

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name "NEOTHYRIS"	Official Number 180810	Nationality and Port of Registry BRITISH London	Gross Tonnage 8243	Date of Build 1945	Port of Survey Delft
Moulded Dimensions: Length 460.96' Breadth 59.0' Depth 34.82'					Date of Survey DURING CONSTRUCTION
Moulded displacement at moulded draught = 85 per cent. of moulded depth 18207 tons					Surveyor's Signature A. S. Wiche
Coefficient of fineness for use with Tables .791					Particulars of Classification *100 A1 CARRYING PETROLEUM IN BULK. (CLASS CONTEMPLATED)

DEPTH FOR FREEBOARD (D). Moulded depth ... 34.82 Stringer plate80"07 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 34.89	DEPTH CORRECTION. (a) Where D is greater than Table depth (D - Table depth) R = $(34.89 - 30.73) \times 3 = +12.48$ (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) 59.0' Standard Round of Beam = $\frac{B \times 12}{50} = 14.16$ Ship's Round of Beam 14.75" = 14.75 Difference .59 Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.59^2}{4} \times .5758 = -.08$
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DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>exposed</i> ...	96.73	96.73	7'-6"	✓	96.73
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed <i>exposed</i> ...	50.83	50.83	7'-6"	✓	50.83
" overhang aft ...	2.92	2.19			2.19
" overhang forward ...					
F'cle enclosed ...	45.80	45.80	7'-6"	✓	45.80
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	196.28	195.55			195.55

Standard Height of Superstructure ... 7.5
" " R.Q.D. ... ✓
Deduction for complete superstructure ... 42"
Percentage covered $\frac{S}{L} = 42.58$
" " $\frac{S_1}{L} =$
" " $\frac{E}{L} =$ } 42.42
Percentage from Table, Line A, Tanker 33.42
(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 x .3342 = -14.03

SHEER CORRECTION.									
Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	56.10	1	56.10	46.7	46.70	1	46.70	1	46.70
$\frac{1}{8}L$ from A.P. ...	24.96	4	99.84	7.6	7.60	4	30.40	4	30.40
$\frac{2}{8}L$ " ...	6.17	2	12.34	0	-	2	-	2	-
Amidships ...	-	4	-	0	-	4	-	4	-
$\frac{2}{8}L$ from F.P. ...	12.34	2	24.68	0	-	2	-	2	-
$\frac{1}{8}L$ " ...	49.92	4	199.68	30.5	30.50	4	122.00	4	122.00
F.P. ...	112.19	1	112.19	102.0	102.00	1	102.00	1	102.00
Total ...							301.10		

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

If limited on account of midship superstructure.

