

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD

NOV 13/37

Computation of Freeboard for Steamer, ~~Sailing Ship~~, Tankerhaving *Poop, Bridge and Forecastle.*Port of Survey *Glasgow.*Date of Survey *10th 11th 1937*Name of Surveyor *J. O. Thomson*Particulars of Classification *+100 A1*
Carrying Oil fuel in bulk F.P. above 150°F.
Fitted for oil fuel 5.18. F.P. above 150°F.

Ship's Name *NEW NAME. "OAKFIELD"*
Nationality and Port of Registry *British London*
Official Number *142415* Gross Tonnage *5244* Date of Build *1918-5*
Moulded Dimensions: Length *399.5* Breadth *52.0* Depth *31.0*
Moulded displacement at moulded draught = 85 per cent. of moulded depth *12096 12055* tons
Coefficient of fineness for use with Tables *.771 .773*

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	31.00	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	52.0
Stringer plate (48)	.04	(31.04 - 26.63) × 3 = +13.23		Standard Round of Beam = $\frac{B \times 12}{50}$	12.48
Sheathing on exposed deck	✓	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	13
$T \left(\frac{L-S}{L} \right) =$				Difference	.52
Depth for Freeboard (D) =	31.04	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{.52}{4} \times .4952 = -.06$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop end	49.25	49.25	7' 11 1/2"	-	49.25
overhang	✓				
R.Q.D. enclosed	✓				
overhang	✓				
Bridge enclosed	112.66	112.66	7' 11 1/2"	-	112.66
overhang aft	✓				
overhang forward	✓				
Fore enclosed	38.75	38.75	7' 11 1/2"	-	38.75
overhang	1.00	1.00			1.00
Trunk aft	✓				
forward	✓				
Tonnage opening aft	✓				
forward	✓				
Total	201.66	201.66			201.66

Standard Height of Superstructure *7.495*

R.Q.D. ✓

Deduction for complete superstructure *41.96*

Percentage covered $\frac{S}{L} =$
" " $\frac{S_1}{L} =$
" " $\frac{E}{L} =$ } *50.48*

Percentage from Table, Line A. ✓
(corrected for absence of forecastle)Percentage from Table, Line B. *36.48*
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = *41.96 × 36.48 = -15.31*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	49.95	1		49.95	60.00	60.00	1		60.00
1/2 L from A.P.	22.225	4		88.90	26.07	26.07	4		104.28
1/2 L	5.995	2		10.99	6.52	6.52	2		13.04
Amidships	-	4		-	-	-	4		-
1/2 L from F.P.	10.99	2		21.98	13.23	13.23	2		26.46
1/2 L	44.45	4		177.80	52.93	52.93	4		211.72
F.P.	99.90	1		99.90	120.00	120.00	1		120.00
Total				449.52					535.50

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{85.98}{18} \left(.75 - \frac{25.24}{49.76} \right) = -2.38$

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 = *31.04*
Summer freeboard = *5.986*
Moulded draught (d) = *25.058*

Deduction for Tropical freeboard and addition for
Winter freeboard = $\frac{d}{4}$ inches = *6.26 = 6 1/4*
Addition for Winter North Atlantic Freeboard (if required) = ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta =$ *11484*
Tons per inch immersion at summer load water line
T = *41.81*

Deduction = $\frac{\Delta}{40T}$ inches
= *6.99 = 7*

TABULAR FREEBOARD corrected for Plush Deck (if required)

Correction for coefficient

Depth Correction	13.23	-
Deduction for superstructures	-	15.31
Sheer correction	-	2.38
Round of Beam correction	-	.06
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-

Summer Freeboard = *71.70*SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc ... *13 1/4*
Fresh Water Line " " ... *7*
Tropical Line " " ... *6 1/4*
Winter Line below " " ... *6 1/4*
Winter North Atlantic Line " " ... ✓

Tropical Fresh Water Freeboard ... *5' 11 1/2"*
Fresh Water " " ... *4' 10 1/4"*
Tropical " " ... *5' 4 1/2"*
Winter " " ... *5' 5 1/4"*
Winter North Atlantic " " ... *6' 5 1/4"*

Oakfield

Hand-drawn sketch of a hatch layout. The sketch shows a rectangular area with dimensions and labels. The top edge is labeled "WOOD HATCHES" with a dimension of "16'5\"". The right edge is labeled "30\"". The bottom edge is labeled "28'2\"". The left edge is labeled "FORWARD". The center of the hatch is labeled "N° 5 HATCH". The right side is labeled "AFT". There are also some handwritten notes like "P.L. Truss" and "A" near the top edge.

$3\frac{1}{2}$ " perforations all around.
If larvae not closely pitched.

home.

