

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having FOCLE - BRIDGE & RAISED Q. DK.
(Type of Superstructures.)
Port of Survey NEWCASTLE
Date of Survey 14TH MARCH, 1932.
Ship's Name EWELL Nationality and Port of Registry BRITISH LONDON Official Number 148788 Gross Tonnage 1350 Date of Build 1926.7.1
Name of Surveyor P. D. Broadacre
Moulded Dimensions: Length 225.0 Breadth 36.33 Depth 18.50
Moulded displacement at moulded draught = 85 per cent. of moulded depth 2860 tons
Coefficient of fineness for use with Tables .779
Particulars of Classification *100A1
WITH FREEBOARD

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	18.50	(a) Where D is greater than Table depth (D - Table depth) R = (18.54 - 15.00) .73 = 6.13	✓	Moulded Breadth (B)	36.33
Stringer plate	.04	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	✓	Standard Round of Beam = $\frac{B \times 12}{50}$	8.7
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	-	If restricted by superstructures	✓	Ship's Round of Beam	8.5
Depth for Freeboard (D) =	18.54			Difference	.2
				Restricted to	
				Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S}{L} \right)$	$\frac{.2^2}{4} (265) = +.01$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	-	-	-	-	-
" overhang	-	-	-	-	-
R.Q.D. enclosed	128.02	128.02	4.00	-	128.02
" overhang	-	-	-	-	-
Bridge enclosed	15.00	15.00	7.00	-	15.00
" overhang aft	-	-	-	-	-
" overhang forward	-	-	-	-	-
F'cle enclosed	22.33	22.33	6.00	-	22.33
" overhang	-	-	-	-	-
Trunk aft	-	-	-	-	-
" forward	-	-	-	-	-
Tonnage opening aft	-	-	-	-	-
" " forward	-	-	-	-	-
Total	165.35	165.35			165.35

Standard Height of Superstructure	6.0
" R.Q.D.	3.83
Deduction for complete superstructure	28.5
Percentage covered $\frac{S}{L} = \frac{165.35}{225.0} = .735$	
" $\frac{S_1}{L} = \frac{165.35}{225.0} = .735$	
" $\frac{E}{L} = \frac{165.35}{225.0} = .735$	
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	-
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	67.30
Interpolation for bridge less than .2L (if required)	-
Deduction = 28.5 + 67.3	95.8

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	32.50	1	✓	32.50	8.50	3.56	3.56	1	3.56
$\frac{1}{4}$ L from A.P.	44.6	4		57.84	-	1.58	1.58	4	63.2
$\frac{3}{4}$ L	3.57	2		7.14	-	.40	.40	2	.80
Amidships	-	4		-	-	-	-	4	-
$\frac{3}{4}$ L from F.P.	7.14	2		14.28	3.00	3.19	3.19	2	6.38
$\frac{1}{4}$ L	28.92	4		115.68	13.00	12.74	12.74	4	50.96
F.P.	65.00	1		65.00	39.00	39.00	39.00	1	39.00
Total				292.44					107.02

Correction = Difference between sums of products
18

If limited on account of midship superstructure.

Mean actual sheer aft = Deficient
Mean standard sheer aftMean actual sheer forward = Deficient
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = 23.6

aft of " = 50.0

Sheer aft increased by virtue of a raised quarter.
Deck of excess height over standard height.Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.Depth to Freeboard Deck = 18.54
Summer freeboard = 2.98
Moulded draught (d) = 15.56

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 3.89

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

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 2840$
Tons per inch immersion at summer load water line
T = 16.75Deduction = $\frac{\Delta}{40 T}$ inches

= 4.25

4 1/4

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.68 - .779}{1.36} = \frac{1.459}{1.36}$

