

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for *M.V. Roop and Forecastle with continuous tank* having *Roop and Forecastle with continuous tank*

Port of Survey *London*

Date of Survey *28th & 30th Dec 32*

Name of Surveyor *B. H. Stocks*

Particulars of Classification *+100A1*  
*benzoyl Petroleum in bulk*

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
" <i>RUSOIL PROD</i> "	<i>British</i> <i>Bristol</i>	<i>160000</i>	<i>836</i>	<i>1930-7</i>

Moulded Dimensions: Length *190'0* Breadth *32'6* Depth *14'3.4"*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *1528* tons

Coefficient of fineness for use with Tables *711*

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... .. <i>14.33</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(14.37 - 12.67) 1.461 = + 2.48"</i>	Moulded Breadth (B) <i>32.5'</i>
Stringer plate ... .. <i>.04</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <i>✓</i>	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{7.80}{50} = 8.00"$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures <i>✓</i>	Ship's Round of Beam = $\frac{8.00}{20} = .20"$
Depth for Freeboard (D) = <i>14.37</i>		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.20}{4} \times .2825 = -.01"$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poep enclosed ... ..	<i>48.33</i>	<i>48.33</i>	<i>7'6</i>	<i>✓</i>	<i>48.33</i>	Standard Height of Superstructure <i>6.00</i>
" overhang ... ..	<i>✓</i>					" " R.Q.D. <i>✓</i>
R.Q.D. enclosed ... ..	<i>✓</i>					Deduction for complete superstructure <i>25.00</i>
" overhang ... ..	<i>✓</i>					Percentage covered $\frac{S}{L} = 37.02\%$
Bridge enclosed ... ..	<i>✓</i>					" " $\frac{S_1}{L} = 71.75\%$
" overhang aft ... ..	<i>✓</i>					" " $\frac{E}{L} = 66.42\%$
" overhang forward	<i>20.17</i>					Percentage from Table, Line A.
F'cle enclosed ... ..	<i>20.17</i>	<i>20.17</i>	<i>6'6</i>	<i>✓</i>	<i>20.17</i>	(corrected for absence of forecastle (if required))
" overhang ... ..	<i>1.10</i>	<i>.91</i>			<i>.91</i>	Percentage from Table, Line B. Tanker <i>59.06%</i>
Trunk aft ... ..	<i>1.10</i>	<i>66.91</i>	<i>see page 14</i>		<i>56.78</i>	(corrected for absence of forecastle (if required))
" forward ... ..	<i>1.10</i>					Interpolation for bridge less than 2L (if required)
Tonnage opening aft ... ..	<i>✓</i>					Deduction = <i>25 × .5906 = 14.76%</i>
" " forward	<i>✓</i>					
Total ... ..	<i>70.33</i>	<i>136.32</i>			<i>126.19</i>	

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ... ..	<i>29.00</i>	<i>1</i>		<i>29.00</i>	<i>27.00</i>	<i>27.00</i>	<i>1</i>		<i>27.00</i>	Mean actual sheer aft = <i>Deficient</i>
$\frac{1}{8}$ L from A.P. ... ..	<i>12.91</i>	<i>4</i>		<i>51.64</i>	<i>7.0</i>	<i>2.50</i>	<i>4</i>		<i>10.00</i>	Mean actual sheer forward = <i>Deficient</i>
$\frac{2}{8}$ L " ... ..	<i>3.19</i>	<i>2</i>		<i>6.38</i>	<i>1.5</i>	<i>.10</i>	<i>2</i>		<i>.20</i>	Mean standard sheer forward
Amidships ... ..	<i>✓</i>	<i>4</i>		<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>4</i>		<i>✓</i>	Length of enclosed superstructure forward of amidships =
$\frac{2}{8}$ L from F.P. ... ..	<i>6.38</i>	<i>2</i>		<i>12.76</i>	<i>4.0</i>	<i>✓</i>	<i>2</i>		<i>✓</i>	" " aft of " =
$\frac{1}{8}$ L " ... ..	<i>25.81</i>	<i>4</i>		<i>103.24</i>	<i>15.0</i>	<i>5.60</i>	<i>4</i>		<i>22.40</i>	
F.P. ... ..	<i>58.00</i>	<i>1</i>		<i>58.00</i>	<i>54.00</i>	<i>54.00</i>	<i>1</i>		<i>54.00</i>	
Total ... ..				<i>261.02</i>					<i>113.60</i>	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( 75 - \frac{S}{2L} \right) = \frac{147.42}{18} \left( 75 - .1851 \right) = + 4.63"$

If limited on account of midship superstructure. *56.49*

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 = *14.37*  
Summer freeboard = *1.19*  
Moulded draught (d) = *13.18*

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = *3\frac{1}{4}"*  
Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta =$   
Tons per inch immersion at summer load water line  
 $T =$   
Deduction =  $\frac{\Delta}{40T}$  inches =

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ... .. *2.48*  
Deduction for superstructures ... .. *14.76*  
Sheer correction ... .. *4.63*  
Round of Beam correction ... .. *.01*  
Correction for Thickness of Deck amidships ... ..  
Other corrections, scantlings, etc. ... ..

