

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

6 OCT 1932

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having *single bridge and R.Q.DK.*Port of Survey *Liverpool**MARWICK HEAD*(Type of Superstructures.) *Leith*Date of Survey *Oct. 1932.*

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

*"ALLANWATER"**British**Liverpool**496**1920-12m.*Name of Surveyor *A.V. Jackson.*Moulded Dimensions: Length *165.25'* Breadth *25.5'* Depth *12.0' to Main DK.*Moulded displacement at moulded draught = 85 per cent. of moulded depth *875* tonsCoefficient of fineness for use with Tables *.712*Particulars of Classification *100A1**S.S. / W No. 2-29*

Depth for Freeboard (D)

Moulded depth *12.0' to Main DK.* ... *12.00*Stringer plate *15.0' to R.Q.DK.* ... *.04*

Sheathing on exposed deck

 $T \left(\frac{L-S}{L} \right) = \text{Nil}$ Depth for Freeboard (D) = *12.04*

Depth correction

(a) Where D is greater than Table depth

(D - Table depth) R = $(12.04 - 11.02) 1.271 = +1.30$

(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) *25.5'*Standard Round of Beam = $\frac{B \times 12}{50} = 6.12$ Ship's Round of Beam = *6.12*Difference *.12*

Restricted to

Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.12^2}{4} \times 2.21 = +.01$

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 ...	<i>95.8</i>	<i>95.60</i>	<i>3.0</i>	<i>3.435</i>	<i>83.50</i>
„ overhang ...					
Bridge enclosed ...	<i>10.83</i>	<i>10.83</i>	<i>7.0</i>	<i>✓</i>	<i>10.83</i>
„ overhang aft ...					
„ overhang forward					
Fore enclosed <i>HOUSE</i> ...	<i>21.05</i>	<i>21.05</i>	<i>7.0</i>	<i>✓</i>	<i>21.05</i>
„ overhang ...	<i>5.0</i>	<i>1.22</i>			<i>1.22</i>
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward					
Total ...	<i>129.93</i>	<i>128.70</i>			<i>116.60</i>

Standard Height of Superstructure *6.0*„ „ R.Q.D. *3.435*Deduction for complete superstructure *22.52*Percentage covered $\frac{S}{L} = 78.63$ „ „ $\frac{S_1}{L} = 77.88$ „ „ $\frac{E}{L} = 70.55$ Percentage from Table, Line A. *✓*

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. *63.68*

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) *✓*Deduction = $22.52 \times 63.68 = -14.34$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>26.53</i>	1		<i>26.53</i>	<i>27.00</i>	<i>27.00</i>	1		<i>27.00</i>
$\frac{1}{2}$ L from A.P. ...	<i>11.81</i>	4		<i>47.24</i>	<i>6.57</i>	<i>7.00</i>	4		<i>28.00</i>
$\frac{2}{3}$ L „ ...	<i>2.92</i>	2		<i>5.84</i>	<i>1.08</i>	<i>.80</i>	2		<i>1.60</i>
Amidships ...	—	4		—	—	—	4		—
$\frac{2}{3}$ L from F.P. ...	<i>5.84</i>	2		<i>11.68</i>	<i>2.56</i>	<i>.60</i>	2		<i>1.20</i>
$\frac{1}{2}$ L „ ...	<i>23.62</i>	4		<i>94.48</i>	<i>15.03</i>	<i>13.30</i>	4		<i>53.20</i>
F.P. ...	<i>53.06</i>	1		<i>53.06</i>	<i>57.00</i>	<i>57.00</i>	1		<i>57.00</i>
Total ...				<i>238.83</i>					<i>168.00</i>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{70.83}{18} \left(\frac{.75 - .3931}{.3569} \right) = +1.40$ If limited on account of midship superstructure. *✓*Mean actual sheer aft = *DEFICIENT.*

Mean standard sheer aft

Mean actual sheer forward = *DEFICIENT.*

Mean standard sheer forward

Length of enclosed superstructure forward of amidships =

„ „ aft of „ = *SHEER DEFICIENT. DOES NOT APPLY.*

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *15.04*Summer freeboard = *3.54*Moulded draught (d) = *11.50*

