text{actual sheer} = .477 \\ + \text{Excess ht} = .310 \\ + \text{additional poop sheer} = .098 \\ \hline \text{new sheer @ A.T.} = .885 \text{ m.} \end{array} \right\} \\
 \begin{array}{l} \text{(b) Ht poop @ 2/3 @ side} = 2.698 \text{ m.} \\ \text{Ht. poop front actual} = 2.600 \text{ m.} \\ \therefore \text{additional poop sheer} = .098 \end{array} &
 \end{aligned}$$

$$\frac{L}{6} = 110.833$$

$$\text{Length Poop @ side} = \frac{45.040}{4.207}$$

$$\text{Sheer @ } \frac{L}{6} = \left(\frac{4.207}{45.040} \right)^2 \times 885 = 8 \text{ mfm.}$$

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £