

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker having <u>FORECASTLE, BRIDGE MIDSHIPS, BRIDGE AFT.</u> <i>note registered at Panama.</i>					Port of Survey <u>BREMEN.</u>
(Type of Superstructures.) <u>17 ft. 10 in.</u>					Date of Survey <u>12.2.32.</u>
Ship's Name <u>F. J. WOLFE</u>	Nationality and Port of Registry <u>Panama</u> <u>PANAMA</u>	Official Number <u>167573</u>	Gross Tonnage <u>12231</u>	Date of Build <u>1914/49</u>	Name of Surveyor <u>W. H. Meyer</u>
Moulded Dimensions: Length <u>510.81'</u> Breadth <u>70'</u> Depth <u>38.75'</u>					Particulars of Classification <u>+ 100 A1</u> <u>LONGITUDINAL FRAMING.</u> <u>CARRYING PETROLEUM IN BULK.</u>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>27458.</u> tons					
Coefficient of fineness for use with Tables <u>.800.</u>					

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>38' 9"</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>(38.83 - 34.42) x 3 = + 12.33.</u>	Moulded Breadth (B) <u>70'</u>
Stringer plate <u>1"</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{70 \times 12}{50} = 16.80$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <u>17.51"</u>
Depth for Freeboard (D) = <u>38' 10"</u>		Difference <u>.92.</u>
		Restricted to
		Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.92}{4} \times .4424 = -.13.$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
AFTER BRIDGE					
Peep enclosed	<u>54.85</u>	<u>54.85</u>	<u>7' 6"</u>	✓	<u>54.85</u>
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed	<u>40.03</u>	<u>40.03</u>	<u>7' 6"</u>	✓	<u>40.03</u>
„ overhang aft					
„ overhang forward					
F'cle enclosed					
„ overhang	<u>39.11</u>	<u>39.11</u>	<u>7' 6"</u>	✓	<u>39.11</u>
Trunk aft					
„ forward					
Tonnage opening aft					
„ „ forward					
Total	<u>133.99</u>	<u>133.99</u>			<u>133.99</u>

Standard Height of Superstructure	<u>7.50.</u> ✓
„ „ R.Q.D.	✓
Deduction for complete superstructure	<u>42.00</u> ✓
Percentage covered $\frac{S}{L} =$	<u>25.43</u>
„ „ $\frac{S_1}{L} =$	<u>25.43</u>
„ „ $\frac{E}{L} =$	<u>25.43</u> ✓
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	
Percentage from Table, Line B. Tanker	<u>18.01</u> ✓
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	
Deduction =	<u>42.00 x .1801 = - 7.56.</u> ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<u>62.08</u>	1		<u>62.08</u>	<u>89.25"</u>	<u>89.25</u>	1		<u>89.25</u>
$\frac{1}{2}$ L from A.P.	<u>24.62</u>	4		<u>110.48</u>	<u>35.83"</u>	<u>35.83</u>	4		<u>143.32</u>
$\frac{2}{3}$ L „	<u>6.83</u>	2		<u>13.66</u>	<u>8.02"</u>	<u>8.04</u>	2		<u>16.14</u>
Amidships	✓	4		✓	0	✓	4		✓
$\frac{2}{3}$ L from F.P.	<u>13.66</u>	2		<u>27.32</u>	<u>10.12"</u>	<u>10.12</u>	2		<u>20.24</u>
$\frac{1}{2}$ L „	<u>55.23</u>	4		<u>221.00</u>	<u>58.50"</u>	<u>58.50</u>	4		<u>234.00</u>
F.P.	<u>124.16</u>	1		<u>124.16</u>	<u>136.39"</u>	<u>136.39</u>	1		<u>136.39</u>
Total				<u>558.40</u>					<u>639.34</u>

Mean actual sheer aft =	<u>Excess</u>
Mean standard sheer aft	
Mean actual sheer forward =	<u>Excess</u>
Mean standard sheer forward	
Length of enclosed superstructure forward of amidships =	
„ „ aft of „ =	<u>Does not apply.</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{80.64}{18} \times (.45 - .1286) = -2.48.$ ✓

