

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having POOP - BRIDGE & FOULE Port of Survey NEWCASTLE

(Type of Superstructures.)

Date of Survey 8TH MARCH, 1932

Ship's Name "PEGAWAY" Nationality and Port of Registry BRITISH NEWCASTLE Official Number 148067 Gross Tonnage 1826 Date of Build 1924 5P

Name of Surveyor P. H. Broadacre

Moulded Dimensions: Length 262-0 Breadth 39-10 Depth 21-0

Moulded displacement at moulded draught = 85 per cent. of moulded depth 4045 tons

Coefficient of fineness for use with Tables .448

Particulars of Classification 100A1

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth 21-00	(a) Where D is greater than Table depth (D - Table depth) R = $(21-04 - 17-44) \times 2.011 = + 7.24$	Moulded Breadth (B) <u>39.0</u>
Stringer plate 04	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{9.36}{50} = 9.75$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <u>9.75</u>
Depth for Freeboard (D) = <u>21.04</u>		Difference <u>0.39</u>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.39}{4} \times .455 = -.06$

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure
Poop enclosed <u>21.44</u>	<u>21.44</u>	<u>7-6"</u>	<u>✓</u>	<u>21.44</u>	<u>6.12</u>
" overhang + <u>5"</u>					R.Q.D. <u>✓</u>
R.Q.D. enclosed - <u>.33</u>					Deduction for complete superstructure <u>32.15</u>
" overhang - <u>.33</u>					Percentage covered $\frac{S}{L} = \frac{36.30}{39.0} = .931$
Bridge enclosed <u>46.33</u>	<u>46.33</u>	<u>7-6"</u>	<u>✓</u>	<u>46.33</u>	" $\frac{S_1}{L} = \frac{35.45}{39.0} = .909$
" overhang aft - <u>.42</u>					" $\frac{E}{L} = \frac{35.45}{39.0} = .909$
" overhang forward <u>4-5"</u>	<u>2.21</u>			<u>2.21</u>	Percentage from Table, Line A. <u>19.63</u>
F'ole enclosed <u>22.9</u>	<u>22.95</u>	<u>7-6"</u>	<u>✓</u>	<u>22.95</u>	(corrected for absence of forecastle (if required))
" overhang <u>6-5 SKETCH</u>					Percentage from Table, Line B. <u>23.63</u>
Trunk aft -					(corrected for absence of forecastle (if required))
" forward -					Interpolation for bridge less than 2L (if required) $19.63 + \left(\frac{.85}{.2} \times 4 \right) = 23.33$
Tonnage opening aft -					Deduction = $32.15 \times .2333 = - 7.50$
" forward -					
Total <u>94.94</u>	<u>92.93</u>			<u>92.93</u>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<u>36.15</u>	<u>1</u>	<u>✓</u>	<u>36.15</u>	<u>33.00</u>	<u>53.02</u>	<u>1</u>	<u>✓</u>	<u>53.02</u>
$\frac{1}{2}$ L from A.P.	<u>16.09</u>	<u>4</u>	<u>✓</u>	<u>64.36</u>	<u>21.25</u>	<u>21.40</u>	<u>4</u>	<u>✓</u>	<u>85.60</u>
$\frac{3}{4}$ L "	<u>3.98</u>	<u>2</u>	<u>✓</u>	<u>7.96</u>	<u>5.25</u>	<u>5.35</u>	<u>2</u>	<u>✓</u>	<u>10.70</u>
Amidships	<u>4</u>	<u>✓</u>	<u>✓</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>✓</u>	<u>✓</u>	<u>4</u>
$\frac{3}{4}$ L from F.P.	<u>7.95</u>	<u>2</u>	<u>✓</u>	<u>15.90</u>	<u>9.50</u>	<u>9.69</u>	<u>2</u>	<u>✓</u>	<u>19.38</u>
$\frac{1}{2}$ L "	<u>32.18</u>	<u>4</u>	<u>✓</u>	<u>128.72</u>	<u>38.50</u>	<u>38.76</u>	<u>4</u>	<u>✓</u>	<u>155.04</u>
F.P.	<u>72.31</u>	<u>1</u>	<u>✓</u>	<u>72.31</u>	<u>83.00</u>	<u>83.02</u>	<u>1</u>	<u>✓</u>	<u>83.02</u>
Total				<u>325.40</u>					<u>406.76</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{81.36}{18} \times \left(.75 - \frac{.1815}{.2} \right) = 2.54$

