

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

52701

Computation of Freeboard for Steamer, ~~Sailing Ship~~ *Raised Dr. Sk. Bridge & Forecastle*

having *Raised Dr. Sk. Bridge & Forecastle*

(Type of Superstructures.)

Port of Survey *Glasgow*

Date of Survey *5th July 1932*

Name of Surveyor *A.W. Paterson*

Particulars of Classification *+100 A1*
SS. Grk. 2nd No. 3. 5. 31.

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
<i>"SLESMAN"</i>	<i>British Glasgow</i>	<i>119143</i>	<i>281</i>	<i>1904-6</i>

Moulded Dimensions: Length *132'* Breadth *23'* Depth *10'-6"*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *585* tons

Coefficient of fineness for use with Tables *.756*

<p>Depth for Freeboard (D)</p> <p>Moulded depth ... <i>10'-50"</i></p> <p>Stringer plate <i>3/8"</i> ... <i>.03</i></p> <p>Sheathing on exposed deck</p> <p>$T \left(\frac{L-S}{L} \right) =$</p> <p>Depth for Freeboard (D) = <i>10'-53"</i></p>	<p>Depth correction</p> <p>(a) Where D is greater than Table depth (D - Table depth) R = <i>(10.53 - 8.80) 1.015 = + 1.76</i></p> <p>(b) Where D is less than Table depth (if allowed) (Table depth - D) R =</p> <p>If restricted by superstructures</p>	<p>Round of Beam correction</p> <p>Moulded Breadth (B) <i>25'-0"</i></p> <p>Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>5.52</i></p> <p>Ship's Round of Beam = <i>5'-3 3/4"</i></p> <p>Difference <i>Excess .23</i></p> <p>Restricted to</p> <p>Correction = $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L}) =$ <i>.23 / 4 (1 - .521) = .479 = -.02</i></p>
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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>46-0</i>	<i>46-00</i>	<i>4'-0"</i>		<i>46-00</i>	
" overhang ...	✓					
Bridge enclosed ...	<i>7-0</i>	<i>7-00</i>	<i>7'-0"</i>		<i>7-00</i>	
" overhang aft ...	✓					
" overhang forward ...	✓					
File enclosed <i>open</i> ...	<i>21-25</i>	<i>15-78</i>	<i>6'-6"</i>		<i>15-78</i>	
" overhang ...	✓					
Trunk aft ...	✓					
" forward ...	✓					
Tonnage opening aft ...	✓					
" forward ...	✓					
Total ...	<i>74-25</i>	<i>68-78</i>			<i>68-78</i>	

Standard Height of Superstructure	<i>6-00</i>
" R.Q.D.	<i>3-213</i>
Deduction for complete superstructure	<i>19-2</i>
Percentage covered $\frac{S}{L} =$	<i>56.25</i>
" $\frac{S_1}{L} =$	<i>52.10</i>
" $\frac{E}{L} =$	<i>52.10</i>
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	<i>34.94</i>
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	<i>—</i>
Interpolation for bridge less than .2L (if required)	<i>—</i>
Deduction = $19.2 \times .3494 =$	<i>-6.71</i>