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	92.28. ✓
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	100.40 ✓
Depth to Freeboard Deck = <u>38.83</u> ✓	Δ = <u>25/20</u>	Depth Correction	<u>12.33</u> ✓
Summer freeboard = <u>8.52</u> ✓	Tons per inch immersion at summer load water line	Deduction for superstructures	<u>✓ 4.56</u> ✓
Moulded draught (d) = <u>30.31</u> ✓	T = <u>48.2</u>	Sheer correction	<u>✓ 2.48</u> ✓
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>7.58</u> ✓	Deduction = $\frac{\Delta}{40 T}$ inches = <u>8.03</u> ✓	Round of Beam correction	<u>✓ .13</u> ✓
Addition for Winter North Atlantic Freeboard (if required) = <u>5.21</u> ✓	<u>= 20 in</u>	Correction for Thickness of Deck amidships	<u>✓</u> ✓
		Other corrections, scantlings, etc.	<u>✓</u> ✓
		12.33 10.44 + 1.80	
		Summer Freeboard = <u>102.26</u> ✓	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck <u>8' 6 1/2</u> 102.26" = 2.60 M. Free			
Tropical Fresh Water Line above Centre of Disc	<u>15 1/2</u> 15.41" = .43 M.	Tropical Fresh Water Freeboard	<u>7' 3"</u> 86.65" = 2.20 M. Free
Fresh Water Line	<u>8</u> 8.23" = .23 M.	Fresh Water	<u>7' 10 1/2"</u> 94.23" = 2.49 M. Free
Tropical Line	<u>7 1/2</u> 7.58" = .19 M.	Tropical	<u>7' 11"</u> 94.68" = 2.41 M.
Winter Line below	<u>7 1/2</u> 7.58" = .19 M.	Winter	<u>9' 2"</u> 109.84" = 2.79 M.
Winter North Atlantic Line	<u>12 3/4</u> 12.49" = .32 M.	Winter North Atlantic	<u>9' 7 1/4"</u> 115.05" = 2.92 M.

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...
COAMINGS	Height above Deck	...	18" ✓	31.5" ✓	31.5" ✓	31.5" ✓	24" ✓		
	Thickness	...	.374" ✓	.433" ✓	.394" ✓	.433" ✓	.374" ✓		
	Stiffeners	...							
	Brackets, Stays	...							
HATCH BEAMS	Number	...							
	Spacing	...							
FORE AND AFTERS	Number	...							
	Spacing	...							
HATCH COVERS	Material	...	STEEL						
	Thickness	...	.374" ✓	.374" ✓	.394" ✓	.532" ✓	.374" ✓		
How fitted	...								
Bearing Surface	...								
Spacing of Cleats	...								
Number of Tarpaulins	...								

Particulars of fiddley, funnel and ventilator coamings :—

NO FIDDLEY. ✓

FUNNEL AND VENTILATORS EFFICIENTLY FASTENED ON CASING TOP WITH RIVETED ANGLES.

Particulars of Flush Bunker Scuttles:—

NONE. ✓

Particulars of Companionways :—

NONE. ✓

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

FRAME 34/35, 600 Z, COAMING HEIGHT 800 mm, THICKNESS 5 Z.		ON AFTER BRIDGE:—	
562 S.		FRAME 67, 350 Z, COAMING HEIGHT 760 Z, THICKNESS 5 Z. 3 S.	✓
1644 p.s.		" 104, 600 Z, " 950 "	✓
1412 p.s. 1000 Z	1150	1414, 300 "	0 " 5 Z. ✓
1494 p.s. 600 Z	1250		
1494 p.s. 400 Z	1100	ON FORECASTLE:—	
8494 p.s. 300 Z	3100	FRAME 103/108, 400 Z, COAMING HEIGHT 760 Z, THICKNESS 5 Z. 3 S.	✓

ALL VENTILATORS ARE CAPABLE OF BEING CLOSED BY A WOOD COVER. ✓

Specially supported.

30" should be 26

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

FRAME -6-7 S.S. GOOSE NECK 100x80x42 HEIGHT 915 Z.	FRAME 16/18 P.S.S. 2.5" GOOSE NECK, HEIGHT 915 Z.
1/4 P.S.	82/80 P.S.S. 2.5 "
15/19 P.S.	84/88 P.S. 3.5 "
	93/94 P.S. 3.5 " 1000 "
	98/96 2.5 5" 1500 "
	108/9 ANGLE 5.5 "
IN TRANSVERSE SPACE 2" GOOSE NECK, HEIGHT 915 Z.	
FRAME O-1	
1-4 S.S.	
5-6 S.S.	
13/14 P.S.S.	
16/18 P.S.S.	
	ABOVE AFTER BRIDGE:-
	FRAME 16/18 P.S.S. 3" GOOSENECK, HEIGHT 960 Z.

