

Rpt. C.11.

B.T. COPY

18 MAY 1932

Index. No. 32001
(For London Office only.)Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

poop and forecastle.

Port of Survey

New York

Date of Survey

May 2nd 1932

Name of Surveyor

W. H. Cunniff

Particulars of Classification

+ 100 A.I.

Ship's Name

(Type of Superstructures.)

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Moulded Dimensions: Length 344 - Breadth 52.5 Depth 24 -

Moulded displacement at moulded draught = 85 per cent. of moulded depth 9496 tons

Coefficient of fineness for use with Tables 495

Depth for Freeboard (D)

Moulded depth 24.00

Stringer plate ... (72")06

Sheathing on exposed deck (None)

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

Depth for Freeboard (D) = 24.06

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R =

$$(24.06 - 23.13) \times 2.669 = 10.49$$

(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) 52.5

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} = 12.6$$

$$\text{Ship's Round of Beam} = 13$$

$$\text{Difference} = .40$$

Restricted to

$$\text{Correction} = \frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.40}{4} \times .558 = (.0558) .06$$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	100' 10 1/2"	100.87	7' 6"	✓	100.87
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
Fore enclosed	52' 6"	52.50	7' 6"	✓	52.50
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	153.37	153.37			153.37

Standard Height of Superstructure 6.97

" " R.Q.D.

Deduction for complete superstructure 38.47

Percentage covered $\frac{S}{L} = 44.20$ " " $\frac{S_1}{L} = 44.20$ " " $\frac{E}{L} = 44.20$

Percentage from Table, Line A. 24.07

(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) NO BRIDGE

$$\text{Deduction} = .2407 \times 38.47 = 10.41$$

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate PLOTTED	Effective Ordinate	S M	Product
A.P.	44.70	1	44.70	36.12	36.50	1	36.50
1/4 L from A.P.	19.89	4	79.56	5.5	5.50	4	22.00
1/2 L "	4.92	2	9.84	2.4	-	2	-
Amidships	-	4	-	-	-	4	-
3/4 L from F.P.	9.83	2	19.66	4.4	-	2	-
3/4 L "	39.79	4	159.16	12.4	12.40	4	49.60
F.P.	89.40	1	89.40	72	72.00	1	72.00
Total			402.32				180.10

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{222.22}{18} (1 - .221) = 41.653$$

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 = 24.06

Summer freeboard = 5.31

Moulded draught (d) = 21.75

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 5.44

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$$\Delta = 9054$$

Tons per inch immersion at summer load water line

$$T = 37$$

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

$$= 6.12$$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.495 + .68}{1.36} = \frac{1.475}{1.36}$

Depth Correction 10.49

Deduction for superstructures 10.41

Sheer correction 6.53

Round of Beam correction06

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. 3.17

Summer Freeboard = 63.45

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

Tropical Fresh Water Line above Centre of Disc ... 11 1/2"

Fresh Water Line " " ... 6"

Tropical Line " " ... 5 1/2"

Winter Line below " " ... 4"

Winter North Atlantic Line " " ... 4"

Tropical Fresh Water Freeboard ... 4 - 3 3/4"

Fresh Water " " ... 4 - 9 3/4"

Tropical " " ... 4 - 10 1/2"

Winter " " ... 5 - 9 1/4"

Winter North Atlantic " " ... 5 - 9 1/4"

25 MAY 1932

MARKING FORM

RECEIVED

4 JUN 1940

RECEIVED

MARKING FORM

RECEIVED

20 JUN 1932

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS					
Description of Hatchway		No. 1	No. 2	No. 3	No. 4
Dimensions of Hatchway		11'4" x 20	32 x 30	25 x 30	10 x 5
COAMINGS	Height above Deck	30	30	30	12"
	Thickness Sides	.44	.44	.44	.44
	Thickness Ends	.44	.44	.44	.44
	Stiffeners	7 x 3 x .44	6 1/2 x 3 x 3/4	6 1/2 x 3 x 3/4	5
	Brackets, Stays	None	Every 4' 6"	Every 4' 6"	✓
HATCH BEAMS	Number	2	None	None	None
	Spacing	5' 9"	None	None	None
	Scantling and Sketch	4 x 3 x .44	None	None	None
	Bearing Surface	3	None	None	None
FORE AND AFTERS	Number	✓	✓	✓	None
	Spacing	✓	✓	✓	None
	Unsupported Lengths	✓	✓	✓	None
	Scantling* and Sketch	✓	✓	✓	None
HATCH COVERS	Material	wood	steel	steel	wood
	Thickness	3	1/2	1/2	3
	How fitted	F + 4ft	F + 4ft	F + 4ft	Trans.
	Bearing Surface	3	3	3	3
Spacing of Cleats		24	34	34	24
Number of Tarpaulins		2	None	None	2

