

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

GRN. REPORT No 19408

Index. No. 24107
(For London Office only.)Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~

having

Raised quarter deck, bridge & forecastle.

Port of Survey

Greenock.

(Type of Superstructures.)

Date of Survey

May 16th 1932

Ship's Name

YEWGLEN N.N.
HOLDERNESSE

Nationality and Port of Registry

Glasgow Hull
British

Official Number

137788

Gross Tonnage

593

Date of Build

1915
3.

Name of Surveyor

Kenneth Inglis

Particulars of Classification

+100 A.I.

Moulded Dimensions: Length 175'-0" Breadth 28'-0" Depth 12'-5"

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

1057

tons

Coefficient of fineness for use with Tables

.711

Depth for Freeboard (D)

Moulded depth 12'-5"

Stringer plate -4'-0"

Sheathing on exposed deck

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

Depth for Freeboard (D) =

12'-53"

Depth correction

(a) Where D is greater than Table depth

$$(D - \text{Table depth}) R = (12.53 - 11.67) / 1.346$$

$$= + 1.16"$$

(b) Where D is less than Table depth (if allowed)

$$(\text{Table depth} - D) R =$$

If restricted by superstructures

✓

Round of Beam correction

Moulded Breadth (B)

28'-00"

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} = 6.72$$

$$\text{Ship's Round of Beam} = 6.34$$

Difference

.03

Restricted to

$$\text{Correction} = \frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.03}{4} \times 2329 =$$

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 ...	101'-3"	101.25	3'-6"		101.25
" overhang ...					
Bridge enclosed ...	11'	11.00	7'-0"		11.00
" overhang aft ...					
" overhang forward ...					
Fore enclosed ...	26'-6"	22.00	6'-3"		22.00
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	138.75	134.25			134.25

Standard Height of Superstructure

6'-00"

" " R.Q.D.

3'-50"

Deduction for complete superstructure

23.50

Percentage covered $\frac{S}{L} = 79.30\%$ " " $\frac{S_1}{L} = 76.71\%$ " " $\frac{E}{L} = 76.71\%$

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

71.25%

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

$$\text{Deduction} = 23.50 \times .7125 = - 16.74"$$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	27.50	1		27.50	51	57.00	1		57.00
1/4 L from A.P. ...	12.24	4		48.96	23.3	23.30	4		93.20
1/2 L " ...	3.02	2		6.04	5.8	5.82	2		11.64
Amidships ...	✓	4		✓	0	✓	4		✓
3/4 L from F.P. ...	6.04	2		12.08	7.8	7.85	2		15.70
1/4 L " ...	24.48	4		97.92	31.4	31.40	4		125.60
F.P. ...	55.00	1		55.00	69	69.00	1		69.00
Total ...				247.50					366.14

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{118.64}{18} \left(.75 - .3965 \right) = - 2.33$$

If limited on account of midship superstructure.

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 = 16'-03"
Summer freeboard = 3'-67"
Moulded draught (d) = 12'-36"

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 3'-09" = 3"

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

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$$\Delta = 11 - 1030 = 1255$$

$$12 - 1147$$

Tons per inch immersion at summer load water line

$$T = 10 - 9.42 = 9.68$$

$$12 - 9.55$$

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

$$= 3.24 = 3\frac{1}{4}"$$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

$$\frac{.711 + .68}{1.36} = \frac{1.391}{1.36}$$

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. R.Q.D.

+	-
1.16	-
-	16.74
-	2.33
-	-
-	-
42.00	-

Summer Freeboard = 43'-58"

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

Tropical Fresh Water Line above Centre of Disc ... 3 1/4"
Fresh Water Line " " ... 3 1/4"
Tropical Line " " ... NIL
Winter Line below " " ... 3"
Winter North Atlantic Line " " ... 5"

Tropical Fresh Water Freeboard ... 3'-8"
Fresh Water " " ... 3'-4 1/2"
Tropical " " ... 3'-8"
Winter " " ... 3'-11"
Winter North Atlantic " " ... 4'-1"