Particulars of Gangway Cargo and Coaling Ports:—

NONE.

FRAME 91/92 P.A.S.S. GOOSE NECK 800X600 XZ, HEIGHT 915 Z.

" 100/101 P.A.S.S. " " " " " "

Closing appliances?

F. J. Wolfe.

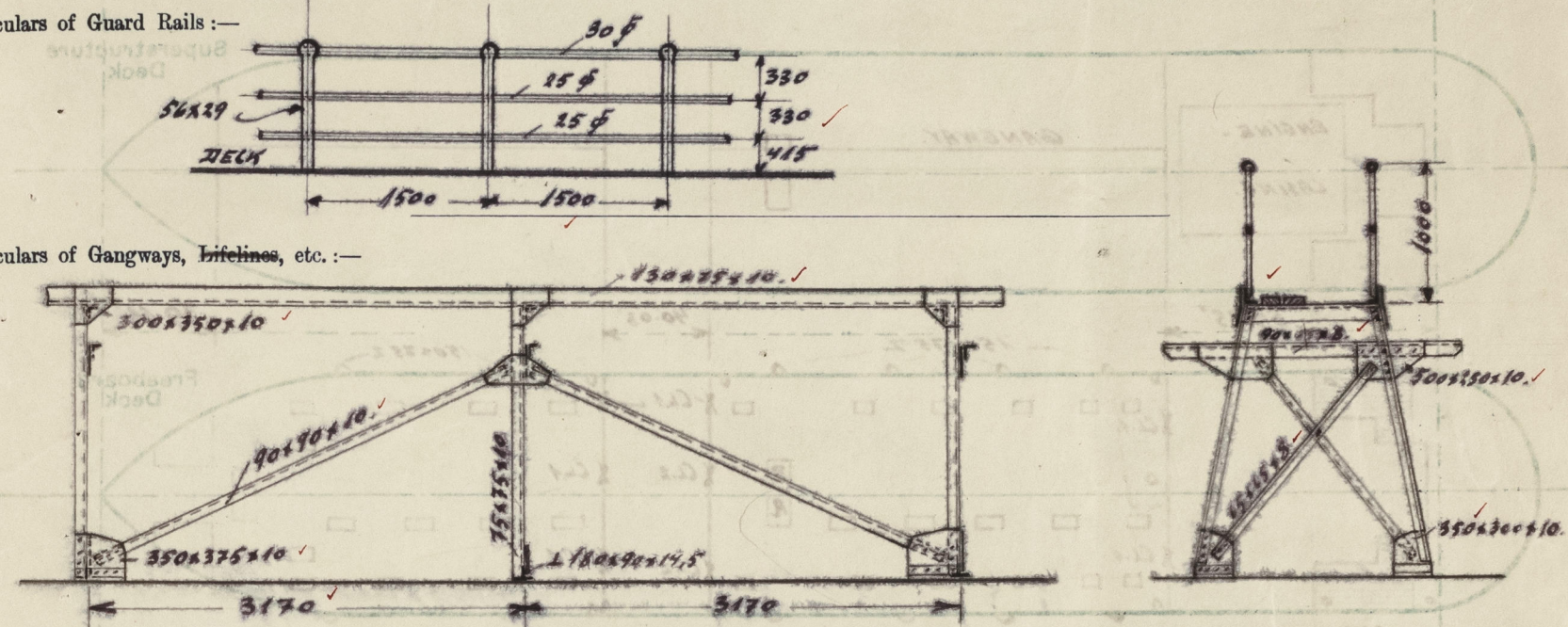
Particulars of Scuppers and Sanitary Discharge Pipes — **SANITARY DISCHARGE PIPES:—**