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<i>23.20</i>	1		<i>23.20</i>	<i>24</i>	<i>24.00</i>	1		<i>23.20</i>
1/4 L from A.P. ...	<i>10.32</i>	4		<i>41.28</i>	<i>11</i>	<i>11.06</i>	4		<i>41.28</i>
2/4 L " ...	<i>2.55</i>	2		<i>5.10</i>	<i>2 1/2</i>	<i>2.51</i>	2		<i>5.10</i>
Amidships ...		4					4		
3/4 L from F.P. ...	<i>5.10</i>	2		<i>10.20</i>	<i>4</i>	<i>4.54</i>	2		<i>9.08</i>
1/4 L " ...	<i>20.65</i>	4		<i>82.60</i>	<i>18</i>	<i>18.17</i>	4		<i>72.68</i>
F.P. ...	<i>46.40</i>	1		<i>46.40</i>	<i>42</i>	<i>42.00</i>	1		<i>42.00</i>
Total ...				<i>208.78</i>					<i>193.34</i>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{15.44}{18} \left(.75 - \frac{2812}{2132} \right) = + .402$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = <i>10.53</i></p> <p>Summer freeboard = <i>.79</i></p> <p>Moulded draught (d) = <i>9.74</i></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = $\frac{9.74}{4} = 2.43 = 2 \frac{1}{2}$</p> <p>Addition for Winter North Atlantic Freeboard (if required) =</p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta =$</p> <p>Tons per inch immersion at summer load water line</p> <p>T =</p> <p>Deduction = $\frac{\Delta}{40T}$ inches</p> <p><i>2 1/2"</i></p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient $\frac{.756 + .68}{1.36} = \frac{1.436}{1.36}$</p> <table border="1"> <tr> <td></td> <td>+</td> <td>-</td> </tr> <tr> <td>Depth Correction ...</td> <td><i>1.76</i></td> <td><i>—</i></td> </tr> <tr> <td>Deduction for superstructures ...</td> <td><i>—</i></td> <td><i>6.71</i></td> </tr> <tr> <td>Sheer correction ...</td> <td><i>.40</i></td> <td><i>—</i></td> </tr> <tr> <td>Round of Beam correction ...</td> <td><i>—</i></td> <td><i>.03</i></td> </tr> <tr> <td>Correction for Thickness of Deck amidships ...</td> <td><i>—</i></td> <td><i>—</i></td> </tr> <tr> <td>Other corrections, scantlings, etc. ...</td> <td><i>—</i></td> <td><i>—</i></td> </tr> <tr> <td></td> <td><i>2.16</i></td> <td><i>6.71</i></td> </tr> </table> <p>Summer Freeboard = <i>13.24</i></p> <p><i>13.98</i></p>		+	-	Depth Correction ...	<i>1.76</i>	<i>—</i>	Deduction for superstructures ...	<i>—</i>	<i>6.71</i>	Sheer correction ...	<i>.40</i>	<i>—</i>	Round of Beam correction ...	<i>—</i>	<i>.03</i>	Correction for Thickness of Deck amidships ...	<i>—</i>	<i>—</i>	Other corrections, scantlings, etc. ...	<i>—</i>	<i>—</i>		<i>2.16</i>	<i>6.71</i>
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Flush~~ Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc ...		Tropical Fresh Water Freeboard ...	
Fresh Water Line " " ...		Fresh Water " " ...	
Tropical Line " " ...		Tropical " " ...	
Winter Line below " " ...		Winter " " ...	
Winter North Atlantic Line " " ...		Winter North Atlantic " " ...	

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Description of Hatchway		No 1	No 2	Casing top bunker hatch			
Dimensions of Hatchway		10'-6" x 12'	26'-3" x 12'	3'-2" x 13'			
COAMINGS	Height above Deck	30"	30"	9"			
	Thickness	.32	.32	1/4"			
	Stiffeners	none	none	none			
	Brackets	none	fine each side, three each end	none			
HATCH BEAMS	Number	none	2 1/2 x 2 1/2 x 38	none			
	Spacing	none	32" 3/8	none			
	Scantling and Sketch	none	2 1/2" half rounds	none			
FORE AND AFTERS	Bearing Surface	none	3"	none			
	Number	3	3	none			
	Spacing	3'-0"	3'-0"	none			
	Unsupported Lengths	10'-3 1/4"	8'-5 1/8"	none			
HATCH COVERS	Scantling* and Sketch	Ante 5 1/4" 7"	7" 8"	none			
	Bearing Surface	Sides 6 x 6 1 3/8 3	5" 1 3/8 3	none			
	Material	W.P.	W.P.	W.P.			
	Thickness	2 1/2"	2 1/2"	2 1/2"			
HATCH COVERS	How fitted	Thwartship	Thwartship	7 x 7			
	Bearing Surface	1 3/8	1 3/8	2 1/4"			
Spacing of Cleats		24" at sides 30" at ends	30" 24	24"			
Number of Tarpaulins		2	2	2			

*Are wood fore and afters steel shod at all bearing surfaces? *yes*
 Are battens and wedges efficient and in good condition? *yes*
 Are tarpaulins in good condition and in accordance with rule requirements? *yes*
 Are lashings provided in accordance with rule requirements? *Ring bolts fitted*

Particulars of fiddle, funnel and ventilator coamings:— *Stokehold gratings covered by strong steel hinged covers. Fiddle & funnel ventilators in efficient condition. Engine skylight of wood strongly constructed.*

Particulars of Flush Bunker Scuttles:—

none.