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway		No. 1.		No. 2		COAL HATCH			
Dimensions of Hatchway		ON MAIN DECK		ON 2ND QRD DECK		ON CASING TOP			
COAMINGS		27' x 14'		32' 9" x 14' 0"		5' 3" x 13' 0"			
COAMINGS	Height above Deck	30"		30"		8 1/2" BULB ANGLE			
	Thickness	.50		.50		COAMING			
	Stiffeners	NO BA STIFFENER		NO STIFFENERS					
	Brackets, Stays	2-6" BULB PLATE STAYS		3-6" BULB PLATE STAYS					
HATCH BEAMS	Number	5		6					
	Spacing	53		56					
	Scantling and Sketch	3x3x42 14x3/8		SAME AS NO. 1		NONE			
	Bearing Surface	3"		3"					
FORE AND AFTERS	Number								
	Spacing								
	Unsupported Lengths								
	Scantling* and Sketch								
		NO FORE & AFTERS				NONE			
Bearing Surface									
HATCH COVERS	Material	WOOD		WOOD		WOOD			
	Thickness	2 1/2"		2 1/2"		2 1/2"			
	How fitted	F & A		F & A		F & A			
	Bearing Surface	3"		3"		3"			
Spacing of Cleats		24"		24"		24"			
Number of Tarpaulins		2		2		NONE			
*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/> Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/> YES Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> YES EXCEPT BUNKER HATCH. Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/> YES									

Particulars of fiddle, funnel and ventilator coamings:— Stokehold gratings covered by strong hinged steel covers. Fiddle ventilators & funnel in efficient condition, engine skylight of steel strongly constructed.

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways:—

6' companionway under forecastle deck. 5'-0" x 30" leading to crew accommodation. door of wood with sill 15" above 3" wood deck, door operated from both sides.

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

2 vents on forecastle deck. 6" dia coamings 30" x 30 led to crew space.
 " " " " 13" " " 30" x 34 led to hold.
 " " " " 13" " " 30" x 34 led to hold.
 all ventilators constructed in accordance with rules but no wood plugs & canvas covers provided.

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

1.	W.I.	air pipe on forecastle deck.	8" high x 2 1/2" dia	from fore peak.	under striking plate.	air pipes have no closing appliances fitted. wood plugs for closing.
1.	W.I.	" " " Main	18" " x 2 1/2"	" "	double bottom, under fore peak.	
2.	W.I.	" " " R. Q	30" 12" " x 2 1/2"	" "	" " " " " "	
2.	W.I.	" " " " "	16" " x 2 1/2"	" "	" " " " " "	
1.	W.I.	" " " " "	30" 10" " x 1 1/2"	" "	Aft peak.	

Particulars of Gangway Cargo and Coaling Ports:—

None.



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New Glen

Particulars of Scuppers and Sanitary Discharge Pipes —

Sanitary discharge pipes fitted with non-return valve at ship's side + efficient trap at inner end.
Scuppers to weather decks pass through gunwale bar ✓

Particulars of Side Scuttles:

All side scuttles below + reboard deck + in forecastle fitted with hinged deadlights. All scuttles of substantial construction. ✓

Particulars of Guard Rails:— Guard rails on forecastle 3'3" high having 2 rods + stanchions spaced 4'6" apart.
Well deck fitted with steel bulwark 44" high, Raised quarter deck fitted with steel bulwark 39" high, efficiently constructed + supported. Bridge deck fitted with steel bulwark. ✓

Particulars of Gangways, Lifelines, etc.:—

Gangway consisting of manilla rope passed thro' stanchions
sub. led. along hatch provided.
~~No efficient gangway provided.~~

Particulars of Freeing Arrangements.

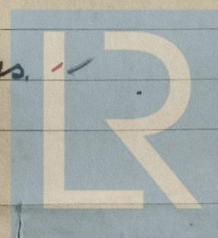
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	101'	39"	$\left\{ \begin{array}{l} 36" \times 18" \times \\ 31" \times 19" \end{array} \right.$	$\left. \begin{array}{l} 2 \\ 3 \end{array} \right\}$	$\left. \begin{array}{l} 20 \text{ f.} \\ 12 \end{array} \right\}$	20.7^2
Forward Well	36' 3"	44"	$37\frac{1}{2} \times 21\frac{1}{2}$	2	11.25 ✓	10.5^{12}
State position of each freeing port { After Well:— 12', 27', 80' 10" above deck edge. ✓ (F. and A. position and height above deck edge) { Forward Well:— 7', 24' ✓ State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— balanced shutters. ✓ Additional area where sheer is less than standard. ✓ These freeing ports fitted with one bar						

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 ...	✓							
Bridge, After Bulkhead								
Bridge, Forward Bulkhead		35	$5\frac{1}{2} \times 3 \times 40 \text{ BS}$	30	Blkea	None		
Forecastle Bulkhead		30	$2\frac{1}{2} \times 2\frac{1}{2} \times 30$	30"	None	$4'6" \times 24"$	16	6'3"
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	35	30	$3 \times 3 \times 30$	36	None	$4'6" \times 24"$	22	7'0"
Exposed Machinery Casings on Superstructure 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		No openings ✓
Bridge, Forward Bulkhead		No openings ✓
Forecastle Bulkhead		open forecastle ✓
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...		steel doors operated from both sides. ✓
Exposed Machinery Casings on Superstructure Decks	✓	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓	
Deckhouses on Flush Deck Ships ...	✓	

