

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

19802

Computation of Freeboard for Steamer, ~~Sailing Ship~~, Tanker

having \_\_\_\_\_

(Type of Superstructures.) \_\_\_\_\_

Port of Survey *Swansea*

Date of Survey *25<sup>th</sup> May 1933*

Name of Surveyor *J. Sellar*

Particulars of Classification *+100 ft*

Ship's Name <i>"CITY OF LYONS"</i>	Nationality and Port of Registry <i>British Liverpool</i>	Official Number <i>147353</i>	Gross Tonnage <i>7063</i>	Date of Build <i>1926-2</i>
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Moulded Dimensions: Length \_\_\_\_\_ Breadth \_\_\_\_\_ Depth \_\_\_\_\_

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

Coefficient of fineness for use with Tables \_\_\_\_\_

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... ..	(a) Where D is greater than Table depth (D - Table depth) R =	Moulded Breadth (B)
Stringer plate ... ..	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam =
Depth for Freeboard (D) =		Difference
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) =$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ... ..						Standard Height of Superstructure _____
„ overhang ... ..						„ „ R.Q.D. _____
R.Q.D. enclosed ... ..						Deduction for complete superstructure _____
„ overhang ... ..						Percentage covered $\frac{S}{L} =$
Bridge enclosed... ..						„ „ $\frac{S_1}{L} =$
„ overhang aft ... ..						„ „ $\frac{E}{L} =$
„ overhang forward ... ..						Percentage from Table, Line A.
Fore enclosed ... ..						(corrected for absence of forecastle (if required))
„ overhang ... ..						Percentage from Table, Line B.
Trunk aft ... ..						(corrected for absence of forecastle (if required))
„ forward ... ..						Interpolation for bridge less than 2L (if required)
Tonnage opening aft ... ..						Deduction =
„ „ forward ... ..						
Total ... ..						

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..		1					1		
$\frac{1}{4}L$ from A.P. ... ..		4					4		
$\frac{2}{4}L$ „ ... ..		2					2		
Amidships ... ..		4					4		
$\frac{3}{4}L$ from F.P. ... ..		2					2		
$\frac{1}{4}L$ „ ... ..		4					4		
F.P. ... ..		1					1		
Total ... ..									

Mean actual sheer aft = \_\_\_\_\_  
Mean standard sheer aft = \_\_\_\_\_

Mean actual sheer forward = \_\_\_\_\_  
Mean standard sheer forward = \_\_\_\_\_

Length of enclosed superstructure forward of amidships = \_\_\_\_\_  
L

„ „ aft of „ = \_\_\_\_\_

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

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 = Ft. \_\_\_\_\_

Summer freeboard = \_\_\_\_\_

Moulded draught (d) = \_\_\_\_\_

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

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

=

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

Correction for coefficient

	+	-
Depth Correction ... ..		
Deduction for superstructures ... ..		
Sheer correction ... ..		
Round of Beam correction ... ..		
Correction for Thickness of Deck amidships ... ..		
Other corrections, scantlings, etc. ... ..		

Summer Freeboard = \_\_\_\_\_

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

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



*City of Lyons*

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Description of Hatchway		Upper Deck No 1	No 2	3A					
Dimensions of Hatchway		27'-0" x 18'-1"	42'-0" x 18'-1"	30'-0" x 18'-0"					
COAMINGS	Height above Deck	19"	19"	19"					
	Thickness	75	75	75					
	Stiffeners	12 x 3 1/2 x 60	12 x 3 1/2 x 60	12 x 3 x 3/4					
	Brackets, Stays	5 x 4 x 50, 0A	4	2					
HATCH BEAMS	Number	5	7	4					
	Spacing	4'-6"	5'-3"	5					
	Scantling and Sketch	Plate 15" x 3 3/8"	16 1/2" x 3 3/8"	19 1/2" x 3 3/8"					
	Bearing Surface	3	3	4					
FORE AND AFTERS	Number								
	Spacing								
	Unsupported Lengths								
	Scantling* and Sketch	None	None	None					
HATCH COVERS	Material	White wood	White wood	Wood					
	Thickness	2 1/4" - 2 1/2"	2 1/4" - 2 1/2"	3"					
	How fitted	F 9 9	F 9 9	F 1 A					
	Bearing Surface	8"	8"	3"					
Spacing of Cleats	22" x 2 1/4"	22" x 2 1/4"	24"						
Number of Tarpaulins	2	2	3						

\*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 fiddley, funnel and ventilator coamings:—

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways:—

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

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

Particulars of Gangway Cargo and Coaling Ports:—



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