

19 SEP 1932

Index. No. 18755
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, POOP, bridge and forecabin

having

POOP, bridge and forecabinPort of Survey SingaporeDate of Survey 20th August 1932Name of Surveyor John WormaldParticulars of Classification +100HS.S. Eng 2nd No. 3-3-29

Ship's Name "VOLSELM" Nationality and Port of Registry British London Official Number 124,318 Gross Tonnage 1979 Date of Build 1906

Moulded Dimensions: Length 281'0" Breadth 39'84" Depth 20'7 1/2" tons 4410

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

Coefficient of fineness for use with Tables .787

Depth for Freeboard (D)

Moulded depth ... 20'62"

Stringer plate ... 0'5"

Sheathing on exposed deck

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

Depth for Freeboard (D) = 20'66"

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R = (20'66" - 18'73") 2'162" = +4'17"

(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) 39'84"

Standard Round of Beam = $\frac{B \times 12}{50} = \frac{9.56}{50} = \underline{10'25"} \checkmark$

Ship's Round of Beam .69

Difference

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.69}{4} \times .5551 = \underline{.10}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<u>20'56"</u>	<u>20'56"</u>	<u>7'0"</u>	<u>✓</u>	<u>20'56"</u>
" overhang ...	<u>4'0"</u>	<u>4'0"</u>	<u>7'0"</u>	<u>✓</u>	<u>4'0"</u>
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	<u>74'25"</u>	<u>74'25"</u>	<u>7'0"</u>	<u>✓</u>	<u>74'25"</u>
" overhang aft ...	<u>0'33"</u>	<u>.25</u>	<u>7'0"</u>	<u>✓</u>	<u>.25</u>
" overhang forward ...	<u>0'62"</u>	<u>.31</u>	<u>7'0"</u>	<u>✓</u>	<u>.31</u>
Foremast ...	<u>26'59"</u>	<u>26'59"</u>	<u>7'0"</u>	<u>✓</u>	<u>26'59"</u>
" overhang ...	<u>0'62"</u>	<u>3'78"</u>	<u>2'64"</u>	<u>✓</u>	<u>2'64"</u>
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<u>126'94"</u>	<u>125'00"</u>			<u>125'00"</u>

Standard Height of Superstructure 6'31"

" R.Q.D. ✓

Deduction for complete superstructure 34'07"

Percentage covered $\frac{S}{L} = \frac{45'18"}{L}$

" $\frac{S_1}{L} = \frac{44'49"}{L}$

" $\frac{E}{L} = \frac{44'49"}{L}$

Percentage from Table, Line A. (corrected for absence of forecabin (if required)) ✓

Percentage from Table, Line B. (corrected for absence of forecabin (if required)) 31'31"

Interpolation for bridge less than 2L (if required) ✓

Deduction = $34'07" \times .3131 = \underline{10'67"} \checkmark$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>38'10"</u>	1	38'10"	<u>48"</u>	<u>48'00"</u>	<u>48'00"</u>	1	48'00"	<u>48'00"</u>
1/4 L from A.P. ...	<u>16'95"</u>	4	<u>67'80"</u>	<u>19'5"</u>	<u>20'93"</u>	<u>20'93"</u>	4	<u>83'72"</u>	<u>83'72"</u>
3/4 L " ...	<u>4'19"</u>	2	<u>8'38"</u>	<u>4'25"</u>	<u>5'23"</u>	<u>5'23"</u>	2	<u>10'46"</u>	<u>10'46"</u>
Amidships ...	<u>✓</u>	4	<u>✓</u>	<u>0</u>	<u>✓</u>	<u>✓</u>	4	<u>✓</u>	<u>✓</u>
1/4 L from F.P. ...	<u>8'38"</u>	2	<u>16'76"</u>	<u>8'0"</u>	<u>9'77"</u>	<u>9'77"</u>	2	<u>19'54"</u>	<u>19'54"</u>
3/4 L " ...	<u>33'91"</u>	4	<u>135'64"</u>	<u>38'1"</u>	<u>39'10"</u>	<u>39'10"</u>	4	<u>156'40"</u>	<u>156'40"</u>
F.P. ...	<u>76'20"</u>	1	<u>76'20"</u>	<u>9'10"</u>	<u>90'00"</u>	<u>90'00"</u>	1	<u>90'00"</u>	<u>90'00"</u>
Total ...			<u>342'88"</u>					<u>408'12"</u>	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) = \frac{65'24"}{18} \times (.75 - .2259) = \underline{-1'90"} \checkmark$

If limited on account of midship superstructure. ✓

Mean actual sheer aft = Excess

Mean standard sheer aft

Mean actual sheer forward = Excess

Mean standard sheer forward

Length of enclosed superstructure forward of amidships = > 1L

" aft of " = > 1L

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 20'66"