If limited on account of midship superstructure. $2.54 \times \frac{.147}{.20} = - 2.27$ 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 =	<u>21.04</u>
Summer freeboard =	<u>2.90</u>
Moulded draught (d) =	<u>18.14</u>

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = $4.53 \times 4\frac{1}{2}$

Addition for Winter North Atlantic Freeboard (if required) = 2"

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 4386$

Tons per inch immersion at summer load water line

$T = 20.25$

Deduction = $\frac{\Delta}{40T}$ inches = $5.41 = 5\frac{1}{2}"$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient	+	-
Depth Correction	<u>7.24</u>	<u>✓</u>
Deduction for superstructures	<u>✓</u>	<u>7.50</u>
Sheer correction	<u>✓</u>	<u>2.27</u>
Round of Beam correction	<u>✓</u>	<u>.06</u>
Correction for Thickness of Deck amidships	<u>✓</u>	<u>✓</u>
Other corrections, scantlings, etc.	<u>✓</u>	<u>✓</u>
	<u>7.24</u>	<u>9.83</u>
Summer Freeboard =	<u>34.63</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>10"</u>	<u>8$\frac{1}{2}$"</u>	Tropical Fresh Water Freeboard	<u>2'-10$\frac{3}{4}$"</u>	<u>19.06</u>
Fresh Water Line " "	<u>5$\frac{1}{2}$"</u>	<u>5$\frac{1}{2}$"</u>	Fresh Water " "	<u>2'-0$\frac{3}{4}$"</u>	<u>2'-9$\frac{1}{2}$"</u>
Tropical Line " "	<u>4$\frac{1}{2}$"</u>	<u>3"</u>	" " " "	<u>2'-5$\frac{1}{4}$"</u>	<u>2'-4"</u>
Winter Line below " "	<u>4$\frac{1}{2}$"</u>	<u>2$\frac{1}{2}$"</u>	" " " "	<u>2'-6$\frac{1}{2}$"</u>	<u>2'-6$\frac{1}{2}$"</u>
Winter North Atlantic Line " "	<u>6$\frac{1}{2}$"</u>	<u>4$\frac{1}{2}$"</u>	" " " "	<u>3'-3$\frac{1}{4}$"</u>	<u>3'-0"</u>
			" " " "	<u>3'-5$\frac{1}{2}$"</u>	<u>3'-2"</u>

