

Rpt. C.11 (Comp.)

Preliminary Assignment  
Particulars supplied by the Builders  
**Lloyd's Register of Shipping.**

Index. No. 36127  
(For London Office only).

**SURVEYS FOR FREEBOARD.**

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Alex. Stephensons</i> <i>Yard No 575-6</i>	Official Number <i>-</i>	Nationality and Port of Registry <i>British</i>	Gross Tonnage <i>approx 6400</i>	Date of Build <i>1939</i>	Port of Survey <i>Glasgow</i>
Moulded Dimensions: Length <i>450.77'</i> Breadth <i>60.00'</i> Depth <i>29.67' to 2nd Deck</i> <i>Centre of Rudder stock</i> <i>39.42' to Shelter Deck</i>				Date of Survey <i>16th October 1939</i>	
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>13630</i> tons				Surveyor's Signature <i>J. Thomson</i>	
Coefficient of fineness for use with Tables <i>.699</i>				Particulars of Classification <i>100 A1</i> <i>with freeboard</i> <i>(contemplated)</i>	

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth ...	<i>29.67'</i>	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	<i>60.00'</i>
Stringer plate ( <i>.68"</i> ) ...	<i>.07'</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	<i>(30.05 - 29.74) 3 = - .78" 93</i>	Standard Round of Beam = $\frac{B \times 12}{50}$	<i>14.40</i>
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$		If restricted by superstructures		Ship's Round of Beam	<i>14.2</i>
Depth for Freeboard (D) =	<i>29.74</i>			Difference	<i>even .10</i>
				Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S}{L} \right)$	<i>= <math>\frac{.10}{4} \times .0059 = \text{NIL}</math></i>

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>85.65</i>	<i>85.65</i>	<i>9.75</i>		<i>85.65</i>
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...	<i>359.79</i>	<i>359.79</i>	<i>9.75</i>		<i>359.79</i>
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...	<i>5.33</i>	<i>2.67</i>			<i>2.67</i>
" forward ...					
Total ...	<i>450.77</i>	<i>448.11</i>			<i>448.11</i>

Standard Height of Superstructure	<i>7.50'</i>
" R.Q.D.	<i>✓</i>
Deduction for complete superstructure	<i>42.00"</i>
Percentage covered $\frac{S}{L} =$	<i>100.00</i>
" $\frac{S_1}{L} =$	<i>99.41</i>
" $\frac{E}{L} =$	<i>99.41</i>
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	<i>99.27</i>
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	
Deduction = $42.00 \times .9927 =$	<i>- 41.70"</i>

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>55.08</i>	1		<i>55.08</i>	<i>60.00</i>	<i>87.00</i>	1		<i>87.00</i>
$\frac{1}{2}$ L from A.P. ...	<i>24.51</i>	4		<i>98.04</i>	<i>26.70</i>	<i>38.72</i>	4		<i>154.88</i>
$\frac{3}{4}$ L " ...	<i>6.06</i>	2		<i>12.12</i>	<i>6.60</i>	<i>9.57</i>	2		<i>19.14</i>
Amidships ...	-	4		-	-	-	4		-
$\frac{3}{4}$ L from F.P. ...	<i>12.12</i>	2		<i>24.24</i>	<i>13.20</i>	<i>15.84</i>	2		<i>31.68</i>
$\frac{1}{2}$ L " ...	<i>49.02</i>	4		<i>196.08</i>	<i>53.40</i>	<i>64.08</i>	4		<i>256.32</i>
F.P. ...	<i>110.15</i>	1		<i>110.15</i>	<i>117.27</i>	<i>144.00</i>	1		<i>144.00</i>
Total ...				<i>495.71</i>					<i>693.02</i>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{197.31}{18} \times .25 = -2.74$

If limited on account of midship superstructure.

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 = *29.74*  
Summer freeboard = *3.60*  
Moulded draught (d) = *26.14*

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = *6.53 = 6\frac{1}{2}*

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$  *14390*

Tons per inch immersion at summer load water line

 $T =$  *62.07.12*Deduction =  $\frac{\Delta}{40 T}$  inches*=  $\frac{14390}{40 \times 62.07} = 2.90$* *= 6.86 = 6\frac{7}{8}*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 *$\frac{68 + .699}{1.36} = \frac{137.9}{1.36}$* 

