

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship , Tanker					Port of Survey <u>London</u>	
having <u>Poof, Bridge and Forecastle</u>					Date of Survey <u>8th Apr 1932</u>	
(Type of Superstructures.)					Name of Surveyor <u>Chief Engineer</u>	
Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	Particulars of Classification <u>+100A1, Carrying Petroleum in Bulk</u>	
<u>BRITISH FAITH</u>	<u>London British</u>	<u>149974</u>	<u>6950</u> <u>6955</u>	<u>1928.1</u> <u>6959 moft 27.47</u>		
Moulded Dimensions: Length <u>440 ft</u> Breadth <u>56' 7 1/2"</u> Depth <u>33' 11.92"</u>						
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>15985</u> tons						
Coefficient of fineness for use with Tables <u>.777</u>						
Depth for Freeboard (D)			Depth correction		Round of Beam correction	
Moulded depth <u>33' 11.92"</u>			(a) Where D is greater than Table depth (D-Table depth) R = <u>(33.99-29.33) 3.00</u> <u>= +13.98</u>		Moulded Breadth (B) <u>56' 9 1/2"</u>	
Stringer plate <u>.290</u>			(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Standard Round of Beam = $\frac{B \times 12}{50}$ = <u>13.62</u>	
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$			If restricted by superstructures		Ship's Round of Beam = <u>14</u>	
Depth for Freeboard (D) = <u>33.99</u>					Difference Excess <u>.38</u>	
					Restricted to	
					Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right)$ = $\frac{.38^2}{4} \times .5783 = -.05$	

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poof enclosed	<u>103' 17"</u>	<u>103.17</u>	<u>8' 0"</u>		<u>103.17</u>	Standard Height of Superstructure <u>7.50</u>
" overhang	<u>none</u>					" " R.Q.D. <u>-</u>
R.Q.D. enclosed	<u>-</u>					Deduction for complete superstructure <u>42.00</u>
" overhang	<u>-</u>					Percentage covered $\frac{S}{L} = 42.33\%$
Bridge enclosed	<u>33' 10"</u>	<u>33.83</u>	<u>8' 0"</u>		<u>33.83</u>	" " $\frac{S_1}{L} = 42.17\%$
" overhang aft	<u>none</u>					" " $\frac{E}{L} = 42.17\%$
" overhang forward	<u>none</u>					Percentage from Table, Line A <u>Tanker 33.17%</u>
F'cle enclosed	<u>53' 7 1/2"</u>	<u>47.83</u>	<u>8' 0"</u>		<u>47.83</u>	(corrected for absence of forecastle (if required))
" overhang	<u>see sketch</u>	<u>47.83</u>			<u>.71</u>	Percentage from Table, Line B.
Trunk aft	<u>none</u>					(corrected for absence of forecastle (if required))
" forward	<u>none</u>					Interpolation for bridge less than 2L (if required)
Tonnage opening aft	<u>-</u>					Deduction = <u>42.00 x .3317 = -13.94</u>
" " forward	<u>-</u>					
Total	<u>186.25</u>	<u>185.54</u>			<u>185.54</u>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	<u>54.00</u>	1		<u>54.00</u>	<u>51.50</u>	<u>51.50</u>	1		<u>51.50</u>	Mean actual sheer aft = <u>Deficient: 74.60% Standard</u>
1/4 L from A.P.	<u>24.03</u>	4		<u>96.12</u>	<u>14.90</u>	<u>14.90</u>	4		<u>59.60</u>	Mean actual sheer forward = <u>Excessant</u>
3/8 L "	<u>5.94</u>	2		<u>11.88</u>	<u>3.72</u>	<u>3.72</u>	2		<u>7.44</u>	Mean standard sheer forward
Amidships		4					4			Length of enclosed superstructure forward of amidships = <u>7 Tanker</u>
3/8 L from F.P.	<u>11.88</u>	2		<u>23.76</u>	<u>12.79</u>	<u>12.78</u>	2		<u>25.56</u>	" " aft of " = <u>-</u>
1/4 L "	<u>48.06</u>	4		<u>192.24</u>	<u>51.15</u>	<u>51.10</u>	4		<u>204.40</u>	Sheer aft
F.P.	<u>108.00</u>	1		<u>108.00</u>	<u>105.50</u>	<u>105.46</u>	1		<u>105.46</u>	Sheer forward
Total				<u>486.00</u>					<u>453.96</u>	
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{32.04}{18} (.75 - .2116) = +.96$										
If limited on account of midship superstructure. <u>5384</u>										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.