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS													
← UPPER DECK →													
Description of Hatchway			No 1.	No 2.	COAL HATCH.	No 3.	No 4.	FORE PEAK.	ESCAPE HATCHES.	BUNKER HATCHES.	POOP STORE	CASING TOP COAL.	
Dimensions of Hatchway			28'8"X27'	26'0"X27'	9'0"X27'	28'8"X27'	33'1"X27'	1'11"X2'3"	3'8"X1'11"	4'0"X3'0"	2'6"X1'11"	4'6"X11'0"	
COAMINGS	{	Height above Deck	52"✓	52"✓	52"✓	52"✓	52"✓	14"✓	7" ABOVE RAISED DK. ✓	9'X3'X45BA ✓	9'18"✓	9'X3'X45BA ✓	
		Thickness { Sides	44"✓	44"✓	44"✓	44"✓	44"✓	44"✓	26"✓			30"✓	30"✓
		Stiffeners { Ends	44"✓	44"✓	44"✓	44"✓	44"✓	44"✓	26"✓	7'X3'X34"✓		30"✓	
		Brackets, Stays 2" DIA	SIDES & FE. 28. ✓	SIDES & FE. 38. ✓	SIDES & FE. 28. ✓	S. & FE. 28. ✓	SIDES & FE. 38. ✓	-	-	-	-	-	-
HATCH BEAMS	{	Number	5	5	1	5	6						
		Spacing	4'9"	4'4"	4'6"	4'9"	4'9"						
		Scantling and Sketch	25'X32" 3AS A 2AS B	20'X32" 3AS A 2AS B	1AS B	3AS A 2AS B	3AS A 3AS B						
		Bearing Surface	3 1/2"✓	3 1/2"✓	3 1/2"✓	3 1/2"✓	3 1/2"✓						
FORE AND AFTERS	{	Number											
		Spacing											
		Unsupported Lengths											
		Scantling* and Sketch											
HATCH COVERS	{	Material	W.P. ✓	W.P. ✓	W.P. ✓	W.P. ✓	W.P. ✓	W.P. ✓	JOINTED W/T STEEL COVER WITH 8 BUTTERFLY NUTS. ✓	W.P. ✓	W.P. ✓	W.P. ✓	
		Thickness	3"✓	3"✓	3"✓	3"✓	3"✓	2 1/2"✓	2 1/2"✓	2 1/2"✓	2 1/2"✓	2 1/2"✓	
		How fitted	F.A. ✓	F.A. ✓	F.A. ✓	F.A. ✓	F.A. ✓	T. ✓	T. ✓	T. ✓	T. ✓	F.A. ✓	
		Bearing Surface	3 1/2"✓	3 1/2"✓	3"✓	3 1/2"✓	3 1/2"✓	2"✓	3"✓	3"✓	2 1/2"✓	2 1/2"✓	
Spacing of Cleats			24"✓	24"✓	24"✓	24"✓	24"✓	15"	-	24"✓	20"✓	24"✓	
Number of Tarpaulins			3 SETS TO EACH HATCH. ✓										
*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? YES. ✓													

Particulars of fiddle, funnel and ventilator coamings:—

FIDDLE GRATINGS FITTED WITH HINGED STEEL COVERS.
 E.R. SKYLIGHTS STEEL.
 FIDDLE & FUNNEL VENTS GOOD.

Particulars of Flush Bunker Scuttles:—

TWO ON BRIDGE DECK 20" DIA. BAYONET JOINTS.

Particulars of Companionways:—

POOP DECK:— STEEL COMPANION WITH 1 3/4" WOOD DOOR OPERATING BOTH SIDES. SILL 17"
 BRIDGE DECK:— ENTRANCES TO BRIDGE SPACE ACCOMMODATION ENCLOSED IN STRONG STEEL HOUSES WITH SOLID 1 5/8" TEAK DOORS OPERATING BOTH SIDES. SILL 18"

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

POOP DECK:— 4 @ 6" DIA. LED TO POOP SPACE. COAMINGS 34"X30"
 AFT WELL 1 @ 13" " " HOLD. " 7'8"X38" supported
 1 @ 13" " " TUNNEL " 36"X38"
 1 @ 9" " " " " 7'8"X36" supported
 FORE WELL 2 @ 13" " " HOLD " 36"X38"
 FORE DECK 1 @ 13" " " " " 36"X38"

VENTILATORS ARE TO RULE REQUIREMENTS.
 CLOSING- WOOD PLUGS & CANVAS COVERS.

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

POOP DECK:— 4 C.I. @ 6" DIA. LED TO POOP. HEIGHT TO MOUTH 8 1/2"
 AFT WELL 2 M.I. @ 3" " " DB. TANKS " " 26"
 BRIDGE 4 M.I. @ 2 1/2" " " " " 3"
 FORE WELL 3 M.I. @ 3" " " " " 24"
 FORE DECK 1 M.I. @ 3" " " " " 3"

Wood plugs provided as means of closing

Particulars of Gangway Cargo and Coaling Ports:—

NONE.



