

12 MAY 1932

Index. No. **31909**  
(For London Office only.)

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Mod. No. 7557.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

Leaving POOP, BRIDGE AND FORECASTLEPort of Survey Manchester

(Type of Superstructures.)

Date of Survey 10<sup>th</sup> & 11<sup>th</sup> May 1932

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

CITY OF Hereford  
NN "GOLDEN ALPHA"BRITISH  
LIVERPOOL14961851015.27Moulded Dimensions: Length 383.0Breadth 51.5Depth 32.66Moulded displacement at moulded draught = 85 per cent. of moulded depth 12199

tons

Coefficient of fineness for use with Tables 776Particulars of Classification \* 100 A1Carrying oil fuel & oil above 50° in 98

## Depth for Freeboard (D)

Moulded depth ... .. 32.66Stringer plate ... .. 0.04

Sheathing on exposed deck

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

Depth for Freeboard (D) = 32.70

## Depth correction

(a) Where D is greater than Table depth  
(D-Table depth) R =  $(32.70 - 32.53) 2.947$ 

$$= + 21.75$$

(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) 51.5Standard Round of Beam =  $\frac{B \times 12}{50} = \frac{12.36}{50}$ Ship's Round of Beam = 1.3Difference 0.64

Restricted to

Correction =  $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{0.64}{4} (1 - 0.4665) = -0.09$ 

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<u>31.00</u>	<u>31.00</u>	<u>7.5</u>		<u>31.00</u>
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...	<u>110.50</u>	<u>109.76</u>	<u>8.25</u>		<u>109.76</u>
„ overhang aft ...	<u>1.50</u>	<u>1.12</u>			<u>1.12</u>
„ overhang forward ...					
„ overhang ...					
„ overhang forward ...	<u>37.00</u>	<u>37.00</u>	<u>7.50</u>		<u>37.00</u>
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ forward ...	<u>180.00</u>	<u>180.00</u>			
Total ...	<u>449.00</u>	<u>448.28</u>			<u>448.28</u>

Standard Height of Superstructure 7.33

„ „ R.Q.D. ...

Deduction for complete superstructure 40.87Percentage covered  $\frac{S}{L} = \frac{448.28}{449.00} = 0.9984$ „ „  $\frac{S_1}{L} = \frac{448.28}{449.00} = 0.9984$ „ „  $\frac{E}{L} = \frac{448.28}{449.00} = 0.9984$ 

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 40.87 + 33.07 = -13.52

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>48.30</u>	1		<u>48.30</u>	<u>47.5</u>	<u>47.5</u>	1		<u>47.50</u>
$\frac{1}{2}$ L from A.P. ...	<u>21.49</u>	4		<u>85.96</u>	<u>21.4</u>	<u>21.33</u>	4		<u>85.32</u>
$\frac{2}{3}$ L „ ...	<u>5.31</u>	2		<u>10.62</u>	<u>5</u>	<u>5.32</u>	2		<u>10.64</u>
Amidships ...		4		<u>0</u>	<u>0</u>	<u>0</u>	4		<u>0</u>
$\frac{2}{3}$ L from F.P. ...	<u>10.62</u>	2		<u>21.24</u>	<u>10.5</u>	<u>10.64</u>	2		<u>21.28</u>
$\frac{1}{2}$ L „ ...	<u>42.99</u>	4		<u>171.96</u>	<u>42.5</u>	<u>42.65</u>	4		<u>170.60</u>
F.P. ...	<u>96.60</u>	1		<u>96.60</u>	<u>96</u>	<u>96.00</u>	1		<u>96.00</u>
Total ...				<u>434.68</u>					<u>431.34</u>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( 75 - \frac{S}{2L} \right) = \frac{3.34}{18} \left( 75 - \frac{2349}{2 \times 449} \right) = +0.09$ 

If limited on account of midship superstructure.

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 = 32.70Summer freeboard = 6.54Moulded draught (d) = 26.16

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 6.54 = 6.5

Addition for Winter North Atlantic Freeboard (if required =

## Deduction for Fresh Water.

Displacement in salt water at

summer load water line

 $\Delta = \frac{11410}{1.025} = 11130$ 

Tons per inch immersion at

summer load water line

T = 40.78Deduction =  $\frac{\Delta}{40T}$  inches $\frac{11130}{40 \times 40.78} = 6.99$ 6.99 = 7

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ... .. 21.13Deduction for superstructures ... .. 13.52Sheer correction ... .. 0.09Round of Beam correction ... .. 0.09Correction for Thickness of Deck amidships ... .. 0.22Other corrections, scantlings, etc. ... .. 0.00Summer Freeboard = 78.8

