

Garonia 35496  
Daphnella 35499

# AMENDED COMPUTATION

## Lloyd's Register of Shipping.

### SURVEYS FOR FREEBOARD.

(COMPUTATION FOR ~~STEAMER~~, ~~SAILING SHIP~~, TANKER.)

Index No. 35957  
(For London Office only).

Ship's Name <i>Diloma</i>	Official Number <i>167258</i>	Nationality and Port of Registry <i>British London</i>	Gross Tonnage <i>8145.78</i>	Date of Build <i>1939</i>	Port of Survey <i>Liverpool</i>
Moulded Dimensions: Length <i>461.00</i> Breadth <i>59.00</i> Depth <i>34.03</i> <i>to centre of rudder stock</i>					Date of Survey <i>During construction</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>17758</i> tons					Surveyor's Signature <i>A. W. Jackson</i>
Coefficient of fineness for use with Tables <i>.790</i>					Particulars of Classification <i>100 A1 "carrying petroleum in bulk" longitudinal framing at bottom and at deck</i>

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... <i>34.03</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(34.09 - 30.73) 3 = + 10.08"</i>	Moulded Breadth (B) <i>59.00</i>
Stringer plate ... <i>.06</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <i>3.36</i>	Standard Round of Beam = $\frac{B \times 12}{50} = 14.16$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <i>14.75</i>
Depth for Freeboard (D) = <i>34.09</i>		Difference <i>.59 excess</i>
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.59}{4} \times .5809 = -.09"$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed <i>BOW FRONT 2 1/2 x 3.60</i>	<i>93.69</i>	<i>93.69</i>	<i>7.5'</i>		<i>93.69</i>	Standard Height of Superstructure <i>7.50'</i>
" overhang	<i>2.40</i>	<i>2.40</i>			<i>2.40</i>	" " R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure <i>42.00"</i>
" overhang						Percentage covered $\frac{S}{L} = 42.04$
Bridge enclosed	<i>44.60</i>	<i>44.60</i>			<i>44.60</i>	" " $\frac{S_1}{L} = 41.91$
overhang aft	<i>2.50</i>	<i>1.87</i>	<i>7.5'</i>		<i>1.87</i>	" " $\frac{E}{L} = 41.91$
<i>BOW FRONT 2 1/2 x 3.89</i>	<i>2.59</i>	<i>2.59</i>			<i>2.59</i>	Percentage from Table, Line A. <i>TANKER 32.91</i>
overhang forward						(corrected for absence of forecastle (if required))
F'cle enclosed	<i>48.04</i>	<i>48.04</i>	<i>7.5'</i>		<i>48.04</i>	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>42 x .3291 = -13.82"</i>
Tonnage opening aft						
" forward						
Total	<i>193.82</i>	<i>193.19</i>			<i>193.19</i>	

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	<i>56.10</i>	1		<i>56.10</i>	<i>55.78</i>	<i>55.78</i>	1		<i>55.78</i>	Mean actual sheer aft = <i>excess</i>
1/8 L from A.P.	<i>24.965</i>	4		<i>99.86</i>	<i>26.00</i>	<i>26.00</i>	4		<i>104.00</i>	Mean actual sheer forward = <i>excess</i>
2/8 L	<i>6.17</i>	2		<i>12.34</i>	<i>6.47</i>	<i>6.47</i>	2		<i>12.94</i>	Mean standard sheer forward
Amidships		4					4			Length of enclosed superstructure forward of amidships =
2/8 L from F.P.	<i>12.34</i>	2		<i>24.68</i>	<i>12.78</i>	<i>12.78</i>	2		<i>25.56</i>	" " aft of " = <i>Tanker.</i>
1/8 L	<i>49.93</i>	4		<i>199.72</i>	<i>52.00</i>	<i>52.00</i>	4		<i>208.00</i>	
F.P.	<i>112.20</i>	1		<i>112.20</i>	<i>109.41</i>	<i>109.41</i>	1		<i>109.41</i>	
Total				<i>504.90</i>					<i>515.69</i>	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{10.79}{18} \left( .75 - \frac{.2102}{.5398} \right) = -.32"$

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 = *34.09*  
Summer freeboard = *6.67*  
Moulded draught (d) = *27.42*

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = *6.85 = 6 3/4"*  
Addition for Winter North Atlantic Freeboard (if required) = *6.85 + 4.61 = 11.46 = 11 1/2"*

Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta = 16791$   
Tons per inch immersion at summer load water line  
 $T = 56.03$   
Deduction =  $\frac{\Delta}{40 T}$  inches  
= *7.49*  
= *7 1/2"*

TABULAR FREEBOARD corrected for Flush Deck (if required)  
Correction for coefficient  $\frac{.790 + .68}{1.36} = \frac{1.47}{1.36}$

Depth Correction ... *10.08*  
Deduction for superstructures ... *13.82*  
Sheer correction ... *.32*  
Round of Beam correction ... *.09*  
Correction for Thickness of Deck amidships ...  
Other corrections, scantlings, etc. ...

*77.95*  
*84.26*  
*16.5.39*  
*10.08 14.23 - 4.15*  
Summer Freeboard = *80.11*

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

Tropical Fresh Water Line above Centre of Disc ... *14 1/4*  
Fresh Water Line " " ... *7 1/2*  
Tropical Line " " ... *6 3/4*  
Winter Line below " " ... *6 3/4*  
Winter North Atlantic Line " " ... *11 1/2*

Tropical Fresh Water Freeboard ... *5' 5 3/4"*  
Fresh Water " " ... *6' 0 1/2"*  
Tropical " " ... *6' 1 1/4"*  
Winter " " ... *7' 2 3/4"*  
Winter North Atlantic " " ... *7' 7 1/2"*