Depth to Freeboard Deck =	<u>33.99</u>	Ft.
Summer freeboard =	<u>6.54</u>	
Moulded draught (d) =	<u>27.45</u>	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =	<u>6.86</u>	<u>6 3/4"</u>
Addition for Winter North Atlantic Freeboard (if required) =	<u>4.40</u>	<u>4 1/2"</u>

Deduction for Fresh Water.

Displacement in salt water at summer load water line	<u>15238</u>
Tons per inch immersion at summer load water line	<u>49.7</u>
Deduction = $\frac{\Delta}{40T}$ inches	<u>7.66</u>
	<u>7 3/4"</u>

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.777 + .68}{1.36} = \frac{1.457}{1.36}$ $\frac{1.457}{1.36} = 1.071$ $1.071 \times 13.98 = 14.88$ $14.88 - 13.94 = .94$ $.94 - .05 = .89$ $.89 - .05 = .84$ $.84 - .05 = .79$ $.79 - .05 = .74$ $.74 - .05 = .69$ $.69 - .05 = .64$ $.64 - .05 = .59$ $.59 - .05 = .54$ $.54 - .05 = .49$ $.49 - .05 = .44$ $.44 - .05 = .39$ $.39 - .05 = .34$ $.34 - .05 = .29$ $.29 - .05 = .24$ $.24 - .05 = .19$ $.19 - .05 = .14$ $.14 - .05 = .09$ $.09 - .05 = .04$ $.04 - .05 = -.01$ $-.01 - .05 = -.06$ $-.06 - .05 = -.11$ $-.11 - .05 = -.16$ $-.16 - .05 = -.21$ $-.21 - .05 = -.26$ $-.26 - .05 = -.31$ $-.31 - .05 = -.36$ $-.36 - .05 = -.41$ $-.41 - .05 = -.46$ $-.46 - .05 = -.51$ $-.51 - .05 = -.56$ $-.56 - .05 = -.61$ $-.61 - .05 = -.66$ $-.66 - .05 = -.71$ $-.71 - .05 = -.76$ $-.76 - .05 = -.81$ $-.81 - .05 = -.86$ $-.86 - .05 = -.91$ $-.91 - .05 = -.96$ $-.96 - .05 = -1.01$ $-1.01 - .05 = -1.06$ $-1.06 - .05 = -1.11$ $-1.11 - .05 = -1.16$ $-1.16 - .05 = -1.21$ $-1.21 - .05 = -1.26$ $-1.26 - .05 = -1.31$ $-1.31 - .05 = -1.36$ $-1.36 - .05 = -1.41$ $-1.41 - .05 = -1.46$ $-1.46 - .05 = -1.51$ $-1.51 - .05 = -1.56$ $-1.56 - .05 = -1.61$ $-1.61 - .05 = -1.66$ $-1.66 - .05 = -1.71$ $-1.71 - .05 = -1.76$ $-1.76 - .05 = -1.81$ $-1.81 - .05 = -1.86$ $-1.86 - .05 = -1.91$ $-1.91 - .05 = -1.96$ $-1.96 - .05 = -2.01$ $-2.01 - .05 = -2.06$ $-2.06 - .05 = -2.11$ $-2.11 - .05 = -2.16$ $-2.16 - .05 = -2.21$ $-2.21 - .05 = -2.26$ $-2.26 - .05 = -2.31$ $-2.31 - .05 = -2.36$ $-2.36 - .05 = -2.41$ $-2.41 - .05 = -2.46$ $-2.46 - .05 = -2.51$ $-2.51 - .05 = -2.56$ $-2.56 - .05 = -2.61$ $-2.61 - .05 = -2.66$ $-2.66 - .05 = -2.71$ $-2.71 - .05 = -2.76$ $-2.76 - .05 = -2.81$ $-2.81 - .05 = -2.86$ $-2.86 - .05 = -2.91$ $-2.91 - .05 = -2.96$ $-2.96 - .05 = -3.01$ $-3.01 - .05 = -3.06$ $-3.06 - .05 = -3.11$ $-3.11 - .05 = -3.16$ $-3.16 - .05 = -3.21$ $-3.21 - .05 = -3.26$ $-3.26 - .05 = -3.31$ $-3.31 - .05 = -3.36$ $-3.36 - .05 = -3.41$ $-3.41 - .05 = -3.46$ $-3.46 - .05 = -3.51$ $-3.51 - .05 = -3.56$ $-3.56 - .05 = -3.61$ $-3.61 - .05 = -3.66$ $-3.66 - .05 = -3.71$ $-3.71 - .05 = -3.76$ $-3.76 - .05 = -3.81$ $-3.81 - .05 = -3.86$ $-3.86 - .05 = -3.91$ $-3.91 - .05 = -3.96$ $-3.96 - .05 = -4.01$ $-4.01 - .05 = -4.06$ $-4.06 - .05 = -4.11$ $-4.11 - .05 = -4.16$ $-4.16 - .05 = -4.21$ $-4.21 - .05 = -4.26$ $-4.26 - .05 = -4.31$ $-4.31 - .05 = -4.36$ $-4.36 - .05 = -4.41$ $-4.41 - .05 = -4.46$ $-4.46 - .05 = -4.51$ $-4.51 - .05 = -4.56$ $-4.56 - .05 = -4.61$ $-4.61 - .05 = -4.66$ $-4.66 - .05 = -4.71$ $-4.71 - .05 = -4.76$ $-4.76 - .05 = -4.81$ $-4.81 - .05 = -4.86$ $-4.86 - .05 = -4.91$ $-4.91 - .05 = -4.96$ $-4.96 - .05 = -5.01$ $-5.01 - .05 = -5.06$ $-5.06 - .05 = -5.11$ $-5.11 - .05 = -5.16$ $-5.16 - .05 = -5.21$ $-5.21 - .05 = -5.26$ $-5.26 - .05 = -5.31$ $-5.31 - .05 = -5.36$ $-5.36 - .05 = -5.41$ $-5.41 - .05 = -5.46$ $-5.46 - .05 = -5.51$ $-5.51 - .05 = -5.56$ $-5.56 - .05 = -5.61$ $-5.61 - .05 = -5.66$ $-5.66 - .05 = -5.71$ $-5.71 - .05 = -5.76$ $-5.76 - .05 = -5.81$ $-5.81 - .05 = -5.86$ $-5.86 - .05 = -5.91$ $-5.91 - .05 = -5.96$ $-5.96 - .05 = -6.01$ $-6.01 - .05 = -6.06$ $-6.06 - .05 = -6.11$ $-6.11 - .05 = -6.16$ $-6.16 - .05 = -6.21$ $-6.21 - .05 = -6.26$ $-6.26 - .05 = -6.31$ $-6.31 - .05 = -6.36$ $-6.36 - .05 = -6.41$ $-6.41 - .05 = -6.46$ $-6.46 - .05 = -6.51$ $-6.51 - .05 = -6.56$ $-6.56 - .05 = -6.61$ $-6.61 - .05 = -6.66$ $-6.66 - .05 = -6.71$ $-6.71 - .05 = -6.76$ $-6.76 - .05 = -6.81$ $-6.81 - .05 = -6.86$ $-6.86 - .05 = -6.91$ $-6.91 - .05 = -6.96$ $-6.96 - .05 = -7.01$ $-7.01 - .05 = -7.06$ $-7.06 - .05 = -7.11$ $-7.11 - .05 = -7.16$ $-7.16 - .05 = -7.21$ $-7.21 - .05 = -7.26$ $-7.26 - .05 = -7.31$ $-7.31 - .05 = -7.36$ $-7.36 - .05 = -7.41$ $-7.41 - .05 = -7.46$ $-7.46 - .05 = -7.51$ -7.51

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway									
Dimensions of Hatchway									
COAMINGS	Height above Deck	30"	10"	1'-2 1/2"	11"	30"	30"	30"	30"
	Thickness	44	10 1/2 x 40	40	10 x 3 1/2 x 40	44	40	40	32
	Stiffeners	44		40		44	40	40	40
	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	STEEL	STEEL	STEEL	STEEL	PINE	PINE	PINE	PINE
	Thickness	50	60	60	50	3"	3"	3"	3"
	How fitted	W.T. JOINT	OILTIGHT JOINT	OILTIGHT JOINT	OILTIGHT JOINT	ATHWART	ATHWART	ATHWART	ATHWART
	Bearing Surface								
Spacing of Cleats									
Number of Tarpaulins									
*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 fiddley, funnel and ventilator coamings:—

Statehold gratings covered by hinged steel storm plates.
 Fiddley & ER vents in efficient condition.
 Engine room skylight of steel strongly constructed & good condition.

