

GOLD SHELL 34066
CIRCE SHELL 34078
Rpt. C.11.

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Index. No. **34088**
(For London Office only.)

22 JUN 1932

Computation of Freeboard for ~~Steamship~~ *Tanker*
having *Forecastle, bridge and poop*
(Type of Superstructures.)

Ship's Name <i>"COWRIE"</i>	Nationality and Port of Registry <i>British London</i>	Official Number <i>162651</i>	Gross Tonnage <i>8197</i>	Date of Build <i>1931</i>
Moulded Dimensions: Length <i>450.0</i> Breadth <i>61.75</i> Depth <i>34.0</i>		Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>18280</i> tons		
Coefficient of fineness for use with Tables <i>0.796</i>		Particulars of Classification <i>+100 A 1</i>		

Depth for Freeboard (D) = *34.06*

Depth correction
(a) Where D is greater than Table depth (D-Table depth) R = *(34.06 - 30.0) 3 = 12.18*
(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) *61.75*
Standard Round of Beam = $\frac{B \times 12}{50} = 14.82$
Ship's Round of Beam = *15 1/2*
Difference *Enum* *.68*
Restricted to
Correction = $\frac{\text{Diff}^e}{4} \times (1 - \frac{S_1}{L}) = \frac{.68}{4} (5494) = -10$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>102.6</i>	<i>102.60</i>	<i>7'3"</i>	<i>7.25/7.50</i>	<i>99.18</i>
" overhang ...	<i>none</i>				
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed...	<i>35.1</i>	<i>35.10</i>	<i>7'3"</i>	<i>7.25/7.50</i>	<i>33.93</i>
" overhang aft ...	<i>none</i>				
" overhang forward					
Fore enclosed ...	<i>42.6</i>	<i>42.60</i>	<i>7'3"</i>	<i>7.50 to 7.50</i>	<i>42.60</i>
" overhang ...	<i>none</i>				
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<i>180.30</i>	<i>180.30</i>			<i>175.71</i>

Standard Height of Superstructure *7.5*
" " R.Q.D. *42.0*
Deduction for complete superstructure *42.0*
Percentage covered $\frac{S}{L} = 40.06$
" $\frac{S_i}{L} = 40.06$
" $\frac{E}{L} = 39.05$
Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) *40.06*
Percentage from Table, Line B.
(corrected for absence of forecastle (if required)) *39.05*
Interpolation for bridge less than 2L (if required)
Deduction = *-12.62*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>55.00</i>	<i>1</i>	<i>55.00</i>	<i>61.5</i>	<i>63.0</i>	<i>63.00</i>	<i>1</i>	<i>63.00</i>	<i>63.00</i>
1/4 L from A.P. ...	<i>24.47</i>	<i>4</i>	<i>97.88</i>	<i>26.0</i>	<i>26.07</i>	<i>26.07</i>	<i>4</i>	<i>104.28</i>	<i>104.28</i>
1/2 L " ...	<i>6.05</i>	<i>2</i>	<i>12.10</i>	<i>6.5</i>	<i>6.52</i>	<i>6.52</i>	<i>2</i>	<i>13.04</i>	<i>13.04</i>
Amidships ...		<i>4</i>		<i>0</i>			<i>4</i>		
3/4 L from F.P. ...	<i>12.10</i>	<i>2</i>	<i>24.20</i>	<i>12.75</i>	<i>13.03</i>	<i>13.03</i>	<i>2</i>	<i>26.06</i>	<i>26.06</i>
1/4 L " ...	<i>48.95</i>	<i>4</i>	<i>195.80</i>	<i>52.0</i>	<i>52.14</i>	<i>52.14</i>	<i>4</i>	<i>208.56</i>	<i>208.56</i>
F.P. ...	<i>110.00</i>	<i>1</i>	<i>110.00</i>	<i>120.5</i>	<i>120.50</i>	<i>120.5</i>	<i>1</i>	<i>120.50</i>	<i>120.50</i>
Total ...			<i>494.98</i>					<i>535.44</i>	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{40.46}{18} (.75 - .2003) = -1.24$
If limited on account of midship superstructure.

