

AMENDED -

# LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

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

Ship's Name <b>LILY</b> <b>EX. SHELBOURNE COUNTY.</b>	Official Number	Nationality and Port of Registry <b>LIBERIAN</b> <b>MONROVIA.</b>	Gross Tonnage	Date of Build <b>1943.</b>	Port of Survey _____ Date of Survey <b>26.1.55.</b> Surveyor's Signature _____ Particulars of Classification <b>+ 100 A1.</b>
Moulded Dimensions: Length <b>417.35</b> Breadth <b>56.88</b> Depth <b>37.33</b> C.L. OF RUDDER STOCK. Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>16590</b> tons (excluding bossing) Coefficient of fineness for use with Tables <b>.441</b>					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... .. <b>37.33</b>	(a) Where D is greater than Table depth (D-Table depth) R = <b>(37.38 - 27.82) 3.00 = 28.68</b>	Moulded Breadth (B) <b>56.88</b>
Stringer plate ... .. <b>.05</b>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <b>13.65</b>
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <b>14.00</b>
Depth for Freeboard (D) = <b>37.38</b>		Difference <b>.35</b>
		Restricted to
		Correction = $\frac{\text{Diff}^\circ}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <b>.35 = -.09.</b>

## 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 ... ..					

**DECK**

**FLUSH**

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 = **NIL.**

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..	<b>51.43</b>	1	<b>51.43</b>	<b>54.63</b>	<b>54.63</b>	1	<b>54.63</b>
$\frac{1}{2}$ L from A.P. ... ..	<b>23.02</b>	4	<b>92.08</b>	<b>22.38</b>	<b>22.38</b>	4	<b>89.52</b>
$\frac{3}{4}$ L " ... ..	<b>5.69</b>	2	<b>11.38</b>	<b>4.88</b>	<b>4.88</b>	2	<b>9.76</b>
Amidships ... ..	<b>✓</b>	4	<b>✓</b>	<b>✓</b>	<b>✓</b>	4	<b>✓</b>
$\frac{3}{4}$ L from F.P. ... ..	<b>11.38</b>	2	<b>22.76</b>	<b>11.45</b>	<b>11.75</b>	2	<b>23.50</b>
$\frac{1}{2}$ L " ... ..	<b>46.04</b>	4	<b>184.16</b>	<b>44.13</b>	<b>47.13</b>	4	<b>188.52</b>
F.P. ... ..	<b>103.44</b>	1	<b>103.44</b>	<b>104.75</b>	<b>104.75</b>	1	<b>104.75</b>
Total ... ..			<b>465.58</b>				<b>470.68</b>

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

Mean actual sheer forward = **EXCESS**  
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **3**  
 " " aft of " = **NIL.**

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - S}{2L} \right) =$   **$\frac{54.10}{18} \times .75 = - .21$**   
 If limited on account of midship superstructure. **Nº. FLUSH DECK.**

If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD
Addition for Winter and Winter North Atlantic Freeboard.		corrected for Flush Deck (if required)
Depth to Freeboard Deck = <b>37.38</b> Ft.	Displacement in salt water at summer load water line	<b>46.95 + 6.26</b>
Summer freeboard = <b>9.77</b>	$\Delta =$	<b>.68 + .471 = 1.151</b>
Moulded draught (d) = <b>24.61</b>	Tons per inch immersion at summer load water line	Correction for coefficient $\frac{1.36}{1.36}$
Keel allowance =	T =	
Extreme draught =	Deduction = $\frac{\Delta}{40 T}$ inches	
Deduction for Tropical freeboard and addition for	= <b><math>\frac{1.151}{40 \times 1.36} = .21</math></b>	
Winter freeboard = $\frac{d}{4}$ inches = <b>6.90 = .7"</b>	<b><math>\frac{1.151}{18} = .064</math></b>	
Addition for Winter North Atlantic Freeboard (if required) = <b>✓</b>		

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

Tropical Fresh Water Line above Centre of Disc	<b>14.4"</b>	Tropical Fresh Water Freeboard
Fresh Water Line " "	<b>7.4"</b>	Fresh Water " "
Tropical Line " "	<b>7.4"</b>	Tropical " "
Winter Line below " "	<b>7.4"</b>	Winter " "
Winter North Atlantic Line " "	<b>7.4"</b>	Winter North Atlantic " "

**9'-9 1/4"**  
**8'-1 1/4"**  
**9'-2 1/4"**  
**9'-2 1/4"**  
**10'-4 1/4"**  
**11'-1 1/4"**

**27.1.55**

**Lloyd's Register Foundation**