

3/1/33

WRECK BAY

No. 173-2

-2 NOV 1933

Rpt. C.11.

COPY WRITTEN

Index No.

(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

now named "SIG" of Bergen (22/1/37)

23240.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

New & Raised Quarter Deck

Port of Survey NEWPORT, MON.

SIG ex "SEABANK"

(Type of Superstructures.)

Date of Survey 31st Oct, 1933.

Ship's Name

"JOYCE LLEWELLYN."

Nationality and Port of

Registry

British
Cardiff

Official Number

148273.

Gross Tonnage

1446.

Date of Build

1924-6.

Name of Surveyor

D. Macfarlane

Moulded Dimensions: Length 234.25 Breadth 35.33 Depth 18.7"

Moulded displacement at moulded draught = 85 per cent. of moulded depth 2835 tons

Coefficient of fineness for use with Tables

.759

Particulars of Classification

S4100A1

Depth for Freeboard (D)

Moulded depth 18.7

Stringer plate 1.56

Sheathing on exposed deck

 $T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) = 18.62

Depth correction

(a) Where D is greater than Table depth
(D-Table depth) R = $(18.62 - 15.62) \times 1.802$
= + 5.41"(b) Where D is less than Table depth (if allowed)
(Table depth-D) R =

If restricted by superstructures

Round of Beam correction

Moulded Breadth (B) 35.33

Standard Round of Beam = $\frac{B \times 12}{50} = 8.48"$

Ship's Round of Beam = 9"

Difference .52"

Restricted to

Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{.52}{4} \times .3035 = .04$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poep enclosed ...	15.6	15.50	7.0		15.50
" overhang ...	3.12				
R.Q.D. enclosed ...	67.0	67.00	4.0		67.00
" overhang ...					
Bridge enclosed...	57.6	57.50	7.0		57.50
" overhang aft ...					
" overhang forward	9.5	.39			.39
F'cle enclosed ...	22.75	22.75	7.0		22.75
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	163.53	163.14			163.14

Standard Height of Superstructure 6.00

" " R.Q.D. 3.895

Deduction for complete superstructure 29.42

Percentage covered $\frac{S}{L} = \frac{69.82}{100} = 69.82\%$ " " $\frac{S_1}{L} = 69.65\%$ " " $\frac{E}{L} = 69.65\%$

Percentage from Table, Line A. (corrected for absence of forecastle (if required)) 62.40

Percentage from Table, Line B. (corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $29.42 \times \frac{.6240}{.6982} = 26.40$

SHEER CORRECTION.

: Sheer R.Q.D. H₁ = 48.00

Standard = 46.74

Excess 1.26

across

13.4

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	33.42	1		33.42	36.42	37.59	1		37.59
$\frac{1}{4}$ L from A.P. ...	14.87	4		59.48	15.8	16.73	4		66.92
$\frac{2}{4}$ L " ...	3.68	2		7.36	3.95	4.14	2		8.28
Amidships ...	✓	4		✓	X	✓	4		✓
$\frac{3}{4}$ L from F.P. ...	7.35	2		14.70	8.07	8.07	2		16.14
$\frac{1}{4}$ L " ...	29.75	4		119.00	32.39	32.39	4		129.56
F.P. ...	66.85	1		66.85	72.0	72.00	1		72.00
Total ...				300.81					330.49

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{29.68}{18} \left(\frac{.75 - .3491}{2 \times 100} \right) = -.66"$ If limited on account of midship superstructure. $.66 \times \frac{1.26}{2.00} = -.65"$ If limited to maximum allowance of $\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = Ft.

Summer freeboard =

Moulded draught (d) =

Deduction for Tropical freeboard and addition for

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

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\Delta}{40 T}$ inches

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{68 + .709}{1.36} = \frac{143.7}{1360}$

Depth Correction 5.41

Deduction for superstructures 18.24

Sheer correction65

Round of Beam correction04

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

Summer Freeboard = 17.44

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

Tropical Fresh Water Line above Centre of Disc
Fresh Water Line " "
Tropical Line " "
Winter Line below " "
Winter North Atlantic Line " "

Tropical Fresh Water Freeboard
Fresh Water " "
Tropical " "
Winter " "
Winter North Atlantic " "