*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 fiddle, funnel and ventilator coamings:— Funnel riveted to Boat deck. Fiddle has three openings on Boat deck, framed with 3 1/2" coaming angle, with strong steel hinged covers, 3/8" thick, fastened from below. E.R. skylight coaming, 10" at sides, 36" at center, 5/16" thick. Strong hinged steel flaps are fitted in skylight, secured from below. Two E.R. vents each 27" dia., 36" coaming, 3/8" thick. Four E.R. 18" dia. 36" coaming 3/8" thick, above poop deck. All well secured and provided with wood covers + canvas.

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways:—

None

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

No.	Position	Size	Height	Weight
1.	Fore Hold	12	36	3/8
2.	Fore Tron dk	15	36	3/8
3.	On each side (No. 2 & 5)	15	36	3/8
4.	Steering Gear	12	30	3/8
5.	Strong Companion Posts	21	—	1/2

All in good condition. Rivets to deck on later course 3 to 3 1/2" apart. Provided with wood covers + canvas for emergency.

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

Five 2", Four 2 1/2", One 3", One 4", One 4 1/2", Two 5", Eight 6" air pipes, all 18" above deck, and all provided with wood plugs and canvas for emergency. 1/2" scuffing holes in upper part of bend.

Particulars of Gangway Cargo and Coaling Ports:—

None

Particulars of Scuppers and Sanitary Discharge Pipes —

The upper deck is scuppered. This scupper hole cut in Gunwale bar. The sanitary discharge pipes from accommodation spaces within Poop + Fe. spaces are as follows:— Four 4" dia. toilet pipes and six 2 to 2 1/2" dia. bath + basin pipes. There are a single bronze clapper valve on each. Toilet have manual shut off valve in the toilet.

Particulars of Side Scuttles:—

Portlights in sides of Poop and Fe. spaces have cast steel deadlights provided.

Particulars of Guard Rails:—

42" open rails on Poop and Fe. Two rails in height. Steel bulwark on upper deck between Poop + Fe. 42" high, supported by 6 x 5 1/2" bulk plate stays, spaced about 6 ft apart.

Particulars of Gangways, Lifelines, etc.:—

No Gangways. Lifelines provided when required.

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	193' 7 1/2"	42"	42" x 18"	7	39	38.7
Forward Well	✓	✓	✓	✓	✓	✓

State position of each freeing port (F. and A. position and height above deck edge) — After Well:— Evenly distributed along deck. Lower edge 10" above deck. Forward Well:— ✓
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Two rails in height.
 Additional area where sheer is less than standard. ✓

Particulars of Superstructures, Trunks, Casings, Deckhouses.

