

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

GLASGOW REPORT No. 57360

15 AUG 1936
Index No. 34848
(For London Office only.)

Computation of Freeboard for M.V. Steamer, Sailing Ship, Tanker
having Complete Superstructure with Tonnage Opening
(Type of Superstructures.)

Ship's Name <u>"Queen Adelaide"</u>	Nationality and Port of Registry <u>British</u>	Official Number <u>164093</u>	Gross Tonnage <u>4933</u>	Date of Build <u>1936</u>
Moulded Dimensions: Length <u>410'-0"</u> Breadth <u>55'-0"</u> Depth <u>29'-0"</u>				
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>11,975</u> tons				
Coefficient of fineness for use with Tables <u>.754</u>				

Port of Survey Glasgow
Date of Survey while building
Name of Surveyor R. Farley
Particulars of Classification 100A1 with forecastle connecting to rest of C.S.V. with tonnage opening.
Contemporary.

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>29'-0"</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>✓</u> <u>(29.03 - 27.33) / 3 = + 5.1"</u>	Moulded Breadth (B) <u>55'</u>
Stringer plate <u>.03</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <u>1.70</u>	Standard Round of Beam = $\frac{B \times 12}{50} = \underline{13.2}$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ <u>✓</u>	If restricted by superstructures	Ship's Round of Beam = <u>13.2</u>
Depth for Freeboard (D) = <u>29.03</u>		Difference <u>.3 excess</u>
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \underline{\frac{3}{4} \times .0065 = \text{nil}}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<u>24.625</u>	<u>24.625</u>	<u>8'-6"</u>		<u>24.625</u>
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft	<u>380.125</u>	<u>380.125</u>	<u>8'-6"</u>		<u>380.125</u>
" overhang forward					
Forecastle enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft	<u>5.25</u>	<u>2.625</u>	<u>8'-6"</u>		<u>2.625</u>
" forward					
Total	<u>410.00</u>	<u>407.375</u>			<u>407.375</u>

Standard Height of Superstructure 7.50
" " R.Q.D. ✓
Deduction for complete superstructure 42.00
Percentage covered $\frac{S}{L} = 100\%$
" " $\frac{S_1}{L} = 99.35\%$
" " $\frac{E}{L} = 99.35\%$
Percentage from Table, Line A. 99.20%
(corrected for absence of forecastle (if required))
Percentage from Table, Line B.
(corrected for absence of forecastle (if required))
Interpolation for bridge less than 2L (if required)
Deduction = $42 \times .992 = \underline{41.66}$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<u>51.00</u>	<u>1</u>	<u>✓</u>	<u>51.00</u>	<u>39.12</u>	<u>51.00</u>	<u>1</u>	<u>✓</u>	<u>51.00</u>
$\frac{1}{2}$ L from A.P.	<u>22.69</u>	<u>4</u>	<u>✓</u>	<u>90.76</u>	<u>15.16</u>	<u>22.69</u>	<u>4</u>	<u>✓</u>	<u>90.76</u>
$\frac{2}{3}$ L "	<u>5.61</u>	<u>2</u>	<u>✓</u>	<u>11.22</u>	<u>4"</u>	<u>5.61</u>	<u>2</u>	<u>✓</u>	<u>11.22</u>
Amidships		<u>4</u>	<u>✓</u>				<u>4</u>	<u>✓</u>	
$\frac{2}{3}$ L from F.P.	<u>11.22</u>	<u>2</u>	<u>✓</u>	<u>22.44</u>	<u>9.4"</u>	<u>10.74</u>	<u>2</u>	<u>✓</u>	<u>21.48</u>
$\frac{1}{2}$ L "	<u>45.39</u>	<u>4</u>	<u>✓</u>	<u>181.56</u>	<u>37.14</u>	<u>43.44</u>	<u>4</u>	<u>✓</u>	<u>173.76</u>
F.P.	<u>102.00</u>	<u>1</u>	<u>✓</u>	<u>102.00</u>	<u>65.96</u>	<u>97.625</u>	<u>1</u>	<u>✓</u>	<u>97.63</u>
Total				<u>458.98</u>	<u>+12</u>				<u>445.85</u>

Mean actual sheer aft = Standard
Mean standard sheer aft = Standard
Mean actual sheer forward = Deficient
Mean standard sheer forward = Deficient
Length of enclosed superstructure forward of amidships = ✓
" " aft of " = ✓

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{13.13}{18} (.25) = + .18"$$

If limited on account of midship superstructure.

