

AMENDED

# LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

Received .....

Index No. ....

Govt. Copy .....

Owners C11 .....

Ship's Name <b>KYLEMORE.</b>	Official Number <b>131905</b>	Nationality and Port of Registry <b>REPUBLIC OF IRE LIMERICK.</b>	Gross Tonnage <b>950</b>	Date of Build <b>1919</b>	Port of Survey .....
Moulded Dimensions: Length <b>215.10</b> Breadth <b>33.00</b> Depth <b>17.00</b>					Date of Survey <b>21.9.54</b>
Freeboard Length .....					Surveyor's Signature .....
Moulded displacement at moulded draught = 85 per cent. of moulded depth .....					Particulars of Classification <b>* 100 A I</b>
Coefficient of fineness for use with Tables <b>.71 (ASSUMED)</b>					

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth ...	<b>17.00</b>	(a) Where D is greater than Table depth (D - Table depth) R = <b>(17.11 - 14.34) 1.65 = +4.58"</b>		Moulded Breadth (B)	<b>33.00</b>
Stringer plate ...	<b>.04</b>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <b>2.77</b>		Standard Round of Beam = $\frac{B \times 12}{50}$	<b>7.92</b>
4" Wood Sheathing on <del>upper</del> deck <b>46.69</b>	<b>.07</b>			Ship's Round of Beam	<b>8.25</b>
$T \left( \frac{L-S}{L} \right) = 33 \times \frac{46.69}{215.10}$	<b>.07</b>	If restricted by superstructures	<input checked="" type="checkbox"/>	Difference	<b>.33</b>
Depth for Freeboard (D) =	<b>17.11</b>			Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right)$	<b>.35 x .5029</b> <b>.176</b> <b>= -.04</b>

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S)	Height	Height Correction	Effective Length (E)	
Poop enclosed <b>EQUIV.</b>	<b>26.46</b>	<b>26.46</b>	<b>7.25</b>	<b>-</b>	<b>26.46</b>	
" <b>OPEN</b>	<b>21.31</b>	<b>10.65</b>			<b>10.65</b>	
R.Q.D. enclosed						
" overhang						
Bridge enclosed <b>FORWARD</b>	<b>2.00</b>	<b>1.50</b>	<b>7.25</b>	<b>-</b>	<b>1.50</b>	
" <b>OPEN</b>	<b>55.58</b>	<b>27.79</b>			<b>27.79</b>	
" overhang aft						
" overhang forward	<b>3.13</b>	<b>1.57</b>			<b>1.57</b>	
F'cle enclosed <b>FORWARD</b>	<b>11.00</b>	<b>11.00</b>	<b>7.25</b>	<b>-</b>	<b>11.00</b>	
" <b>OPEN</b>	<b>10.51</b>	<b>9.88</b>			<b>9.88</b>	
" overhang						
" <b>OPEN</b>	<b>36.17</b>	<b>18.09</b>			<b>18.09</b>	
" forward						
Tonnage opening aft						
" forward						
Total	<b>166.16</b>	<b>106.94</b>			<b>106.94</b>	

Standard Height of Superstructure **6.00**" " R.Q.D. ☒Deduction for complete superstructure **27.51**Percentage covered  $\frac{S}{L} = 77.23$ " "  $\frac{S_1}{L} =$ " "  $\frac{S_2}{L} =$ " "  $\frac{E}{L} =$ Percentage from Table, Line A. **31.75**(corrected for absence of forecastle (if required)) ☒Percentage from Table, Line B. **35.75**(corrected for absence of forecastle (if required)) ☒Interpolation for bridge less than .2L (if required) **2.87**Deduction = **34.62 x 27.51 = 9.52** **= 34.62**

## SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ...	<b>31.51</b>	<b>1</b>	<b>31.51</b>	<b>27.00</b>	<b>27.00</b>	<b>1</b>	<b>27.00</b>
$\frac{1}{4}$ L from A.P. ...	<b>14.02</b>	<b>4</b>	<b>56.08</b>	<b>14.00</b>	<b>14.00</b>	<b>4</b>	<b>56.00</b>
$\frac{2}{4}$ L " ...	<b>3.47</b>	<b>2</b>	<b>6.94</b>	<b>4.25</b>	<b>4.25</b>	<b>2</b>	<b>8.50</b>
Amidships ...	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>
$\frac{3}{4}$ L from F.P. ...	<b>6.93</b>	<b>2</b>	<b>13.86</b>	<b>5.60</b>	<b>5.60</b>	<b>2</b>	<b>11.20</b>
$\frac{1}{4}$ L " ...	<b>28.04</b>	<b>4</b>	<b>112.16</b>	<b>27.00</b>	<b>27.00</b>	<b>4</b>	<b>108.00</b>
F.P. ...	<b>63.02</b>	<b>1</b>	<b>63.02</b>	<b>60.00</b>	<b>60.00</b>	<b>1</b>	<b>60.00</b>
Total			<b>283.57</b>				<b>270.70</b>

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

If limited on account of midship superstructure.

Mean actual sheer aft = **Deficient**Mean actual sheer forward = **Deficient**Length of enclosed superstructure forward of amidships = **30.86** **14.35**aft of " = **21.51**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 = **17.04**

Summer freeboard = **1.53**

Moulded draught (d) = **15.54**

Keel allowance =

Extreme draught =

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  $\frac{.71 + .68}{1.36} = \frac{1.39}{1.39}$

	+	-
Depth Correction	<b>4.58</b>	<b>-</b>
Deduction for superstructures	<b>-</b>	<b>9.52</b>
Sheer correction	<b>.26</b>	<b>-</b>
Round of Beam correction	<b>-</b>	<b>.04</b>
Correction for Thickness of Deck amidships	<b>-</b>	<b>.84</b>
Other corrections, scantlings, etc.		
	<b>4.84</b>	<b>10.40</b>
Summer Freeboard =	<b>20.73</b>	

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

Tropical Fresh Water Line above Centre of Disc	<b>6.2"</b>
Fresh Water Line	<b>4.2"</b>
Tropical Line	<b>2.2"</b>
Winter Line below	<b>2.2"</b>
Winter North Atlantic Line	<b>4.2"</b>

Tropical Fresh Water Freeboard	<b>0'-11.1/2"</b>
Fresh Water	<b>1'-2.1/2"</b>
Tropical	<b>1'-3.1/2"</b>
Winter	<b>1'-8.1/2"</b>
Winter North Atlantic	<b>1'-10.1/2"</b>

1906 Freeboards being more favorable to this ship have been re-assigned but adjusted to conform with deckline lowered to steel deck, p. and S.

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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.

### Sheathing

$$L - S = 215.10' - 166.16'$$

$$= \underline{\underline{48.94'}}$$

Total Length of framing ports in Bridge Span =  $1.5 \times 3$   
 (Quantity of exposed steel deck) =  $\underline{\underline{4.5}}$

$$\frac{4.5}{2} = 2.25$$

Correction for sheathing:  $48.94 - 2.25$

$$= 46.69$$

$$\text{Correction} = .33 \times 46.69$$

$$\underline{\underline{215.10}}$$

$$= \underline{\underline{1.07}}$$

### Port.

$$\text{Equiv. enclosed} = 32.00' - \left[ \frac{(15.8 \times 5.2) + (1.5 \times 2.5)}{15.50'} \right]$$

$$= 32.00' - 5.54' = \underline{\underline{26.46'}}$$

$$\text{Equiv. open port} = 49.27' - (26.46' + 1.5') = \underline{\underline{21.31'}}$$

### Bridge

$$\text{After portion} = 60.08' - 4.50' = \underline{\underline{55.58'}}$$

$$\text{Forward portion} = \underline{\underline{2.0'}}$$

$$\text{Forward overhang} = 4.8' - 1.67' = \underline{\underline{3.13'}}$$

### Forecastle

$$\text{Enclosed } 11.00'$$

$$\text{IL to F.P. Bld.} = 21.51' - 11.00' = 10.51'$$

$$\text{Effective } L = 10.51' \times .9396' = 9.89'$$

$$\text{aft. IL} = 59.35' - (21.51' + 1.67') = \underline{\underline{36.17'}}$$

(See previous comp. for sketch of Superstructures).

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £ : :

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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