

MAR -7 1938

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

 Computation of Freeboard for Steamer, Sailing Ship, Tanker  
 having *complete superstructure with a tonnage opening*
Port of Survey *Also*

(Type of Superstructures.)

Date of Survey *28-2-38*

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

*OKSYWIE**Poland  
Gdynia**✓**766**3-1938*Name of Surveyor *John T. Green*Moulded Dimensions: Length *56.0 m* Breadth *10.20 m* Depth *4.10 m* *To shell. at G. 30 m*Moulded displacement at moulded draught = 85 per cent. of moulded depth *1360 m<sup>3</sup>* tonsCoefficient of fineness for use with Tables *0.6853*Particulars of Classification *8100 A) with**freeboard*

## Depth for Freeboard (D)

Moulded depth ... *4.10 m*Stringer plate ... *8 m*

Sheathing on exposed deck

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

Depth for Freeboard (D) = *4.108*

## Depth correction

(a) Where D is greater than Table depth

$$(D - \text{Table depth}) R = 8.33(4.108 - 3.733) 14.14 = +44 \text{ m}$$

(b) Where D is less than Table depth (if allowed)

$$(\text{Table depth} - D) R = \checkmark$$

If restricted by superstructures *✓*

## Round of Beam correction

Moulded Breadth (B) *10.20 m*

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} = \frac{10.20 \times 12}{50} = 2.448 \text{ m}$$

Ship's Round of Beam = *upper side 2.102*

$$\text{Difference} = 2.448 - 2.102 = 0.346 \text{ m}$$

Restricted to

$$\text{Correction} = \frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{0.346}{4} \times 0.127 = +1 \text{ m}$$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>6.745</i>	<i>6745</i>	<i>2100 m</i>		<i>6745</i>
„ overhang ...					
R.Q.D. enclosed ...	<i>12.160</i>	<i>12160</i>	<i>11</i>		<i>12160</i>
„ overhang ...					
Bridge enclosed ...	<i>10.640</i>	<i>10640</i>	<i>2200 m</i>		<i>10640</i>
„ overhang aft ...					
„ overhang forward ...	<i>1.170</i>	<i>85</i>			<i>85</i>
F'cle enclosed ...	<i>5.090</i>	<i>5090</i>	<i>3200 m</i>		<i>5090</i>
„ overhang ...					
Trunk aft <i>shell line</i> ...					
„ forward ...	<i>19.845</i>	<i>19845</i>			<i>19845</i>
Tonnage opening aft ...	<i>1.350</i>	<i>718</i>	<i>150 m</i>		<i>718</i>
„ forward ...					
Total ...	<i>56.000</i>	<i>55283</i>			<i>55283</i>

Standard Height of Superstructure *1830 m*„ „ R.Q.D. *1083 m*Deduction for complete superstructure *620 m*Percentage covered  $\frac{S}{L} = 100.00$ „  $\frac{S_1}{L} = 98.73$ „  $\frac{E}{L} = 98.73$ Percentage from Table, Line A. *98.44*

(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 =  $620 \times 98.44 = 610 \text{ m}$ 

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate +370 m	Effective Ordinate m/m	S	M	Product
A.P. ... ..	720	1	720	6057	975	1	975	975	
$\frac{1}{2}L$ from A.P. ...	320	4	1280	2637	433	4	1732	1732	
$\frac{3}{4}L$ „ ...	80	2	160	707	108	2	216	216	
Amidships ...	—	4	—	0	—	4	—	—	
$\frac{3}{4}L$ from F.P. ...	160	2	320	1567	209	2	418	418	
$\frac{1}{2}L$ „ ...	640	4	2560	6797	835	4	3340	3340	
F.P. ... ..	1441	1	1441	15087	1878	1	1878	1878	
Total ...			6481	+370 m			8559		

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{2078}{18} \left( \frac{75-50}{2.5} \right) = -29 \text{ m}$$

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 = *4.108*Summer freeboard = *0.50*Moulded draught (d) = *4.058 m*

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{48}$  inches = *85 m*

Addition for Winter North Atlantic Freeboard (if

required) =  $85 + 50 = 135 \text{ m}$ 

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

$$\Delta = 1700 \text{ m}^3 \text{ } 1685 \text{ m}$$

Tons per  $\text{m}^3$  immersion at summer load water line

$$T = 4.8 \text{ } 12.1$$

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

$$= \frac{1700}{40 \times 4.8} = 88.54 \text{ m}$$

$$= 88 \text{ m}$$

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

Correction for coefficient  $\frac{683 + 68}{1.36} = \frac{1.363}{1.36}$ Depth Correction ... *44*Deduction for superstructures ... *610*Sheer correction ... *29*Round of Beam correction ... *1*Correction for Thickness of Deck amidships ... *—*Other corrections, scantlings, etc. ... *—*Summer Freeboard = *517 m*Summer Freeboard = *518 m*SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, *Wood, Steel, Deck* —Tropical Fresh Water Line above Centre of Disc ... *88 m*Fresh Water Line „ „ ... *88*Tropical Line „ „ (LIMITED) *0*Winter Line below „ „ ... *85*Winter North Atlantic Line „ „ ... *135*Tropical Fresh Water Freeboard ... *MINUS 38*Fresh Water „ „ ... *MINUS 38*Tropical „ „ (LIMITED) ... *50*Winter „ „ ... *135*Winter North Atlantic „ „ ... *185*