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = $2.875 = 2\frac{7}{8}$ Addition for Winter North Atlantic Freeboard (if required) = *2*

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 1012$

Tons per inch immersion at summer load water line

 $T = 8.58$ Deduction = $\frac{\Delta}{40T}$ inches $= \frac{1012}{40 \times 8.58} = 2.95 = 3$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{712+68}{1.36} \frac{1.392}{1.86}$ SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, *WOOD*, Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc ...	<i>5\frac{1}{2}</i>
Fresh Water Line „ „ ...	<i>3</i>
Tropical Line „ „ ...	<i>2\frac{1}{2}</i>
Winter Line below „ „ ...	<i>2\frac{1}{2}</i>
Winter North Atlantic Line „ „ ...	<i>4\frac{1}{2}</i>

Tropical Fresh Water Freeboard ...	<i>3'-6\frac{1}{2}</i>
Fresh Water „ „ ...	<i>3'-0\frac{1}{2}</i>
Tropical „ „ ...	<i>3'-3\frac{1}{2}</i>
Winter „ „ ...	<i>3'-9\frac{1}{2}</i>
Winter North Atlantic „ „ ...	<i>3'-11\frac{1}{2}</i>

MARKING FORM

8 AUG 1937

RECEIVED

MARKING FORM

8 JAN 1938

RECEIVED

429-0109 (112)

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway		No. 1		No. 2					
Dimensions of Hatchway		25' 1 1/2" x 16' 1"		25' 0" x 16' 0"					
COAMINGS	Height above Deck	36"		38"					
	Thickness	44"		44"					
	Sides	44"		44"					
	Ends	44"		44"					
HATCH BEAMS	Stiffeners	44"		44"					
	Brackets, Stays								
	Number	5		5					
	Spacing	4' 2"		4' 2"					
FORE AND AFTERS	Scantling and Sketch								
	Bearing Surface	3'							
	Number								
	Spacing								
HATCH COVERS	Unsupported Lengths	None fitted.							
	Scantling* and Sketch								
	Bearing Surface								
	Material	W.P.		W.P.					
Spacing of Cleats	Thickness	2 1/2"		2 1/2"					
	How fitted	F+A		F+A					
	Bearing Surface	3"		3"					
	Number of Tarpaulins	24"		24"					
*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"/> Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/>									

Particulars of fiddley, funnel and ventilator coamings:— *Stokehold grating covered by strong steel hinged cover. Fiddley ventilators in efficient condition. Funnel carried well down into stokehold, no coaming. Engine skylight of steel, strongly constructed.*

Particulars of Flush Bunker Scuttles:— *None fitted.*

Particulars of Companionways:— *None fitted.*

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—
*1 Vent in forward well 10" diam, coaming 5' 9" x 34", led to hold
 1 " on R.Q.DK. 10" " " 3' 11" x 34", " " " stayed
 2 G.N. Vents on R.Q.DK. 3 1/2" " " 20" high, " " bunker.
 3 C.S. Mushroom Vents 8" diam, coamings 9" high, led to br
 Efficient closing appliances provided*

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—
*1 C.S. air pipe on Feile DK, 9 1/2" high x 3 1/2" diam. from F.P., protected by spurn water.
 2 " " " 5 in Ford Well, 25 1/2" " x 3" " " No. 1 O.B. Tank, protected by Feile Bld.
 2 " " " 3 on R.Q.DK., 23" " x 3" " " No. 2 " " "
 2 " " " 5 " " 23" " x 3" " " No. 3 " " "
 1 " " " " " 15" " x 3 1/2" " " A.P.
 Efficient closing appliances provided*

Particulars of Gangway Cargo and Coaling Ports:— *None fitted.*

Particulars of Scuppers and Sanitary Discharge Pipes:— *Scuppers cut through Main and R.G.D.K. sheerstrakes. ✓*
Sanitary discharge pipes fitted with C.S. storm valves at ship's sides. ✓

Particulars of Side Scuttles:— *Side scuttles in fore fitted with hinged deadlights. ✓*
All scuttles of substantial construction. ✓

