

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

Id 6891

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	
TENAGODUS EX HORSESHOE	181714	BRITISH LONDON	10,636 10654 M.O.T. 15553	1944	Port of Survey. LIVERPOOL Date of Survey. August 1947
Moulded Dimensions: Length 503.00' Breadth 68.00' Depth 39.25' TO CR. OF RUDDER STOCK Moulded displacement at moulded draught = 85 per cent. of moulded depth 24,350 tons Coefficient of fineness for use with Tables .747					Surveyor's Signature. Hannish C. Murray Particulars of Classification. Class contemplated

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	... .. 39'25"	(a) Where D is greater than Table depth (D-Table depth) R = 39.33 - 33.53 = 5.80		Moulded Breadth (B)	68'
Stringer plate	... .. 08"	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓		Standard Round of Beam = $\frac{B \times 12}{50}$	= 16.32
Sheathing on exposed deck				Ship's Round of Beam SEE SKETCH	= 15.82
T ($\frac{L-S}{L}$) =				Difference	Sufficient 50 ✓
Depth for Freeboard (D) =	39.33 ✓	Diff ^c		Restricted to	
		Correction = $\frac{\text{Diff}^c}{4} \times (1 - \frac{S_1}{L})$			= $\frac{50}{4} \times .5972 = +.07$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>equiv^{lt}</i> ...	110. ⁹² 42	110.92	8'-0	✓	110.92
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed <i>equiv^{lt}</i> ...	38.67	38.67	8'-0"	✓	38.67
„ overhang aft ...					
„ overhang forward ...					
F'ele enclosed ...	52. ³ 62	52.63	10'-0"	✓	52.63
„ overhang ...	.75	.38	"		.38
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward...					
Total ...	202.97	202.60			202.60

Standard Height of Superstructure 7.50 ✓

" " R.Q.D.

Deduction for complete superstructure 42.00 ✓

Percentage covered $\frac{S}{L} = 40.35$ ✓

" " $\frac{S_1}{L} =$ } 40.28 ✓

" " $\frac{E}{L} =$ }

Percentage from Table, Line ~~A~~ TANKER - 31.28 ✓
(corrected for absence of forecastle (if required))

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

Interpolation for bridge less than $\cdot 2L$ (if required)

Deduction = $42.00 \times .3128 = 13.14$ ✓

SHEER CORRECTION.

Station	Standard Ordnate	S M	Product	Actual Ordnate	Effective Ordnate	S M	Product
A.P. ...	60.30	1	60.30	16.00	16.00	1	16.00
$\frac{1}{8}$ L from A.P. ...	26.83	4	107.32	2.25	2.25	4	9.00
$\frac{2}{8}$ L " ...	6.63	2	13.26	-	-	2	
Amidships ...	-	4	-	-	-	4	
$\frac{2}{8}$ L from F.P. ...	13.27	2	26.54	-	-	2	
$\frac{1}{8}$ L " ...	53.67	4	214.68	5.50	5.50	4	22.00
F.P. ...	120.60	1	120.60	18.00	18.00	1	18.00
Total ...			542.70				65.00

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

Length of enclosed superstructure
L forward of amidships = } Tanket.
" " aft of " = }

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{477.70}{18} (.75 - .2017)$
 If limited on account of midship superstructure. ✓ 5483

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.

Deduction for Fresh Water.

Displacement in salt water at
summer load water line
 $\Delta = 21886$
Tons per inch immersion at
summer load water line
 $T = 67.2$

TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~

Correction for coefficient $\frac{.747 + .68}{1.36} = \frac{1.427}{1.36}$

88.19
92.54

	Ft.
Depth to Freeboard Deck	= 39.33
Summer freeboard	= 9.23
Moulded draught (d)	= 30.10

$$\text{Deduction} = \frac{\Delta}{40 T} \text{ inches}$$

$$= 8.14 = 8$$

Depth Correction	...	...	...	17.40	—
Deduction for superstructures	...	...	...	—	13.14
Sheer correction	...	...	...	14.55	—
Round of Beam correction	...	...	...	.07	—
Correction for Thickness of Deck amidships	...	...	...	—	—
Other corrections, scantlings, etc.	...	...	...	—	—

Addition for Winter North Atlantic Freeboard (if required) = $7.52 + 5.03 = 12.55" = 12\frac{1}{2}"$

	DFT.	DISP.
	29.6	21,350
	30.0	21,750
	30.4	22,150

DFT.	DISP.	T.P.1
29-6	21,350	66.8
30-0	21,750	67.1
30-6	22,150	67.4

$$\frac{32.02}{13.14} + 18.88$$

Summer Freeboard = 111.42

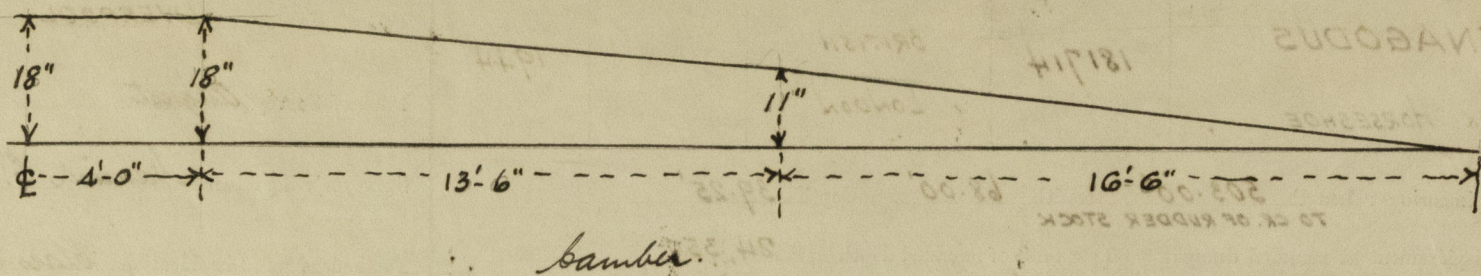
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck :—

Tropical Fresh Water Line above Centre of Disc	...	15 ³ / ₄ "
Fresh Water Line	" "	8 ¹ / ₄ "
Tropical Line	" "	7 ¹ / ₂ "
Winter Line	" "	7 ¹ / ₂ "
Winter North Atlantic Line	" "	12 ¹ / ₂ "

Tropical Fresh Water Freeboard	...	...	7'-11"
Fresh Water	"	...	8'-6"
Tropical	"	...	8'-7 1/4"
Winter	"	...	9'-10 1/4"
Winter North Atlantic	"	...	10'-3 1/4"

Tenagodus.

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.



$$\text{Roop} - = 107.75$$

$$\frac{2}{3} \times 4.75 = 3.17$$

$$\frac{110.92}{\text{equivalent length.}}$$

$$\text{Bridge} = 36.0$$

$$\frac{2}{3} \times 4.0 = 2.67$$

$$\frac{38.67}{\text{equivalent length.}}$$

bamber

$$(8' \times 12') \times 18 = 1728$$

$$(27 \times 12) \times 14.5 = 4698$$

$$(16.50 \times 12) \times 11 = 2178$$

$$\text{Area} = 8604 \text{ sq. ins}$$

$$\frac{2}{3} \times (68 \times 12) = 8604$$

$$h = \frac{8604 \times 3}{2 \times (68 \times 12)}$$

$$\text{equivalent camber} = 15.82''$$

Trade of ship

Tanker

Names of sister ships

T2 SE A1 Tankers

Builder's name and yard number

Alabama Dry dock & Shipbuilding Co.

Owners

Anglo Saxon Petroleum Co.

Fee £

20

MLD



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Foundation