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Lloyd's Register

Foundation

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	N°1	N°2	N°3	N°4			SADDLE HATCH	CROSS BUNKER HATCH	
Dimensions of Hatchway	19'2 22'3" x 22'0"	28'10" x 23'0"	22'3" x 23'	21'3" x 19'8"			12'3" x 4'6"	12'3" x 4'6"	
COAMINGS	Height above Deck	3'0"	3'0"	2'6"	2'6"				
	Thickness	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
	Sides	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
	Stiffeners	7 x 3 x 40	7 x 3 x 40	7 x 3 x 40	7 x 3 x 40				
HATCH BEAMS	Number	4	5	4	4				
	Spacing	5'0"	4'6"	5'0"	5'0"				
	Scantling and Sketch	19'10" x 13'2"	19'10" x 13'2"	19'10" x 13'2"	19'10" x 13'2"				
	Bearing Surface	3'	3'	3'	3'				
FORE AND AFTERS	Number								
	Spacing								
	Unsupported Lengths								
	Scantling and Sketch								
HATCH COVERS	Material	W.P.	W.P.	W.P.	W.P.				
	Thickness	2 1/2"	2 1/2"	2 1/2"	2 1/2"				
	How fitted	F.A.	F.A.	F.A.	F.A.				
	Bearing Surface	4 1/2' x 3'3"	4 1/2' x 3'3"	4 1/2' x 3'3"	4 1/2' x 3'3"				
Spacing of Cleats	24"	24"	24"	24"			24"	24"	
Number of Tarpaulins	2	2	2	2			2	2	

Particulars of fiddle, funnel and ventilator coamings:—
*Stokehold gratings covered by strong steel hinged covers—
 Funnel & Ventilator Coamings in efficient condition—
 Engine Room skylight of steel strongly constructed—*

Particulars of Flush Bunker Scuttles:— *None*

Particulars of Companionways:— *one steel Companionway to Pass space
 4'0" x 3'0" x 6'0" high. steel hinged doors operated from
 either side. sill 9"*

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—
*In well 2 vents 15" dia. canvas 36" high—
 R.O. Deck 2 15" 36" wood plugs. Canvas covers
 fitted—*

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—
*In well 1 air pipe 3 1/2" dia. 12'18" high to F.R. Tank
 In Well 2 3 1/2" 18'24" 10 R.B. Tank
 B. Deck 4 2 1/2" 19'24"
 R.O. Deck 2 2 1/2" 19'24"
 Poop 1 3 1/2" 19'24" A.P. Tank*

Particulars of Gangway Cargo and Coaling Ports:—

None

Particulars of Scuppers and Sanitary Discharge Pipes —

soil Pipes fitted with storm valves at ship side—

Particulars of Side Scuttles: *side scuttles fitted with hinged deadlights—*

Particulars of Guard Rails:— *Mandrills on Side head 3'0" high stanchions
 spaced 4'0" steel bulwarks on R.O. deck. Bulwark deck. Ins well
 efficiently constructed & well stowed—*

Particulars of Gangways, Lifelines, etc.:—

None fitted.

*Lifelines fitted for the use of the crew
 in the regular working of the ship*

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.O.D	67'4	3'0	3'0 1/2" x 1'6"	3	13.68	13.48
Forward Well	71'2	3'6"	3'3" x 1'6"	3	14.62	14.24

State position of each freeing port ... *R.O.D. After Well: 13' House 8" 5'2" 28'3" 50'0" height above deck 4 1/2"*
(F. and A. position and height above deck edge) Forward Well: 4'3" 27'3" 48'2" 9 1/2"
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— *Bars.*
 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	1	32	3 x 3 x 32	30"	✓	✓	✓	7'0"
Raised Quarter Deck Bulkhead	1	32	3 x 3 x 35	36"	✓	✓	✓	4'0"
Bridge, After Bulkhead	1	32	3 x 3 x 35	36"	✓	✓	✓	3'0"
Bridge, Forward Bulkhead	40	38	6 1/2 x 3 x 45.134	30"	Brackets Top	4'6" x 3'0"	15"	7'0"
Forecastle Bulkhead	1	30	3 x 3 x 35	30"	✓	4'4" x 3'0"	17"	7'0"
Trunk, Aft	1							
Trunk, Forward	1							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	1							
Exposed Machinery Casings on Superstructure Decks	✓	35	4 x 3 x 35	3'10"	BKT. Top	4'6" x 22'	18'	7'0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓							
Deckhouses on Flush Deck Ships	✓							