Particulars of Companionways:— *One steel companion 3'-6" x 3'-0" x 6'-6" high on upper deck in way of aft end of forelock leading to crew's quarters. 1 1/4" wood panel door with 17" sill door operated from both sides.*

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

*one vent on forelock 7" diam coaming 33" x 30" to crew's quarters
 one vent on upper dk 10" " " 36" x 32" to hold.
 one vent " " " 10" " " 36" x 32" to hold.*

Constructors constructed in accordance with Rules. Closed with wood plugs & canvas covers.

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

*one air pipe on upper dk from fore peak 12" high x 2 1/2"
 " " " " from aft peak 26" " x 2 1/2"
 Closed with wood plugs and canvas covers.*

Way Cargo and Coaling Ports:— *none*

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Particulars of Upper and Sanitary Discharge Pipes: — No scuppers below fld. deck.
Sanitary discharges from spaces above fld. deck fitted with storm valves
at ship's side. ✓

Particulars of Side Scuttles: — Side scuttles in crew's quarters fwd. fitted with hinged
deadlights. — Lowest side of light 13 1/2" below fld. deck. ✓
Side scuttles in bridge not fitted with deadlights. Side scuttles in
accommodation aft fitted with hinged deadlights. ✓
Scuttles of substantial construction. ✓

Particulars of Guard Rails: — Guard rails on foreck. 3 ft high having two rods and stanchions
spaced 5 ft. apart. ✓
Steel bulwarks on upper dk, bridge dk. & quarter dk, 4'-4", 3'-0" and
3'-0" high respectively efficiently constructed & supported. ✓

Particulars of Gangways, Lifelines, etc.: —
Hemp lifeline provided between bridge & foreck. led through stanchions
riveted to hatch side coaming. ✓

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well <i>2nd dk.</i>	46'-0"	3'-0"	2 @ 2'-6" x 1'-3" 2 @ 2'-0" x 1'-3"	four	11.24	11.10 ✓
Forward Well	57'-9"	4'-4"	2'-10" x 1'-6"	three	12.73	12.275 ✓
State position of each freeing port ... After Well: — 2'-9", 15', 20' and 31'-6" — 3 1/2" above deck ✓ (F. and A. position and height above deck edge) Forward Well: — 1'-8", 22'-2" and 39'-6" — 6 1/2" above deck ✓ State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: — Additional area where sheer is less than standard. <i>hinged steel shutters.</i> ✓						