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

Tropical Fresh Water Line above Centre of Disc ... .. 13.2Fresh Water Line „ „ ... .. 7.1Tropical Line „ „ ... .. 6.2Winter Line below „ „ ... .. 6.5Winter North Atlantic Line „ „ ... .. 6.5Tropical Fresh Water Freeboard ... .. 5.8Fresh Water „ „ ... .. 5.1Tropical „ „ ... .. 6.0Winter „ „ ... .. 7.1Winter North Atlantic „ „ ... .. 7.1

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1935



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
FREEBOARD DECK							BRIDGE DECK			
Description of Hatchway	No 1	No 2	No 2A	DEEP TANK	No 4	No 5	COAL HATCH IN BRIDGE SPACE	SMALL C.H.S. IN BRIDGE SPACE	No 7A	HATCH TO BRIDGE DECK
Dimensions of Hatchway	24'9" x 18'0"	45'0" x 18'0"	11'2" x 18'0"	12'0" x 18'0"	30'0" x 18'0"	24'0" x 18'0"	24'6" x 4'0"	24'9" x 2'0"	15'0" x 18'0"	2-7'11" x 4'0"
COAMINGS	Height above Deck	30	30	30	30	30	9'3 1/2"	9'3 1/2"	30	30
	Thickness	44	44	44	44	44	44	44	44	40
	Sides	40	40	40	40	40	40	40	40	40
	Stiffeners	7 x 3 L	12 x 3 1/2 L	7 x 3 L	10 x 3 1/2 L	9 x 3 1/2 L	7 x 3 L	7 x 3 L	7 x 3 L	7 x 3 L
	Brackets, Stays	2-7 x 3 L	4-9 x 3 1/2 L	NONE	3-2 ROUNDS	2-2 ROUNDS	2-7 x 3 L	2-7 x 3 L	2-7 x 3 L	2-7 x 3 L
HATCH BEAMS	Number	4	8	1	1	5	4	1	6'0" x 4'6"	1
	Spacing	4'11"	4'8"	5'7" x 4'1"	6'0"	5'0"	4'9 1/2"	4'9 1/2"	6'0" x 4'6"	4'9 1/2"
	Scantling and Sketch	4 x 3 x 44	4 x 3 x 44	4 x 3 x 44	4 x 3 x 44	4 x 3 x 44	4 x 3 x 44	4 x 3 x 44	4 x 3 x 44	4 x 3 x 44
		16 x 36	16 x 36	17 x 36	18 x 36	16 x 36	16 x 36	16 x 36	16 x 36	16 x 36
	Bearing Surface	3"	3"	3"	3"	3"	3"	3"	3"	3"
FORE AND AFTERS	Number									
	Spacing									
	Unsupported Lengths									
	Scantling* and Sketch									
	Bearing Surface									
HATCH COVERS	Material	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
	Thickness	3"	3"	3"	3"	3"	3"	3"	3"	3"
	How fitted	F.E.A.	F.E.A.	F.E.A.	F.E.A.	F.E.A.	TRANSVERSE	F.E.A.	F.E.A.	F.E.A.
	Bearing Surface	3"	3"	3"	3"	3"	3"	3"	3"	3"
Spacing of Cleats	24"	24"	27" x 24"	27"	24"	20" x 24"	24"	24"	24"	24"
Number of Tarpaulins	3	3	2	3	3	3	NONE 2	NONE 2	3	3

Particulars of fiddle, funnel and ventilator coamings:—

Stokehold Gratings covered by Strong Hinged Steel Covers.  
Funnel and Fiddle Vents in good condition.  
E. R. Skylight of Steel Strongly constructed.

ON POOL HEAD.  
Hatch to Fore Peak: 9'3" coaming - 3'11" x 2'3"  
1/2" N.T. Steel cover - bolts 4' apart.  
ON FREEBOARD DECK IN FORE.  
Hatch to Fore Peak: 3'8" x 11' - 9" L coaming - 2 1/4" N.C.  
8 cleats - battens & 2 Tarpaulins  
Hatch to Chain Locker: 2'11" x 2'0" - 9" L coaming  
Wood cover - 8 cleats - battens and 2 Tarpaulins  
ON BRIDGE DECK  
Coal Hatch: 2-4'4" x 2'4" - 30" x 5 coaming  
1/2" N.C. Cleats 21" - battens and 3 Tarpaulins

Particulars of Flush Bunker Scuttles:—

NONE

Particulars of Companionways:—

NONE

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

FORWARD WELL  
Vents to Hold 21 1/4" dia x 36 coaming x 35  
28" x 36  
AFTER WELL  
Vents to Hold 18" dia x 36 coaming x 35  
25" x 36

ON FORECASTLE HEAD  
2 Vents to Hold 23" dia x 36 coaming x 35  
1 Vent to Fore 6" x 35  
ON BRIDGE DECK  
2 Vents to Hold 28 1/2" dia x 29 coaming x 35  
2 Vents to Hold 28 1/2" dia x 30  
2 Vents to Hold 28 1/2" dia x 30  
2 Vents to Hold 28 1/2" dia x 30  
2 Vents to Hold 28 1/2" dia x 30

