

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

19279.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having *Raised Quarter 11" Short Bridge, and Focle.*Port of Survey *Leith*

(Type of Superstructures.)

Date of Survey *while building*

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

*FULHAM III**UK  
London**165452**15994**1937*Name of Surveyor *Ernest Law*Moulded Dimensions: Length *238'0"* Breadth *38'1"* Depth *18'6" (+4'36 RQDS)*Moulded displacement at moulded draught = 85 per cent. of moulded depth *3125* tonsCoefficient of fineness for use with Tables *.7674*Particulars of Classification *+100A1  
"WITH FREEBOARD"*

## Depth for Freeboard (D)

Moulded depth ... *18'5"*Stringer plate ... *.04'*

Sheathing on exposed deck

$$T \left( \frac{L-S}{L} \right) =$$

Depth for Freeboard (D) = *18'54"*

## Depth correction

(a) Where D is greater than Table depth

(D - Table depth) R =

$$(18.54 - 15.84) \times 1.831 = +4.89"$$

2.67

(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) *38'08" 18'5"*

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} = 9.14"$$

$$\text{Ship's Round of Beam} = 9.2"$$

$$\text{Difference} = \text{Excess} = .36"$$

Restricted to

$$\text{Correction} = \frac{\text{Diff}^{\circ}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.36}{4} \times .231 = -.02"$$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...	<i>145'0"</i>	<i>145'0"</i>	<i>4'25"</i>	<input checked="" type="checkbox"/>	<i>145'0"</i>
" overhang ...					
Bridge enclosed ...	<i>16'0"</i>	<i>16'0"</i>	<i>7'0"</i>	<input checked="" type="checkbox"/>	<i>16'0"</i>
" overhang aft ...					
" overhang forward ...					
Fore enclosed ...	<i>22'0"</i>	<i>22'0"</i>	<i>6'0"</i>	<input checked="" type="checkbox"/>	<i>22'0"</i>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<i>183'0"</i>	<i>183'0"</i>			<i>183'0"</i>

Standard Height of Superstructure *6'0"*" " R.Q.D. *3'92"*Deduction for complete superstructure *29'80"*

$$\text{Percentage covered} \frac{S}{L} = 76.9$$

$$\frac{S_1}{L} = 76.9$$

$$\frac{E}{L} = 76.9$$

Percentage from Table, Line A. *71.49*

(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 = *29.80 x .7149 = -21.30"*

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>33'80"</i>	1		<i>33'80"</i>	<i>44"</i>	<i>21'00"</i>	1		<i>21'00"</i>
$\frac{1}{2}$ L from A.P. ...	<i>15'04"</i>	4		<i>60'16"</i>	<i>72"</i>	<i>9'35"</i>	4		<i>37'40"</i>
$\frac{2}{3}$ L " ...	<i>3'72"</i>	2		<i>7'44"</i>	<i>12"</i>	<i>2'31"</i>	2		<i>4'62"</i>
Amidships ...	-	4		-	-	-	4		-
$\frac{2}{3}$ L from F.P. ...	<i>7'44"</i>	2		<i>14'88"</i>	<i>52"</i>	<i>5'50"</i>	2		<i>11'00"</i>
$\frac{1}{2}$ L " ...	<i>30'08"</i>	4		<i>120'32"</i>	<i>22 1/4"</i>	<i>22'25"</i>	4		<i>89'00"</i>
F.P. ...	<i>67'60"</i>	1		<i>67'60"</i>	<i>50"</i>	<i>50'00"</i>	1		<i>50'00"</i>
Total ...				<i>304'20"</i>					<i>213'02"</i>

Mean actual sheer aft = *Deficient*Mean standard sheer aft = *Deficient*Mean actual sheer forward = *Deficient*Mean standard sheer forward = *Deficient*Length of enclosed superstructure forward of amidships = *Sheer*" " aft of " = *deficient*

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{91.18}{18} (.45 - .3845) = +1.85"$$

If limited on account of midship superstructure. ☒ *3655* 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.

## RAISED QUARTER

Depth to *Freeboard* Deck = *22'79"*Summer freeboard = *6'24"*Moulded draught (d) = *16'52"*

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = *4'13" = 4 1/4"*

## Addition for Winter North Atlantic Freeboard (if

required) = *6 1/4"*

## Deduction for Fresh Water.

Displacement in salt water at summer load water line *(216'7 3/4")*

$$\Delta = 3328$$

Tons per inch immersion at summer load water line

$$T = 18.71$$

Deduction =  $\frac{\Delta}{40T}$  inches

$$= 4.45 = 4 1/2"$$

## TABULAR FREEBOARD corrected for Flush Deck (if required)

$$\text{Correction for coefficient} = \frac{.767 + .68}{1.36} = 1.447$$

$$\frac{1.36}{1.36}$$

Depth Correction ... *4.89*Deduction for superstructures ... *21.30*Sheer correction ... *1.85*Round of Beam correction ... *.02*Correction for *HEIGHT OF RAISED QUARTER* Thickness of Deck amidships ... *51'00"*Other corrections, scantlings, etc. AND TO CORRESPOND TO APPROVED SUMMER MOULDED DRAUGHT OF *16'6 1/4"* *6'94"*Summer Freeboard = *75'25"*SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, *Wood, Steel Deck:*