Summer freeboard = 2'79"

Moulded draught (d) = 17'87"

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 4'47" = 4 1/2"Addition for Winter North Atlantic Freeboard (if required) = 2' ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 4538$

Tons per inch immersion at summer load water line

 $T = 23'28"$ Deduction = $\frac{\Delta}{40T}$ inches $= 4'87"$ $= 4 3/4"$

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient $\frac{.787 + .68}{1.36} = \frac{1.467}{1.36}$

	+	-
Depth Correction ...	<u>4'17"</u>	<u>✓</u>
Deduction for superstructures ...	<u>✓</u>	<u>10'67"</u>
Sheer correction ...	<u>✓</u>	<u>1'90"</u>
Round of Beam correction ...	<u>✓</u>	<u>10</u>
Correction for Thickness of Deck amidships ...	<u>✓</u>	<u>✓</u>
Other corrections, scantlings, etc. ...	<u>✓</u>	<u>✓</u>
	<u>4'17"</u>	<u>12'67"</u>

Summer Freeboard

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

Tropical Fresh Water Line above Centre of Disc 9 1/4"

Fresh Water Line " 4 3/4"

Tropical Line " 4 1/2"

Winter Line below " 4 1/2"

Winter North Atlantic Line " 6 1/2"

Tropical Fresh Water Freeboard ... 2' -

Fresh Water " ... 2' -

Tropical " ... 2' -

Winter " ... 2' -

Winter North Atlantic " ... 2' -

23 SEP 1932

5m. 8.32.

MARKING FOR
OCT 1932

RECEIVED

MARKING FORM
OCT 1932Lloyd's Register
Foundation

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
← -- SUPERSTRUCTURE -- →					-- FREEBOARD --					
Description of Hatchway	50 fore peak above Bunkers	50 Bunkers	50 Bunkers	50 fore peak above Hatches	Hatches	superstructure hatches to each large hatch.	50 Bunkers	50 cofferdams	50 fore & aft funnel room	
Dimensions of Hatchway	3 1/2" x 2'10"	(2) 3 1/2" x 3'0"	14'2" x 6'0"	4'0" x 3'6"	(1) 23'2" x 14'0"	(2) 6'4" x 8'2"	(2) 2'10" x 2'10"	(2) 3'3" x 3'0"	(4) 2'6" x 1'8"	2'4" x 2'0"
COAMINGS	Height above Deck	14" ✓	16" ✓	30" ✓	9" ✓	30" ✓	6" ✓	4" ✓	12" ✓	21" ✓
	Thickness	1/2" ✓	3/8" ✓	3/8" ✓	3/8" ✓	1/2" ✓	1/2" ✓	1/2" ✓	5/16" ✓	3/8" ✓
	Stiffeners	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Brackets, Stays	✓	✓	✓	✓	✓	✓	✓	✓	✓
HATCH BEAMS	Number				Riveted girder					
	Spacing				7'11" ✓ 36" ✓ 1'11" ✓ 3' x 3' x 3/8"					
FORE AND AFTERS	Number				Riveted girder as above					
	Spacing				together with half beams in way of openings.					
HATCH COVERS	Material	W. Pine ✓	Do. ✓	W. Pine ✓	W. Pine ✓	Riveted steel	steel	W. Pine ✓	steel	steel
	Thickness	2 1/2" ✓	2 1/2" ✓	2 1/2" ✓	2 1/2" ✓	5/8" ✓	1/2" ✓	2 1/2" ✓	3/8" ✓	3/8" ✓
HATCH COVERS	How fitted	TH'SHIP ✓	Do. ✓	F. & A. ✓	F. & A. ✓	plate	stiffness	TH'SHIP ✓	Botha. ✓	Botha. ✓
	Bearing Surface	2" ✓	2" ✓	2 1/2" ✓	2" ✓	2" ✓	2" ✓	2" ✓	2" ✓	2" ✓
Spacing of Cleats	15" ✓	14" ✓	21" ✓	20" ✓	✓	17" ✓	14" ✓	16" ✓	✓	✓
Number of Tarpaulins	2 ✓	2 ✓	2 ✓	2 ✓	✓	fastight ✓	fastight ✓	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 fidley, funnel and ventilator coamings:—

Engine skylight of steel strongly constructed. ✓
 Fidley and funnel ventilators in efficient condition. ✓
 Stokehold gratings covered by strong steel hinged covers. ✓

Particulars of Flush Bunker Scuttles:—

✓

Particulars of Companionways:—

1 steel companionway 2 1/2" x 2 1/2" x 5'6" high leading to shaft tunnel; door of steel, 12" sill, operated both sides. ✓
 1 companionway in house on poop deck; door of wood, strongly constructed and operated both sides, 16" sill, leading to crew space. ✓

