

18 AUG 1932

Rpt. C.11.

Index. No. 24860  
(For London Office only.)

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

14778

Computation of Freeboard for Steamer, ~~Sailing Ship~~, Tanker  
having Fourth, Trunk + Poop (combined)

Port of Survey Southampton

(Type of Superstructures.)

Date of Survey 18<sup>th</sup> August 1932

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

R.F.A. SCOTOL

British  
London

139161

1177  
1174

1916-11

Name of Surveyor E.R. Ryder Toyn

Moulded Dimensions: Length 210.00 Breadth 34.00 Depth 16.50 less 5.6.48

Moulded displacement at moulded draught = 85 per cent. of moulded depth 2200 tons

Coefficient of fineness for use with Tables 769

Particulars of Classification 4100 #1 with Freeboard  
Carrying Petroleum in Bulk  
S.S. form No. 3-10.29

### Depth for Freeboard (D)

Moulded depth	...	...	...	16.50
Stringer plate	...	...	...	.04
Sheathing on exposed deck	...	...	...	
$T \left( \frac{L-S}{L} \right) =$	...	...	...	
Depth for Freeboard (D) =	...	...	...	16.54

### Depth correction

(a) Where D is greater than Table depth (D - Table depth) R =	
$(16.54 - 14.00) 1.615 = + 4.10$	
(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)	34.00
Standard Round of Beam = $\frac{B \times 12}{50}$	8.16
Ship's Round of Beam	9.00
Difference	.84
Restricted to	
Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$\frac{.84}{4} \times .2956 = -.06$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	44.50	44.50	7		44.50
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...	40.00	40.00	7		40.00
F'cle enclosed ...	40.00	40.00			
" overhang ...					
Trunk aft ...	63.43	63.43			63.43
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	84.50	147.93			147.93

Standard Height of Superstructure	6.00
" R.Q.D.	
Deduction for complete superstructure	27.00
Percentage covered $\frac{S}{L} =$	40.24%
" $\frac{S_1}{L} =$	70.44%
" $\frac{E}{L} =$	70.44%
Percentage from Table, Line A Tanker =	63.54%
(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 =	27.00 x .6354 = 17.16

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	31.00	1		31.00	36	18.00	1		18.00
$\frac{1}{2}$ L from A.P. ...	13.79	4		55.16	15.74	5.00	4		20.00
$\frac{3}{8}$ L " ...	3.41	2		6.82	3.75		2		
Amidships ...		4					4		
$\frac{5}{8}$ L from F.P. ...	6.82	2		13.64	1.75	1.00	2		2.00
$\frac{3}{4}$ L " ...	27.59	4		110.36	6	10.50	4		42.00
F.P. ...	62.00	1		62.00	18	36.00	1		36.00
Total ...				278.98					118.00

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{160.98}{18} (.75 - .2012) = + 4.91$

If limited on account of midship superstructure,

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 = 16.54  
Summer freeboard = 1.50  
Moulded draught (d) = 15.04

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = 3 $\frac{3}{4}$ "

Addition for Winter North Atlantic Freeboard (if required) = 2.10 = 2"

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 2390$

Tons per inch immersion at summer load water line

$T = 149$

Deduction =  $\frac{\Delta}{40T}$  inches = 4.01 = 4"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction	4.10	
Deduction for superstructures		17.16
Sheer correction	4.91	
Round of Beam correction		.06
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	9.01	17.22

Summer Freeboard = 18.11

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

Tropical Fresh Water Line above Centre of Disc	...	7 $\frac{3}{4}$ "	Tropical Fresh Water Freeboard	...	0.104"
Fresh Water Line	...	4"	Fresh Water	...	1.2"
Tropical Line	...	3 $\frac{3}{4}$ "	Tropical	...	1.24"
Winter Line below	...	3 $\frac{3}{4}$ "	Winter	...	1.93"
Winter North Atlantic Line	...	5 $\frac{3}{4}$ "	Winter North Atlantic	...	1.113"

5m, 3.32.