24'

Swan Creek Vents ²⁴
on fossil dk. l. (P. 5) 8' x 4" C. l. to lamp & paint store
on Prop. Dk. 6 C. 8' x 4" C. l. to accommodation
all the above are 24" to mouth above
vent or shut disk.
hoppers on Canvas covers fitted.

the pit is constructed in accordance with Rules. fitted with wood plugs & canvas covers.

air pipes on poop. to after peak tank
2 C 3" dia. (P) and 1 C 2" dia. (S) G.N. 30" to mouth.
no plugs or canvas covers fitted.

All the Cargo oil tanks are fitted with
air pipes of 1" P.D.S. each side on top of cargo
hatches. 3 1/2" dia 28" H and similar to No. 1
fitted to the D.B. Tanks. which have perforations
3/16" dia extending 4" side of gun rack for about 12"
no openings in bottom. as in detail on sketch.

Efficient canvas covers provided

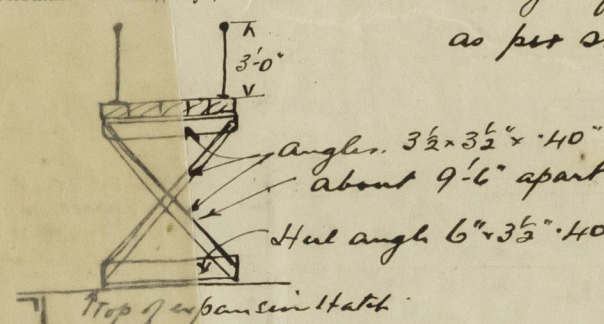
Particulars of Gangway Cargo and Coaling Ports:—

bone.

Scuppers from wells on upper deck discharge overboard thro stringer bar above dt level. Soil, Scupper & Sanitary discharges through ship side below free board deck from Poop, and Bridge accommodation spaces. All are fitted with storm valves. ✓

No. side scuttles below upper deck level.

Particulars of Gangways, Lifelines, etc. :—



Provision for efficient lifelines made ~~in~~ forward well

40

Particulars of Freeing Arrangements.							
		Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Afters Well	...	99' 5"	3' 8"	56" x 18"	3	21 $\frac{1}{2}$	19.9 $\frac{1}{2}$
Forward Well	...	99' 8" ^{98' 33"}	3' 8"	56" x 18"	3	21 $\frac{1}{2}$	19.67 $\frac{1}{2}$

State position of each freeing port } After Well: —
 (F. 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.

$\frac{FR}{20' 8"} \rightarrow \frac{FR}{30' 3"} \rightarrow \frac{FR}{21' 7"} \rightarrow \frac{FR}{24' 6"} \rightarrow \frac{FR}{36' 2"} \rightarrow \frac{FR}{10' 4"} \rightarrow$

Bridges afters.

Shall

front

Back freeing port fitted with 2 heavy round bolts.

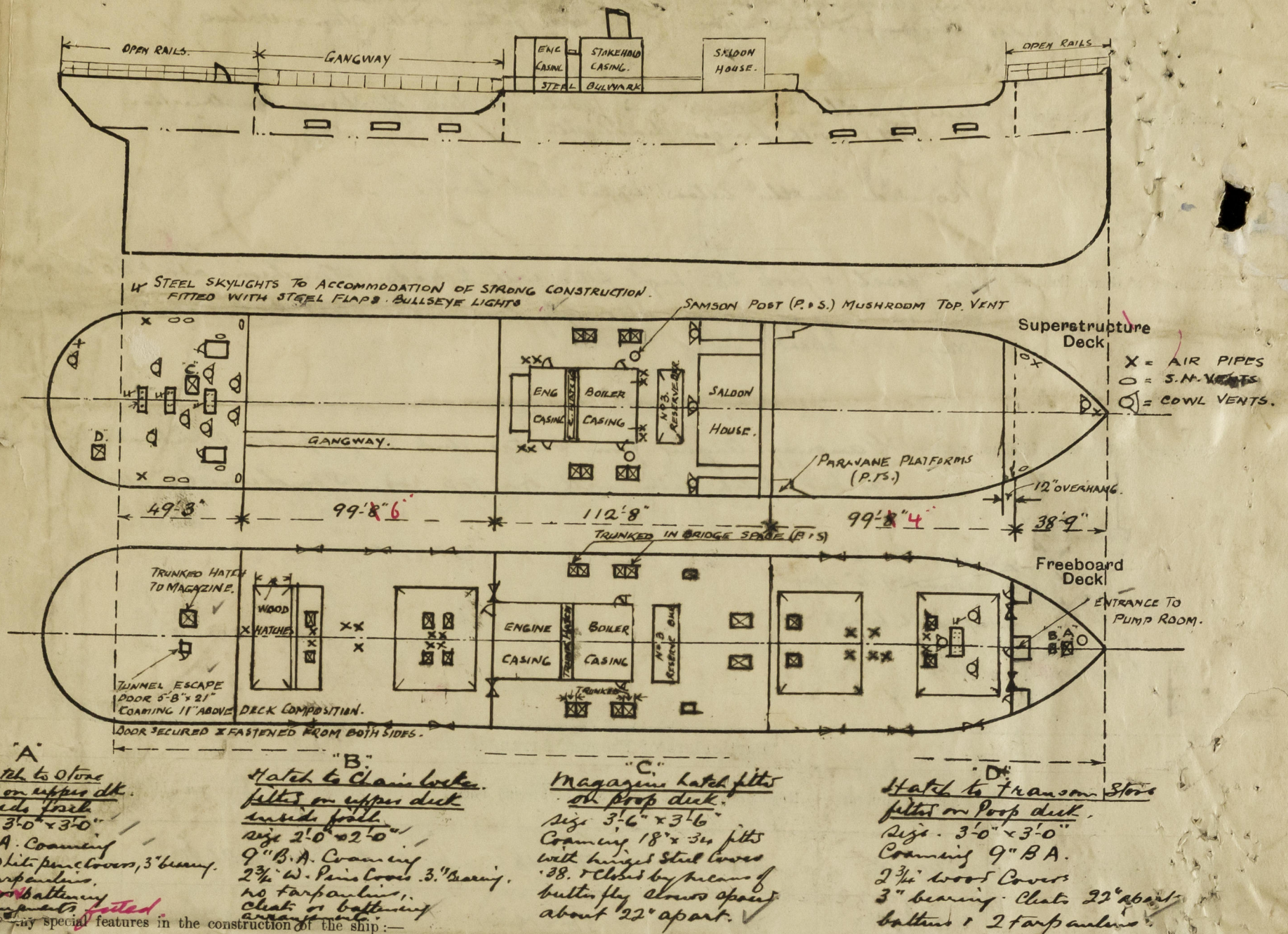
13" above upper Bt. to lower edge of freeing port.

