

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD. 18264.

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having *Fokcastle, Bridge House & R.Q.D.*

(Type of Superstructures.)

Ship's Name <i>s/s "Pyrlades"</i>	Nationality and Port of Registry <i>British Methil</i>	Official Number <i>95407</i>	Gross Tonnage <i>705 tons</i>	Date of Build <i>1903</i>
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Moulded Dimensions: Length *182.8 ft.* Breadth *27.76 ft.* Depth *14.58 ft.*  
Moulded displacement at moulded draught = 85 per cent. of moulded depth *1314* tons  
Coefficient of fineness for use with Tables *.731*

Port of Survey *Leith.*  
Date of Survey *9<sup>th</sup> 12<sup>th</sup> 13<sup>th</sup> Sept 1932.*  
Name of Surveyor *John Houston.*  
Particulars of Classification *+100 A1.*  
*5.5 Nue. 2nd No 3-5.31.*

Depth for Freeboard (D) Moulded depth ... <i>14.58</i> Stringer plate ... <i>40</i> ... <i>03</i> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <i>14.61</i>	Depth correction (a) Where D is greater than Table depth (D-Table depth) R = <i>(14.61 - 12.19) 1.406</i> <i>+ 3.40</i> (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures -	Round of Beam correction Moulded Breadth (B) <i>27.76</i> Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>6.66</i> Ship's Round of Beam = <i>7.00</i> Difference <i>Green 34</i> Restricted to Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <i>\frac{34}{4} \times \left( 1 - \frac{69.69}{182.8} \right) = 7.3031 = .03</i>
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## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						Standard Height of Superstructure <i>6.80</i> ✓
" overhang ...						" " R.Q.D. <i>3.532</i> ✓
R.Q.D. enclosed ...	<i>97.8</i> ✓	<i>97.8</i> ✓	<i>4.4</i> ✓		<i>97.80</i> ✓	Deduction for complete superstructure <i>24.28</i> ✓
" overhang ...						Percentage covered $\frac{S}{L} =$ <i>71.83</i> ✓
Bridge enclosed ...	<i>11.0</i> ✓	<i>11.0</i> ✓	<i>7.0</i> ✓		<i>11.00</i> ✓	" " $\frac{S_1}{L} =$ <i>69.69</i> ✓
" overhang aft ...						" " $\frac{E}{L} =$ <i>69.69</i> ✓
" overhang forward ...						Percentage from Table, Line A. <i>62.47</i> ✓
F'cle enclosed <i>open</i> ...	<i>22.5</i> ✓	<i>22.5</i> ✓	<i>6.3</i> ✓		<i>18.60</i> ✓	(corrected for absence of forecastle (if required)) -
" overhang ...						Percentage from Table, Line B. -
Trunk aft ...						(corrected for absence of forecastle (if required)) -
" forward ...						Interpolation for bridge less than 2L (if required) -
Tonnage opening aft ...						Deduction = <i>24.28 x 62.47 = 15.17</i> ✓
" " forward ...						
Total ...	<i>131.3</i> ✓	<i>127.40</i> ✓			<i>127.40</i> ✓	

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	<i>28.28</i> ✓	1		<i>28.28</i> ✓	<i>38.0</i> ✓	<i>38.00</i> ✓	1		<i>28.28</i> ✓	Mean actual sheer aft = <i>Green</i> ✓
$\frac{1}{2}L$ from A.P. ...	<i>12.58</i> ✓	4		<i>50.32</i> ✓	<i>17.5</i> ✓	<i>17.33</i> ✓	4		<i>50.32</i> ✓	Mean actual sheer forward = <i>Deficient</i> ✓ (90.2% Stand)
$\frac{2}{3}L$ " ...	<i>3.11</i> ✓	2		<i>6.22</i> ✓	<i>4.25</i> ✓	<i>4.35</i> ✓	2		<i>6.22</i> ✓	Mean standard sheer forward =
Amidships ...		4					4			Length of enclosed superstructure forward of amidships =
$\frac{2}{3}L$ from F.P. ...	<i>6.22</i> ✓	2		<i>12.44</i> ✓	<i>5.5</i> ✓	<i>5.53</i> ✓	2		<i>11.06</i> ✓	" " aft of " =
$\frac{1}{2}L$ " ...	<i>25.17</i> ✓	4		<i>100.68</i> ✓	<i>22.0</i> ✓	<i>22.12</i> ✓	4		<i>88.48</i> ✓	Stand sheer fwd actual
F.P. ...	<i>56.86</i> ✓	1		<i>56.86</i> ✓	<i>53.0</i> ✓	<i>53.00</i> ✓	1		<i>53.00</i> ✓	$\frac{6.22}{25.17} \times \frac{17.33}{75.51} \times \frac{5.53}{22.12} \times \frac{16.99}{66.36} \times \frac{57.00}{57.00} = \frac{150.73}{150.73} = 90.2$ ✓
Total ...				<i>254.50</i> ✓					<i>237.36</i> ✓	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) =$  *Deficient*  $\frac{17.14}{18} \left( \frac{75-38.91}{182.8} \right) = +.37$  ✓  
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.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	<i>20.25</i> ✓
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	<i>21.01</i> ✓
Depth to Freeboard Deck = <i>19.03</i> ✓	$\Delta =$ <i>1557</i> ✓		
Summer freeboard = <i>5.21</i> ✓	Tons per inch immersion at summer load water line	Depth Correction ...	<i>3.40</i> ✓
Moulded draught (d) = <i>13.82</i> ✓	T = <i>10.10</i> ✓	Deduction for superstructures ...	<i>15.17</i> ✓
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>3.45</i> ✓ <i>3\frac{1}{2}</i> ✓	Deduction = $\frac{\Delta}{40T}$ inches = <i>3.78</i> ✓	Sheer correction ...	<i>.37</i> ✓
Addition for Winter North Atlantic Freeboard (if required) = <i>2" + 3\frac{1}{2}" = 5\frac{1}{2}"</i> ✓		Round of Beam correction ...	<i>.03</i> ✓
		Correction for Thickness of Deck amidships	
		Other corrections, soundings, etc. ...	<i>53.00</i> ✓
		Summer Freeboard = <i>62.58</i> ✓	

