

Rpt. C.11.

Index. No. \_\_\_\_\_  
(For London Office only.)

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

SEP 11 1937

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey <u>Montreal</u>	
having <u>Flush Deck for full length of Barge</u>					Date of Survey <u>5<sup>th</sup> April 1907</u>	
(Type of Superstructures.)						
Ship's Name <u>"Blue River"</u>	Nationality and Port of Registry <u>British Montreal</u>	Official Number <u>155295</u>	Gross Tonnage <u>1770</u>	Date of Build <u>1930-7</u>	Name of Surveyor <u>Geo. Allan</u>	
Moulded Dimensions: Length <u>248'0"</u> Breadth <u>43'7</u> Depth <u>15'0</u>						
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>4403</u> tons FW.						
Coefficient of fineness for use with Tables <u>.903</u>						
Particulars of Classification <u>+ A.1. Barge for service between Port Colborne &amp; Montreal</u> <u>Freeboard corresponding to an extreme draught of 13'10" and chambers on the forecast hatch with pillars corresponding to an extreme draught of 12'9"</u>						
Depth for Freeboard (D)		Depth correction			Round of Beam correction	
Moulded depth ... .. <u>15'0"</u>		(a) Where D is greater than Table depth (D - Table depth) R = <u>(19.13 - 16.53) 1.907 = +4.96</u>			Moulded Breadth (B) <u>43.50</u>	
Stringer plate ... .. <u>.44</u>		(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <u>2.60</u>			Standard Round of Beam = $\frac{B \times 12}{50} = \frac{43.50 \times 12}{50} = 10.44$	
Sheathing on exposed deck T $\left( \frac{L-S}{L} \right) =$					Ship's Round of Beam = <u>12</u>	
Depth for Freeboard (D) = <u>19.13</u>		If restricted by superstructures			Difference	
					Restricted to	
					Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right) =$	

## DEDUCTION FOR SUPERSTRUCTURES.

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

Standard Height of Superstructure ..... 6.0  
 " " R.Q.D. ....  
 Deduction for complete superstructure ..... 30.8  
 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. ...		1		12" (see letter)		1	
$\frac{1}{6}$ L from A.P. ...		4		0		4	
$\frac{2}{6}$ L " ...		2		0		2	
Amidships ...		4		0		4	
$\frac{3}{6}$ L from F.P. ...		2		0		2	
$\frac{4}{6}$ L " ...		1		0		1	
F.P. ...		1		12" (see letter)		1	
Total ...							

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

If limited on account of midship superstructure.

11.77

If limited to maximum allowance of  $1\frac{1}{2}$  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 style="text-align: right; margin-right: 20px;">Ft.</p> <p>Depth to Freeboard Deck = 19.93</p> <p>Summer freeboard = 5.64</p> <p>Moulded draught (d) = 14.29</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><math>T =</math></p> <p>Deduction = <math>\frac{\Delta}{40 T}</math> inches</p> <p>=</p>	<p><b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)</p> <p>Correction for coefficient</p> <p>Depth Correction ... .. ✓ 4.96</p> <p>Deduction for superstructures ... .. -</p> <p>Sheer correction ... .. ✓ 11.77</p> <p>Round of Beam correction ... .. ✓ 9.60 ✓</p> <p>Correction for Thickness of Deck amidships ... ..</p> <p>Other corrections, scantlings, etc. ... ..</p> <p style="text-align: right;">✓ 26.33</p> <p style="text-align: right;"><b>Summer Freeboard = 67.57</b></p>
---	--	--

SUMMER FREEBOARD amidships from Centre of <sup>Diamond</sup> 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	"	...