Mean actual sheer aft =
Mean standard sheer aft = } *Deficient*

Mean actual sheer forward =
Mean standard sheer forward = }

Length of enclosed superstructure forward of amidships =
L

" " aft of " = } *Tanker*

If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 34.90 Summer freeboard = 7.39 Moulded draught (d) = 27.51 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.87 + 6.34 Addition for Winter North Atlantic Freeboard (if required) = 6.87 + 4.61 = 11.48 = 11½"	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 168.33$ Tons per inch immersion at summer load water line $T = 56.38$ Deduction = $\frac{\Delta}{40 T}$ inches $\frac{168.33}{40 \times 56.38} = 7.46 = 7\frac{1}{2}"$ 28'-0" 17115. 56.55 27'-0" 16439. 56.15	TABULAR FREEBOARD corrected for Fresh Deck (if required) Correction for coefficient $\frac{.791 + .68}{1.36} \times \frac{1.471}{1.36}$ <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction ...</td> <td>12.48</td> <td>-</td> </tr> <tr> <td>Deduction for superstructures ...</td> <td>-</td> <td>14.03</td> </tr> <tr> <td>Sheer correction ...</td> <td>6.08</td> <td>-</td> </tr> <tr> <td>Round of Beam correction ...</td> <td>-</td> <td>.08</td> </tr> <tr> <td>Correction for Thickness of Deck amidships ...</td> <td>-</td> <td>-</td> </tr> <tr> <td>Other corrections, scantlings, etc. ...</td> <td>-</td> <td>-</td> </tr> <tr> <td></td> <td>18.56</td> <td>14.11</td> </tr> </table> Summer Freeboard = 88.75		+	-	Depth Correction ...	12.48	-	Deduction for superstructures ...	-	14.03	Sheer correction ...	6.08	-	Round of Beam correction ...	-	.08	Correction for Thickness of Deck amidships ...	-	-	Other corrections, scantlings, etc. ...	-	-		18.56	14.11
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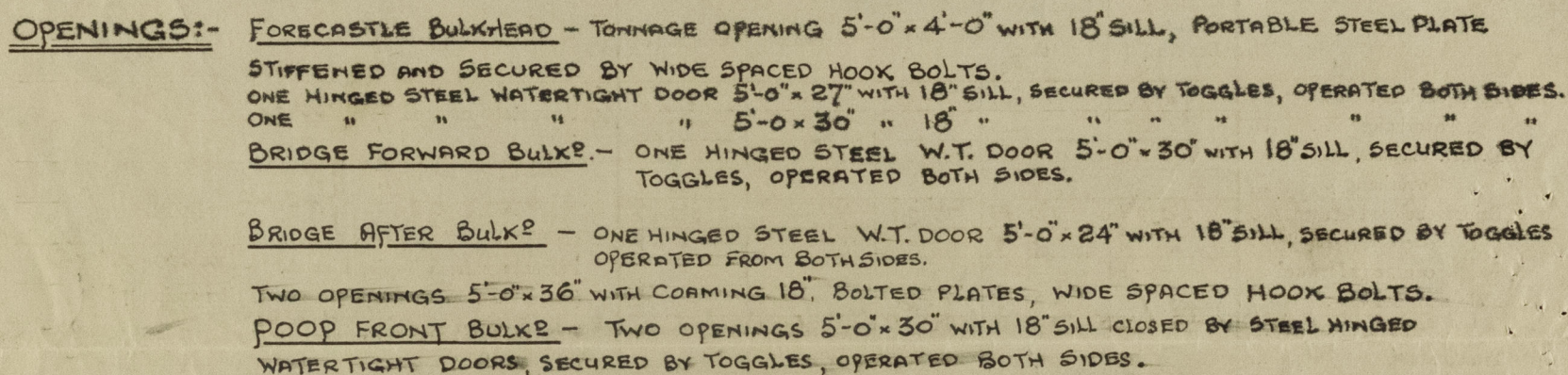
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood Steel, Deck :-			
Tropical Fresh Water Line above Centre of Disc ...	14¼"	Tropical Fresh Water Freeboard ...	7'-4¾"
Fresh Water Line " " ...	7½"	Fresh Water " " ...	6'-2½"
Tropical Line " " ...	6¾"	Tropical " " ...	6'-9¼"
Winter Line below " " ...	6¾"	Winter " " ...	6'-10"
Winter North Atlantic Line " " ...	11½"	Winter North Atlantic " " ...	7'-11½"

11.10.45

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16/1/46

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.



THIS REPORT C11 (COMP.) IS FORWARDED FOR MARKING OF FREEBOARDS BEFORE VESSEL IS LAUNCHED ON THE 24th OCTOBER 1945.

Poop 93.40
 $\frac{2}{3} \times 5 = \frac{3.33}{96.73}$

Bridge - 47.50
 $\frac{2}{3} \times 50 = \frac{3.33}{50.83}$

Trade of ship *Ocean going tanker.*

Names of sister ships *"BRITISH SUPREMACY" and standard type tankers building on Clyde, plans received from H. & W. Ltd; Govan.*

Builder's name and yard number *Messrs Harland and Wolff Ltd; No 1285.*

Owners *Messrs Anglo-Saxon Petroleum Company Limited.*

Fee £ *10* : *0* : *0*