SCUTTLES: FRAME 6/4 PASS. 5" ϕ , 800Z BELOW UPPER DK. ✓ FRAME 8/4 S.S. ✓ FRAME 9/10 PASS } ALL OPENINGS
" 13/14 " 8/16 P.S. " 13/16 P.S. } 800-1000Z
" 14/17 " 15/15 P.S. " 15/16 P.S. } 1500 STEP
" 15/16 " 16/14 P.S. " 16/14 P.S. } 4" ϕ WATER LINE
" 16/15 " 17/13 S.S. " 17/15 P.S. } WITH STORM PAIN
" 17/14 " 18/13 S.S. " 18/15 P.S. }
" 18/13 " 19/12 P.S. " 19/13 P.S. }
" 19/12 " 20/11 P.S. " 20/12 P.S. }
WITHOUT STORM PAIN, METAL OTHER THAN CAST IRON ✓
BESIDES THE ABOVE: - 6 SCUTTLES 15075Z ON EACH }
SIDE THROUGH STAINER ANGLE AS PER SKETCH BELOW. ✓ 66/4X PASS. 5" ϕ = 1100Z BELOW UPPER DK.
66/4X PASS. 5" ϕ = 1100Z BELOW UPPER ✓

Particulars of Side Scuttles :

300 LBS WITH HINGED STEEL COVERS, HEIGHT ABOVE TWEEN DECK = 1650 LBS
ON FRAME: - 3-4, 1/4, 5/4, 8/4, 10/4, 13/4, 14/4, 17/4, 21/4, 23/4, 25/4;
26/4, 28/4, 29/4, 31/4, 34/4, 37/4, 38/4, 41/4, 43/4, 44/4, 45/4.

Particulars of Guard Rails :—



Particulars of Gangways, Lifelines, etc. :—

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						
Forward Well						

State position of each freeing port { After Well :—
(F. and A. position and height above deck edge) { Forward Well :—

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.

State position of each freeing port { After Well :—
(F. and A. position and height above deck edge) { Forward Well :—

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.

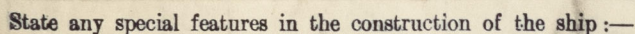
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
AFTER BRIDGE FW.								
Rear Bulkhead	12 ✓	11 ✓	L 180x90x12 ✓	760 ✓	150x90x10 5 mm ✓	1615x205 ✓	460 ✓	2290 +1600 ✓
AFT.								
Raised Quarter Deck Bulkhead ...	12 ✓	8 ✓	L 180x75x11 ✓	760 ✓	150x90x10 5 mm ✓	1615x205 ✓	460 ✓	2290 ✓
Bridge, After Bulkhead	10 ✓	9 ✓	L 180x75x10 ✓	760 ✓	BRACKETS 150x150x10 ✓	1615x165 ✓	515 ✓	"
Bridge, Forward Bulkhead	12 ✓	11 ✓	L 270x90x13 ✓	760 ✓	BRACKETS 150x150x10 ✓	1615x165 ✓	460 ✓	"
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	12 ✓	11 ✓	L 280x90x12 ✓	760 ✓	BRACKETS 150x150x10 ✓	1615x165 ✓	515 ✓	2290 +1600 ✓
Exposed Machinery Casings on Super-structure Decks	✓	10 ✓	L 115x165x75 ✓	760 ✓	✓	✓	✓	1600 ✓
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).

AFTER BRIDGE FWD.			
Ramp Bulkhead ...	...	...	2 OPENINGS 1515x605x10 2. HINGED AND CAPABLE TO BE MANIPULATED FROM BOTH SIDES BY TUGGLES.
Raised Quarter Deck Bulkhead ...	...	...	10 HINGED STEEL DOORS TO BE MANIPULATED FROM BOTH SIDES BY TUGGLES. ✓ 1 HINGED STEEL DOOR, CAPABLE TO BE MANIPULATED FROM BOTH SIDES BY TUGGLES. ✓
Bridge, After Bulkhead ...	...	...	2 PORTABLE PLATES SECURED BY HOOK BOLTS. ✓ → spacing of bolts
Bridge, Forward Bulkhead ...	...	...	3 HINGED STEEL DOORS AS ABOVE. ✓
Forecastle Bulkhead ...	...	...	✓
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	...	...	✓
Exposed Machinery Casings on Super-structure Decks ...	...	...	2 HINGED STEEL DOORS AS ABOVE. ✓
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:—



Names of sister ships

Owners.

Fee £

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