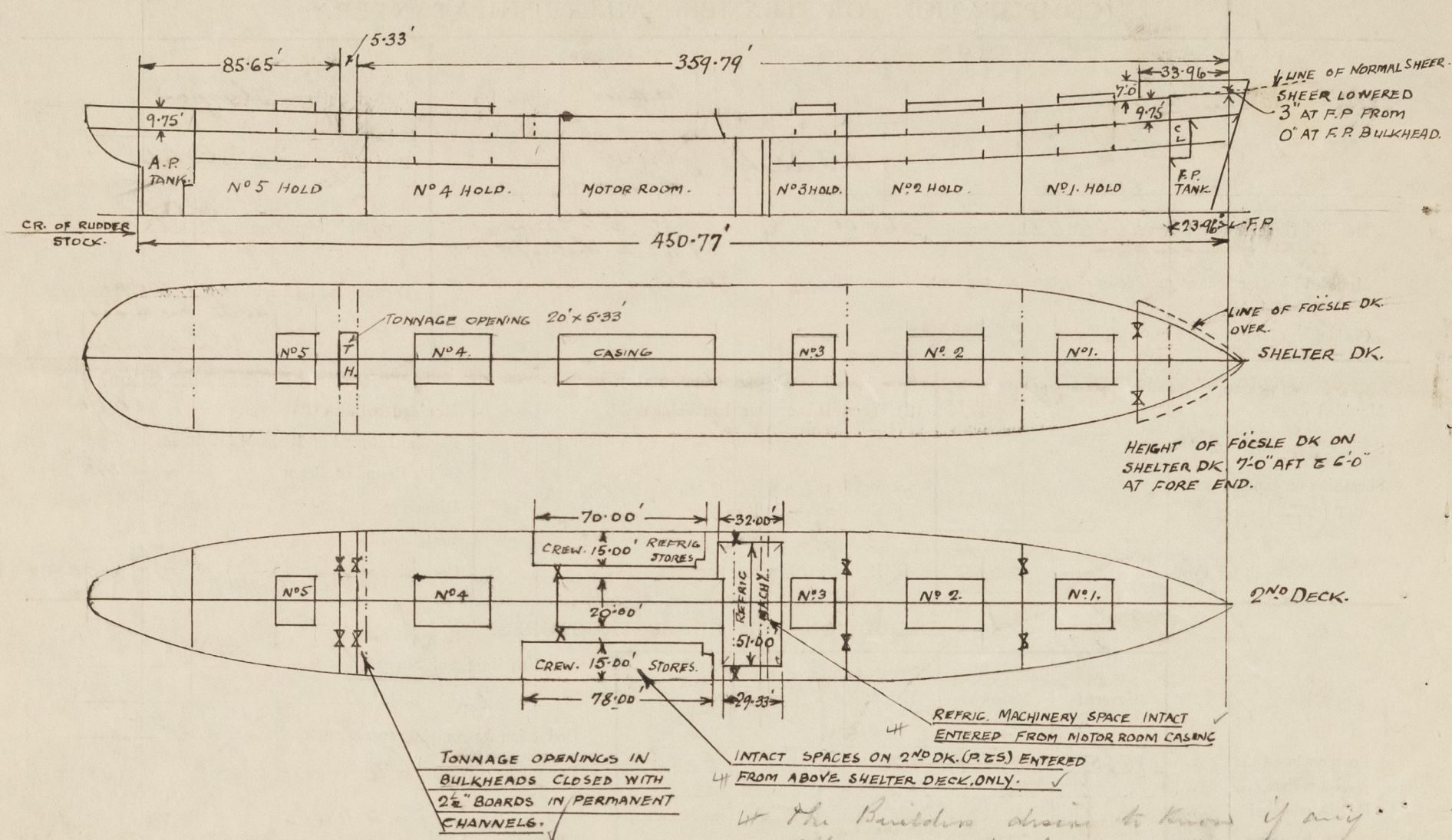
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:-

Tropical Fresh Water Line above Centre of Disc ...	<i>13\frac{1}{2}"</i>
Fresh Water Line " " ...	<i>7"</i>
Tropical Line " " ...	<i>6\frac{1}{2}"</i>
Winter Line below " " ...	<i>6\frac{1}{2}"</i>
Winter North Atlantic Line " " ...	<i>-</i>

Tropical Fresh Water Freeboard ...	<i>3'-7\frac{1}{4}"</i>
Fresh Water " " ...	<i>2'-5\frac{3}{4}"</i>
Tropical " " ...	<i>3'-0\frac{1}{4}"</i>
Winter " " ...	<i>3'-0\frac{3}{4}"</i>
Winter North Atlantic " " ...	<i>4'-1\frac{3}{4}"</i>



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.



The Builder is desired to know if any allowance will be made for these intact spaces under the freeboard regulations.

C.S. S. Vessel with tonnage opening aft.

Extreme draught	Extreme Δ	T. P. I.
26.22	14350	52.1
24.22	13110	51.35

Approved midship section, profile and deck plans forwarded for reference together with sketch showing closed sections in Shelter tween Decks. Freeboard request form 9. Attached.

Trade of ship Meat carrier.

Names of sister ships None.

Builder's name and yard number Alex<sup>r</sup> Stephen & Sons. Yard No. 575-6.

Owners The New Zealand Shipping Co. Ltd.

Fee £ ✓



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