Mean actual sheer aft = *Enum*
Mean standard sheer aft
Mean actual sheer forward = *Enum*
Mean standard sheer forward

Length of enclosed superstructure forward of amidships =
" " aft of " = *40.06*

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <i>34.06</i> Summer freeboard = <i>6.65</i> Moulded draught (d) = <i>27.41</i>	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 17499$ Tons per inch immersion at summer load water line $T = 56.8$ Deduction = $\frac{\Delta}{40T}$ inches $= 7.70 = 7 3/4$	TABULAR FREEBOARD corrected for Fresh Deck (if required) Correction for coefficient $\frac{.797 + .68}{1.36} = \frac{1.477}{1.36}$ Depth Correction ... <i>12.18</i> Deduction for superstructures ... <i>12.62</i> Sheer correction ... <i>1.24</i> Round of Beam correction ... <i>.10</i> Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. ... Summer Freeboard = <i>79.78</i>
--	---	--

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

Tropical Fresh Water Line above Centre of Disc ...	<i>14 1/2</i>	Tropical Fresh Water Freeboard ...	<i>5 1/4</i>
Fresh Water Line " " ...	<i>7 3/4</i>	Fresh Water " " ...	<i>6 1/4</i>
Tropical Line " " ...	<i>6 3/4</i>	Tropical " " ...	<i>6 1/4</i>
Winter Line below " " ...	<i>6 3/4</i>	Winter " " ...	<i>7 1/2</i>
Winter North Atlantic Line " " ...	<i>11 1/4</i>	Winter North Atlantic " " ...	<i>7 1/2</i>

23 JUN 1932

RECEIVED

RECEIVED

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
			21 OFF	18 OFF					
Description of Hatchway	...	...	CARGO HOLD FORWARD	Oil cargo tanks	Ballast pump room				
Dimensions of Hatchway	...	...	9' x 12'	6' 1" x 4'	3' x 3'				
COAMINGS	Height above Deck ... Thickness { Sides ... { Ends ... Stiffeners ... Brackets, Stays ...	...	30"	30"	30"				
		...	.44"	.40"	.40"				
		...	.44"	.40"	.40"				
		...	-	-	-				
HATCH BEAMS	Number ... Spacing ... Scantling and Sketch ... Bearing Surface ...	...	none	none	none				
		...							
FORE AND AFTERS	Number ... Spacing ... Unsupported Lengths ... Scantling* and Sketch ... Bearing Surface ...	...	none	none	none				
		...							
HATCH COVERS	Material ... Thickness ... How fitted ... Bearing Surface ...	...	Steel	Steel O.T. hatch	Steel w.T. hatch				
		...	.50" and stiffened	.50"	.50"				
		...	by 65-75-92 angles and stiffened						
		...	Slump parking	Slump parking					
Spacing of Cleats	...	...	-	-	-		
Number of Tarpaulins	...	...	-	-	-		

*Are wood fore and afters steel shod at all bearing surfaces? ✓

Are battens and wedges efficient and in good condition? ✓

Are tarpaulins in good condition and in accordance with rule requirements? ✓

Are lashings provided in accordance with rule requirements? ✓

Particulars of fiddley, funnel and ventilator coamings:— Fiddley-deck 8" above hatch deck. Openings in fiddley-deck are closed by hinged steel covers with turnbuckles. Funnel and ventilator coamings to engine and sailer-rooms are riveted to fiddley-deck.

Particulars of Flush Bunker Scuttles:—

none

Particulars of Companionways :—

none

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

On forecastle deck: One vent. lator to shore room 12" diam opening 36" high 3/8" thick } screwed
 One vent. lator to fore. tween dk. 12" " " 36" high 3/8" thick } closed by steel
 One vent. lator to fore. cargo hold 12" " " 36" high 3/8" thick } covers and wooden
 On foreboard deck: One vent. lator to fore. tween dk 12" " " 36" high 3/8" thick } covers with canvas.
 One vent. lator to fore. cargo hold 12" " " 36" high 3/8" thick }
 One vent. lator to ballast pen. room 12" " " 36" high 3/8" thick }
 One vent. lator to main pump room 24" " " 44" high 3/8" thick }
 deck house of main pump room.

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

On forecabin deck: One air pipe to fore peak tank 5" diam 26" above deck.
Two " " to fore deep tank 4" diam 26" " "

On fuel and deck: Two air pipes to fore coffer dam 3 1/4" diam 36" above deck.
Three " " to after coffer dam 3 1/4" diam 60" above deck.
Two " " to main bunker 4 1/4" diam 84" above deck.
Four " " to settling tanks 3 1/4" " 84" " "

} All air pipes are of substantial construction and fitted with gauze.

