

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No. 36096  
(For London Office only.)

18 SEP 1939

Computation of Freeboard for Steamer, ~~Sailing Ship, Tug, or~~ Motor (Wood)

having flush deck with horse amidships. Port of Survey Vancouver B.C.

(Type of Superstructures.)

Date of Survey Aug 2. 10. 1939.

Ship's Name <u>LEOLA VIVIAN</u>	Nationality and Port of Registry <u>Canadian Vancouver B.C.</u>	Official Number <u>171809</u>	Gross Tonnage <u>49.49</u>	Date of Build <u>1939.</u>
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Name of Surveyor A. Scott.

Particulars of Classification LLOYDS + 9A1.

Moulded Dimensions: Length 58' Breadth 14.25 Depth 8.7

Moulded displacement at moulded draught = 85 per cent. of moulded depth 139. tons

Coefficient of fineness for use with Tables .7 .496

<p><b>Depth for Freeboard (D)</b></p> <p>Moulded depth ... .. <u>8.7</u></p> <p>Stringer plate ... <u>wood deck</u> ... <u>.17</u></p> <p>Sheathing on exposed deck <math>T \left( \frac{L-S}{L} \right) =</math></p> <p>Depth for Freeboard (D) = <u>8.87</u></p>	<p><b>Depth correction</b></p> <p>(a) Where D is greater than Table depth (D-Table depth) R =</p> <p>(b) Where D is less than Table depth (if allowed) (Table depth-D) R =</p> <p>If restricted by superstructures</p>	<p><b>Round of Beam correction</b></p> <p>Moulded Breadth (B) <u>14.25</u></p> <p>Standard Round of Beam = <math>\frac{B \times 12}{50} = 3.4</math></p> <p>Ship's Round of Beam = <u>4.5</u></p> <p>Difference <u>.1</u></p> <p>Restricted to</p> <p>Correction = <math>\frac{Diff}{4} \times \left( 1 - \frac{S_1}{L} \right) =</math></p>
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### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S)	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..					
„ overhang ... ..					
R.Q.D. enclosed ... ..					
„ overhang ... ..					
Bridge enclosed... ..		<u>horse only.</u>			
„ overhang aft ... ..					
„ overhang forward ... ..					
F'cle enclosed ... ..					
„ overhang ... ..					
Trunk aft ... ..					
„ forward ... ..					
Tonnage opening aft ... ..					
„ „ forward ... ..					
Total ... ..					

Standard Height of Superstructure \_\_\_\_\_

„ „ R.Q.D. \_\_\_\_\_

Deduction for complete superstructure \_\_\_\_\_

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

„ „  $\frac{S_1}{L} =$

„ „  $\frac{E}{L} =$

Percentage from Table, Line A. (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 = \_\_\_\_\_

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	<u>5.8</u>	1			<u>14</u>		1		
$\frac{1}{4}$ L from A.P. ... ..	<u>7.03</u>	4			<u>7.2</u>		4		
$\frac{2}{4}$ L „ „ ... ..	<u>1.7</u>	2			<u>2</u>		2		
Amidships ... ..	<u>0</u>	4			<u>0</u>		4		
$\frac{3}{4}$ L from F.P. ... ..	<u>3.47</u>	2			<u>3.5</u>		2		
$\frac{1}{4}$ L „ „ ... ..	<u>14</u>	4			<u>10</u>		4		
F.P. ... ..	<u>31</u>	1			<u>22</u>		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 = \_\_\_\_\_

„ „ aft of „ = \_\_\_\_\_

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

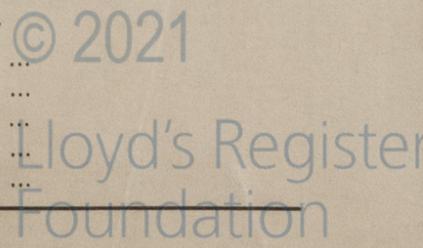
If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

