

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name "TRIGONOSEMUS" Official Number 181748 Nationality and Port of Registry BRITISH LONDON Gross Tonnage 10676 10685 Date of Build MAY 1944 Port of Survey FALMOUTH

Moulded Dimensions: Length 503'00 Breadth 68'00 Depth 39'25

Moulded displacement at moulded draught = 85 per cent. of moulded depth 24300 tons

Coefficient of fineness for use with Tables .745

Date of Survey 14th OCTOBER 1947

Surveyor's Signature Alex M. Jenkins

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 =		Moulded Breadth (B)	68'00
Stringer plate	.08	(39.33 - 33.53) R =	+17.40"	Standard Round of Beam = $\frac{B \times 12}{50}$	16.32
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	5.80	Ship's Round of Beam	18"
$T \left(\frac{L-S}{L} \right) =$				Difference	1.68
Depth for Freeboard (D) =	39.33	If restricted by superstructures	✓	Restricted to	
				Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{1.68}{4} \times 1007 = -25"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	109.17	109.17	8'-0"		109.17
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	38.67	38.67	8'-0"		38.67
" overhang aft					
" overhang forward					
F'cle enclosed	52.63	52.63	10'-0"		52.63
" overhang	.75	.38			.38
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	201.22	200.85			200.85

Standard Height of Superstructure 7.50

" " R.Q.D. ✓

Deduction for complete superstructure 42.00

Percentage covered $\frac{S}{L} = 40.01$

" " $\frac{S_1}{L} = 39.93$

Percentage from Table, Line A. Tanker 30.93 (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 = 42.00 × 30.93 = 12.99

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	60.30	1	60.30	24.0	24.00	1	24.00
$\frac{1}{2}$ L from A.P.	26.83	4	107.32	4.0	4.00	4	16.00
$\frac{3}{4}$ L	6.63	2	13.26	0	-	2	-
Amidships	-	4	-	0	-	4	-
$\frac{1}{4}$ L from F.P.	13.27	2	26.54	0	-	2	-
$\frac{1}{2}$ L	53.67	4	214.68	6.0	6.00	4	24.00
F.P.	120.60	1	120.60	18.0	18.00	1	18.00
Total			542.70				82.00

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{460.70}{18} \left(.75 - \frac{200.85}{503} \right) = +14.07"$

If limited on account of midship superstructure.

Mean actual sheer aft = Sufficient

Mean standard sheer aft =

Mean actual sheer forward = Sufficient

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " = } Tanker.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 39.33

Summer freeboard = 9.23

Moulded draught (d) = 30.10

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 7.52 = 7 $\frac{1}{2}"$

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

Deduction for Fresh Water.

Displacement in salt water at summer load water line $\Delta = 21890$.

Tons per inch immersion at summer load water line T = 67

Deduction = $\frac{\Delta}{40 T}$ inches = 8.17 = 8 $\frac{1}{4}"$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction	17.40	-
Deduction for superstructures	-	12.99
Sheer correction	14.07	-
Round of Beam correction	-	25
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	31.47	13.24
Summer Freeboard	110.63	

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

Tropical Fresh Water Line above Centre of Disc	15 $\frac{1}{4}"$
Fresh Water Line	8 $\frac{1}{4}"$
Tropical Line	7 $\frac{1}{2}"$
Winter Line below	7 $\frac{1}{2}"$
Winter North Atlantic Line	12 $\frac{1}{2}"$

Tropical Fresh Water Freeboard	9'2 $\frac{3}{4}"$
Fresh Water	7'11"
Tropical	8'6 $\frac{1}{2}"$
Winter	8'7 $\frac{1}{4}"$
Winter North Atlantic	9'10 $\frac{1}{4}"$

Trigonosemus.

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.

IT WILL BE RECOMMENDED THE VESSEL BE CONTINUED CLASSIFICATION CONTEMPLATED AND TO HAVE THE NOTATION OF EXAMINED L.R. 10, 47 VALID FOR 12 MONTHS.

Alex. M. Jenkins.
14th October 1947.

$$\begin{aligned} \text{Roop} &= 106.50' \\ \frac{2}{3} \times 4 &= 2.67' \\ \hline 109.17' &= \text{equivalent enclosed length.} \end{aligned}$$

$$\begin{aligned} \text{Bridge} &= 36.00' \\ \frac{2}{3} \times 4 &= 2.67' \\ \hline 38.67 &= \text{equivalent enclosed length.} \end{aligned}$$

Equivalent enclosed =

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

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

$$(16.50 \times 12) \times 11 = 4170$$

8604 sq. ft.

$$754 (68 \times 12) = 8604$$

$$W = 8604 \times 2$$

$$2 (68 \times 12)$$

$$= 15208 = \text{equivalent enclosed length}$$

Trade of ship CARRYING PETROLEUM IN BULK (OCEAN)

Names of sister ships

Builder's name and yard number KAISER COMPANY INCORPORATED. PORTLAND OREGON.

Owners ANGLO SAXON PETROLEUM CO. LTD.

Fee £ 20 : 0 : 0

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