Particulars of Guard Rails:— *On Fore Head 3'-6" high with two rods and stanchions 4'-6" apart. ✓*

Particulars of Gangways, Lifelines, etc.:— *Wooden gangways from bridge to hatch in forward well, and from fore end of hatch in well to fore, efficiently supported. ✓*
Guard rails and lifeline fitted. ✓

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	95'-7" ✓	3'-0" ✓	2'-3" x 1'-6" ✓ 2'-6" x 1'-6"	5 1	16-85 sq ft 19	19.07 sq ft
Forward Well	35'-10" ✓	3'-0" ✓	2'-3" x 1'-6" ✓	3	10.125 sq ft	10.08 sq ft

State position of each freeing port } After Well:— Aft. 12'-3" 16'-3" 12'-3" 14'-2" 12'-5" 16'-3" 12'-3" 19'-4" 12'-3" 15'-6" Ford.
 (F. and A. position and height above deck edge) } Forward Well:— Aft. 12'-3" 9'-5" 12'-3" 8'-0" 12'-3" 6'-9" 12'-3" 6'-9" Ford.

State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— *Steel shutters, horizontal rod working in supports riveted to bulwarks. ✓*
Lower edge of shutters at top edge of sheerstrake, i.e. 7½" above deck. ✓

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 ...	✓	✓	✓	✓	✓	✓	✓	✓
Bridge, After Bulkhead	✓	25" ✓	5" x 3½" x 46" L 3" x 2½" x 32" ✓	30" ✓	Brackets top and bottom.	Nil ✓	Nil ✓	7'-0" ✓
Bridge, Forward Bulkhead	28" ✓	24" ✓	4" x 3" x 34" O.P. alternate stiffeners fitted with 3" x 3" x 36" Rev. 3'-0" and ends of side houses.	30" ✓	"	"	"	"
Forecastle Bulkhead	32" ✓	32" ✓	3" x 3" x 40" ✓	3'-0" and ends of side houses.	Nil ✓	2'-0" x 4'-2" ✓	24" ✓	"
Trunk, Aft	✓	✓	✓	✓	✓	✓	✓	✓
Trunk, Forward	✓	✓	✓	✓	✓	✓	✓	✓
Exposed Machinery Casings on Fore- board or Raised Quarter Decks ...	26" ✓	26" ✓	3" x 3" x 40" ✓	27½" and 37½" to suit doors.	Bkt. at top.	2'-0" x 4'-6" ✓	18" ✓	6'-6" ✓
Exposed Machinery Casings on Super- structure Decks	✓	✓	✓	✓	✓	✓	✓	✓
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).

Poop Bulkhead	✓
Raised Quarter Deck Bulkhead ...	✓ <i>no openings.</i>
Bridge, After Bulkhead	Nil ✓
Bridge, Forward Bulkhead	Nil ✓
Forecastle Bulkhead	Heavy teak door, capable of being manipulated from both sides. ✓
Exposed Machinery Casings on Fore- board or Raised Quarter Decks ...	Steel doors to engine room storehold, capable of being manipulated from both sides. ✓
Exposed Machinery Casings on Super- structure Decks	✓
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships ...	✓