Particulars of Gangway Cargo and Coaling Ports :—

none

Crowne

Particulars of Scuppers and Sanitary Discharge Pipes

7 scuppers above freeboard deck $6\frac{1}{2}'' \times 5\frac{1}{2}''$
6 scuppers below freeboard deck $5\frac{1}{2}''$ diam.

All sanitary discharge pipes are fitted with down valves.

Particulars of Side Scuttles:

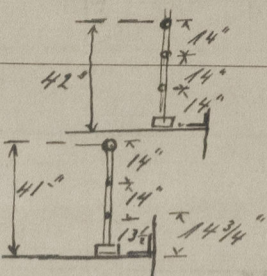
No side scuttles below freeboard deck.

Side scuttles in forecabin and poop spaces are fitted with hinged dead lights.

Particulars of Guard Rails:

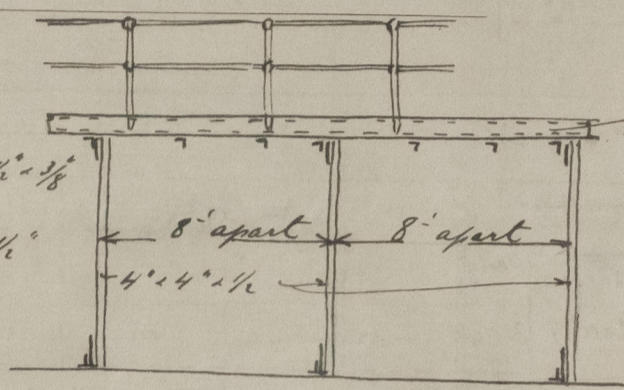
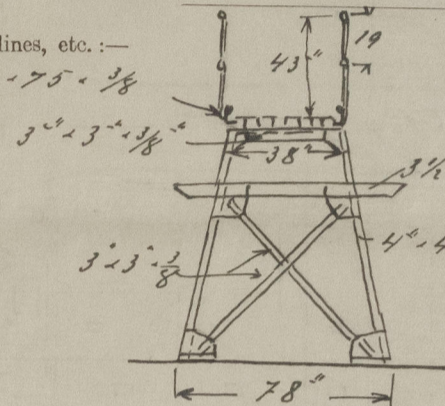
On forecabin deck.

on freeboard deck.



Particulars of Gangways, Lifelines, etc.:

5 150 x 75 x 3/8



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			Open rail forward and aft.			
Forward Well						

State position of each freeing port } After Well:—
(E. and A. position and height above deck edge) } Forward Well:—

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.