RECEIVED  
MAR 1932

RECEIVED  
DEC 1932

RECEIVED  
AUG 1932



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...
COAMINGS	Height above Deck	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	Sides	...	...	...	...	...	...	...	...
	Stiffeners	...	...	...	...	...	...	...	...
HATCH BEAMS	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
	Scantling and Sketch	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
FORE AND AFTERS	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
	Unsupported Lengths	...	...	...	...	...	...	...	...
	Scantling and Sketch	...	...	...	...	...	...	...	...
HATCH COVERS	Material	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	How fitted	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
Spacing of Cleats	...	...	...	...	...	...	...	...	...
Number of Tarpaulins	...	...	...	...	...	...	...	...	...

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

Particulars of fiddle, funnel and ventilator coamings:—

*7" fiddle funnel & ventilator coamings strongly constructed  
 Steel lined plate over gratings  
 Engine room skylight, steel, strongly constructed with steel plate*

Particulars of Flush Banker Scuttles:—

Particulars of Companionways:— Companion to lower quarter fore. 4.2 x 3.6 - 6' high steel 1/4 plate with steel door 15" high  
 clip handles operated from either side  
 Pump Room 6.6 x 6', 7' high steel 1/4 plate. Riggers 3 x 3 x 1/2 spaced 2.3' apart. Steel door, 18" high  
 clip handles operated from either side

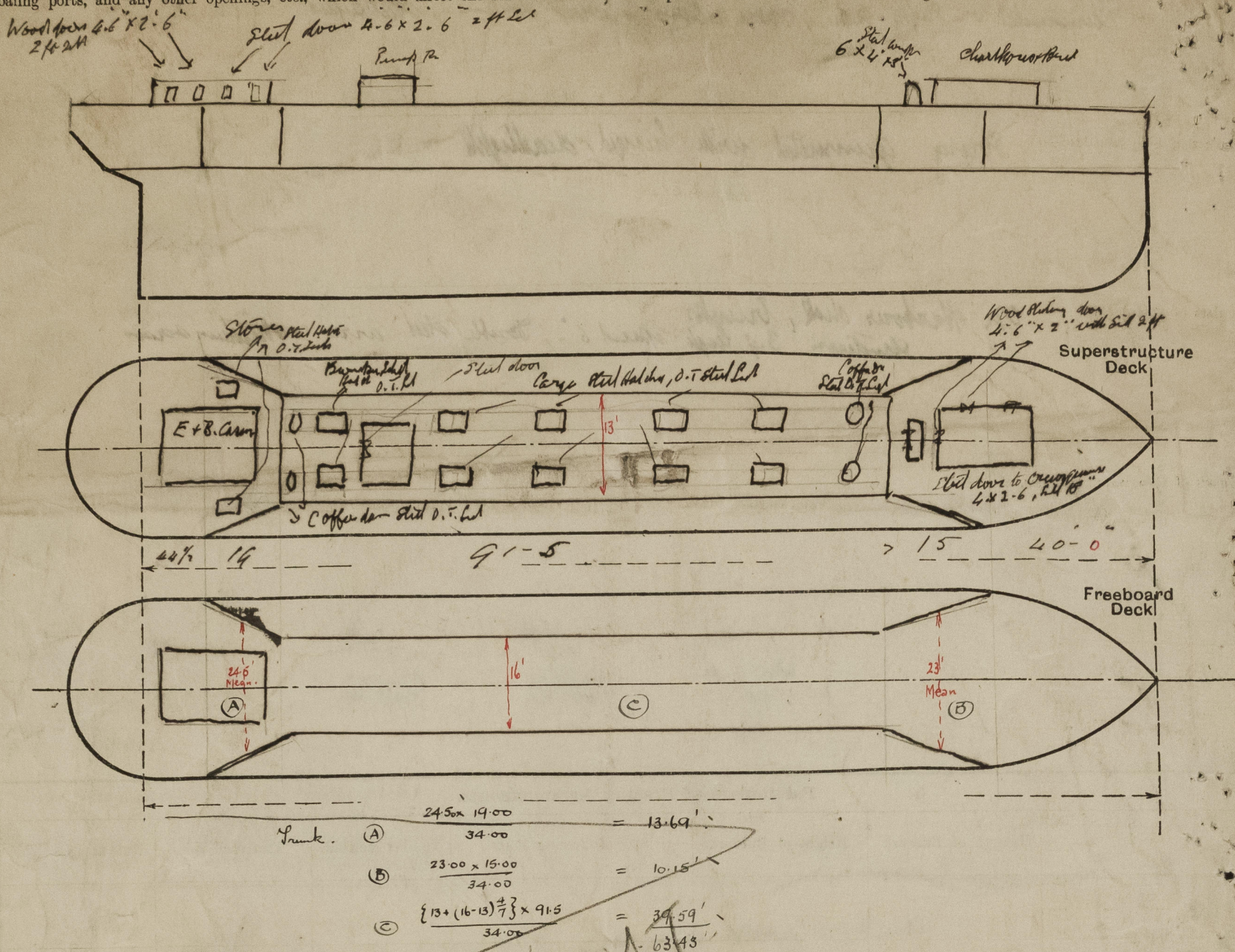
Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