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 ... ..	.45	.40	6 x 3 1/2 x 52" OA	30"	none	no openings	—	7'-1 1/2"
Raised Quarter Deck Bulkhead ...	—					1 (P+S) 4'-10" x 3'-3"	18" sills	7'-1 1/2"
Bridge, After Bulkhead ... ..	.38	.28	3 1/2 x 3 1/2 x 38"	36"	none	1 (P) 5'-0" x 2'-4"	18 "	7'-1 1/2"
Bridge, Forward Bulkhead ... ..	.44	.40	9 x 3 1/2 x 56" BA	30"-24"	Bkts. T & B	no openings	—	7'-1 1/2"
Forecastle Bulkhead ... ..	.30	.25	3 1/2 x 3 1/2 x 45"	32"-35"	none	3 C 5'-0" x 2'-4" 2 C 7'-4" x 4'-6"	18" sills 3 1/2" sills	7'-1 1/2"
Trunk, Aft	✓							
Trunk, Forward	—							
Exposed Machinery Casings on Fore- board or Raised Quarter Decks ...	✓							
Exposed Machinery Casings on Super- structure Decks	No plating .40		3 1/2" flanges	37"-40"	Bkts. top	2 (P+S) 5'-6" x 2'-4"	18" sills	7'-6"
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances						1 (P+S) 5'-0" x 2'-4"	18" sills	7'-6"
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	...	...	...	{ 1 steel door capable of being secured and fastened from both sides. 1 opening (P. 15) fitted with weather boards 2 1/2" thick full height in riveted channels.
Bridge, Forward Bulkhead	...	...	...	no openings
Forecastle Bulkhead	...	...	...	{ 3 steel doors capable of being secured and fastened from both sides 1 opening (P. 15) fitted with weather boards 2 3/4" thick full height in riveted channels
Exposed Machinery Casings on Fore- ward Raised Quarter Decks	...	...	...
Exposed Machinery Casings on Super- structure Decks	...	...	...	2 steel doors (P. 15). Capable of being secured and fastened from both sides.
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances	...	...	...	1 steel door in hatch (P. 15) { Port door opened from inside stokehold. Starboard door capable of being secured and fastened from both sides.
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:—



Wood deck fillets on poop over accommodation.

Draught.	Extreme Δ	Tons per inch.
24'0"	10845	40.81
25'0"	11339	41.08
26'0"	11834	41.36
27'0"	12336	41.59.

Particulars OF NORWEGIAN FREEBOARDS AT PRESENT ON VESSEL.

F.W. tropical	4' 11 1/2"
F.W. Summer.	5' 5"
Tropical	5' 6"
Summer (C. g. disc)	5' 11 1/2"
Winter	6' 5"
W. N.A.	---

Builder's name and yard number. *Messrs Harland and Wolff Ltd. Glasgow. Yard No. 527G.*

Names of sister ships. *Standard vessel Type A (Converted oil carrier)*

NEW Owners. *FINCHLEY STEAMSHIP CO. LD LONDON*

Fee £ *16* : *0* : *0*

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