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

Tropical Fresh Water Line above Centre of Disc ...	<i>7\frac{1}{2}"</i> ✓	Tropical Fresh Water Freeboard ...	<i>4' - 2\frac{1}{2}"</i> ✓
Fresh Water Line " " ...	<i>3\frac{3}{4}"</i> ✓	Fresh Water " " ...	<i>4' - 7\frac{1}{2}"</i> ✓
Tropical Line " " ...	<i>3\frac{1}{2}"</i> ✓	Tropical " " ...	<i>4' - 10\frac{3}{4}"</i> ✓
Winter Line below " " ...	<i>3\frac{1}{2}"</i> ✓	Winter " " ...	<i>4' - 11"</i> ✓
Winter North Atlantic Line " " ...	<i>5\frac{1}{2}"</i> ✓	Winter North Atlantic " " ...	<i>5' - 6"</i> ✓



3/5. PYLADES.

Particulars of fiddle, funnel and ventilator coverings:— The fiddle funnel & ventilator coverings are in efficient condition. The stokehold grating is covered by a strong hinged cover. The E.R. skylight is of wood in good condition.

None.

Under fence, access to fork accom.  
6'-0 high.  
3'-6 deep.  
2'-9 breadth.  
10½ ft. of sill.  
3'9" x 2'-3" Wood door, facing as

4'-9" high ✓  
5'-0" deep ✓  
2'-10" broad ✓  
12" h. of sill ✓  
3'-7" x 2'-3" wood door facing port.

1-7" dia! 15' high on foreccastle led to fore mast.  
1-6" " 33' " under " " " Accom's  
1-10" " 39' " on fore deck " " to No 1 + 2 holds  
1-10" " 39' " on R.Q.D. " " No 3 hold

Closing appliances  
provided

[illegible]

Closing appliances provided.

None.

No scuppers or sanitary discharges are fitted below the heelboard or R. Q. Deck.

2 Ford. Stard. 1 Aft. Stard. } 8" diam fitted with dead lights.  
2 " Port. 1 " Port.

Those found are in the main  
Shearwater. Those left are  
in the R. Q. D. Shearwater.

On forecattle Open Rails 2'-10" high. 2 rails 17" apart. stanchions 3'-9" apart  
In Well Solid Bulwarks. 3'-9" high. -  
On R.Q.D. Solid Bulwarks. 3'-0" high. -

~~There are no lifelines at present but the Duncans propose setting up some along the forward wall.~~

Acceptable provision made for rigging lifelines on every part of the ship which might have to be used by the crew in the regular working of the ship.

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Aster Well ... R Q D ...	<del>98'-0"</del> 97'-90	3'-0"	2'-0" x 1'-9" 10'-0" x 9" 8'-0" x 9"	2 1 1	20.5 sq ft.	<del>19.86 sq ft.</del> 20 sq ft.
Forward Well ...	<del>51'-3"</del> 51'-50	3'-9"	3'-0" x 2'-0"	2	12 sq ft.	<del>11.68 sq ft.</del> 12 sq ft.

State position of each freeing port. ... } After Well: — 13 ft. 23 ft. 46 ft. 73 ft. from bridge + 3 1/2' above deck.  
(F. and A. position and heights above deck edge) } Forward Well: — 12 ft. 33 ft. from bridge. + 2 1/2' above deck.  
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: — Forward Well: 3 foot bars 6' apart.  
aft. Well: 1 with 3 foot bars 6' apart.  
1 with balanced door.