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

6m fore-castle deck
 1 @ 4" diam; coaming 10" x 0.36" leading to store space ✓
 1 @ 6" " " 14" x 0.36" " " " " ✓
 1 @ 9" " " 28" x 0.44" " " " " ✓
 1 @ 10" " " 28" x 0.44" " " " " ✓
 6m Bridge deck
 2 @ 18" diam; coaming 31" x 0.44" leading to bunkers ✓
 6m Poop deck
 4 @ 8" diam; coaming 17" x 0.44" leading to crew space ✓
 1 @ 7" " " 11" x 0.36" " " " " ✓
 All ventilators fitted with wood plugs and canvas covers. ✓

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

1 on forward well deck, 4" diam, 10" high to double bottoms and cofferdam. ✓
 1 on bridge " " " " " " " " " " ✓
 1 on aft well " " " " " " " " " " ✓
 1 on well deck 3" diam, 16" high to holdas fitted with steel blank flanges. ✓
 All airpipes fitted with canvas covers. ✓

Gangway Cargo and Coaling Ports:—

✓



© 2021

Lloyd's Register
Foundation

Particulars of Scuppers and Sanitary Discharge Pipes:—

Scuppers on freeboard deck cut through stringer angle. ✓
 All sanitary discharges fitted with storm valves and efficient trap at inner end. ✓

Particulars of Side Scuttles:—

All scuttles of substantial construction ✓
 Side scuttles to crew spaces in forecastle and poop fitted with hinged deadlights. ✓

Particulars of Guard Rails:—

On poop, bridge and forecastle.

3'2" high, having 2 bars; stanchions spaced about 4'6" apart. ✓

Particulars of Gangways, Lifelines, etc.:—

None fitted. Suitable provision is made for rigging lifelines on port and starboard side forward and after wells.

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	76'0" 75'-2"	4'2"	30" x 15" 30 x 15	35	15 15	15.03
Forward Well	76'0" 74'-10"	4'2"	30" x 15" 30 x 15	35	15 15	14.97

State position of each freeing port } After Well:— 9'9"; 28'0" and 50'6" from aft end of bridge.
 (F. and A. position and height above deck edge) } Forward Well:— 7'3"; 24'6" and 43'6" " " " for end of bridge.

State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Steel hinged shutters, no bars.

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	7/16" ✓	7/16" ✓	5" x 3" x 3/8" Γ ✓	21" ✓	sketch stiffeners brackets to poop overhang.	None ✓	—	—
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead	5/16" ✓	5/16" ✓	3" x 3" x 3/8" Γ ✓	41" ✓	None ✓	3'0" x 5'0" ✓	20" ✓	6'9" ✓
Bridge, Forward Bulkhead	7/16" ✓	7/16" ✓	7 1/2" x 3" x 3/8" Γ ✓	30" ✓	Brackets top and bottom ✓	4'4" x 2'9" ✓	22" ✓	6'9" ✓
Forecastle Bulkhead	5/16" ✓	5/16" ✓	3" x 3" x 3/8" Γ ✓	30" ✓	None ✓	4'6" x 2'0" ✓	18" ✓	7'0" ✓
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	3							
Exposed Machinery Casings on Superstructure Decks	3/8" ✓	3/8" ✓	3" x 3" x 3/8" (in way of doors only) ✓		None ✓	4'6" x 2'0" ✓	18" ✓	7'0" ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	7/16" ✓	7/16" ✓	3" x 3" x 3/8" Γ ✓	24" ✓	None ✓	4'6" x 2'0" ✓	18" ✓	6'9" ✓
Deckhouses on Flush Deck Ships ...								

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

Poop Bulkhead	None ✓ No openings
Raised Quarter Deck Bulkhead ...	—
Bridge, After Bulkhead	Riveted channels fitted full height with 3" storm boards
Bridge, Forward Bulkhead	Steel W.T. doors with hook bolts, operated forward side only. ✓
Forecastle Bulkhead	Steel hinged doors, operated both sides. ✓
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	—
Exposed Machinery Casings on Superstructure Decks	Steel hinged doors, operated both sides. ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	Steel hinged doors, operated both sides. ✓
Deckhouses on Flush Deck	—