ON POOP DECK  
1 Vent. to Funnel E. 16" dia x 29" x 3  
1 Vent. to Accom 10" x 28" x 3  
4 Vents to 6" x 29" x 3  
1 Vent. to 8" x 29" x 3  
All Vents are Strongly constructed and closed by Wood plugs and canvas covers

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

Fore Peak 3" dia x 31" To Mouth  
No 1 2" x 32" To Mouth  
No 2 2" x 39" To Mouth  
No 3 2" x 38" To Mouth  
No 4 2" x 23" To Mouth  
No 5 2" x 26" To Mouth  
No 6 2" x 27" To Mouth  
No 7 2" x 28" To Mouth

2 air pipes to No 6 D.B. Tank 2" dia x 39" To Mouth  
No 7 2" x 39" To Mouth

No SNIFFING HOLES DRILLED

No Means of Closing provided: wood plugs & canvas covers

Particulars of Gangway Cargo and Coaling Ports:—

NONE



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Particulars of Scuppers and Sanitary Discharge Pipes —

*N.C. discharges from crew's quarters aft belowboards about 5'-0" below freeboard D<sup>h</sup> with Storm Valves.*  
*Galley Sink discharges P.S. 5'-0" below freeboard Deck with Storm Valves.*  
*Other W.C. discharges are above freeboard Deck.*  
*Scuppers draining freeboard deck in wells are cut through stringer angle.* ✓

Particulars of Side Scuttles:

*Side Scuttles to accommodation on freeboard D<sup>h</sup> are of strong construction and fitted with permanent hinged deadlights.*

Particulars of Guard Rails:—

*Poop Deck:— 3 in Guard Rails 3'-6" high Stanchions about 5'-0" apart.*  
*Bridge Deck:— 3 in " 3'-3" " 4'-6"*  
*Fore Deck:— 3 " 3'-3" " 5'-3"*  
*Strong Steel Bulwarks are fitted in way of Wells 4'-2" high and supported by 6x3 L Stays about 5'-6" apart.* ✓

Particulars of Gangways, Lifelines, etc.:—

*Lifelines for protection of crew provided in after well.*

*NONE*

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 ...	110.75"	4'-2"	3'-0" x 1'-6"	5	22.5	✓ 22.25
Forward Well ...	93.75'	4'-2"	3'-0" x 1'-6"	4	18.0	✓ 18.75
State position of each freeing port ... After Well:— From BRIDGE BULWARK: 20'-4" 32'-4" 54'-6" 71'-8" 83'-6" (F. and A. position and height above deck edge) Forward Well:— " 10'-0" 36'-0" 53'-6" 64'-0" } 15' ABOVE DECK EDGE State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— <i>Hinged Steel Shutters and 2 Horizontal Bars</i> 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 ...	✓	40	6x3x35 L	31"	LUGS	2'-9" x 3'-9"	36"	7'-6"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ...	✓	35	3½x2½x3 L	30"-35"	NONE	5'-0" x 4'-0"	20"	8'-3"
Bridge, Forward Bulkhead ...	✓	50	9x3x5 L	28"-30"	LUGS TOP AND BOTTOM	INTACT	✓	8'-3"
Forecastle Bulkhead ...	✓	30	3x3x3 L	41"	NONE	5'-0" x 4'-0"	21"	7'-6"
Trunk, Aft ...								
Trunk, Forward ...								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	✓	30 E.R. CASING PLATES 45"	28-32" apart	NONE	LUGS TO B <sup>h</sup>	5'-0" x 3'-0"	15" FOLEY	8'-3"
Exposed Machinery Casings on Superstructure Decks ...	✓	35 (B.R. + NEOS. 4" AT TOP DOUBLE 3x3 L)	28" apart	"	"	5'-0" x 3'-0"	15" E.R.	8'-3"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	✓	30 E.R. 35 (B.R.) AS ABOVE	"	"	"	5'-0" x 3'-0" FOLEY 1-4" x 2-4" E.R. 1-5'-4" x 3'-0" E.R.	18" 14" 15"	7'-6"
Deckhouses on Flush Deck Ships ...								