BLUE RIVER

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	N. 1.	N. 2.	N. 3.	N. 4.			
Dimensions of Hatchway	...	...	36'-0" x 26'-0" 3"	36'-0" x 26'-0" 3"	36'-0" x 26'-0" 3"	28'-0" x 26'-0" 3"			
COAMINGS	{	Height above Deck	2'-4"	2'-4"	2'-4"	6'-0"			
		Thickness { Sides	4"	4"	4"	5"			
		Ends	4"	4"	4"	5"			
		Stiffeners	4" x 3" x 1/8"	4" x 3" x 1/8"	4" x 3" x 1/8"	3 1/2" x 3" x 1/8"			
		Brackets, Stays	4" x 3" x 1/8"	4" x 3" x 1/8"	4" x 3" x 1/8"	3" x 10" x 2 1/2" x 1/8"			
MAIN HATCH BEAMS FIXED.	{	Number	4	4	4	3			
		Spacing	7'-3" 12'-0"	7'-3" 12'-0"	7'-3" 12'-0"	7'-3" 12'-0"			
		Scantling and Sketch	12" x 30" x 3/8" T.S.B. ANGLES 5" x 3" x 1/16"	12" x 30" x 3/8" T.S.B. ANGLES 5" x 3" x 1/16"	12" x 30" x 3/8" T.S.B. ANGLES 5" x 3" x 1/16"	12" x 30" x 3/8" T.S.B. ANGLES 5" x 3" x 1/16"			
		Bearing Surface	3"	3"	3"	3"			
AUXILIARY FORE AND AFTERS HATCH BEAMS.	{	Number	3	3	3	3			
		Spacing	6'-6 3/4" 11'-4"	6'-6 3/4" 11'-4"	6'-6 3/4" 11'-4"	6'-6 3/4" 11'-4"			
		Unsupported Lengths	11'-4"	11'-4"	11'-4"	11'-4"			
		Scantling and Sketch	10" x 5 3/4" x 23" #	10" x 5 3/4" x 23" #	10" x 5 3/4" x 23" #	10" x 5 3/4" x 23" #			
		Bearing Surface	5" x 3"	5" x 3"	5" x 3"	5" x 3"			
HATCH COVERS	{	Material	Wood	Wood	Wood	Wood			
		Thickness	3 1/2" 2 1/2"	3 1/2" 2 1/2"	3 1/2" 2 1/2"	3 1/2" 2 1/2"			
		How fitted	2 1/2"	2 1/2"	2 1/2"	2 1/2"			
		Bearing Surface	2 1/2"	2 1/2"	2 1/2"	2 1/2"			
		Spacing of Cleats	24"	24"	24"	24"			
Number of Tarpaulins	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:— *Fiddle, funnel and ventilator coamings are of substantial construction and height and in efficient condition.*

Particulars of Flush Bunker Scuttles:— *Nil.*

Particulars of Companionways:— *Two side entrances to Engine Room, one Port & one Star. 7'-0" high 8'-6" long with steel doors 58" x 23" with 15" sill. Two steel latches to fore peak 24" x 17" x 1/2" coaming with hinged steel covers. Two steel latches one between #1 & #2 holds and one between #3 & #4 holds 48" x 24" 8" coaming. One steel hatch on top of oil fuel tank 24" x 20" 8" coaming and steel cover. Steel hatches fitted with hinged covers and properly bolted down.*

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:— *Three funniform ventilators 18" x 6" dia. 1/2" aft accommodation. Two ventilators 15 1/2" dia. x 18" coaming to Engine Room. One ventilator 11" dia. x 30" coaming to Boiler Room. Wooden plugs with canvas covers as means of closing.*

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:— *One goose neck vent forward 12" high x 4" dia. Two " " aft 12" " x 4" " Two " " fore oil tank 18" " x 3" " Two " " " 17" " x 4" "* } *Wooden plugs and canvas covers.*

Particulars of Gangway Cargo and Coaling Ports:— *Nil.*

BLUE RIVER

Particulars of Scuppers and Sanitary Discharge Pipes — *One 4" dia. toilet discharge and scupper discharge with storm valves below deck. One galley discharge 2 1/2" dia. with storm valve discharging below deck.*

Particulars of Side Scuttles: *✓*

Particulars of Guard Rails:— *Open rails from forward to deck house aft.*

Particulars of Gangways, Lifelines, etc.:— *Steel wire ropes and stanchions at sides of vessel from forward to deck house aft with turnbuckles. Provision made for rigging a lifeline from the deckhouse aft to the vessel's bow.*

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	20'-0" long on each side of stem	36"	5 stanchions on Port side 2 " " Star side	✓	✓	✓
Forward Well	around stem	40"	13 stanchions spaced 56" apart	✓	✓	✓
State position of each freeing port (P. 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
Fore peak	Vertical plating	3/8" x 1/4"	12" x 20-7 lb. channels.	31 1/4"	Brackets top & bottom	✓	✓	✓
Poep Bulkhead	✓							
Raised Quarter Deck Bulkhead	✓							
Bridge, After Bulkhead	✓							
Bridge, Forward Bulkhead	✓							
Forecastle Bulkhead	Vertical plating	3/8" x 1/4"	12" x 20-7 lb. channels.	31 1/4"	Brackets top & bottom	✓	✓	✓
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	18"	1/4"	2 1/4" x 2 1/4" L	24"	No brackets	58" x 23"	18"	7'-0"