*10" 2" with 26" canopy & R.P.  
 2 of 12" " 30" " 15" 6" 1/2  
 2 of 10" " 30" " 15" 6" 1/2  
 2 of 8" " 24" " 15" 6" 1/2  
 2 of 6" " 24" " 15" 6" 1/2  
 2 of 4" " 24" " 15" 6" 1/2  
 2 of 2" " 24" " 15" 6" 1/2  
 2 of 1" " 24" " 15" 6" 1/2  
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 2 of 1/16" " 24" " 15" 6" 1/2  
 2 of 1/32" " 24" " 15" 6" 1/2  
 2 of 1/64" " 24" " 15" 6" 1/2  
 2 of 1/128" " 24" " 15" 6" 1/2  
 2 of 1/256" " 24" " 15" 6" 1/2  
 2 of 1/512" " 24" " 15" 6" 1/2  
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 2 of 1/4096" " 24" " 15" 6" 1/2  
 2 of 1/8192" " 24" " 15" 6" 1/2  
 2 of 1/16384" " 24" " 15" 6" 1/2  
 2 of 1/32768" " 24" " 15" 6" 1/2  
 2 of 1/65536" " 24" " 15" 6" 1/2  
 2 of 1/131072" " 24" " 15" 6" 1/2  
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 2 of 1/4789048565205902682369834459844713955576690425987072" " 24" " 15" 6" 1/2  
 2 of 1/9578097130411805364739668919689427911153380851974144" " 24" " 15" 6" 1/2  
 2 of 1/19156194260823610729479337839378855822306761703948288" " 24" " 15" 6" 1/2  
 2 of 1/38312388521647221458958675678757711644613523407896576" " 24" " 15" 6" 1/2  
 2 of 1/76624777043294442917917351357515423289227046815793152" " 24" " 15" 6" 1/2  
 2 of 1/153249554086588885835834702715030846578454093631586304" " 24" " 15" 6" 1/2  
 2 of 1/306499108173177771671669405430061693156908187263172608" " 24" " 15" 6" 1/2  
 2 of 1/612998216346355543343338810860123386313816374526345216" " 24" " 15" 6" 1/2  
 2 of 1/1225996432692*



R.F.A. Scott

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 shown on the following sketches:—



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

Vessel examined afloat

Builder's name and yard number

Type from ship co.

Names of sister ships

Owners

The Admiralty

Fee £

8.10.0

Received by me

Expenses 1.13.3



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