

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having *Jeune M. Poop Bridge and Forecastle*

Seabank Spray (Type of Superstructures.)

Ship's Name *BARON ELIPANK* Nationality and Port of Registry *British Androssant Cardiff* Official Number *141938* Gross Tonnage *2465* Date of Build *1919-12*

Moulded Dimensions: Length *302.6* Breadth *42.75* Depth *23.1* X

Moulded displacement at moulded draught = 85 per cent. of moulded depth *5700* tons

Coefficient of fineness for use with Tables *789*

Port of Survey *London*

Date of Survey *13.6.32* a.c.

Name of Surveyor *Thomas E. Sowden*

Particulars of Classification *+100 A.1.*
55. Gls. No. 2-28.

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <i>23.08</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(23.12 - 20.17) 2.328 = +6.87</i>	Moulded Breadth (B) <i>42.75</i>
Stringer plate <i>46</i> <i>.04</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>10.26</i>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <i>10.75</i>
Depth for Freeboard (D) = <i>23.12</i>		Difference <i>Emm</i> <i>.49</i>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>\frac{.49}{4} (.5183) = -.06</i>

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure
<i>32.67</i>					<i>6.526</i>
Poop enclosed <i>32.8</i>	<i>32.67</i>	<i>7'-6"</i>		<i>32.67</i>	" " R.Q.D. <i>35.51</i>
" overhang					Deduction for complete superstructure
R.Q.D. enclosed					Percentage covered $\frac{S}{L} =$ <i>48.41</i>
" overhang					" " $\frac{S_1}{L} =$ <i>48.17</i>
Bridge enclosed <i>80</i>	<i>80.00</i>	<i>7'-6"</i>		<i>80.00</i>	" " $\frac{E}{L} =$ <i>48.17</i>
" overhang aft					Percentage from Table, Line A.
" overhang forward					(corrected for absence of forecastle (if required))
Fore enclosed <i>32.4</i>	<i>32.33</i>	<i>7'-6"</i>		<i>32.33</i>	Percentage from Table, Line B. <i>34.44</i>
" overhang					(corrected for absence of forecastle (if required))
Trunk aft					Interpolation for bridge less than .2L (if required)
" forward					Deduction = <i>-12.23</i>
Tonnage opening aft					
" " forward					
Total <i>146.50</i>	<i>145.75</i>			<i>145.75</i>	

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product	Mean actual sheer aft =
A.P.	<i>40.26</i>	<i>1</i>	<i>40.26</i>	<i>64</i>	<i>64.00</i>	<i>40.26</i>	<i>1</i>	<i>40.26</i>
$\frac{1}{8}$ L from A.P.	<i>17.91</i>	<i>4</i>	<i>71.64</i>	<i>284</i>	<i>28.44</i>	<i>17.91</i>	<i>4</i>	<i>71.64</i>
$\frac{2}{8}$ L "	<i>4.43</i>	<i>2</i>	<i>8.86</i>	<i>74</i>	<i>7.11</i>	<i>4.43</i>	<i>2</i>	<i>8.86</i>
Amidships		<i>4</i>					<i>4</i>	
$\frac{3}{8}$ L from F.P.	<i>8.61</i>	<i>2</i>	<i>17.22</i>	<i>84</i>	<i>8.14</i>	<i>8.19</i>	<i>2</i>	<i>16.38</i>
$\frac{4}{8}$ L "	<i>34.83</i>	<i>4</i>	<i>139.32</i>	<i>33</i>	<i>32.78</i>	<i>32.78</i>	<i>4</i>	<i>131.12</i>
F.P.	<i>80.52</i>	<i>1</i>	<i>80.52</i>	<i>72</i>	<i>72.00</i>	<i>72.00</i>	<i>1</i>	<i>72.00</i>
Total			<i>362.32</i>					<i>340.26</i>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ $\frac{22.06}{18} \left(.75 - \frac{.2420}{.508} \right) = +.62$

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.