Summer Freeboard = *14.33*

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

Tropical Fresh Water Line above Centre of Disc ... ..  
Fresh Water Line " " ... ..  
Tropical Line " " ... ..  
Winter Line below " " ... ..  
Winter North Atlantic Line " " ... ..

Tropical Fresh Water Freeboard ... ..  
Fresh Water " " ... ..  
Tropical " " ... ..  
Winter " " ... ..  
Winter North Atlantic " " ... ..

# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS					
Fore Deck + Trunk Top					
Description of Hatchway	Fore Deck	Fore Hold	Coff	Cargo Hatch	Wing Hatch
Dimensions of Hatchway	21' x 24'	10'0" x 5'6"	18' x 18'	3'6" x 3'6"	3'2" x 2'4"
COAMINGS	Height above Deck	6"	27"	6"	6" BA
	Thickness	3/16	40	3/16	40
	Sides	3/16	40	3/16	40
	Stiffeners	3/16	40	3/16	40
HATCH BEAMS	Number	1	1	1	1
	Spacing	1	1	1	1
	Scantling and Sketch	1	1	1	1
	Bearing Surface	1	1	1	1
FORE AND AFTERS	Number	1	1	1	1
	Spacing	1	1	1	1
	Unsupported Lengths	1	1	1	1
	Scantling and Sketch	1	1	1	1
HATCH COVERS	Material	Steel	Wood	Steel	Steel
	Thickness	7/16	3"	7/16	7/16
	How fitted	W.T.	F.A.	W.T.	O.T.
	Bearing Surface	2 3/4	2 3/4	2 3/4	2 3/4
Spacing of Cleats	4 foggles	20"	4 foggles	8 foggles	8 foggles
Number of Tarpaulins	2	2	2	2	2

\*Are wood fore and afters steel shod at all bearing surfaces? *yes*  
 Are battens and wedges efficient and in good condition? *yes*  
 Are tarpaulins in good condition and in accordance with rule requirements? *yes*  
 Are lashings provided in accordance with rule requirements? *yes*

Particulars of fiddle, funnel and ventilator coamings:—

*Of substantial construction and efficient condition. Engine Room skylight of steel with hinged steel flaps.*

Particulars of Flush Bunker Scuttles:—

*Nil.*

Particulars of Companionways:—

*To After Casement. Entrances from Steel deckhouse on Poop Deck. 2" Solid Teak doors 1'-9" x 4'-9" Sills 13" operated both sides.*

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

*Fore Deck:— 5' x 9" dia Height 15" x 36" x 30"  
 Trunk Top:— 6" x 15" dia Height 30" x 34"  
 Poop Deck:— 6" dia Gorsewicks 31" high x 30"  
 Fitted with temporary closing appliances.*

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

*Fore Deck:— 3" dia x 25' 34" high  
 Poop Deck:— 3 1/2" x 5" dia x 25' 30" high  
 Efficient  
 No temporary closing appliances*

Particulars of Gangway Cargo and Coaling Ports:—

*Nil.*

Particulars of Scuppers and Sanitary Discharge Pipes:—

*From Poop Deckhouses discharging above & below line of Upper Deck and fitted with storm valves*

Particulars of Side Scuttles:—

*Of substantial construction and fitted with hinged steel deadlights.*

Particulars of Guard Rails:—

*Poop Deck - 46" high 3 Rails Stanchions spaced about 48" apart  
 Trunk Top - 43" " " " " 48" "  
 Upper Deck - 43" " 2 Rails " " " 58" "  
 Fore Deck - 46" " 3 " " " 54" "*