Particulars of Flush Bunker Scuttles:—

none.

Particulars of Companionways:—

One to stowards quarters in hook housed in steel hook deckhouse. Solid wood door 24x60. 18" sill.
 Two to lower 't'le space (above fore peak tank top) panelled door 24"x60. 18" sill. Housed under 't'le.
 One trunkway to transfer pump room forward, housed under 't'le wing. Steel door 24"x60. 18" sill.
 All doors fastened from both sides.

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

On 't'le. 2 @ 8" to lower 't'le coamings 36" high.
 In forward well 1 @ 8" to pump room coaming 36" high.
 In After well 2 @ 20" to main pump room coamings 36".
 Wood plugs & canvas covers used for closing.

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

On 't'le. 2 @ 3" + 2 @ 4" 1 1/2" x 9"
 In fore well 2 @ 2" dia from cofferdam 1 1/2" x 30"
 In after well 2 @ 2" dia from cofferdam 1 1/2" x 30"
 On Poop deck 2 @ 4" 1 1/2" 2 @ 3" 1 1/2" 2 @ 4" 1 1/2" 2 @ 3" 1 1/2"
 Efficient means provided for closing air pipes.
 All goose-necks beaded at outlet for canvas covers.
 No closing appliances provided.

Particulars of Gangway Cargo and Coaling Ports:—

none.



Particulars of Scuppers and Sanitary Discharge Pipes —

- 2 @ 3" from Pile accommodation, available CI storm valves in lower pile spaces.
 2 @ 3" from Poop accommodation, available CI storm valves in machinery space.
 All other sanitary discharges are above freeboard deck with storm valves in superstructure.
 All sanitary discharges are in spaces always accessible.

Particulars of Side Scuttles:

Side scuttles in Yele (upper & lower). Poop & bridge spaces fitted with hinged deadlights.

Particulars of Guard Rails:—

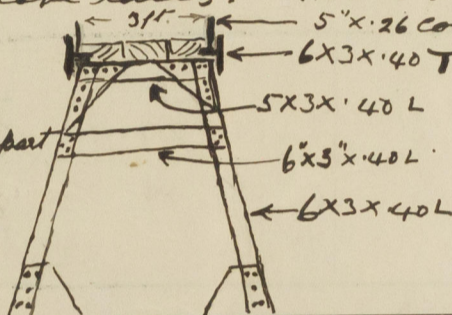
On Yele & Poop decks Rails 36" to 39" high, 3 bars, stanchions 4 ft to 5 ft spacing.

Particulars of Gangways, Lifelines, etc.:—

More aft gangway fitted from poop to bridge & bridge to forecabin. Rail stanchions 3'-0" high with two wire rope rails. Wood decking 2 1/2" —

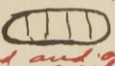
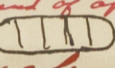
5" x 26 continuous coaming.
 6 x 3 x 40 T BAR STRINGER

Supports spaced
 in average of 15'-0" apart



Longitudinal & transverse
 bracing fitted at 11 ft R
 12/12/41

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	15'-1 ft	42"	open rails fitted for a length of 70'-2" 48" x 24" 	52	36 sq ft	50% open rail
Forward Well	98'-5"	42"	open rails fitted for a length of 98'-0" 48" x 24" 	41	29 sq ft	50% open rail
State position of each freeing port After Well: — 17'-0, 45'-0, 72'-0, 99'-0 & 127 ft from poop. 14" above deck. (F. and A. position and height above deck edge) Forward Well: — 14', 38', 62' & 86' from bridge. State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: — 4 bars. Additional area where sheer is less than standard.						

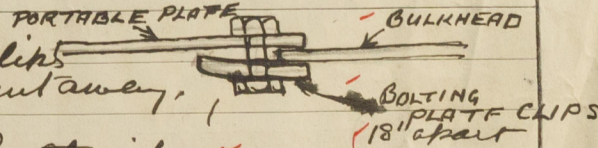
with 42" bulwark
 132 1/4 sq ft
 86 1/4 sq ft

Particulars of Superstructures, Trunks, Casings, Deckhouses.