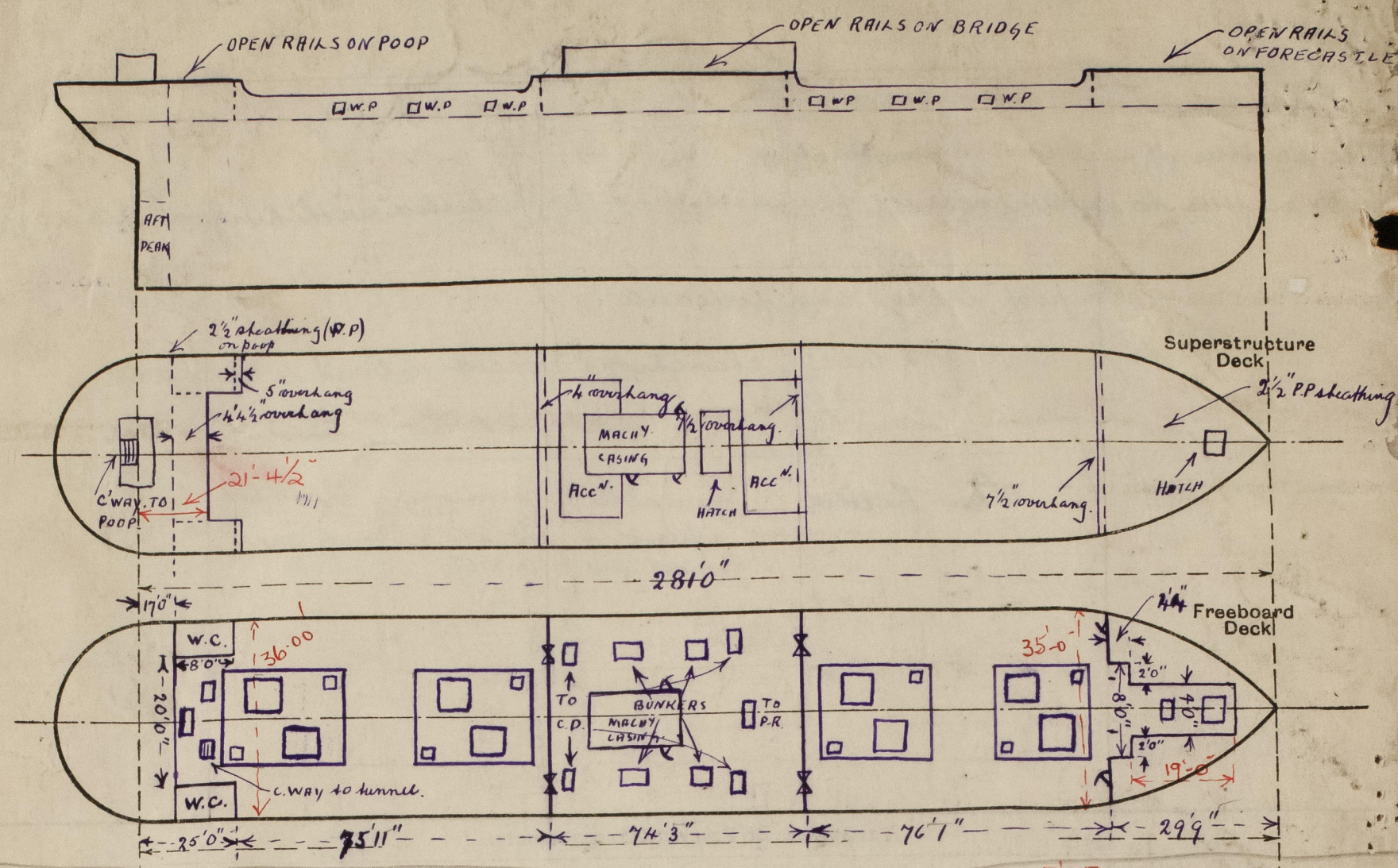


© 2021

Lloyd's Register Foundation

212 1500-091600-251600

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:—



POOP
LEN = 25.00

T. $\frac{20.0 \times 8.0}{36} = \frac{4.44}{20.56} = \text{Equid. B}^{th}$

O.H. = $\frac{21.87}{20.56} = .81$

FCE LEN 29'-9"

DEDUCT. $\frac{8.0 \times 4.33}{35.0} = .99$ 29.75'

$\frac{19.0 \times 4.0}{35} = 2.17$ 3.16

O.H. 3.16

$\frac{.62}{3.78}$

State any special features in the construction of the ship:— No particulars of displacements available.

The survey for International Convention load line was held with the vessel in dry dock in conjunction with the examination for annual docking and afterwards completed afloat. The examination consisted of:— Hatches and means of closing, decks, casings, bulkheads, bulkhead openings and means of closing same, ventilators, and their coamings, air pipes, sidelights, scuppers, companionways and guardrails.

Builder's name and yard number: W. Gray & Co. Ltd., West Hartlepool.

Names of sister ships: _____

Owners: Anglo-Saxon Petroleum Co. Ltd.

Fee \$ 185.-
Expenses \$ 10.-

Received by me _____