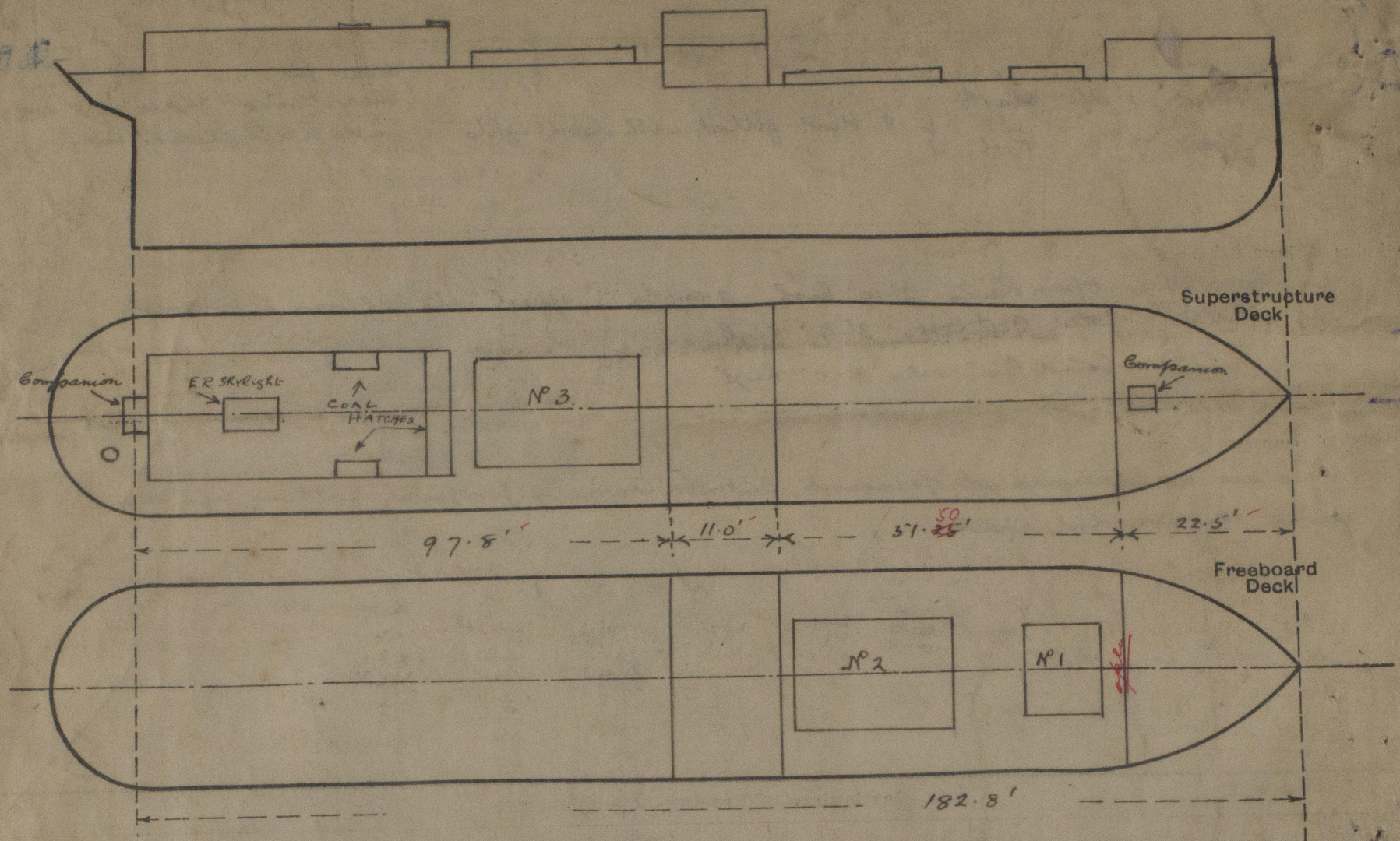
Additional area where sheer is less than standard.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ... ..								
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ... ..	35"	35"	3 1/2" x 3" x 30"	36"	Brackets at top	<del>3' dia section</del> none	4' 4"	4' 4"
Bridge, Forward Bulkhead ... ..	40"	35"	5 1/2" x 3" x 30"	30"	Brackets top + bottom	<del>3' dia section</del> none	4' 6" from deck	7' 0"
Forecastle Bulkhead ... ..	Open							
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	40"	30"	3" x 3" x 30"	38"	Brackets at top	3' 10" x 1' 9"	34"	6' 9"
Exposed Machinery Casings on Super-structure Decks ... ..								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..								
Deckhouses on Flush Deck Ships ...								

POOP Bulkhead	...	...	...	
Raised Quarter Deck Bulkhead	...			
Bridge, After Bulkhead	...	...		
Bridge, Forward Bulkhead	...	...		
Forecastle Bulkhead	...	...	...	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...			
Exposed Machinery Casings on Superstructure Decks	...	...	...	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...	...	...	
Deckhouses on Flush Deck Ships	...			



Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



This vessel has been surveyed in drydock for Condition.

State any special features in the construction of the ship:—

File 22.5  
 $\frac{L}{10} = \frac{182.8}{10} \times 902 = 16.49$   
 $4 \times 22 \times 50 = 2.11$   
18.60

Builder's name and yard number

Names of sister ships

Owners

Matthew Taylor Esq.

Fee £

6 : 16 : 0

Received by me