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. for correspond

with approved winter moulded

draft of 15.3

27.55

29.55

+ -

6.13 -

19.24

3.95

.01

48.00

15.03

73.73

Summer Freeboard = 83.50

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

Tropical Fresh Water Line above Centre of Disc ... 8 1/4
Fresh Water Line " " ... 4 1/4
Tropical Line " " ... 4
Winter Line below " " ... 4
Winter North Atlantic Line " " ... 6Tropical Fresh Water Freeboard ... 6-3/4
Fresh Water " " ... 6-7/8
Tropical " " ... 6-7/8
Winter " " ... 7-3/8
Winter North Atlantic " " ... 7-5/8

MAR 1932

18 JUN 1932

MARKING FORM

28 JUL 1934

MARKING FORM

9 APR 1932

RECEIVED

RECEIVED

RECEIVED

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS						
UPPER DK. ← RAISED Q DECK →						
Description of Hatchway	No 1.	No 2.	COAL HATCH.	TO AFT STORE.		
Dimensions of Hatchway	51'-6 ³ / ₄ " X 22'-6"	60'-0" X 22'-6"	5'-0" X 18'-3"	1'-6" X 2'-0"		
COAMINGS { Height above Deck ... Thickness { Sides ... Stiffeners 7 x 3 x .48 BA... Ends ... Brackets, Stays 2" DIA... SIDES ...	36" .44" .44" SIDES. 4 SIDES. 1 BKT. FORE	36" .44" .44" SIDES. 5 SIDES. 1 BKT. AFT.	5'-10" .35" .35" 4 x 3 x .34" VERTICAL SP. 42"	24" .30" .30" — —		
HATCH BEAMS { Number ... Spacing ... Scantling and Sketch ...	9' 5'-1"	11' 5'-0"	TWO STEEL DIMS- IONS AT CENTRE FORMING STAKE HOLD ESCAPE HATCH.			
Bearing Surface	19 ¹ / ₄ " x 36" 4 ¹ / ₂ " x 3 x .48	19 ¹ / ₄ " x 36" 4 ¹ / ₂ " x 3 x .48				
FORE AND AFTERS { Number ... Spacing ... Unsupported Lengths ... Scantling* and Sketch ...						
Bearing Surface						
HATCH COVERS { Material ... Thickness ... How fitted ... Bearing Surface ...	W.P. 2 ¹ / ₂ " F.A. 3' x 4 ¹ / ₂ "	W.P. 2 ¹ / ₂ " F.A. 3' x 4 ¹ / ₂ "	W.P. 2 ¹ / ₂ " F.A. 2 ¹ / ₂ "	W.P. 2 ¹ / ₂ " T. 2"		
Spacing of Cleats	24"	24"	21"	13"		
Number of Tarpaulins	3 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 fiddley, funnel and ventilator coamings :—

FIDDLEY GRATINGS ARE FITTED WITH HINGED STEEL COVERS. ✓
ENGINE ROOM SKYLIGHT IS STEEL. ✓
FUNNEL & FIDDLEY VENTS GOOD. ✓

Flush Bunker Scuttles :—

CONM.

Particulars of Companionways :—

ENTRANCE TO MIDSHIP & AFT ACCOMMODATION ENCLOSED IN STRONG STEEL HOUSES WITH 1½ SOLID TEAK DOORS IN WAY OPERATING BOTH SIDES. SILL 16"

SKYLIGHT TO AFT ACCOM^N ~~STEEL~~ WITH WOOD TOP. SIZE 1'-9" x 30" HEIGHT 20'-12"

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

ingulars of Ventilators in exposed positions on freeboard and superstructure decks :-

FORE WELL:-	2@ 16" D/A. LED TO HOLD. COAMING 36"x-34"
BRIDGE DK.-	6 MUSH-ROOM YENTS 9" IN HEIGHT X 6" D/A. LED TO ACCOM ^N .
RAISED Q.DK.	2@ 21" D/A. LED TO STOKE-HOLD. COAMING 36"x-34"
" " "	2@ 16" " " " HOLD. " 36"x-34"
" " "	7 MUSH-ROOM YENTS. 9" IN HEIGHT X 6" D/A. LED TO ACCOM ^N .

VENTS ARE IN ACCORDANCE WITH RULES. /

CLOSING - WOOD PLUGS & CANVAS
COVERS.