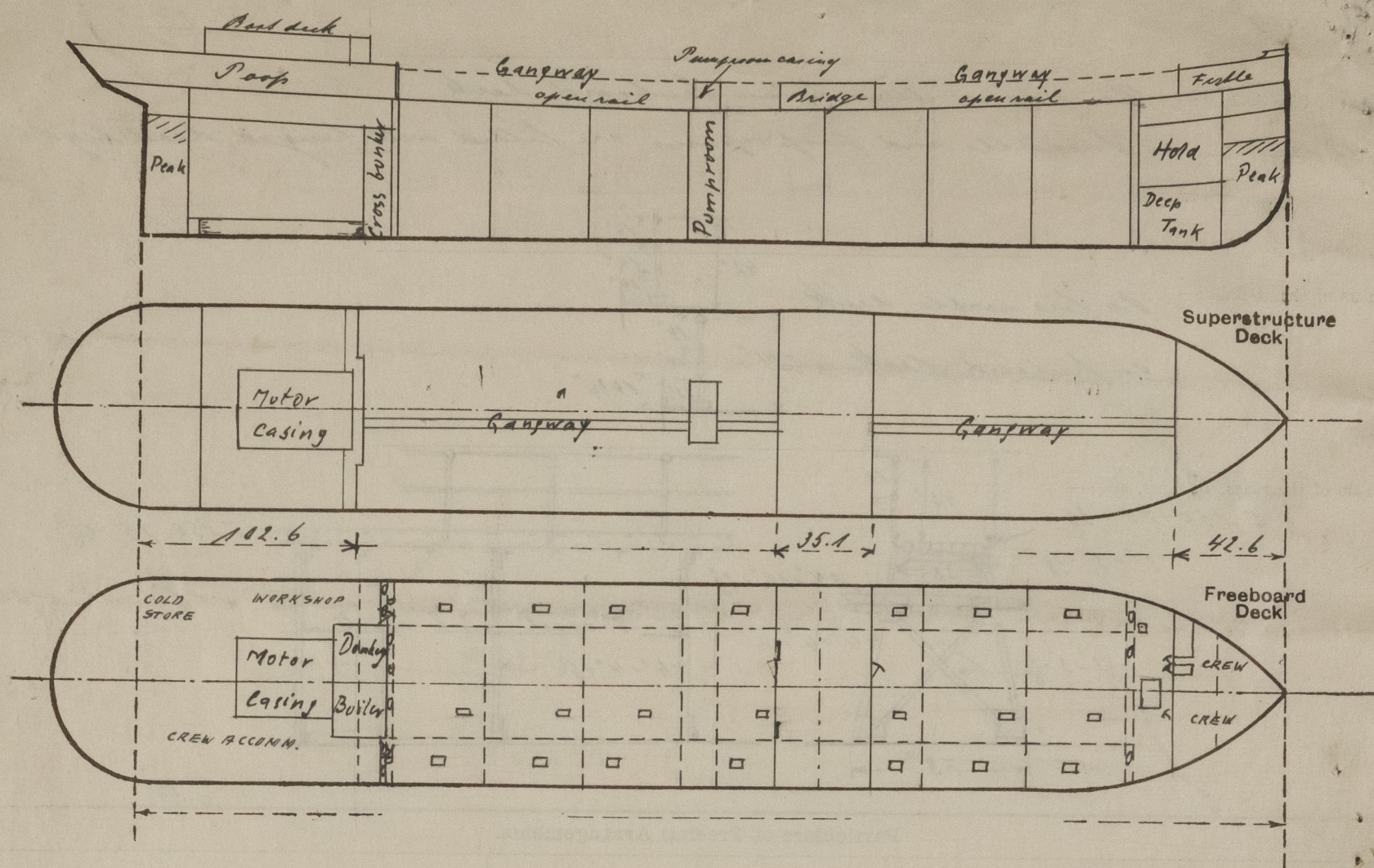
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	17" x 1/2"	7/16"	6 x 3 1/2" x 7/16" 12"	27"-30"	bracketed	2 W.T. doors 51" x 30"	24"	7'3"
Raised Quarter Deck Bulkhead ...	-	-	-	-	-	-	-	-
Bridge, After Bulkhead	23" x 7/16"	8/16"	6 x 7" x 3/8" 12"	26"-31"	bracketed	2 openings 51" x 30"	23"	7'3"
Bridge, Forward Bulkhead	23" x 1/2"	7/16"	9" x 3 1/2" x 7/16"	26"-31"	bracketed	1 W.T. door 60" x 30"	18"	7'3"
Forecastle Bulkhead	24 1/2" x 7/16"	5/16"	4" x 3" x 5/16"	27"-30"	bracketed	3 doors 60" x 25"	18"	7'3"
Trunk, Aft	-	-	-	-	-	-	-	-
Trunk, Forward	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-
Deckhouses on Flush Deck Ships ...	-	-	-	-	-	-	-	-

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

Poop Bulkhead	2 W.T. hinged steel doors with turnbuckles; manipulated from both sides.
Raised Quarter Deck Bulkhead ...	-
Bridge, After Bulkhead	2 openings closed by steel plates with hook and bolts.
Bridge, Forward Bulkhead	1 W.T. hinged steel door with turnbuckles; manipulated from both sides.
Forecastle Bulkhead	2 teakwood doors 2" thick to serve as accommodation manipulated from both sides.
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	-
Deckhouses on Flush Deck Ships ...	-

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:—*longitudinal framing at bottom and at deck.*
The vessel has been surveyed afloat and in dry dock for condition and load line.

Builder's name and yard number *Cantieri Riuniti Dell Adriatico*

Names of sister ships *Silver Shell, Gold Shell.*

Owners *Anglo-Saxon Petroleum Co. Ltd.*

Fee £ *16 : 3 : 0*

Received by me

Surveyor at Harburg



© 2021

Lloyd's Register
Foundation