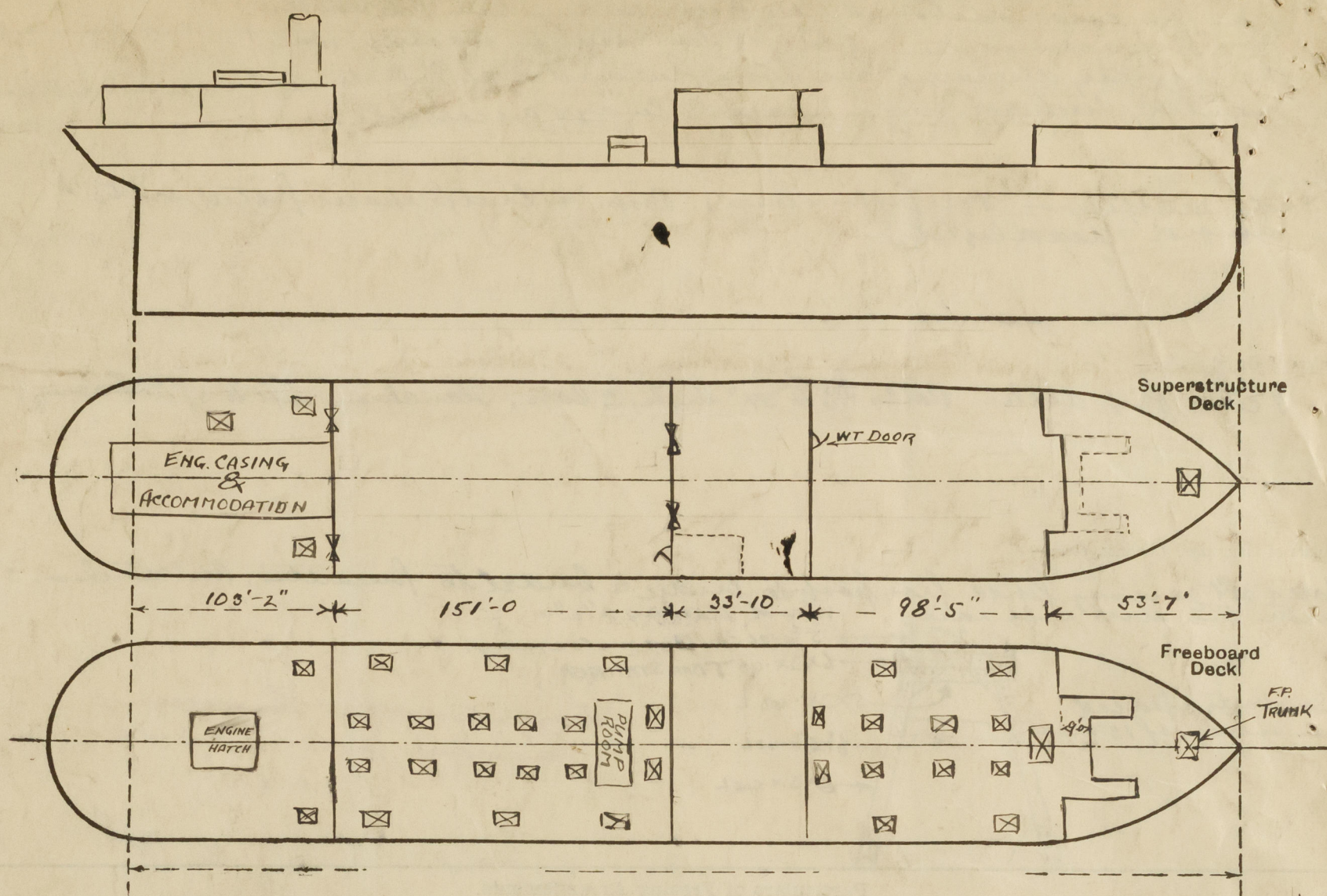
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ... ..	.44	.40	9" x 3" x .5"	30"	Brackets T & B	2 @ 3'-1" x 4'-1"	22"	8'-0"
Raised Quarter Deck Bulkhead ...	—	—	—	—	—	1 @ 3'-0" x 4'-8" 1 @ 3'-0" x 5'-0" 1 @ 2'-6" x 5'-0"	18"	8'-0"
Bridge, After Bulkhead ... ..	.40	.36	3 1/2 x 3 x .40 L	32"	free ends	1 @ 5'-0" x 2'-3" 2 @ 3'-0" ALLEYWAYS 12 doors 5'-0" x 2'-0"	18"	8'-0"
Bridge, Forward Bulkhead ... ..	.44	.40	9" x 3" x .40 L	30"	Brackets T & B	—	18"	8'-0"
Forecastle Bulkhead	—	.26	3 1/2 x 3 1/2 x .40 L	30"	free ends	—	18"	8'-0"
Trunk, Aft	—	—	—	—	—	—	—	—
Trunk, Forward	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Superstructure Decks ... ..	.40	.32	3 x 3 x .32 L	32"	continuous coaming to skylight	2 @ 5'-9" x 2'-4" 2 @ 5'-0" x 2'-4"	18"	8'-0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	.46	.32	3 x 3 x .32 L	32"	- do -	1 @ 5'-3" x 3'-7"	13"	8'-0"
PUMP ROOM Deckhouses on Flush Deck Ships ...	.40	.32	3 1/2 x 3 x .40	30" to 40"	free ends	1 @ 27' x 52"	24"	5'-6" to 6'-6"