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# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS.									
Superstructure Deck - Deck					Forward Upper-deck				
Description of Hatchway	No. 1	No. 2	No. 3	Tonnage opening	On the fore. dk.	No. 1	No. 2		
Dimensions of Hatchway	5630 x 4000	6080 x 4000	7600 x 4000	1350 x 4000	520 x 585	5630 x 4000	6080 x 4000		
COAMINGS									
Height above Deck	770	770	770	300	700	250	250		
Thickness Sides	10.5	10.5	10.5	10	8	11	11		
Stiffeners	180 x 75 x 9.5	See No. 1	See No. 1	10	8	11	11		
Brackets, Stays	2 x 8 x 50								
HATCH BEAMS									
Number	3	3	4			3	3		
Spacing	1407	1520	1520			1407	1520		
Scantling and Sketch	3" x 3" x 42"	See No. 1	See No. 1			3" x 3" x 42"	See No. 1		
Bearing Surface	80	80	80			80	80		
FORE AND AFTERS									
Number									
Spacing									
Unsupported Lengths									
Scantling and Sketch									
Bearing Surface									
HATCH COVERS									
Material	wood	wood	wood	wood	steel	wood	wood		
Thickness	60	60	60	60	60	60	60		
How fitted	F+A	F+A	F+A	F+A	with rubber packing	F+A	F+A		
Bearing Surface	75	75	75	65		75	75		
Spacing of Cleats	580	580	580			610	610		
Number of Tarpaulins	2	2	2			2	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:—  
 One vents. on the engine casing  $\phi=520$ , h 600 Z, stayed to the deckhouse.  
 The funnel fitted with one door 1470 x 500 Z, sill 240 Z.

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways:— One 7 Z steel door in the deckhouse aft, sill 400 Z

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

On the fore castle dk. 1 vent.  $\phi 400$ , h = 3000 Z - strong coaming (10 Z) stayed by 3 brackets to the deck.  
 " " shelter dk. 5 "  $\phi 400$ , h = 3000 Z - " " " " to the deckhouses or masts.  
 All ventilators provided with wood covers and tarpaulins.

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

On the forward deck 4 air pipes  $\phi 75$  Z, h = 650 Z } provided with wood  
 " " after " 2 "  $\phi 55$  Z, h = 600 Z } plugs

Particulars of Gangway Cargo and Coaling Ports:—

Particulars of Scuppers and Sanitary Discharge Pipes:—

100 x 90 Z  
 5 scuppers, on each side from shelter dk.  
 All sanitary discharge pipes fitted with nonreturn valves.  
 The tonnage well provided with non return valves (135 x 135 Z) closed from shelter dk.  
 The engine room drained with a hat at fore end fitted with hand pump.  
 The accommodation spaces on freeboard and deck drained by 3/4" scupper pipe each side led to engine room.  
 The side scuttles in the poop and bridge fitted with hinged deadlights.

Particulars of Guard Rails:—

On the shelter dk. 24-35 Z  
 In way of the hatchways No. 2 and 3.

Particulars of Gangways, Lifelines, etc.:—

V

## 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	✓					
Forward Well	✓					
State position of each freeing port (F. and A. position and height above deck edge) 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.

