

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker						Port of Survey
having <i>a rained quarter-deck, bridge and fore-castle.</i>						Date of Survey <i>24th June '35</i>
(Type of Superstructures.)						Name of Surveyor
Ship's Name <i>Ask</i> <i>ex LOWFIELD</i>	Nationality and Port of Registry <i>Norwegian</i>	Official Number	Gross Tonnage	Date of Build <i>1917-11</i>	Particulars of Classification	
Moulded Dimensions: Length <i>240.05</i> Breadth <i>36.0</i> Depth <i>20.52</i>						
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>3204</i> tons						
Coefficient of fineness for use with Tables <i>.744</i>						

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	<i>20.52</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(20.56 - 16.00) × 1.846 = +8.42</i>		Moulded Breadth (B)	<i>36'</i>
Stringer plate	<i>.04</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <i>✓</i>		Standard Round of Beam = $\frac{B \times 12}{50}$	<i>= 8.64</i>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	<i>✓</i>	If restricted by superstructures		Ship's Round of Beam	<i>= 9.00</i>
Depth for Freeboard (D) =	<i>20.56</i>			Difference	<i>.36</i>
				Restricted to	<i>✓</i>
				Correction = $\frac{\text{Diff}^a}{4} \times \left(1 - \frac{S_1}{L} \right)$	<i>= $\frac{.36}{4} \times .3069 = -.03$</i>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...	<i>91.39</i>	<i>91.39</i>	<i>1.5</i>	<i>× 1.5 / 3.933</i>	<i>34.85</i>
" overhang ...					
Bridge enclosed ...	<i>51.75</i>	<i>51.75</i>	<i>7.0</i>	<i>✓</i>	<i>51.75</i>
" overhang aft ...					
" overhang forward ...	<i>.50</i>	<i>.25</i>			<i>.25</i>
Fore enclosed ...	<i>23.00</i>	<i>23.00</i>	<i>7.0</i>		<i>23.00</i>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<i>166.64</i>	<i>166.39</i>			<i>109.85</i>

Standard Height of Superstructure	<i>6.0</i>
" " R.Q.D.	<i>3.933</i>
Deduction for complete superstructure	<i>30</i>
Percentage covered $\frac{S}{L} =$	<i>69.42</i>
" " $\frac{S_1}{L} =$	<i>69.31</i>
" " $\frac{E}{L} =$	<i>45.76</i>
Percentage from Table, Line A. <i>✓</i>	
(corrected for absence of fore-castle (if required))	
Percentage from Table, Line B. <i>32.39</i>	
(corrected for absence of fore-castle (if required))	
Interpolation for bridge less than 2L (if required) <i>✓</i>	
Deduction = $30 \times .3239 =$	<i>- 9.72</i>

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>34.00</i>	<i>1</i>		<i>34.00</i>	<i>42.00</i>	<i>42.00</i>	<i>1</i>		<i>42.00</i>
$\frac{1}{8}L$ from A.P. ...	<i>15.13</i>	<i>4</i>		<i>60.52</i>	<i>18.96</i>	<i>18.96</i>	<i>4</i>		<i>75.84</i>
$\frac{2}{8}L$ " ...	<i>3.74</i>	<i>2</i>		<i>7.48</i>	<i>4.74</i>	<i>4.74</i>	<i>2</i>		<i>9.48</i>
Amidships ...	<i>-</i>	<i>4</i>		<i>-</i>	<i>-</i>	<i>-</i>	<i>4</i>		<i>-</i>
$\frac{3}{8}L$ from F.P. ...	<i>7.48</i>	<i>2</i>		<i>14.96</i>	<i>8.10</i>	<i>8.10</i>	<i>2</i>		<i>16.20</i>
$\frac{1}{8}L$ " ...	<i>30.26</i>	<i>4</i>		<i>121.04</i>	<i>32.39</i>	<i>32.39</i>	<i>4</i>		<i>129.56</i>
F.P. ...	<i>68.01</i>	<i>1</i>		<i>68.01</i>	<i>72.00</i>	<i>72.00</i>	<i>1</i>		<i>72.00</i>
Total ...				<i>306.01</i>					<i>345.08</i>

Mean actual sheer aft = *Excess*
Mean standard sheer aft

Mean actual sheer forward = *Excess*
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = *.096*

" " aft of " = *> .10*

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{39.07}{18} (.75 - .3471) = -.87$

If limited on account of midship superstructure. $.87 \times \frac{1.96}{2.00} = -.85$

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.

Ft.
Depth to Freeboard Deck = *20.56*
Summer freeboard = *2.66*
Moulded draught (d) = *17.90*

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = *4.48 = 4\frac{1}{2}*
Addition for Winter North Atlantic Freeboard (if required) = *6\frac{1}{2}*

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 = $\frac{\Delta}{40T}$ inches

$\frac{1}{4} = 4\frac{1}{2}$

TABULAR FREEBOARD corrected for Flush 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. ...

30.31

744.08 = 1.424
1.36 = 1.36

8.42

9.72

0.85

0.03

2.50

10.92

10.60

+ 0.32

Summer Freeboard = *32.06*

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

Tropical Fresh Water Line above Centre of Disc ...

Fresh Water Line " "

Tropical Line " "

Winter Line below " "

Winter North Atlantic Line " "

Tropical Fresh Water Freeboard ...

Fresh Water " "

Tropical " "

Winter " "

Winter North Atlantic " "

2'-8" = 813

1'-11" = 585

2'-3\frac{1}{2}" = 699

2'-3\frac{1}{2}" = 699

3'-0\frac{1}{2}" = 927

3'-2\frac{1}{2}" = 977

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
Description of Hatchway											
Dimensions of Hatchway											
COAMINGS	{	Height above Deck ...									
		Thickness { Sides ...									
		{ Ends ...									
		Stiffeners									
		Brackets, Stays ...									
HATCH BEAMS	{	Number									
		Spacing									
		Scantling and Sketch ...									
		Bearing Surface									
FORE AND AFTERS	{	Number									
		Spacing									
		Unsupported Lengths ...									
		Scantling* and Sketch ...									
		Bearing Surface									
HATCH COVERS	{	Material									
		Thickness									
		How fitted									
		Bearing Surface									
Spacing of Cleats											
Number of Tarpaulins											
<p>*Are wood fore and afters steel shod at all bearing surfaces ? Are battens and wedges efficient and in good condition ? Are tarpaulins in good condition and in accordance with rule requirements ? Are lashings provided in accordance with rule requirements ?</p>											

Particulars of fiddley, funnel and ventilator coamings :—

Particulars of Flush Bunker Scuttles :—

For particulars of page
2, 3 & see
Newcastle Report dated
22nd July 1932.

Particulars of Companionways :—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

Particulars of Gangway Cargo and Coaling Ports :—