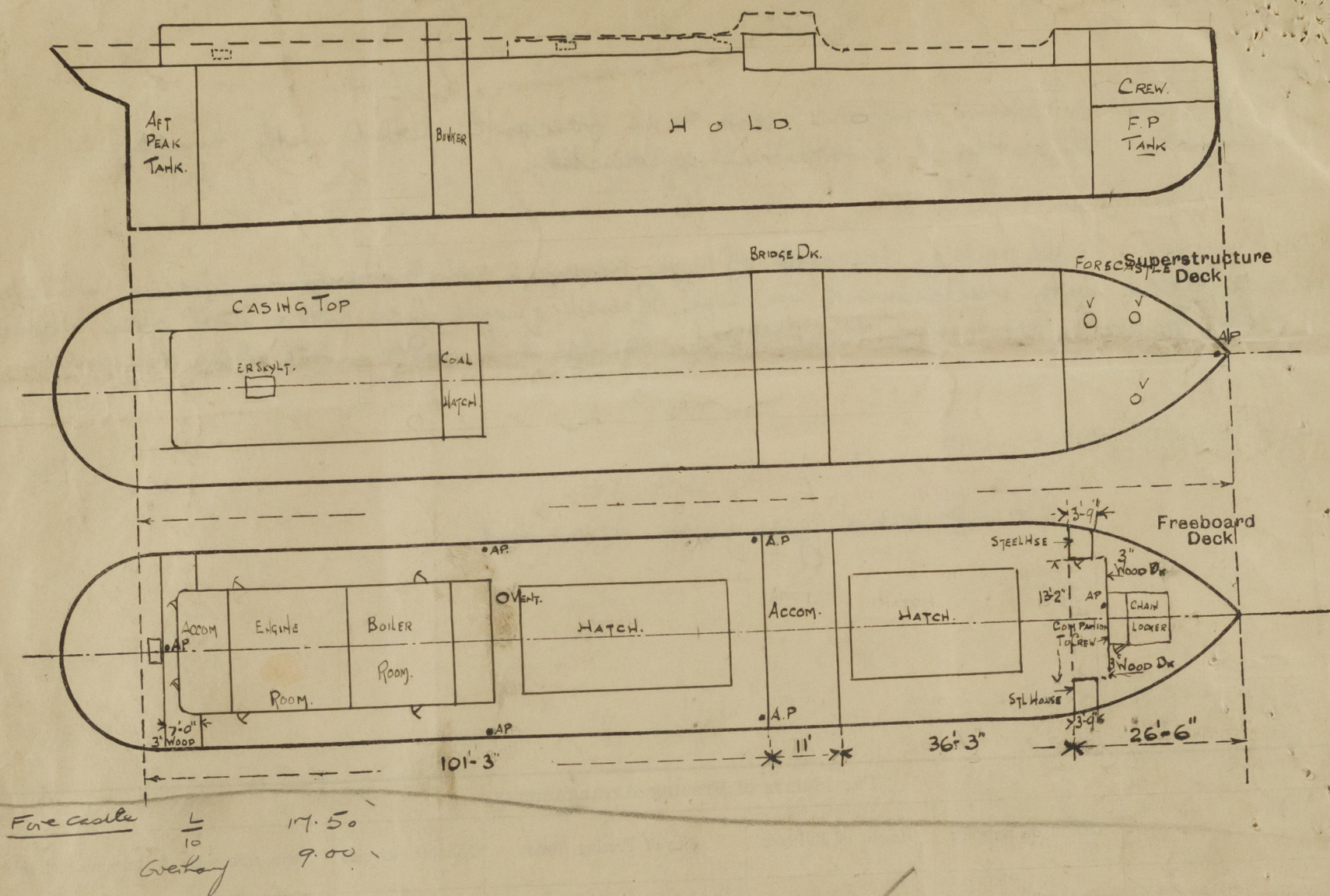


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Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the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



State any special features in the construction of the ship:— This vessel has been examined on the Port Glasgow shipyard where she is at present undergoing special survey No 1.

The following recommendations have been made to comply with the rules

1. Air pipes on raised quarter deck to be raised to 30" high.
2. Satisfactory means of closing to be provided for air pipes & ventilators.
3. Two tarpaulins to be supplied for the bunker hatch on casing top.
4. Gangway, lifelines or other satisfactory means for the protection of the crew to be fitted in the forward well.
5. Freeing port area on raised quarter deck to be made equivalent to an area of 20 square feet each side.

Builder's name and yard number Ardrum D.D & S.B Co Ltd

Names of sister ships ✓

Owners J Stewart & Co.

Fee £ 6 : 16 : 0

Received by me



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