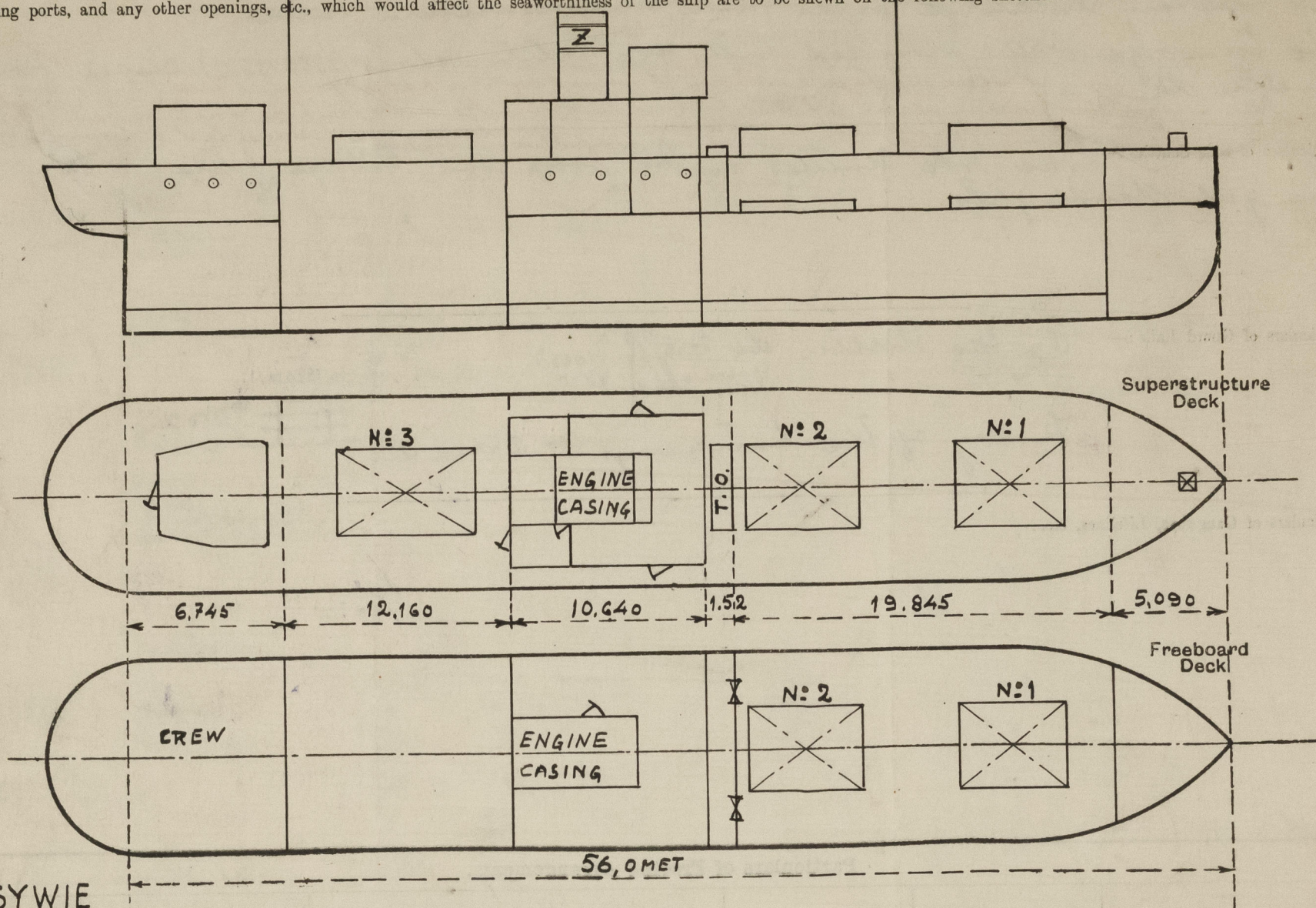
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead		8 Z	100 x 65 x 8 L	890 Z	—	—	—	2100
Raised Quarter Deck Bulkhead								
Bridge, After Bulkhead		8 Z	140 x 65 x 9 L	740 Z	—	—	—	2200
Bridge, Forward Bulkhead		8 Z	100 x 65 x 8 L	680 Z	—	—	—	2200
Forecastle Bulkhead		8 Z	130 x 65 x 8 L	610 Z	300 x 300 x 10	—	—	3200
Trunk, Aft								
T.W. BULKH.		7 Z	100 x 65 x 8 L	610 Z	—	2 x 940 x 2000	—	—
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								
Exposed Machinery Casings on Superstructure Decks	770 Z	7 Z	75 x 65 x 8 L	760 Z	300 x 480 x 8	1750 x 700	460 Z	2200
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	1560 Z	7 Z	75 x 65 x 8 L	760 Z	—	1750 x 700	230 Z	2200
Deckhouses on Flush Deck Ships								

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

Poop Bulkhead	
Raised Quarter Deck Bulkhead	
Bridge, After Bulkhead	
T.W. Bulkhead, Forward Bulkhead	Loose steel plates, 8 Z provided with 3/4" hook-balls, 300 Z apart
Forecastle Bulkhead	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	
Exposed Machinery Casings on Superstructure Decks	45 Z teak doors being closed from both sides
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	7 Z steel " " " "
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 shewn on the following sketches:—



M/3 OKSYWIE

State any special features in the construction of the ship:— Please forward me the freeboard certificates as soon as possible and cable me the freeboards, as this vessel will be completed 15th March. The freeboard certificates are to be issued on ordinary Lloyd's forms, as this vessel is Polish. At the same time I beg to enclose for your information two drawings of the vessel.

*omit*

Builder's name and yard number *Ars Briclon - Vulcan, also. yard no. 747*

Names of sister ships *yard no. 748*

Owners *Leghwa Polska, Gdynia.*

Fee £ *✓*

Received by me

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*Thian Syben*



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