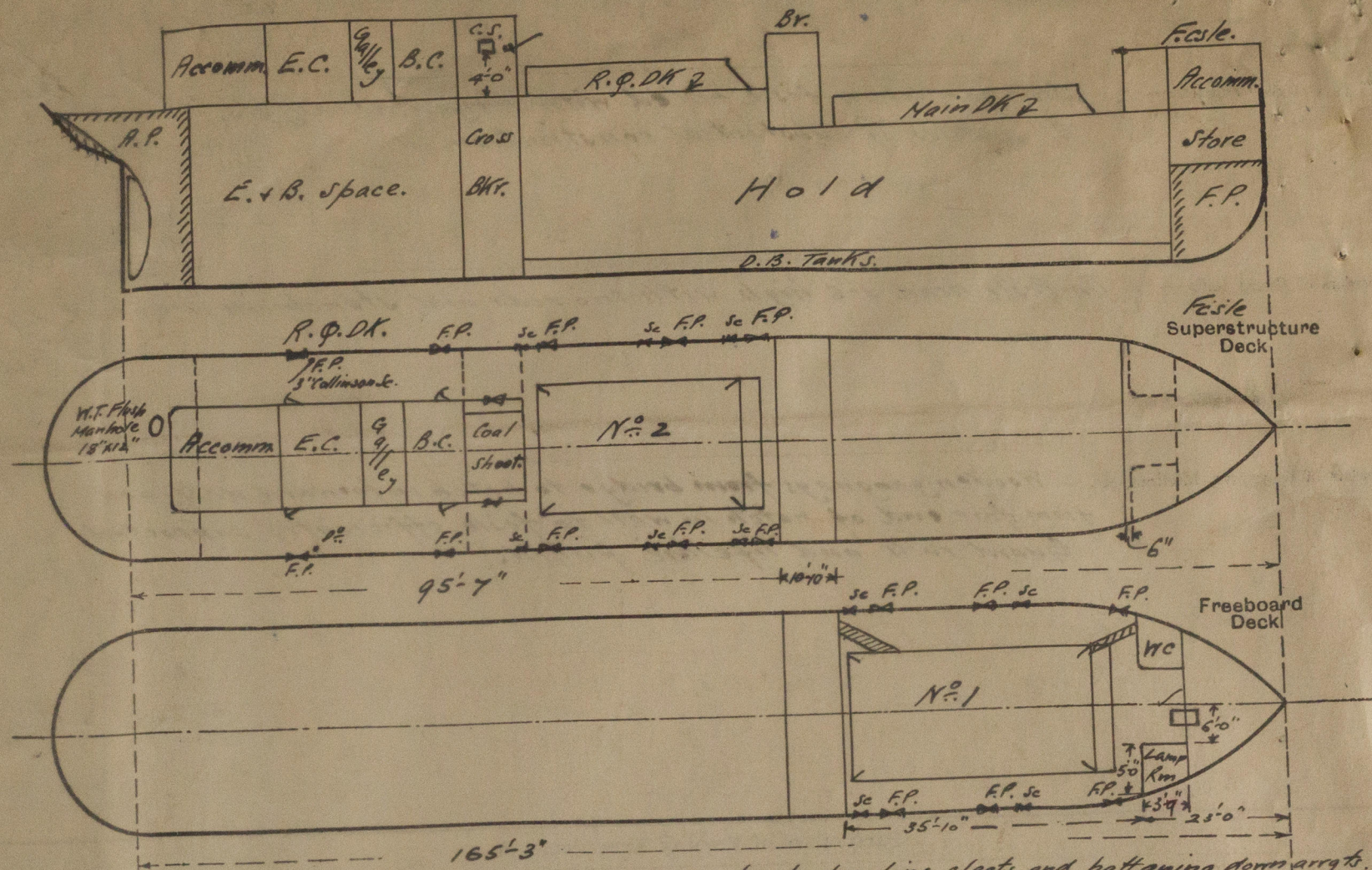
© 2020

Lloyd's Register

W429 001096 212

Warwick Head

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:—



- ✓ Hatch 18'x30', steel coaming 18'x30', 2 1/2" r.p. cover, two tarpaulins, cleats and battening down arqts.
- ✗ Escape hatches from coal shoot 18'x18', 4'-0" above R.P. DK, closed by steel hinged covers, capable of being manipulated from both sides.

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

$$\begin{aligned} \text{FORECASTLE} \\ 19.42 + \left(\frac{3.58 \times 5.0}{11.0} \right) &= 21.05 \\ \text{OVERHANG} \cdot 23.5 - 21.05 &= 2.45 \end{aligned}$$

Vessel examined afloat for freeboard purposes only.

Draft	Disp in Tons
12'-0"	1060
11'-0"	957
10'-0"	857
9'-0"	757

Builder's name and yard number Day, Summers & Co. Ltd. No. 185

Names of sister ships Nos 184+186 "CAMBALU" and "BLACKCOCK."

Owners Mason Shipping Co Ltd. A F Henry Macgregor & Co.

Fee £ 5 : 2 : 0 Received by me



© 2020

Lloyd's Register Foundation