Particulars of Gangways, Lifelines, etc.:—

*Trunk Top used as gangway.*

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well						
Forward Well						

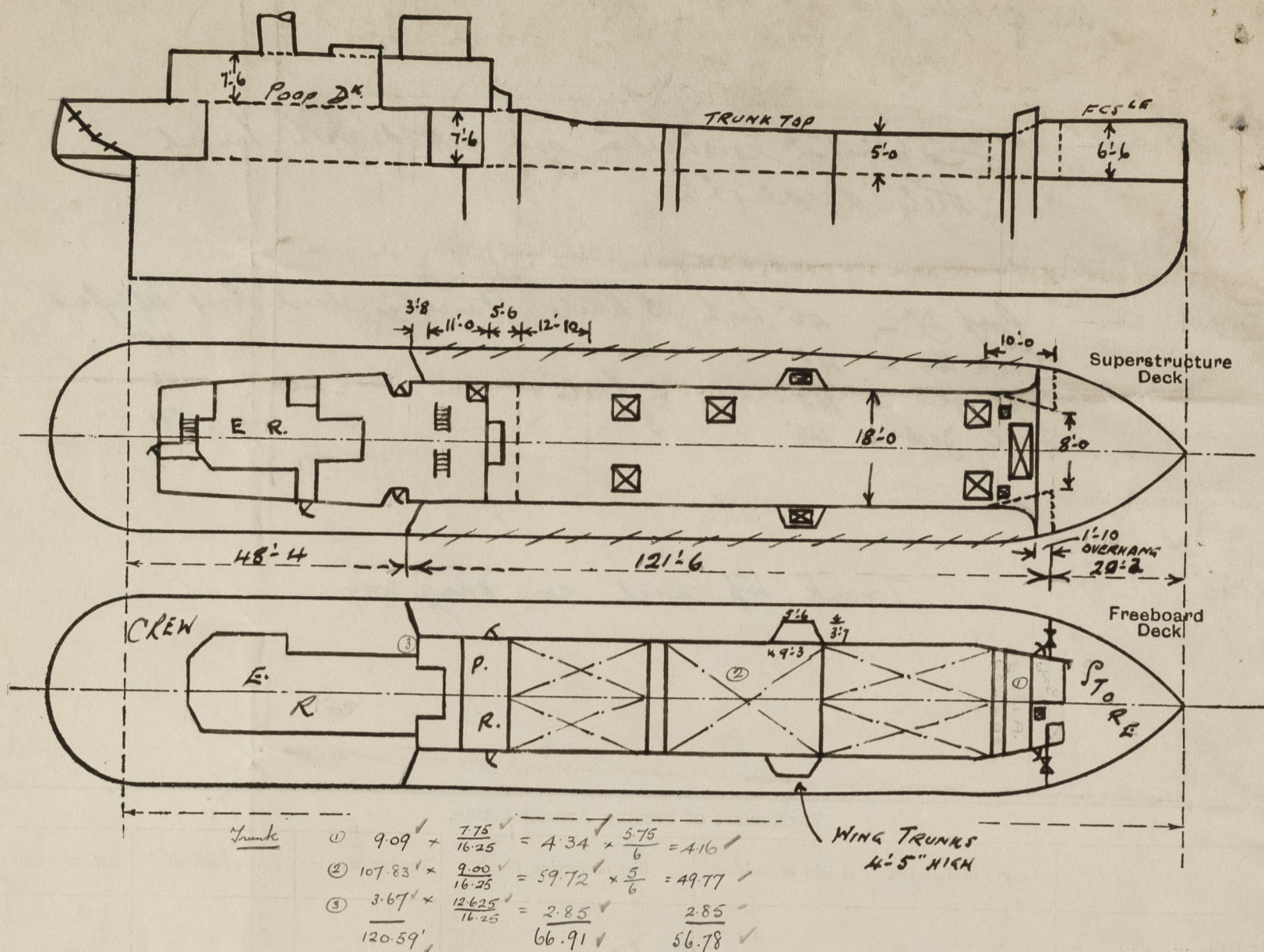
State position of each freeing port (F. and A. position and height above deck edge) { After Well:—  
 { Forward Well:—  
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—  
 Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	34	30	7 x 3 x 34	24	Lag To A.	-	✓	7'6"
Raised Quarter Deck Bulkhead	✓							
Bridge, After Bulkhead	✓							
Bridge, Forward Bulkhead	✓							
Forecastle Bulkhead	34	30	2 1/2 x 2 1/2 x 30	31	Nil	4'0" x 3'0"	12"	6'6"
Trunk, Aft	✓							
Trunk, Forward	38	38	4 x 3 x 38	22	3/4" To A.	5'0" x 2'0"	19"	5'0" 7'6"
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓							
Exposed Machinery Casings on Superstructure Decks	30	26	3 x 2 1/2 x 34	33	Nil	5'0" x 2'0"	12"	7'6"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓							
Deckhouses on Flush Deck Ships	✓							

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	✓
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	✓
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	3" Skirting boards in full height riveted channels
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓
Exposed Machinery Casings on Superstructure Decks	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships	✓

*Steel hinged door operated both sides.*

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



State any special features in the construction of the ship:—

Computation requested under 1932 Load Line Rules.  
Survey held in dry dock.

Builder's name and yard number... *C. Hill & Sons Ltd No 179*

Names of sister ships... *✓*

Owners... *Russian Oil Products Ltd*

Fee £ *6 16 0*

Received by me

*(s) - 2 JAN 1933*



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