<p><b>Deduction for Tropical Freeboard.</b></p> <p><b>Addition for Winter and Winter North Atlantic Freeboard.</b></p> <p>Depth to Freeboard Deck = _____ Ft.</p> <p>Summer freeboard = _____</p> <p>Moulded draught (d) = _____</p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = <math>\frac{d}{4}</math> inches = _____</p> <p>Addition for Winter North Atlantic Freeboard (if required) = _____</p>	<p><b>Deduction for Fresh Water.</b></p> <p>Displacement in salt water at summer load water line</p> <p><math>\Delta =</math> _____</p> <p>Tons per inch immersion at summer load water line</p> <p>T = _____</p> <p>Deduction = <math>\frac{\Delta}{40T}</math> inches = _____</p>	<p><b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)</p> <p>Correction for coefficient</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">+</td> <td style="width: 50%; text-align: center;">-</td> </tr> <tr> <td>Depth Correction ... ..</td> <td></td> <td></td> </tr> <tr> <td>Deduction for superstructures ... ..</td> <td></td> <td></td> </tr> <tr> <td>Sheer correction ... ..</td> <td></td> <td></td> </tr> <tr> <td>Round of Beam correction ... ..</td> <td></td> <td></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> </table> <p style="text-align: right;">Summer Freeboard = _____</p>		+	-	Depth Correction ... ..			Deduction for superstructures ... ..			Sheer correction ... ..			Round of Beam correction ... ..			Correction for Thickness of Deck amidships ... ..			Other corrections, scantlings, etc. ... ..		
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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 ... ..	Tropical Fresh Water Freeboard ... ..
Fresh Water Line „ „ ... ..	Fresh Water „ „ ... ..
Tropical Line „ „ ... ..	Tropical „ „ ... ..
Winter Line below „ „ ... ..	Winter „ „ ... ..
Winter North Atlantic Line „ „ ... ..	Winter North Atlantic „ „ ... ..



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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

		HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS			
Description of Hatchway		Accommodation	After Accommodation		
Dimensions of Hatchway		27 1/2 x 25	4 x 3		
COAMINGS	Height above Deck	18	18		
	Thickness	3" wood	3" wood		
	Stiffeners	none	none		
	Brackets, Stays	none	none		
HATCH BEAMS	Number	none	none		
	Spacing				
	Scantling and Sketch				
	Bearing Surface				
FORE AND AFTERS	Number	none	none		
	Spacing				
	Unsupported Lengths				
	Scantling* and Sketch				
HATCH COVERS	Material	wood	wood		
	Thickness	2 1/4"	2 1/4"		
	How fitted	By A, hinges fore	By A		
	Bearing Surface	2"	2"		
Spacing of Cleats					
Number of Tarpaulins		Two	Two		

\*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? ✓

Particulars of fiddle, funnel and ventilator coamings:— Funnel & Eng Room Vent Carried through House in wood casing, doubly insulated. Two 5" ports of brass, with metal instead of glass are fitted in sides of after accommodation hatch for ventilation only.

Particulars of Flush Bunker Scuttles:— None.

Particulars of Companionways:— Companionways to forward and after accommodation are at the hatches with proper closings. Companionways to after accommodation and to Engine Room are inside house.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:— One 6" dia vent to house on house top.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:— Two fuel tanks 1 1/2 dia gal pipe up side of house 7 feet high. Vent for fresh water pipe is led up inside of after hatch 18" above deck.

Particulars of Gangway Cargo and Coaling Ports:— None

Particulars of Scuppers and Sanitary Discharge Pipes:— Storm valves on ship's side, also screwed shut down hatch.

Particulars of Side Scuttles:— 7 dia heavy brass, heavy glass & deadlights. Windows in house 18x24 wood frames - plate glass, 3-9" above deck. Height of sills? du house forward end are 4-3" above deck.

Particulars of Guard Rails:— Guard rails on top of Bulwark - 18" high. Top rail 1 1/2 dia galvanized pipe. 2nd - 3/4 dia steel tube.

Particulars of Gangways, Lifelines, etc.:— No special provision on deck. Communication throughout vessel from Companionways in house, and doors in H.T. bulkheads.