Depth to Freeboard Deck =	<i>23.12</i>
Summer freeboard =	<i>3.56</i>
Moulded draught (d) =	<i>19.56</i>

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = *4.89* : *4\frac{3}{4}*

Addition for Winter North Atlantic Freeboard (if required) =

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

$=$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.68 + .789}{1.36} = \frac{1.469}{1.36}$

	+	-
Depth Correction	<i>6.87</i>	
Deduction for superstructures		<i>12.23</i>
Sheer correction	<i>.62</i>	
Round of Beam correction		<i>.06</i>
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	<i>7.49</i>	<i>12.29</i>

Summer Freeboard = *42.78*

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, 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 " "	<i>4\frac{3}{4}</i>	Winter " "	
Winter North Atlantic Line " "		Winter North Atlantic " "	

W984-0184/2

1906 Lloyd's Register
Foundation

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	h°1 U°	h°2 W°	h°3 U°	h°4 U°	B.D. B°	U.D. B°			
Dimensions of Hatchway	26' x 16'	26' x 18'	26' x 18'	26' x 16'	11'6" x 17'	6' x 17'			
COAMINGS	Height above Deck ... 30 Thickness Sides ... 44 Thickness Ends ... 44 Stiffeners ... 7 1/2 Brackets, Stays ... 13A				30"	9"			
HATCH BEAMS	Number ... 5 Spacing ... 4-4 Scantling and Sketch ... Bearing Surface ... 3 1/2 x 3 1/2 x 46 12 x 34 3 1/2 x 3 1/2 x 46 3"	5	5	5	B° IN MIDDLE				
FORE AND AFTERS	Number ... Spacing ... Unsupported Lengths ... Scantling* and Sketch ... Bearing Surface ...								
HATCH COVERS	Material ... Pine Thickness ... 2 1/2 How fitted ... F&A Bearing Surface ... 3				Pine 2 1/2 F&A 3 1/2	Do.			
Spacing of Cleats	24				24				
Number of Tarpaulins	3				3				
*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?									

Particulars of fiddle, funnel and ventilator coamings:—

Fiddle gratings fitted with hinged plate covers.
 Vent: funnel coamings in good condition
 Engine Room Skylights of Steel strongly constructed

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways:—

None

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

Forecastle: 2 at 7' x 36" high to Yumb.
 2 at 6' x 11" (S.N.)
 Fore Well: 1 at 16' x 4'-3" high (supported at Yumb B°) to Hold.
 2 at 16' x 36" to Holds.
 Bridge: 2 at 12' x 36" high to Yumb.
 2 at 12' x 36" " " Bunker.
 Aft Well: 4 at 16' x 36" " " Hold.
 Poop: 6 S.N. 6' x 10" high to Poop.
 6 at 6' x 36" " " Yumb.
 1 at 8' x 26" " " Funnel.
 All ventilators fitted with plugs & canvas covers.
 Deck in way (2 funnel coamings on Poop deck to be repaired)

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

Forecastle: 1 to 4P. 4' x 9" high.
 1 " 2' x 12"
 Fore Well: 4 at 2' x 10" high to B°.
 Br. Deck 2 at 2' x 12" " "
 Aft Well 4 at 2' x 8" " "
 No means of closing or snifting holes fitted.
 3'0 high 2.37
 3'0 high 2.37
 All air pipes fitted with snifting holes in upper bend, and having second plugs & chain