© 2020

Lloyd's Register Foundation

Pegaway

Particulars of Scuppers and Sanitary Discharge Pipes —

W.C. PIPES LEAD 1 M.I. STORM-VALVES FITTED.

Scupper from bridge space with screw cap.

Particulars of Side Scuttles:

DEAD-LIGHTS FITTED IN POOP-BRIDGE SPACES.

Particulars of Guard Rails:—

POOP DECK.
FOCLE DECK.
WELLS :-
BRIDGE

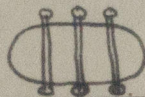
2 TIER RAILS 3'0" HIGH. STANCHIONS SPACED 4'7" APART.
2 " " 3'3" " " " " 3'6" "
BULWARKS 3'9½" HIGH. STANCHIONS 6½" X 34" B.P. SPACED 5'3" APART.
" " 3'0" " " " 6½" X 34" B.P. " 6'9" "
(NO WASH-PORTS IN BRIDGE BULWARKS).

Particulars of Gangways, Lifelines, etc. :—

Lifelines have been fitted across
the hatches in both wells.

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	85.54 86'0"	3'9½"	3.75' X 1.83'	3	18.42 sq. ft.	14.11 sq. ft.
Forward Well	79'6"	3'9½"	3.75' X 1.83'	3	18.42 sq. ft.	15.9 sq. ft.
State position of each freeing port (F. and A. position and height above deck edge) { After Well:— 11'10" — 4'0" 170'4" FROM BRIDGE END. ✓ Forward Well:— 12'0" — 39'0" 768'6" " FOCLE END. ✓ 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	—	32"	5½" X 3" X 40L	30"	NONE	NONE	—	—
Raised Quarter Deck Bulkhead ...	—	—	—	—	—	—	—	—
Bridge, After Bulkhead	—	28"	5½" X 3" X 40L	42"	NONE	2) 4' X 3' ✓	18"	—
Bridge, Forward Bulkhead	—	38"	7 X 3 X 55BA	30"	BRACKETS	NONE	—	—
Forecastle Bulkhead	—	32"	3½" X 3" X 32"	33"	NONE	ONE 4' X 3' ✓	18"	—
Trunk, Aft	—	—	—	—	—	—	—	—
Trunk, Forward	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Super-structure Decks	—	28"	3 X 2½" X 32" AND 5" FLANGE ALTY	26"	BRACKETS AT TOP	2) 5'0" X 23" ✓ 1) 5'1" X 24" ✓	18"	—
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	—	28"	3 X 2½" X 32" AND 5" FLANGE ALTY	26"	—	NONE	—	—
Deckhouses on Flush Deck Ships ...	—	—	—	—	—	—	—	—

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

Poop Bulkhead	INTACT. ✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	FULL HEIGHT RIVETED CHANNELS WITH 3" WEATHER-BOARDS. ✓
Bridge, Forward Bulkhead	INTACT. ✓
Forecastle Bulkhead	FULL HEIGHT RIVETED CHANNELS WITH 3" WEATHER-BOARDS. ✓
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Super-structure Decks	3) HINGED STEEL DOORS OPERATING BOTH SIDES. ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓ no openings ✓
Deckhouses on Flush Deck Ships ...	✓