Tropical Fresh Water Line above Centre of Disc ...	<i>8 3/4"</i>	Tropical Fresh Water Freeboard ...	<i>5'6 1/2"</i>
Fresh Water Line " " ...	<i>4 1/2"</i>	Fresh Water " " ...	<i>5'10 3/4"</i>
Tropical Line " " ...	<i>4 1/4"</i>	Tropical " " ...	<i>5'11"</i>
Winter Line below " " ...	<i>4 1/4"</i>	Winter " " ...	<i>6'4 1/2"</i>
Winter North Atlantic Line " " ...	<i>6 1/4"</i>	Winter North Atlantic " " ...	<i>6'9 1/2"</i>

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

PARTICULARS OF PROTECTION									
HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway		On Upper D <sup>1</sup>		On RQ D <sup>1</sup>					
Dimensions of Hatchway		11'0"		11'0" 11'3"					
Height above Deck		4'-6"		4'-6"					
Thickness		4'4"		4'4"					
Stiffeners		10 x 3 1/2 x 44		10 x 3 1/2 x 44					
Brackets, Stays		9'-0" apart		9'-0" apart					
Number		6-1 3/4"		6-10 5/8" 6-5 1/3"					
Spacing		25 1/2" x 41"		21" x 39" 20 1/4" x 38"					
Scantling and Sketch		L 5 6 x 3 1/2 x 48		L 6 x 3 1/2 x 48					
Bearing Surface		2 1/2"		2 1/2"					
FORE AND AFTERS		✓		✓					
Material		WP		WP					
Thickness		3"		3"					
How fitted		fore 9' aft		fore 9' aft					
Bearing Surface		6'19 3"		6'19 3"					
Spacing of Cleats		24"		24"					
Number of Tarpaulins		2		2					

\*Are wood fore and afters steel shod at all bearing surfaces? *none* ✓  
 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* ✓  
*all ha'tches have three ring bolts each side for ordinary lashings*  
*and at N<sup>o</sup> 1 hatchway there are eight eye plates each side, in addition for*  
*special lashings* ✓  
*Special lashings 1 3/4" wire*

Particulars of fiddley, funnel and ventilator coamings:— The fiddley top is of steel, the opening bare steel rock gratings, with hinged steel plate covers, secured by metal clips ✓  
The coal shoot opening, 4'-6" x 12'-6", has 2½" angle coaming, 3" w.P. covers, 3" bearing surface, seats 24" apart, & two tarpaulins ✓  
~~The funnel & ventilator coamings are not yet felled, and the fiddley top remains to be finally examined.~~  
Particulars of Flush Bunker Scuttles:—

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none. ✓

Particulars of Companionways:—

none. ✓

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

On Upper Deck, to hold:—	Two, 15" dia	x .36.	one @ 36" above deck & one 4' 6" above, (connected to house)	✓
" " " " " " " "	" " " "	" x 2'-6"	" above deck	✓
" " " " " " " "	" " " "	40 x 3'-0"	" " "	✓
" " " " " " " "	" 24" " "	" x 2'-6"	" above deck	✓
" " " " " " " "	" 4" " "	" Swan neck Vents	x 2'-6" above deck	✓
" " " " " " " "	" " " "	" " " "	" " " "	✓

all Ventilator coverings are provided with wood plugs & canvas covers ✓  
The suan nich ventilators are also " " " " ✓

The Swan mch ventilators are as follows:  
Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

on Fore deck	To Upper Fore Peak Tank:	One, 2½" diam x 1'-6" above deck.
" "	" Lower " " :	" 4½" " x " "
" Upper " "	" No 1 DB Tank :	" 3½" " and one 3" diam each side x 3'-0" above D-"
" BQ " "	" No 2 " " :	Two 4½" " each side x 3'-0" above deck.
" Bridge " "	" Deep " :	One 3½" " and one 1½" diam round & air combined x 1'-6" above D-"
" BQD " "	" After Peak " :	" 3" " x 2'-6" above deck.

+ there are no misting holes, except combined

all air pipes are provided with wood flugs & have misting holes, except combined air & sounding which have metal caps.

Particulars of Gangway Cargo and Coaling Ports:—

none. ✓