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

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard.	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = \underline{12,540}$ Tons per inch immersion at summer load water line $T = \underline{46.50}$ Deduction = $\frac{\Delta}{40 T}$ inches $= \underline{6.74}$ $= \underline{6.34}$	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.754 + .68}{1.36} = \underline{\frac{1.434}{1.36}}$ Depth Correction <u>5.10</u> Deduction for superstructures <u>41.66</u> Sheer correction <u>.18</u> Round of Beam correction <u>-</u> Correction for Thickness of Deck amidships <u>-</u> Other corrections, scantlings, etc. <u>-</u> Summer Freeboard = <u>42.28</u>
Depth to Freeboard Deck = <u>29.03</u> Summer freeboard = <u>3.52</u> Moulded draught (d) = <u>25.51</u> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>6.38</u> = <u>6 1/2"</u> Addition for Winter North Atlantic Freeboard (if required) = <u>✓</u>		

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

Tropical Fresh Water Line above Centre of Disc	<u>13 1/4"</u>	Tropical Fresh Water Freeboard	<u>2'-5"</u>
Fresh Water Line " "	<u>6 3/4"</u>	Fresh Water " "	<u>2'-11 1/2"</u>
Tropical Line " "	<u>6 1/2"</u>	Tropical " "	<u>2'-11 3/4"</u>
Winter Line below " "	<u>6 1/2"</u>	Winter " "	<u>4'-0 3/4"</u>
Winter North Atlantic Line " "	<u>-</u>	Winter North Atlantic " "	<u>-</u>

21 AUG 1936

RECEIVED
FOURTH SEP 1936

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
Upper Deck						Shelter Deck					
Description of Hatchway	...	...	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...	...	...
COAMINGS	Height above Deck	...	...	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...	...	...
	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	...	...	...	...	...	...	...	...	...	...	...
*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/> Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/> Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/>											

Particulars of fiddle, funnel and ventilator coamings:—

Funnel, Ventilator and engine room skylight
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:—

on Shelter Deck

- 6" x 14" S.N. Vent. to Store coaming 36" to lip
- 12" C.V. to Jumb. escape " 36" x 34"
- 2" x 6" C.V. to Crew Stairs " 36" x 30"
- 2" x 12" S.N. Vent. to Store " 36" to lip
- 2" x 24" C.V. to hold down D^o " 36" x 40"
- 6" x 18" " " " 4 off " 36" x 40"
- 2" x 24" " " " 2 off 11" x 55" coaming (derrick post stayed)
- 8" x 14" S.N. Vent. to galley bunkers " 36" high to lip

2-14" C.V. to hold down decks 36" x 40" coaming on Forecastle
2-6" x 14" S.N. Vent. to hold down D^o 36" to lip
2-12" x 14" " " to Forecastle 36" to lip
2-21" C.V. to hold down decks 36" x 40" coaming
2-18" " " " 11" x 55" coaming (derrick post stayed)

wood plugs + canvas covers provided.

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

1 c 2 1/2" dia. to main tank.
2 c 2" dia.
2 c 2 1/2" dia.
6 c 3" dia.
5 c 3 1/2" dia.
13 c 4" dia.

2-6" dia. to Deep Tank.
all air pipes goose necks have then onifics 18" above deck. wood plugs provided where goose neck fitted.

2 to Forward and after Peak Tanks double bottom tanks + effluents.

Particulars of Gangway Cargo and Coaling Ports:—

none.



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Particulars of Scuppers and Sanitary Discharge Pipes :— Scuppers 4 off P.S. 2nd deck led thro' deck stainer angle with flap valves.
" 6 " P.S. Shelter deck led thro' stainer angle.
All discharge pipes fitted thro' shell immediately above 2nd deck stainer angle & fitted with storm valves.
2 Scuppers from crew space (P.S) aft led below 2nd deck with storm valve and screw plug at deck level.

Particulars of Side Scuttles :—
2 - 10" diam } Braces with hinged deadlights in crew space - shelter tween decks aft.
8 - 12" diam } all of substantial construction

Particulars of Guard Rails :—
Shelter Deck 3'-6" high top rod 1" dia - 2 lower rods 3/4" dia stanchions 5'-0" apart.
" " Bulwark 138'-6"
Forecastle Deck 3'-6" high top rod 1" dia lower rod 3/4" dia stanchions 5'-0" apart