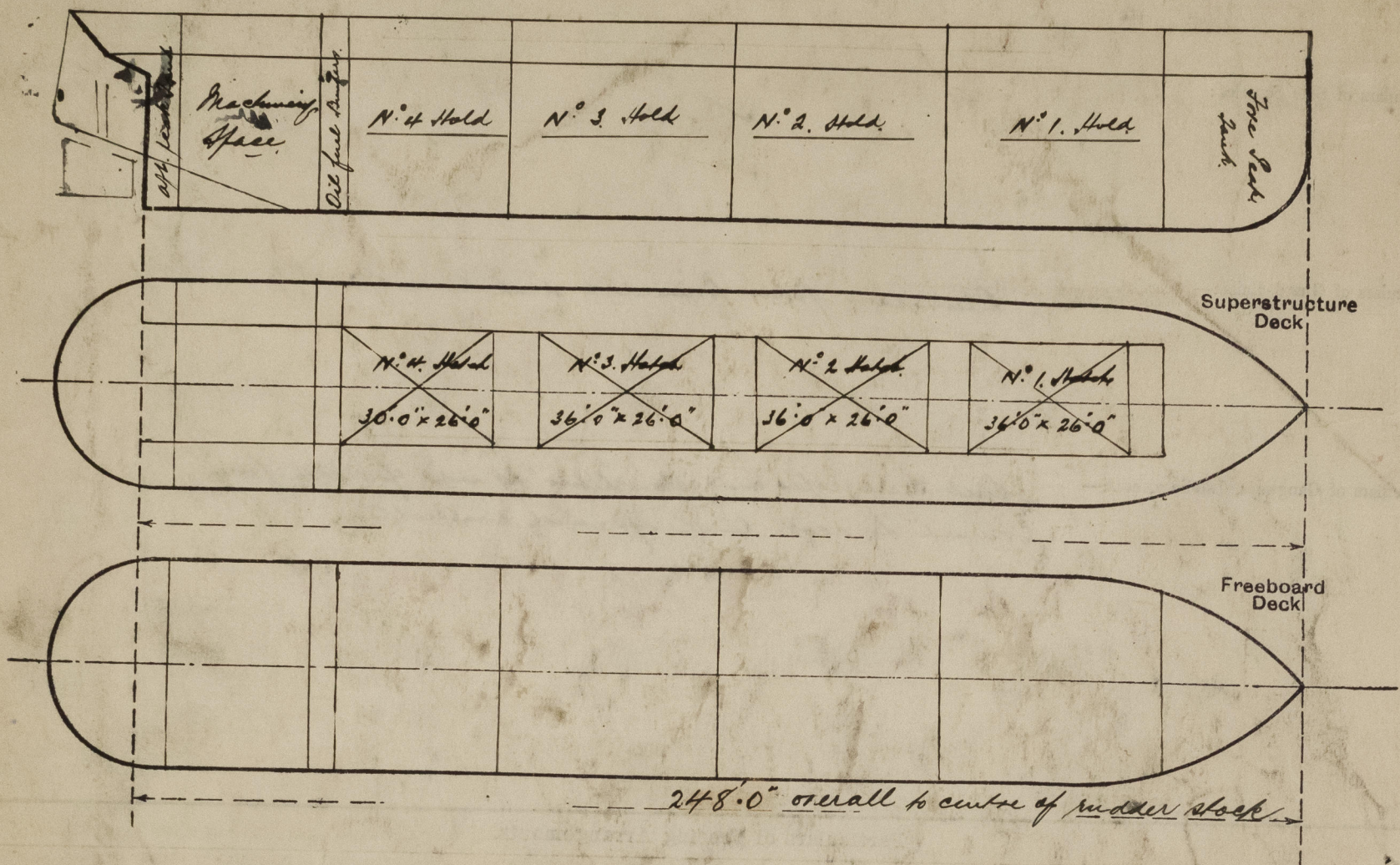
Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poep Bulkhead	✓
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	✓
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	✓
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓
Exposed Machinery Casings on Superstructure Decks	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships	✓

*Companionway up to engine room fitted with steel doors 58" x 23" and can be worked from both sides. ✓*

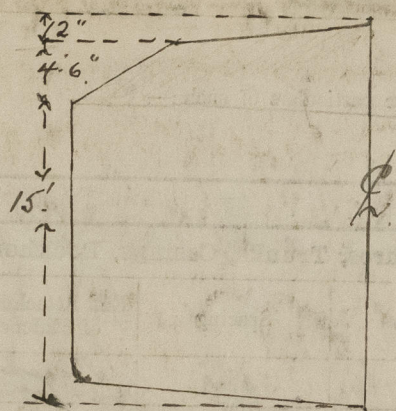


# BLUE RIVER

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:—



Builder's name and yard number Canadian Vickers Ltd.

Names of sister ships "Blue Cross"

Owners Blue Line Motorships Ltd.

Fee £ 7 40 Received by me \_\_\_\_\_



© 2021

Lloyd's Register  
Foundation