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	Full length.	18"	10" x 1 3/4"	38	5.5	12.5
Forward Well						

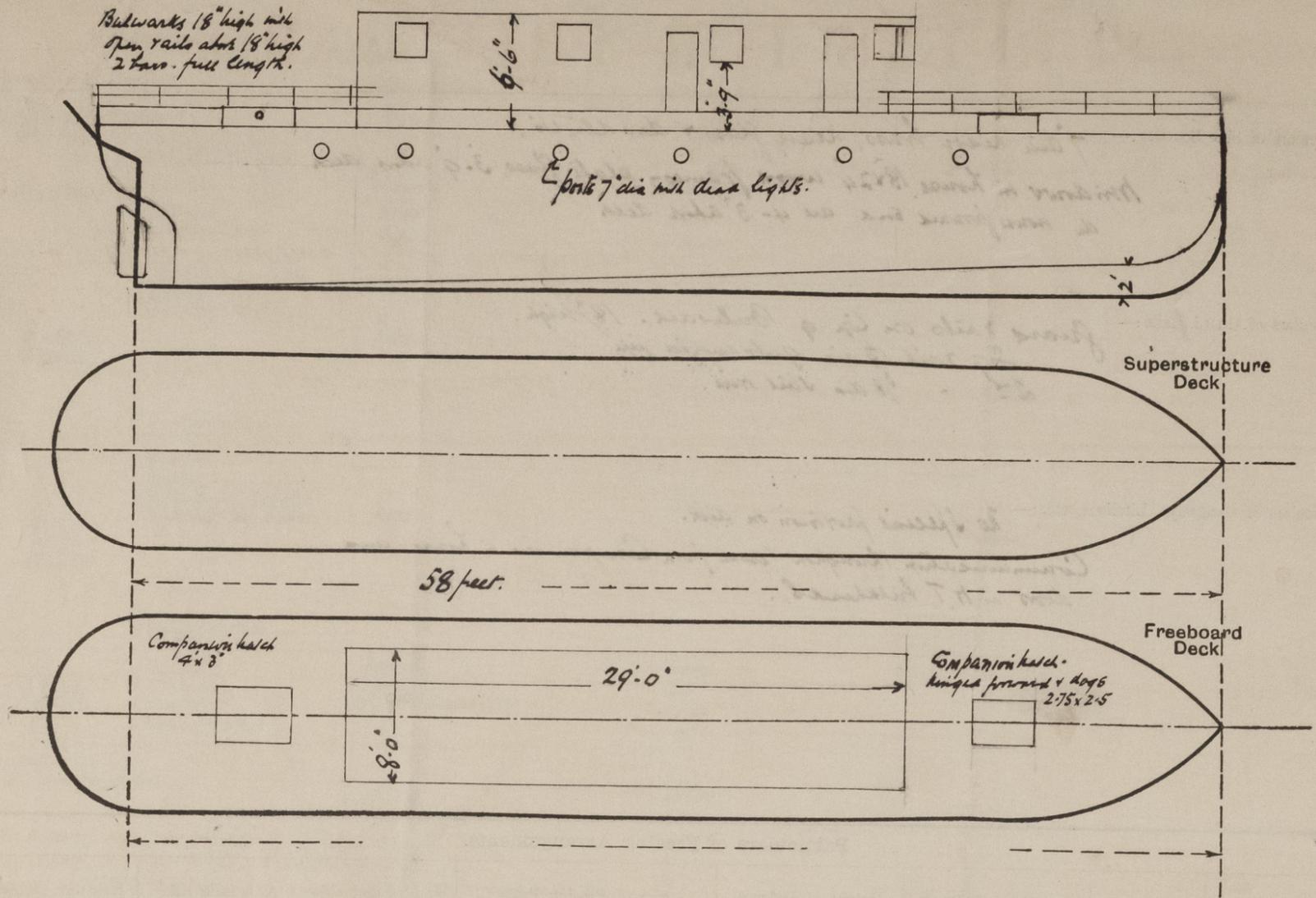
\* State position of each freeing port ... After Well:— Openings between Stanchions at deck level. (F. and A. position and height above deck edge) Forward Well:— State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— No shutters.  
 Additional area where 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								
Raised Quarter Deck Bulkhead								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
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	6" x 6"	1" outside 3/4" inside	1 1/2" x 3"	16	Through bulkhead 1/2" to center deck 3/4" dia from	24" x 52"	18"	78"

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								
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								

Doors 2" wood, manipulated from both sides - mistow sliding - special shutter for weather

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:—

*This vessel has been constructed under special survey of approved materials, and the workmanship is good throughout also materials. The vessel will be recommended for class + QAI when completed.*

Builder's name and yard number *Virain Yards, Maple, No. 1.*

Names of sister ships

Owners *W. Virain - Vancouver B.C.*

Fee £ *30.00.*

Received by me



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