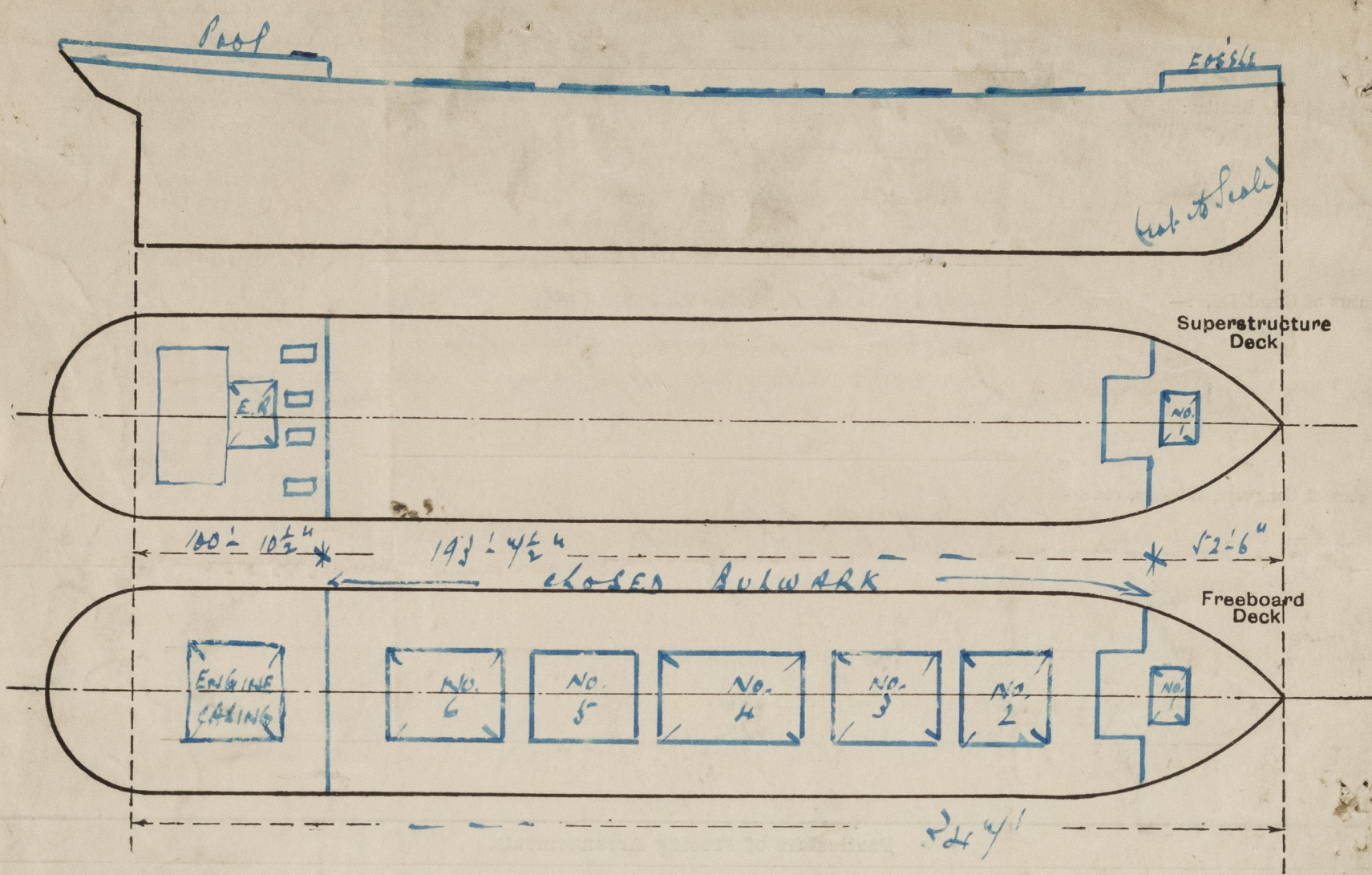
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	3/8	3/8	9 x 3 x 1/2 BA	30	Btts at top	None	✓	7' 6"
Raised Quarter Deck Bulkhead	✓							
Bridge, After Bulkhead	✓							
Bridge, Forward Bulkhead	✓							
Forecastle Bulkhead	5/16	5/16	3 x 2 1/2 x 1/4 OA	30	Btts at top	2 T slots 63 x 36 2 Steel slots 63 x 36	15	7' 6"
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	✓	No openings
Raised Quarter Deck Bulkhead	✓	
Bridge, After Bulkhead	✓	
Bridge, Forward Bulkhead	✓	
Forecastle Bulkhead	✓	Frames have wood sheathing boards in riveted channels, full height. Others steel hinged doors, operable from either side.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓	
Exposed Machinery Casings on Superstructure Decks	✓	(Not exposed)
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓	
Deckhouses on Flush Deck Ships	✓	

Gypsum King

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:— This vessel is constructed with wing and double bottom tanks. There are five hatches on the upper deck between Post & fore-castle, and these are closed by approved Hogg Can steel covers ^{which can be made watertight}. The owners desire consideration be given to these constructional features with a view to having additional draft being allowed under Article 8 of the International Load Line Rules.

Full Δ	at 22ft	extreme draft in salt water	9100 Tons	Taken from Chassis Δ curves.
T.P.D	" 23ft	"	9500 "	
"	" 24ft	"	37	
"	" 25ft	"	37.25	

Vessel examined in water.

W. Bennett.

Builder's name and yard number *Furness S. B. Co. Ltd.*
 Names of sister ships *"Gypsum Prince" "Gypsum Queen" (also Gypsum Empress except, Fx.)*
 Owners *Gypsum Packet Co. Ltd.*

Fee £ 60⁰⁰ : : Received by me

Shayed at New York.



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Foundation