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

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

FOCLE DECK:-	1.M.I. 3" DIA X 5' TO MOUTH	1.M.I. 4" DIA. X 4' TO MOUTH LED TO FORE PEAK.
FORE WELL:-	2.M.I. 4" DIA X 16' TO MOUTH.	LED TO D.B. TANKS.
BRIDGE DECK:-	1.C.I. 4" " X 6" " " " "	ACCOMD.
R.Q. DK:-	2.C.I. 4" " X 26" " " " "	D.B. TANKS.
	2.M.I. 2 1/2" " X 16" " " " "	" "
	1.M.I. 3" " X 12" " " " "	AFT. PEAK.

PEAK. fitted with brass non-detachable ^{new plug} canvas covers fitted to air pipes

Particulars of Gangway Cargo and Coaling Ports:—

NONE.

Particulars of Scuppers and Sanitary Discharge Pipes —

W.C. DISCHARGES LEAD 9 M.I. STORM-VALVES FITTED.

Particulars of Side Scuttles:

DEAD-LIGHTS FITTED IN WAY OF BRIDGE R.Q.D. ACCOMMODATION.

Particulars of Guard Rails:—

FOCLE DECK: 2 TIER RAILS. 2'-9" IN HEIGHT. STANCHIONS SP. 4'-0" APART.
 FORE WELL: BULWARKS 3'-9" IN HEIGHT SUPPORTED BY 5"x3"x38 L STANCHIONS SP. 5'-9" APART.
 R.Q.DK: " 3'-4" " " 5"x3"x38 L " 5'-9" "
 BRIDGE DK: " 3'-9" " " 2" DIA. STAYS SP. 7'-6".

Particulars of Gangways, Lifelines, etc.:—

Wire life line set up with screw on port side of hatches on fore well deck. Stanchions spaced about 12'-0" app.

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 R.Q.D.K. ...	128.02'	3'-4"	12.00' x .75' 18.00' x .75'	2 / 1	31.50 sq'	23.6 sq'
Forward Well ...	59.65'	3'-9"	12.00' x .75' 12.00' x .50'	1 / 1	15.00 sq'	12.5 sq'

State position of each freeing port ... } After Well:— 10' 3" — 34' 9" & 58' 9" FROM BRIDGE END. 4 ABOVE DECK.
 (F. and A. position and height above deck edge) } Forward Well:— 6' 9" & 30' 0" FROM FOCLE END. 7 " " "
 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.