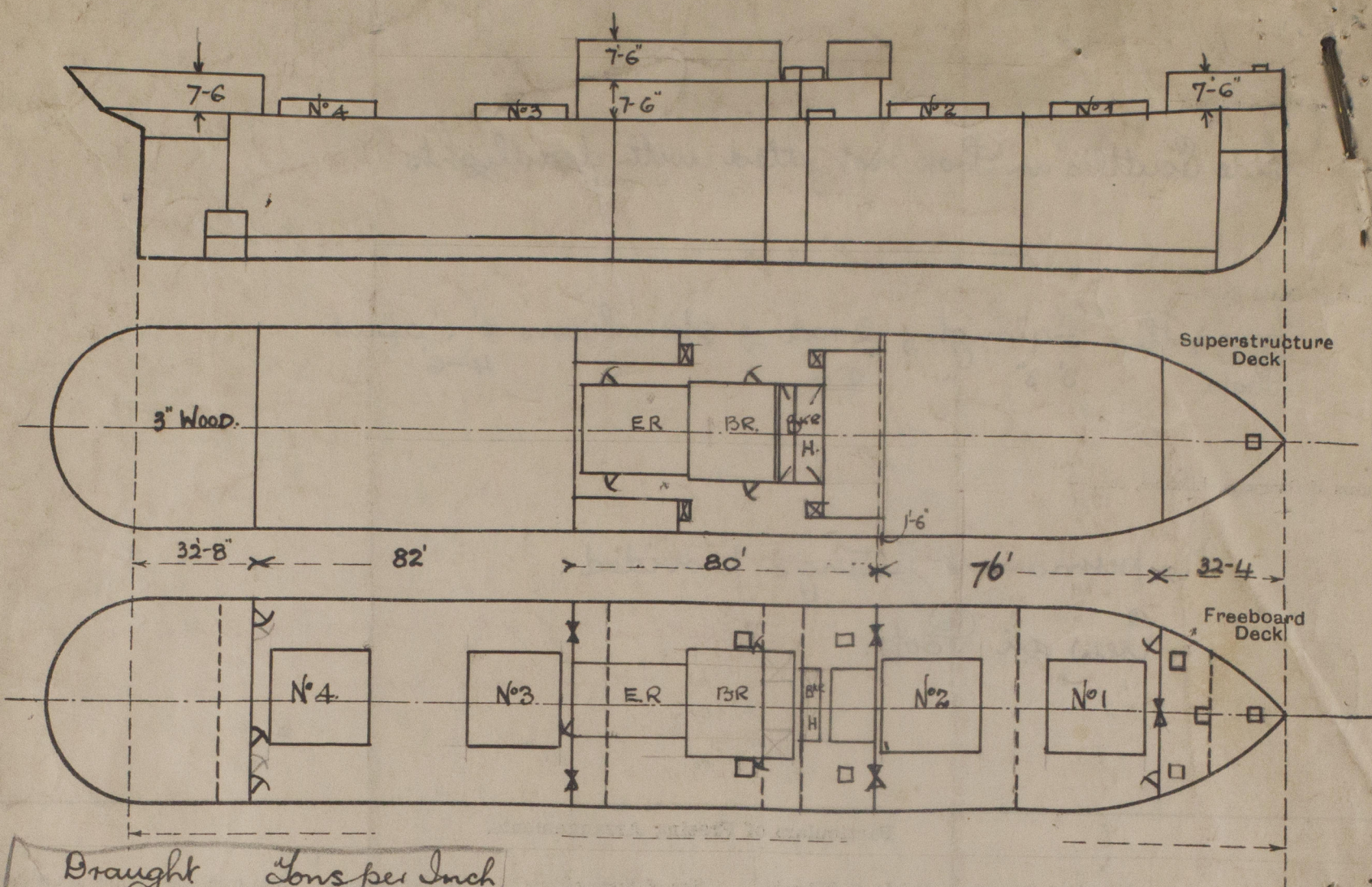
Particulars of Gangway Cargo and Coaling Ports:—

None.



Seabank Spray

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:—



Draught	Tons per Inch
17	26.29
18	26.49
19	26.71
20	26.96

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

Small hatches:—

Fore D^e 2' x 2' x 9" high to 4' cle with clips battens covers & tarpaulins
 Bridge D^e 2 x 5'-3" x 3'-6" x 12" high to Bunker - - - - -
 2 x 3'-6" x 3' x 12" " " " " " " " " " " " "

Upper D^e in 4' cle

2 x 2'-9" x 2' x 9" " " Hold " " " " " "
 1 x 3'-9" x 3' x 9" " " 4' Peak " " " " " "
 1 x 2' x 2' x 9" " " Ch L^r " " " " " "

Upper D^e in Bridge:—

2 x 3' x 2' x 9" " " Bunker " " " " " "
 2 x 3' x 2' x 9" " " Hold " " " " " "

This Survey has been carried out afloat. The S.S. No. 3. has been partly held.

Builder's name and yard number *Ardrossan D.D. & S.B. Co. Ltd* No
 Names of sister ships *"H" Class Standard Ship.*
 Owners *Kelvin Shipping Co. Ltd. (H. Hogarth & Sons Mgrs)*

Fee £ *11 : 1 : 0* Received by me *17/6/32*