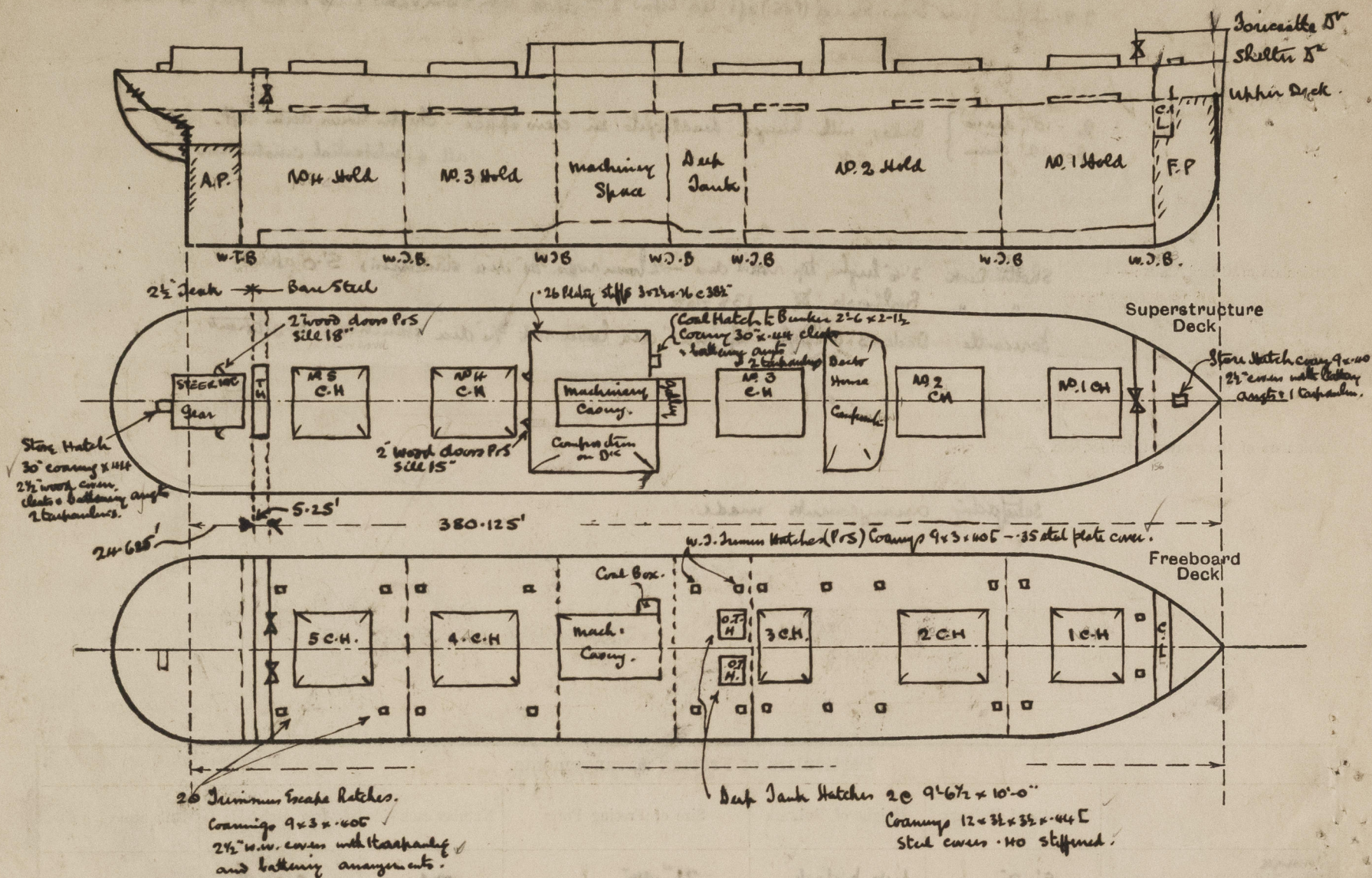
Particulars of Gangways, Lifelines, etc. :—
Satisfactory arrangements made.

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Damage Well	5'-0"	deck to deck	21" x 14"	one	2.04 sq ft	
Bulwark Amidships Forward Well Open at both ends	138'-6 1/2"	3'-6"	2'-6" x 1'-3" + 31'-6" x 3'-6"	3	9.375 sq ft + remainder open rails	13.85
State position of each freeing port in bulwark (F. and A. position and height above deck edge) { 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.						

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 ... ..	.16	.16	3 1/2 x 3 x .16	30, 33 & 36"	Riveted to boundary beam	✓	✓	8'-6"
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead ... ..	.16	.16	3 1/2 x 1 1/2 x .16 + 3 1/2 x 1/2"	30, 33 & 26"	Riveted to boundary beam	2 @ 4'-7" x 37"	18"	8'-6"
Bridge, Forward Bulkhead	✓							
Forecastle Bulkhead ... ..	.30	.30	3 1/2 x 2 1/2 x .16	33"	Riveted to body beam	1 @ 5'-1" x 49"	18"	7'-6"
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓							
Exposed Machinery Casings on Super-structure Decks	✓ .32	.30	one frame space only exposed Port Side	✓	✓	✓	✓	✓
Machinery Casings within Superstructures 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	none (No openings)
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	2 1/2" w.p. shifting boards in steel channels riveted to bulkhead - full height.
Bridge, Forward Bulkhead	none
Forecastle Bulkhead	3 3/8" w.p. shifting boards in steel channels riveted to bulkhead - full height.
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	none
Exposed Machinery Casings on Super-structure Decks	none
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	none
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:—



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

Displacement	at 25'-0" humbles	12,255 tons
	" 26'-0" "	12,814 "

1000 per inch 46.34.
 " " " 46.67.

Builder's name and yard number Messrs Barclay, Curle & Co. Ltd. No 658.

Names of sister ships Same Builders Nos 659, 660 and 662.

Owners *Queen Line*

Est. Fee £ 15 : 0 : 0

Received by me.