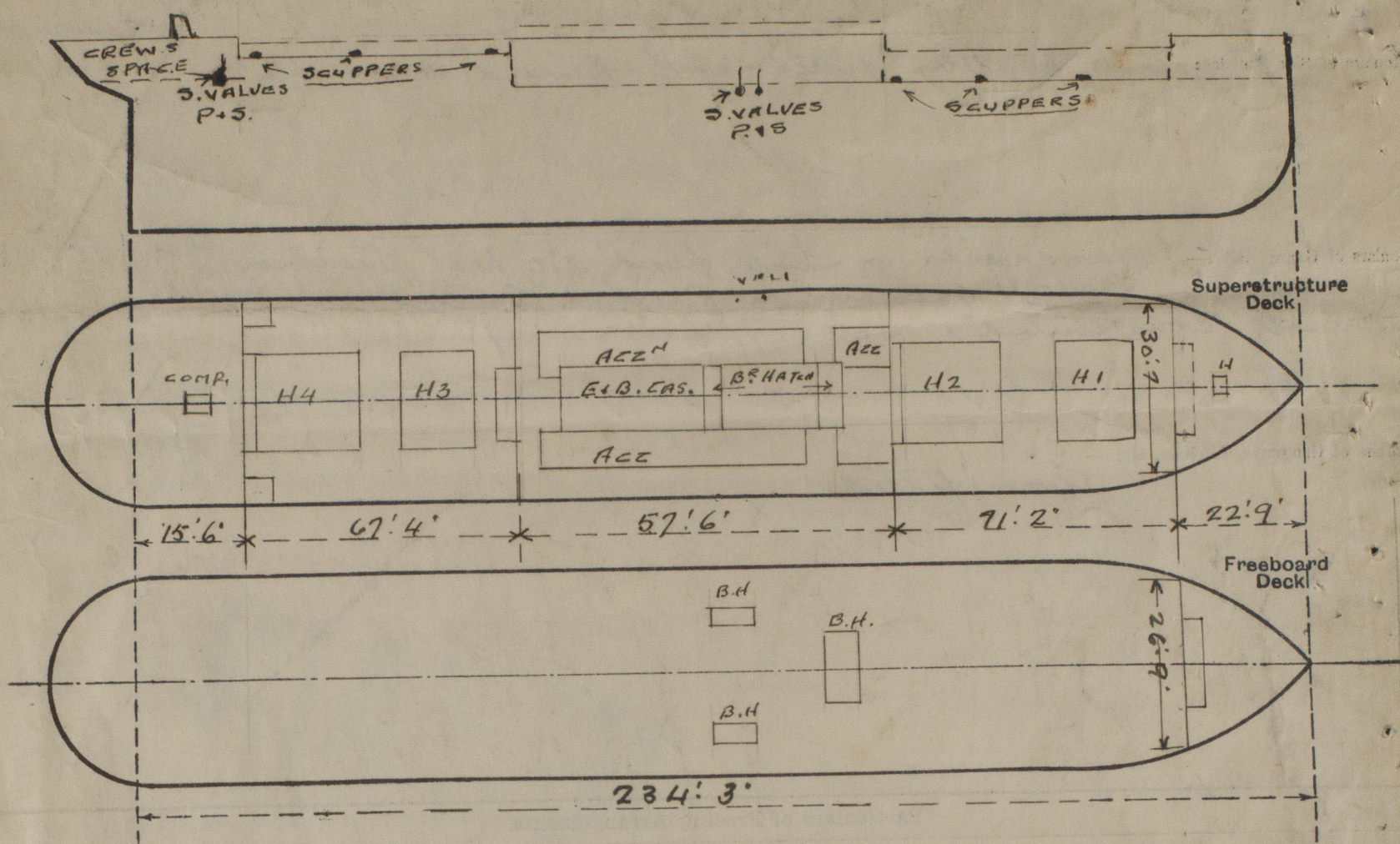
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	<i>Nil No openings</i>
Raised Quarter Deck Bulkhead	<i>Nil No openings</i>
Bridge, After Bulkhead	<i>Nil No openings</i>
Bridge, Forward Bulkhead	<i>steel plates bolted through Bulkhead plates. Bolts 6" apart. Bulkhead</i>
Forecastle Bulkhead	<i>storm boards fitted for full height in wetted channels—</i>
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓
Exposed Machinery Casings on Superstructure Decks	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	<i>steel hinged doors operated from either side.</i>
Deckhouses on Flush Deck Ships	

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Sig.

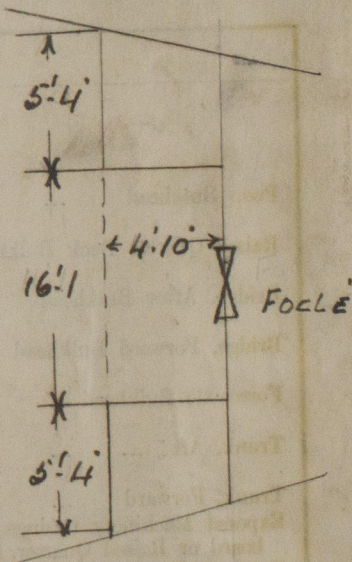
Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



State any special features in the construction of the ship:— Vessel examined in dry dock for complete special survey H.2.— 2 Bunker Hatches in Briny space 1P.15. 8'3" x 3'0" with 12' B.A Coaming also 1 Cross Bunker Hatch 13'0" x 4'6" Coaming 18' plating full. In Forecastle, 1 Hatch to Chain locker 7'6" x 3'6" Coaming 11' plating full, 1 Hatch to stores 2'0" x 2'0" Coaming 3' angle. Cleek, Battens, Tanpaulins etc for Hatch in Briny space only. No battening down arrangements in Forecastle Hatchways.

Note 1st 2 & 4 Main Hatches attached to Bulkheads at aft ends.

2155	ton D.W at	17'2" draught
2120	"	17'0"
1920	"	16'0"
1715	"	15'0"
1520	"	14'0"



Builder's name and yard number

J Lewis & Son Ltd

Names of sister ships

Owners

Cardigan Shipping Coy Ltd.

Fee £ 8.— 10.—

Received by me



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