

Rpt. C.11 (Comp.).

Index No. 88153  
(For London Office only.)

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>M/V KILLUPIN.</b>	Official Number <b>18079</b>	Nationality and Port of Registry <b>British Newcastle London</b>	Gross Tonnage <b>approx. 545 565</b>	Date of Build <b>1945</b>	Port of Survey <b>NEWCASTLE-ON-TYNE</b>
Moulded Dimensions: Length <b>175'0"</b> Breadth <b>27'0"</b> Depth <b>11'6" to upper dk (+8'6" R.Q.D.)</b>					Date of Survey <b>While Building</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>1074 - 11'1" 926</b> tons.					Surveyor's Signature <b>Stephen P. Cooke</b>
Coefficient of fineness for use with Tables <b>.700</b>					Particulars of Classification <b>+100A1 (Class Contemplated)</b>

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... .. <b>11'50"</b>	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B) <b>27'0"</b>
Stringer plate ... .. <b>.0476</b>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <b>(11.69-11.54) x 1.349 = -.20</b>	Standard Round of Beam = $\frac{B \times 12}{50} =$ <b>6.48"</b>
Sheathing on exposed deck T $\left(\frac{L-S}{L}\right) =$	If restricted by superstructures <b>Lys. Nil.</b>	Ship's Round of Beam = <b>6.75"</b>
Depth for Freeboard (D) = <b>11'54"</b>		Difference <b>.27"</b>
		Restricted to
		Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.27 \times 3065}{4} = -.021$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	<b>45.27</b>	<b>45.70</b>	<b>7.25</b>	<b>(3'6" above R.Q.D.)</b>	<b>45.70</b>
" overhang ... ..	<b>70</b>				
R.Q.D. enclosed ... ..	<b>60.98</b>	<b>59.12</b>	<b>3'6"</b>	<b>3'5" above upper dk</b>	<b>59.06</b>
" overhang ... ..	<b>59.13</b>				
Bridge enclosed ... ..	<b>✓</b>				
" overhang aft ... ..	<b>✓</b>				
" overhang forward ... ..	<b>✓</b>				
F'cle enclosed <b>open</b> ... ..	<b>16.85.83</b>	<b>16.83</b>	<b>7.0</b>		<b>16.83</b>
" overhang ... ..	<b>85</b>				
Trunk aft ... ..	<b>✓</b>				
" forward ... ..	<b>✓</b>				
Tonnage opening aft ... ..	<b>✓</b>				
" " forward ... ..	<b>✓</b>				
Total ... ..	<b>121.65</b>	<b>121.65</b>			<b>121.59</b>

Standard Height of Superstructure	<b>6.00</b>
" " R.Q.D.	<b>3.503</b>
Deduction for complete superstructure	<b>23.54</b>
Percentage covered $\frac{S}{L} =$	<b>69.35</b>
" " $\frac{S_1}{L} =$	
" " $\frac{E}{L} =$	<b>69.33</b>
Percentage from Table, Line A.	<b>61.86</b>
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B.	<b>✓</b>
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	<b>✓</b>
Deduction =	<b>23.54 x 61.86 = -14.56</b>

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..	<b>27.54</b>	<b>1</b>	<b>27.54</b>	<b>27 1/2"</b>	<b>27.50</b>	<b>1</b>	<b>27.50</b>
1/8 L from A.P. ... ..	<b>12.255</b>	<b>4</b>	<b>49.02</b>	<b>13 1/4"</b>	<b>12.25</b>	<b>4</b>	<b>49.00</b>
2/8 L " ... ..	<b>3.03</b>	<b>2</b>	<b>6.06</b>	<b>1 1/2"</b>	<b>1.50</b>	<b>2</b>	<b>3.00</b>
Amidships ... ..	<b>-</b>	<b>4</b>	<b>-</b>	<b>Nil.</b>	<b>-</b>	<b>4</b>	<b>-</b>
3/8 L from F.P. ... ..	<b>6.06</b>	<b>2</b>	<b>12.12</b>	<b>6 3/8"</b>	<b>6.375</b>	<b>2</b>	<b>12.75</b>
1/8 L " ... ..	<b>24.51</b>	<b>4</b>	<b>98.04</b>	<b>25 1/16"</b>	<b>25.81</b>	<b>4</b>	<b>103.24</b>
F.P. ... ..	<b>55.08</b>	<b>1</b>	<b>55.08</b>	<b>60 7/8"</b>	<b>60.87</b>	<b>1</b>	<b>60.87</b>
Total ... ..			<b>247.86</b>				<b>256.36</b>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - S}{2L} \right) = \frac{8.50}{18} \left( \frac{.75 - .3467}{.4033} \right) = -.19$

If limited on account of midship superstructure.  $.19 \times \frac{1.75}{2} = -.187$

Mean actual sheer aft = **> .75**

Mean actual sheer forward = **Nil.**

Length of enclosed superstructure forward of amidships = **.09**

" " aft of " = **.500**

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to **R.Q.** Freeboard Deck = **15'04"**  
Summer freeboard = **3'87"**  
Moulded draught (d) = **11'17"**

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = **2.79 = 2 3/4**

Addition for Winter North Atlantic Freeboard (if required) = **4 3/4**

## Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta =$  **1083 - 1092**  
Tons per inch immersion at summer load water line  
T = **9.202**

Deduction =  $\frac{\Delta}{40 T}$  inches  
= **2.94 = 3**

T.A.I. @ 10'6" = **9.044**

11'0" = **9.18**

11'6" = **9.258**

## TABULAR FREEBOARD corrected for Fresh 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.

	+	-
Depth Correction		
Deduction for superstructures		<b>14.56</b>
Sheer correction		<b>.189</b>
Round of Beam correction		<b>.02</b>
Correction for Thickness of Deck amidships	<b>42.00</b>	
Other corrections, scantlings, etc.		
	<b>42.00</b>	<b>14.78</b>
Summer Freeboard =	<b>46.632</b>	

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

Tropical Fresh Water Line above Centre of Disc ... .. **5 3/4"**

Fresh Water Line " " ... .. **3"**

Tropical Line " " ... .. **2 3/4"**

Winter Line below " " ... .. **2 3/4"**

Winter North Atlantic Line " " ... .. **4 3/4"**

Tropical Fresh Water Freeboard ... .. **2'3 1/4"**

Fresh Water " " ... .. **3'7 1/2"**

Tropical " " ... .. **3'7 3/4"**

Winter " " ... .. **4'1 1/4"**

Winter North Atlantic " " ... .. **4'3 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 - Collier British Home Trade.

Names of sister ships None.

Builder's name and yard number Chloride (Successors) Ltd. No 77

Owners Henry Smith & Co. Ltd

Fee £                     

11-0-0 = 11-0-0  
8-0-0 = 8-0-0  
11-0-0 = 11-0-0



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