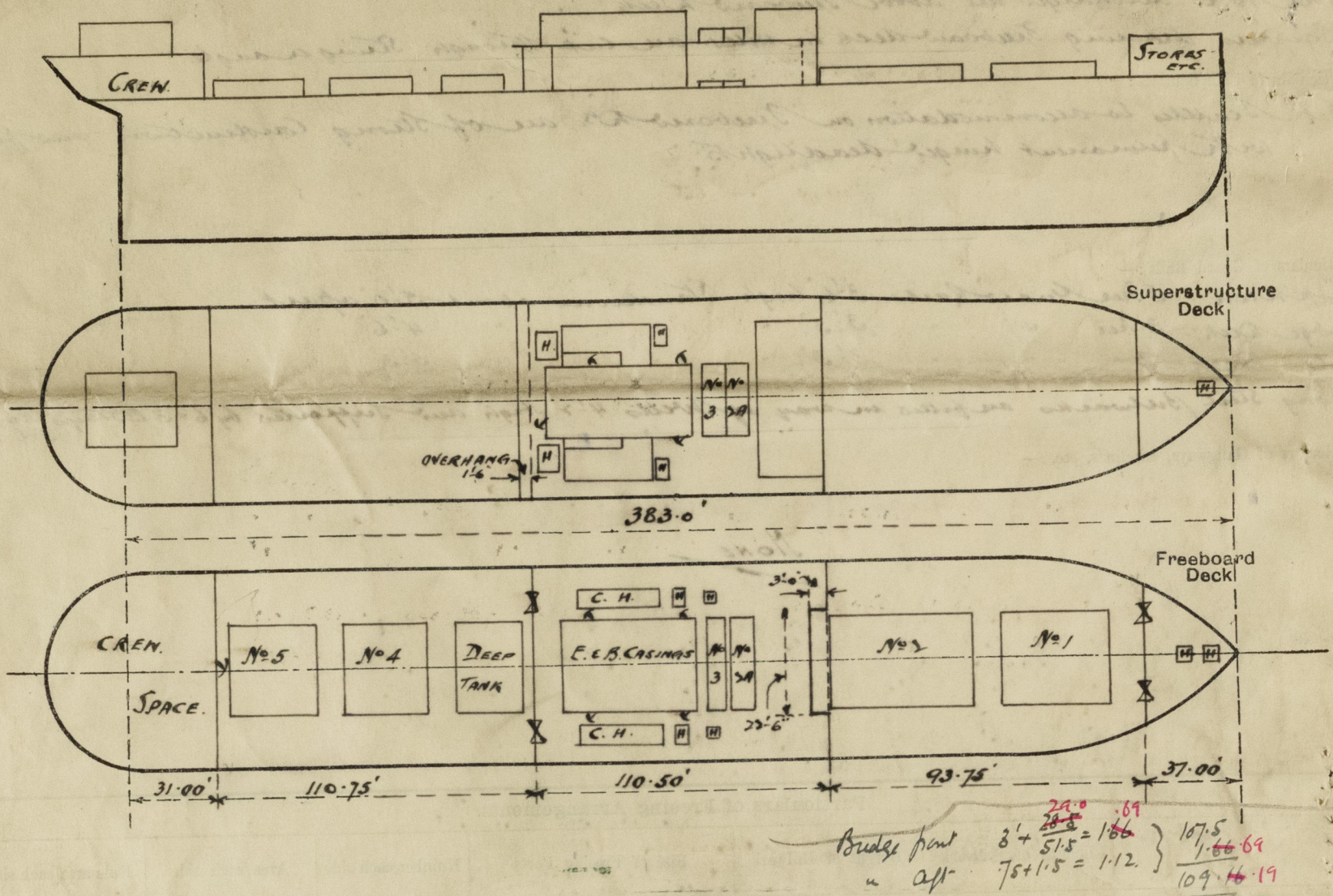
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead ...	<i>Hinged Steel W.T. Door to Ice House operated from outside only.</i>
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead ...	<i>3" 5/8" full height in Riveted channels &amp; portable steel plates secured by hook bolts.</i> ✓
Bridge, Forward Bulkhead ...	<i>Intact.</i> ✓
Forecastle Bulkhead ...	<i>3" 5/8" full height in Riveted channels &amp; portable steel plates secured by hook bolts.</i> ✓
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	<i>Hinged Steel Doors operated from both sides (in Bridge Space).</i> ✓
Exposed Machinery Casings on Superstructure Decks ...	<i>Hinged Steel Doors operated from both sides (in Bridge Space).</i> ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	<i>Hinged Wood Door operated from both sides E.R. Port Side } on Bridge Deck ✓</i> <i>Hinged Steel Door operated both sides E.R. after entrance</i>
Deckhouses on Flush Deck Ships ...	



Civil of Hereford

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 SURVEYED AFLOAT

The vessel is drydocking on the 12<sup>TH</sup> May 1933 when the Special Survey No 1 will be completed.

No crew are berthed in the Forecastle which is utilises for stores only.

Builder's name and yard number

Barday, Curle & Co. Ltd Glasgow No 615

Names of sister ships

Owners

Ellerman Lines Ltd (Hull & Co. Ltd. Tugs)

Fee £

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