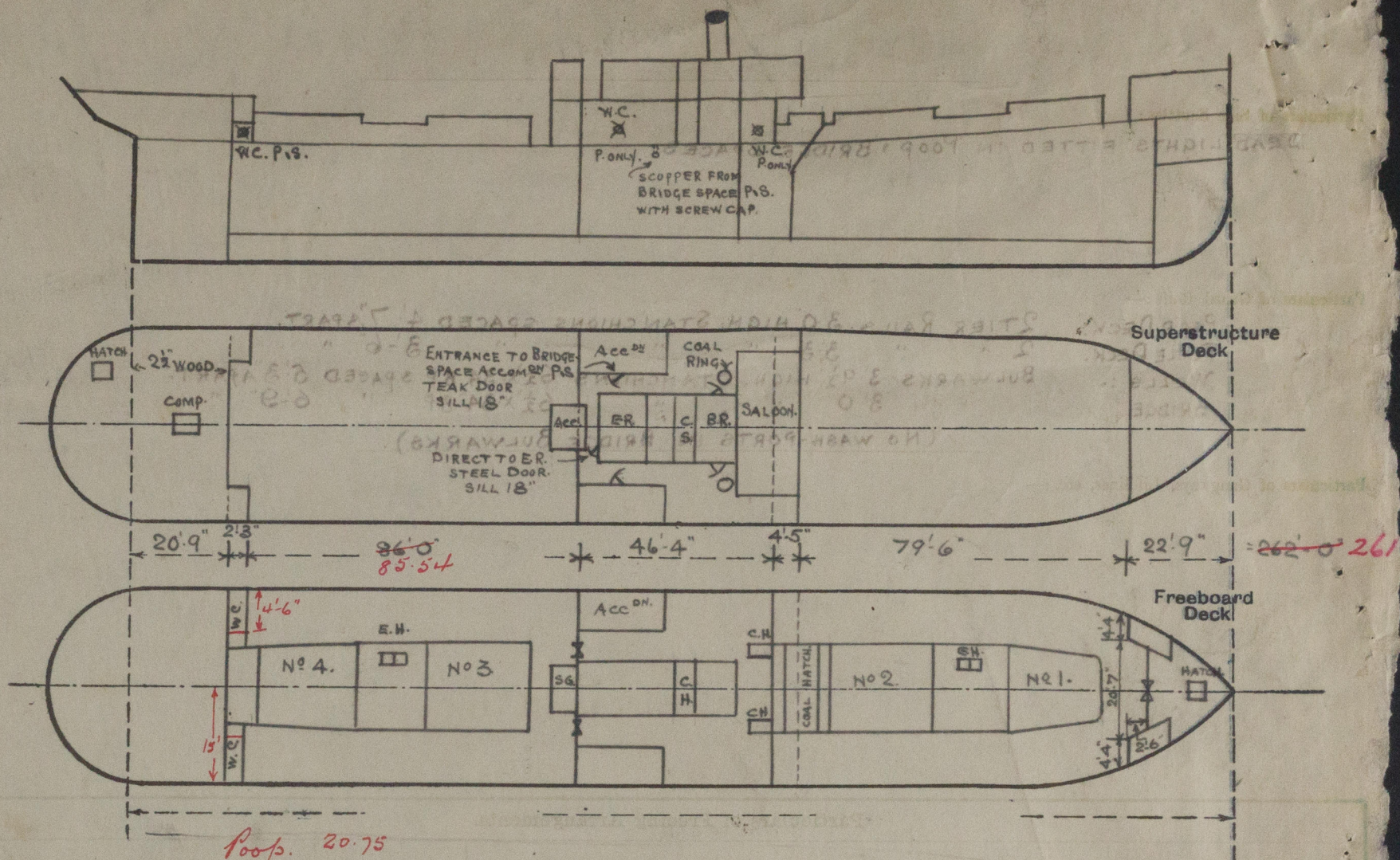
© 2020

Lloyd's Register
Foundation

W571-0069(2/2)

Pegaway

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 shown on the following sketches:—



Poop. 20.75
Sidehouses
 $4.5 \times 2.25 = .69$
 $\frac{.69}{.15} = 4.6$

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

NO TIMBER ASSIGNMENT REQUIRED.



Builder's name and yard number SMITHS DOCK CO. LD. MIDDLESBRO.

Names of sister ships

Owners HILL S.S. CO. LD.

Fee £ 9 : 7 :

Received by me



© 2020

Lloyd's Register Foundation