

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

 Index No. 39083
 (For London Office only).

Ship's Name " TERRA NOVA "	Official Number Not allocated 178535	Nationality and Port of Registry British St. John's, NFL.,	Gross Tonnage Approx. 360 379.14	Date of Build 1947	Port of Survey <u>Monroe & Clareville, NFL.,</u> Date of Survey <u>19-20-21st, May/47.</u> Surveyor's Signature <u>M. M. Conway</u> Particulars of Classification <u>49A1.</u>
Moulded Dimensions: Length <u>137.0'</u> Breadth <u>28.17'</u> Depth <u>14'-0"</u> to centre of middle stow Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>415 760</u> tons Coefficient of fineness for use with Tables <u>68</u> (actual <u>573</u>)					

Depth for Freeboard (D). Moulded depth ... <u>14.00</u> Stringer plate <u>3"</u> wood shelf ... <u>.67</u> Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ <u>.29</u> Depth for Freeboard (D) = <u>14.29</u>	Depth correction. (a) Where D is greater than Table depth (D - Table depth) R = <u>(14.29 - 13.13) 1.054 = + 5.44"</u> (b) Where D is less than Table depth (if allowed) (Table depth - D) R = <u>5.16</u> If restricted by superstructures <input checked="" type="checkbox"/>	Round of Beam correction. Moulded Breadth (B) <u>28.17'</u> Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>6.76"</u> Ship's Round of Beam = <u>8"</u> Difference = <u>+ 1.24</u> Restricted to <u>1.24</u> Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <u>1.24 x .6596 = .818</u>
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<u>19.21</u>	<u>19.21</u>	<u>7'-1"</u>	<input checked="" type="checkbox"/>	<u>19.21</u>
" overhang ...	<u>21.6"</u>				
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...	<u>27.17</u>	<u>27.17</u>	<u>7'-1"</u>	<input checked="" type="checkbox"/>	<u>27.17</u>
Fore enclosed ...	<u>24.10</u>	<u>25</u>			<u>25</u>
" overhang ...	<u>50</u>				
Trunk aft ...					
" forward ...					
Tonnage opening aft ...	None				
" " forward					
Total ...	<u>46.88</u>	<u>46.63</u>			<u>46.63</u>

Standard Height of Superstructure 6.0'
 " " R.Q.D. ☒
 Deduction for complete superstructure 19.7"
 Percentage covered $\frac{S}{L} =$ 34.22
 " " $\frac{S_1}{L} =$ 34.04
 " " $\frac{E}{L} =$ 18.43
 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 = 19.7 x .1843 = - 3.63"

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	<u>23.70</u>	1	<u>23.70</u>	<u>39</u>	<u>23.70</u>	1	<u>23.70</u>
%L from A.P. ...	<u>10.55</u>	4	<u>42.20</u>	<u>19</u>	<u>10.55</u>	4	<u>42.20</u>
%L " ...	<u>2.61</u>	2	<u>5.22</u>	<u>6</u>	<u>2.61</u>	2	<u>5.22</u>
Amidships ...		4				4	
%L from F.P. ...	<u>5.21</u>	2	<u>10.42</u>	<u>3</u>	<u>3.00</u>	2	<u>6.00</u>
%L " ...	<u>21.09</u>	4	<u>84.36</u>	<u>13</u>	<u>13.00</u>	4	<u>52.00</u>
F.P. ...	<u>47.40</u>	1	<u>47.40</u>	<u>59</u>	<u>36.00</u>	1	<u>36.00</u>
Total ...			<u>213.30</u>				<u>165.12</u>

 Mean actual sheer aft = even
 Mean standard sheer aft = even

 Mean actual sheer forward = deficient
 Mean standard sheer forward = deficient

 Length of enclosed superstructure forward of amidships = deficient
 " " aft of " = sheer

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ $\frac{48.18}{18} \times (.75 - .1711) = + 1.55"$
 If limited on account of midship superstructure. ☒ If limited to maximum allowance of 1 1/2 ins. per 100 ft. ☒

 Deduction for Tropical Freeboard.
 Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 14.29
 Summer freeboard = 1.42
 Moulded draught (d) = 12.87

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3.22 = 3 1/4
 Addition for Winter North Atlantic Freeboard (if required) = 5 1/4

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta =$ 760
 Tons per inch immersion at summer load water line
 $T =$ 7.65

Deduction = $\frac{\Delta}{40T}$ inches
 = 2 1/2

 TABULAR FREEBOARD corrected for Flush Deck (if required)
 Correction for coefficient.

	+	-
Depth Correction ...	<u>5.44</u>	
Deduction for superstructures ...		<u>3.63</u>
Sheer correction ...	<u>1.55</u>	
Round of Beam correction ...		<u>.20</u>
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc. ...		
	<u>6.99</u>	<u>3.83</u>
Summer Freeboard =	<u>17.00</u>	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—
 Tropical Fresh Water Line above Centre of Disc 5 1/4"
 Fresh Water Line " " 2 1/2"
 Tropical Line " " 3 1/4"
 Winter Line below " " 3 1/4"
 Winter North Atlantic Line " " 5 1/4"

Tropical Fresh Water Freeboard 0.21 1/4"
 Fresh Water " 0.21 1/4"
 Tropical " 1.13 1/4"
 Winter " 1.8 1/4"
 Winter North Atlantic " 1.10 1/4"

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Trade of ship Coasting and Sealfishery.

Names of sister ships None.

Builder's name and yard number H.W.Stone, Monroe, Trinity Bay, NFL., outfitting by Nfld. Shipyards, Ltd.,
Clareville, Newfoundland.

Owners Bowring Brothers, Limited, St. John's, Newfoundland.

Fee £ As agreed.



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