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

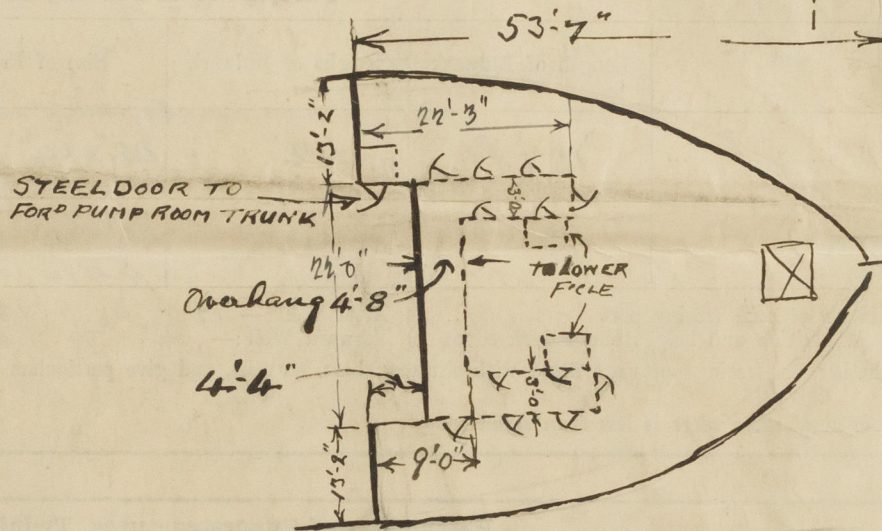
Poop Bulkhead	Portable steel plates with loose bolting plates clips
Raised Quarter Deck Bulkhead ...	Storm board channels have been cut away.
Bridge, After Bulkhead	2 portable plates same as poop front.
Bridge, Forward Bulkhead	1 framed steel hinged W.T. door fastening both sides.
Forecastle Bulkhead	1 framed steel hinged W.T. door fastening both sides.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	Doors to lower part of pump room trunk, hinged steel, others panelled wood
Exposed Machinery Casings on Superstructure Decks	all workable from both sides
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	Steel doors (hinged) fastening both sides
PUMP ROOM Deckhouses on Flush Deck Ships ...	Steel hinged doors fastening both sides.
	Steel framed W.T. hinged door fastening both sides.



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:—



$$.85 \times 33.92 = 28.83$$

$$29'-0\frac{1}{2}'' BK$$

$$12.5 \times 49.9 = 625$$

$$\begin{array}{r} 15440 \\ 16065 \\ \hline 80 \\ 15985 \end{array}$$

$$27-5\frac{1}{2}'' mld$$

$$27-8'' BK$$

$$8 \times 49.9 = 398$$

$$\begin{array}{r} 14840 \\ 15238 \end{array}$$

$$\frac{22.25 \times 3 + 9.0 \times 8.0}{24.17} = \frac{138.75}{24.17} = 5.75$$

$$\frac{53.58}{47.83} = 1.12$$

$$\frac{49.25}{1.42} = 34.68$$

Builder's name and yard number

Names of sister ships

Owners

Fee £

14 : 9 : 0

Received by me

11/4/32



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