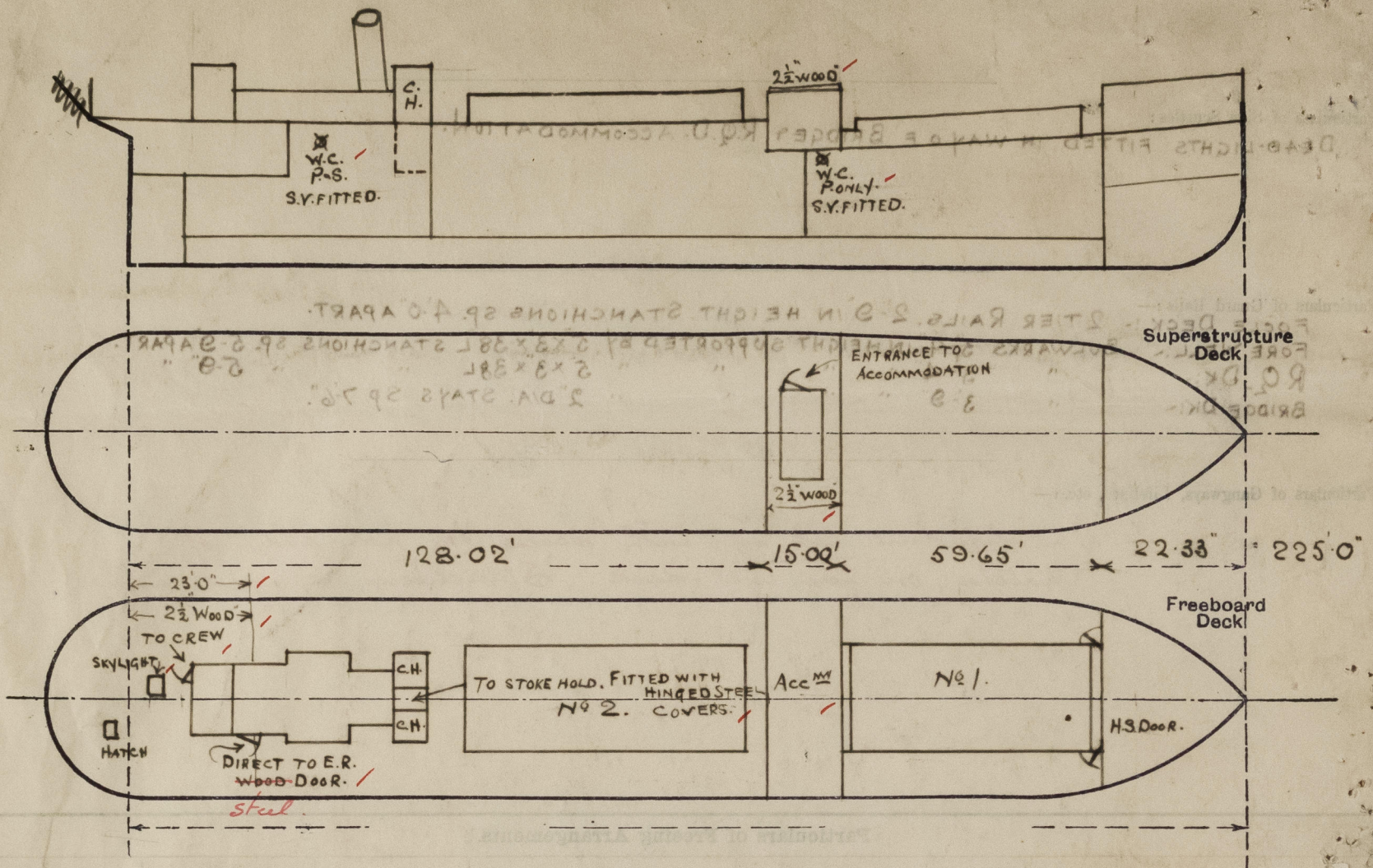
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ...	—	—	—	—	—	—	—	—
Raised Quarter Deck Bulkhead ...	—	35"	6"x3"x38 BA	30"	LUGS.	NONE	—	—
Bridge, After Bulkhead ...	—	—	ALSO USUAL BRACKETS & DIAPHRAGMS.					
Bridge, Forward Bulkhead ...	38"	36"	6"x3"x38 BA	30"	LUGS.	NONE	—	—
Forecastle Bulkhead ...	—	30"	3" FLANGE OR. 3"x3"x32 ANGLE	48"	NONE	TWO 3'-6" x 35"	18"	—
Trunk, Aft ...	—	—	—	—	—	—	—	—
Trunk, Forward ...	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	—	32"	4"x3"x32	32"	NONE	TWO 4'-6" x 24"	16"	3'-6" & 6"
Exposed Machinery Casings on Super-structure Decks ...	—	—	—	—	—	—	—	—
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 ...	✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead ...	✓
Bridge, Forward Bulkhead ...	✓
Forecastle Bulkhead ...	HINGED STEEL DOORS OPERATED OUTSIDE ONLY.
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	HINGED ^{Steel} TEAK DOORS (1 1/2" SOLID) OPERATED BOTH SIDES.
Exposed Machinery Casings on Super-structure Decks ...	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	✓
Deckhouses on Flush Deck Ships ...	✓

Erwell

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:—



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

NO TIMBER ASSIGNMENT REQUIRED.

Builder's name and yard number BURNT ISLAND S.B. CO. LTD.

Names of sister ships

Owners WANDSWORTH DISTRICT GAS CO.

Fee £ 8 : 10 : 0

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