

Glasgow 72200

17 OCT 1947

Index No. 39307
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name TURBINELLUS.	Official Number 181767.	Nationality and Port of Registry BRITISH. LONDON.	Gross Tonnage 10,640	Date of Build 1944.	Port of Survey GLASGOW.
Moulded Dimensions: Length 503.00 Breadth 68.00 Depth 39.25 .					Date of Survey 16TH OCTOBER 1947.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 24300. tons					Surveyor's Signature <i>George Sullivan.</i>
Coefficient of fineness for use with Tables .745.					Particulars of Classification <i>Classification contemplated.</i>

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 = +17.40"		Moulded Breadth (B)	68.00
Stringer plate08	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 5.80"		Standard Round of Beam = $\frac{B \times 12}{50}$	16.32
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = \text{NONE}$		If restricted by superstructures		Ship's Round of Beam	18"
Depth for Freeboard (D) = 39.33				Difference	1.68"
				Restricted to	
				Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right)$	1.68 x 6009 = -25"

DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	108.67	108.67	8'-0"		108.67
" overhang	106.0				
R.Q.D. enclosed					
" overhang	38.67	38.67	8'-0"		38.67
Bridge enclosed	86.0				
" overhang aft	40.0				
" overhang forward					
F'cle enclosed	53.0	53.0	10'-0"		53.0
" overhang	.83	.42			.42
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	201.17	200.76			200.76

Standard Height of Superstructure **7.5**
" " R.Q.D. **—**
Deduction for complete superstructure **+2.00**
Percentage covered $\frac{S}{L} = 39.99$
" " $\frac{S_1}{L} = 39.91$
" " $\frac{E}{L} = 39.91$
Percentage from Table, Line **A** **Tanker 30.91**
(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 x .3091 = -12.98"**

SHEER CORRECTION.							
Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S
A.P. ...	60.30	1	60.30	24.00	24.00	1	24.00
$\frac{1}{2}$ L from A.P. ...	26.835	4	107.34	4.00	4.00	4	16.00
$\frac{3}{4}$ L " ...	6.63	2	13.26	—	—	2	—
Amidships ...	—	4	—	—	—	4	—
$\frac{3}{4}$ L from F.P. ...	13.27	2	26.54	—	—	2	—
$\frac{1}{4}$ L " ...	53.67	4	214.68	6.00	6.0	4	24.00
F.P. ...	120.60	1	120.60	18.00	18.0	1	18.00
Total ...			542.72				82.00

Mean actual sheer aft
Mean standard sheer aft = **< 1**
Mean actual sheer forward
Mean standard sheer forward = **< 1**
Length of enclosed superstructure forward of amidships = **Tankers with definite sheer.**
" " aft of " = **—**
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{460.72 - 1999}{18} = +14.08"$
If limited on account of midship superstructure. **5501**
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. 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 = 7.51 - 7.2 Addition for Winter North Atlantic Freeboard (if required) = 7.52 + 5.03 = 12.55	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 21890$ Tons per inch immersion at summer load water line $T = 67.0$ Deduction = $\frac{\Delta}{40T}$ inches = 8.17 = 8 1/4"	TABULAR FREEBOARD corrected for Flush Deck (if required) 88.19 Correction for coefficient 1.425/1.36 92.42 <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td>17.40</td> <td>—</td> </tr> <tr> <td>Deduction for superstructures</td> <td>—</td> <td>12.98</td> </tr> <tr> <td>Sheer correction</td> <td>14.08</td> <td>—</td> </tr> <tr> <td>Round of Beam correction</td> <td>—</td> <td>.25</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>31.48</td> <td>13.23</td> </tr> </table> Summer Freeboard = 110.67		+	-	Depth Correction	17.40	—	Deduction for superstructures	—	12.98	Sheer correction	14.08	—	Round of Beam correction	—	.25	Correction for Thickness of Deck amidships	—	—	Other corrections, scantlings, etc.	—	—		31.48	13.23
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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	15 3/4"	Tropical Fresh Water Freeboard	7 1/2"
Fresh Water Line	8 1/4"	Fresh Water	8 1/2"
Tropical Line	7 1/2"	Tropical	8 1/4"
Winter Line below	7 1/2"	Winter	9 1/4"
Winter North Atlantic Line	12 1/2"	Winter North Atlantic	10 1/4"

Turbinellus

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.

Port at tide	106	Bridge at tide =	36.0
Round $\frac{2}{3} \times 4$	2.67	Round $\frac{2}{3}$	2.67
Equiv.	<u>108.67</u>	Equiv.	<u>38.67</u>

[Signature]
LONDON

Trade of ship INTERNATIONAL TRADE

Names of sister ships

Builder's name and yard number "TURBINELLUS" EX. "BRYCE CANYON" (T2. TANKER).

Owners ANGLO SAXON PETROLEUM CO. LD.

Fee £ 20

This vessel is at present under general examination survey for classification contemplated and is expected to sail on 22nd October 1947. I shall be glad to have load line certificates for issue to sail this date.



Lloyd's Register
Foundation