

29 SEP 1953

Index No. 44185
(For London Office only.)

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	Port of Survey
t/t "SAXONSKY"	---	Liberian Monrovia	About 13,000	1953.	Malmö.
Moulded Dimensions: Length 160270mm. Breadth 21946 mm. Depth 12220 mm.					Date of Survey
Moulded displacement at moulded draught = 85 per cent. of moulded depth 28800 tons					Whilst Building.
Coefficient of fineness for use with Tables .781 ✓					Surveyor's Signature <i>James K. Young</i>
					Particulars of Classification *100A1 Carrying Petroleum in Bulk.

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 12220mm	(a) Where D is greater than Table depth (D-Table depth) R = $8.33(12248-10685)30$ = 391 mm. ✓	Moulded Breadth (B) 21946
Stringer plate 28 mm	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓	Standard Round of Beam = $\frac{B \times 12}{50} = 439 \frac{mm}{mm}$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures ✓	Ship's Round of Beam = 480 mm.
Depth for Freeboard (D) = 12248 mm		Difference 41 mm
		Restricted to
		Correction = $\frac{Diff}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{41}{4} \times .5836 = -6 \frac{mm}{mm}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed (Equiv)...	32645mm	32645	2430	✓	32645
" overhang	-	-	-	-	-
R.Q.D. enclosed	-	-	-	-	-
" overhang	-	-	-	-	-
Bridge enclosed (Equiv)...	14559	14559	-	-	14559
" overhang aft	-	-	-	-	-
" overhang forward ...	-	-	-	-	-
F'cle enclosed	19525	19525	2310	✓	19525
" overhang	-	-	-	-	-
T'funk aft	-	-	-	-	-
" forward	-	-	-	-	-
Tonnage opening aft ...	-	-	-	-	-
" " forward	-	-	-	-	-
Total	66729	66729	-	-	66729

Standard Height of Superstructure	2.29M
" " R.Q.D.	✓
Deduction for complete superstructure	10.67 mm.
Percentage covered	$\frac{S}{L} =$
" " "	$\frac{S_1}{L} =$
" " "	$\frac{E}{L} =$
Percentage from Table, Line A TANKER 32.64.	
(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 = $1067 \times .3264 = 348 \frac{mm}{mm}$	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	1589	1	1589	975mm	975	1	975		
$\frac{1}{2}$ L from A.P. ...	706	4	2824	137mm	137	4	548		
$\frac{3}{4}$ L "	177	2	354	0	0	2	0		
Amidships	✓	4	✓	0	0	4	0		
$\frac{1}{4}$ L from F.P. ...	353	2	706	0	0	2	0		
$\frac{1}{2}$ L "	1412	4	5648	3	3	4	12		
F.P.	3178	1	3178	1929	1929	1	1929		
Total			14299				3464		

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{10835}{18} \left(.75 - \frac{2082}{5418} \right) = +326 \frac{mm}{mm}$

If limited on account of midship superstructure. ✓

Mean actual sheer aft = Deficient

Mean standard sheer aft =

Mean actual sheer forward = Deficient

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = } Tanker.

" " aft of " = } Deficient Sheers.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 40.18 Ft.

Summer freeboard = 9.56

Moulded draught (d) = 30.62

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 7.66 = 7 $\frac{3}{4}$

Addition for Winter North Atlantic Freeboard (if required) = 5.26 + 7.66 = 12.92 = 13"

Deduction for Fresh Water.

(Shore) Displacement in salt water at summer load water line $\Delta = 25758$

Tons per inch immersion at summer load water line T = 79.56

Deduction = $\frac{\Delta}{40 T}$ inches = 8.09 = 8"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction 391

Deduction for superstructures 348

Sheer correction 326

Round of Beam correction 6

Correction for Thickness of Deck amidships -

Other corrections, scantlings, etc. -

2373 ✓

2549 ✓

+	-
391	-
-	348
326	-
-	6
-	-
-	-
717	354

Summer Freeboard = 2912.2 = 29 $\frac{1}{2}$ - 6 $\frac{3}{4}$

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: - CONTD. & SHIPS SIDE			
Tropical Fresh Water Line above Centre of Disc	15 $\frac{3}{4}$ "	Tropical Fresh Water Freeboard	6 $\frac{1}{2}$ 3/4"
Fresh Water Line " "	8"	Fresh Water " "	5 $\frac{1}{2}$ 3/4"
Tropical Line " "	7 $\frac{3}{4}$ "	Tropical " "	5 $\frac{1}{2}$ 11"
Winter Line below " "	7 $\frac{3}{4}$ "	Winter " "	7 $\frac{1}{2}$ 2 1/2"
Winter North Atlantic Line " "	13"	Winter North Atlantic " "	7 $\frac{1}{2}$ 7 3/4"

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.

ENGLISH TONS

DISPLACEMENT IN SALT WATER & TONS/INS. IMMERSION

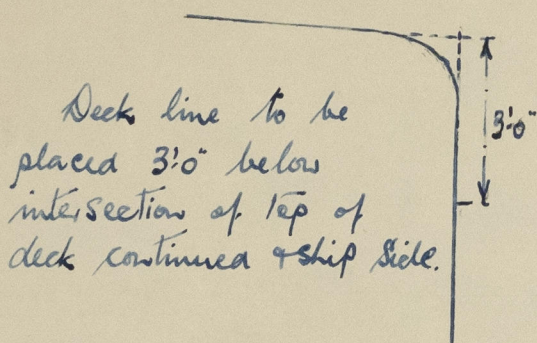
MOULDED DRAFT mm.	(Extreme) DISPLACEMENT	TONS/INS.
85 = 10387	28910	81.37
80 = 9776	27040	80.35
75 = 9165	25260	79.25
70 = 8554	23480	78.10

BRIDGE

$$\begin{aligned}
 \text{Length at Side} &= 13810 \\
 + \frac{2}{3} \times 1630 &= 1087 \\
 \hline
 &14897 \times \frac{21446}{21946} \\
 &= 14559
 \end{aligned}$$

ROUNDED STRINGER

$$\begin{aligned}
 \text{Loss of Sectional Area} &= 2 \left(500^2 - \frac{\pi 500^2}{4} \right) \\
 \text{Affect on depths} &= \frac{2 \times 500^2 \left(1 - \frac{\pi}{4} \right)}{21946} \\
 &= 5 \text{ mm} \therefore \text{which is negligible.}
 \end{aligned}$$



Trade of ship All seas.

Names of sister ships t/t 359 "Saxonsea".

Builder's name and yard number Rockums Mek. Verkstads A.-B., Yard No. 360.

Owners North American Shipping & Trading Co. (London) Ltd.

Fee £



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Foundation