

ATTENDED -

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>LILY</i> <i>EX. SHELBORNE COUNTY.</i>	Official Number	Nationality and Port of Registry <i>LIBERIAN</i> <i>MONROVIA.</i>	Gross Tonnage	Date of Build <i>1943.</i>	Port of Survey _____
Moulded Dimensions: Length <i>417.35</i> Breadth <i>56.88</i> Depth <i>37.33</i>					Date of Survey <i>26.1.55.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) <i>16590</i> tons					Surveyor's Signature _____
Coefficient of fineness for use with Tables <i>.471</i>					Particulars of Classification <i>+ 100 A1.</i>

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

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure _____
Poop enclosed					" " R.Q.D. _____
" overhang					Deduction for complete superstructure _____
R.Q.D. enclosed					Percentage covered $\frac{S}{L} =$
" overhang					" " $\frac{S_1}{L} =$
Bridge enclosed					" " $\frac{E}{L} =$
" overhang aft					Percentage from Table, Line A.
" overhang forward					(corrected for absence of forecastle (if required))
F'cle enclosed					Percentage from Table, Line B.
" overhang					(corrected for absence of forecastle (if required))
Trunk aft					Interpolation for bridge less than .2L (if required)
" forward					Deduction = <i>NIL.</i>
Tonnage opening aft					
" " forward					
Total					

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	<i>51.43</i>	1	<i>51.43</i>	<i>54.63</i>	<i>54.63</i>	1	<i>54.63</i>
$\frac{1}{2}$ L from A.P.	<i>23.02</i>	4	<i>92.08</i>	<i>22.38</i>	<i>22.38</i>	4	<i>89.52</i>
$\frac{3}{4}$ L "	<i>5.69</i>	2	<i>11.38</i>	<i>4.88</i>	<i>4.88</i>	2	<i>9.76</i>
Amidships	<i>✓</i>	4	<i>✓</i>	<i>✓</i>	<i>✓</i>	4	<i>✓</i>
$\frac{3}{4}$ L from F.P.	<i>11.38</i>	2	<i>22.76</i>	<i>11.45</i>	<i>11.75</i>	2	<i>23.50</i>
$\frac{1}{2}$ L "	<i>46.04</i>	4	<i>184.16</i>	<i>47.13</i>	<i>47.13</i>	4	<i>188.52</i>
F.P.	<i>103.47</i>	1	<i>103.47</i>	<i>104.75</i>	<i>104.75</i>	1	<i>104.75</i>
Total			<i>465.58</i>				<i>470.69</i>

Mean actual shear aft = *Deficient > .75*
 Mean standard shear aft = _____
 Mean actual shear forward = *EXCESS*
 Mean standard shear forward = _____

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

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{510}{18} \times .75 = -.21$
 If limited on account of midship superstructure. *Nº. FLUSH DECK.* If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <i>37.38</i> Ft. Summer freeboard = <i>9.77</i> Moulded draught (d) = <i>27.61</i> Keel allowance = _____ Extreme draught = _____ Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>6.90 = 7"</i> 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 = <i>1 1/4"</i>	TABULAR FREEBOARD corrected for Flush Deck (if required) <i>46.95 + 6.26 = 53.21</i> Correction for coefficient $\frac{.68 + .471}{1.36} = 1.451$ <i>83.21</i> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> <tr> <td style="text-align: center;">+</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Depth Correction</td> <td style="text-align: center;"><i>28.68</i></td> </tr> <tr> <td>Deduction for superstructures</td> <td style="text-align: center;"><i>✓</i></td> </tr> <tr> <td>Sheer correction</td> <td style="text-align: center;"><i>✓ .21</i></td> </tr> <tr> <td>Round of Beam correction</td> <td style="text-align: center;"><i>✓ .09</i></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td style="text-align: center;"><i>✓</i></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td style="text-align: center;"><i>✓</i></td> </tr> <tr> <td></td> <td style="text-align: center;"><i>28.68 .30 + 28.38</i></td> </tr> </table> Summer Freeboard = <i>117.16</i>			+	-	Depth Correction	<i>28.68</i>	Deduction for superstructures	<i>✓</i>	Sheer correction	<i>✓ .21</i>	Round of Beam correction	<i>✓ .09</i>	Correction for Thickness of Deck amidships	<i>✓</i>	Other corrections, scantlings, etc.	<i>✓</i>		<i>28.68 .30 + 28.38</i>
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc <i>14 1/4"</i>	Tropical Fresh Water Freeboard <i>9'-9 1/4"</i>
Fresh Water Line " " <i>7 1/4"</i>	Fresh Water " " <i>8'-7 1/4"</i>
Tropical Line " " <i>7 1/4"</i>	Tropical " " <i>9'-2 1/4"</i>
Winter Line below " " <i>7 1/4"</i>	Winter " " <i>10'-4 1/4"</i>
Winter North Atlantic Line " " <i>7 1/4"</i>	Winter North Atlantic " " <i>11'-1 1/4"</i>

27.1.55