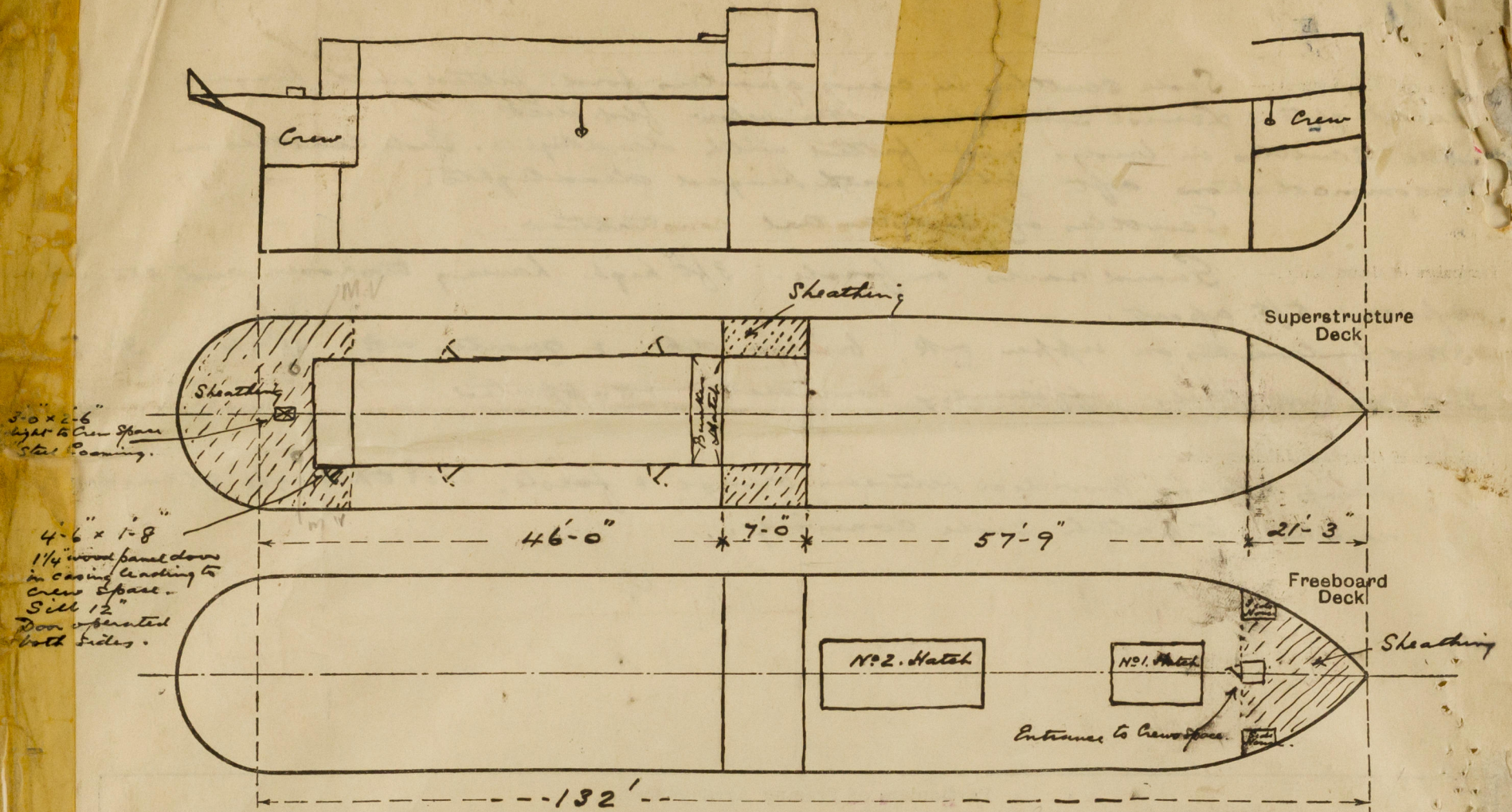
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	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	✓	5/16	protected by casing			none	✓	✓
Bridge, Forward Bulkhead	✓	5/16	1/4	5 x 3 x 40 B.A.	39"	bracketed top & bottom	none	✓
Forecastle Bulkhead		open						
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings <i>on Free- board</i> Raised Quarter Decks	.26	.24	3 x 3 x 25	40"	bracketed at top	5' x 2'	19"	7'-0"
Exposed Machinery Casings on Super- structure Decks	✓							
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances	✓							
Deckhouses on Flush Deck Ships	✓							

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	✓	
Raised Quarter Deck Bulkhead	✓	<i>no openings</i>
Bridge, After Bulkhead	✓	<i>no openings</i>
Bridge, Forward Bulkhead	✓	<i>no openings</i>
Forecastle Bulkhead	✓	
Exposed Machinery Casings <i>on Free- board</i> Raised Quarter Decks	✓	<i>Steel hinged doors. not operated from both sides.</i>
Exposed Machinery Casings on Super- structure Decks	✓	
Machinery Casings within Superstruc- tures 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 pots, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



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

This vessel is engaged in the British Continental Coasting Trade.

Timber fld. not required.

Survey held on slipway.

OMIT

Displacement particulars are not available as Builders' yard is now closed.

Builder's name and yard number

Bow MacLellan & Co Ltd., No. 175.

Names of sister ships

Owners

J. Kennedy & Sons.

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Received by me



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