

# Cloud's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having POOP, BRIDGE & FORECASTLE (ON SPAR DECK)

Port of Survey

SPLIT 308

Date of Survey

21st August 1933

Name of Surveyor

J. B. B. B.

Particulars of Classification

+100A1  
SPAR DECK

PEI PING

(Type of Superstructures.)

Ship's Name

Nationality and Port of Official Number

Gross Tonnage

Date of Build

DUŠAN SILNI

JUGOSLAV  
DUBROVNIK

5654

1906-11

Moulded Dimensions: Length

Breadth

Depth

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

13865

tons

Coefficient of fineness for use with Tables

.793

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Moulded depth ... 31'7"

Stringer plate ... .05

Sheathing on exposed deck  
 $T \left( \frac{L-S}{L} \right) = .25 \times \frac{147.62}{420}$ 

Depth for Freeboard (D) =

31'31"

(a) Where D is greater than Table depth

(D-Table depth) R =  
(31.31 - 28.00) 3.00 = + 9.93"

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

(Table depth-D) R =

If restricted by superstructures

Moulded Breadth (B)

55'

Standard Round of Beam =  $\frac{B \times 12}{50} = 13.20"$ 

Ship's Round of Beam = 14"

Difference = .80"

Restricted to

Correction =  $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.80}{4} \times .4526 = -.09"$ 

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	58.33'	58.33'	7'-3"		58.33'
" overhang ...			+3" Wood		
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	112.5'	112.50'	7'-3"		112.50'
" overhang aft ...	12.57'	9.43'	+3" Wood		9.43'
" overhang forward ...	27.98'	47.98'	7'-3"		47.98'
F'cle enclosed ...	51.25'	47.98'	7'-3"		47.98'
" overhang ...	3.27'	1.63'	+3" Wood		1.63'
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	234.65	229.87			229.87

Standard Height of Superstructure

7.50

" " R.Q.D.

Deduction for complete superstructure

42.00

Percentage covered  $\frac{S}{L} =$ 

55.88%

" "  $\frac{S_1}{L} =$ 

54.74%

" "  $\frac{E}{L} =$ 

54.74%

Percentage from Table, Line A.

(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 =  $42 \times .4074 = -17.11"$ 

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	52.00	1		52.00	43.5	43.50	1		43.50
$\frac{1}{2}$ L from A.P. ...	23.14	4		92.56	13.2	11.00	4		44.00
$\frac{2}{3}$ L " ...	5.72	2		11.44	3.3	-1.00	2		-2.00
Amidships ...		4					4		
$\frac{2}{3}$ L from F.P. ...	11.44	2		22.88	11.3	14.00	2		28.00
$\frac{1}{2}$ L " ...	46.28	4		185.12	45.4	45.00	4		180.00
F.P. ...	104.00	1		104.00	116.0	116.00	1		116.00
Total ...				468.00					399.00

Correction =  $\frac{\text{Difference between sums of products}}{18}$  $\left( .75 - \frac{S}{2L} \right) = \frac{.68}{18} \left( .75 - .2794 \right) = + .0180"$ 

If limited on account of midship superstructure.

If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.

Mean actual sheer aft = Deficient. (.530).

Mean actual sheer forward = Excess.

Length of enclosed superstructure forward of amidships = &gt; 10

" " aft of " = &gt; 10

52.00	52.00	43.50	43.50
23.14	69.42	11.00	33.00
5.72	17.16	-1.00	-3.00
11.44			
138.58			73.50

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 31.22

Summer freeboard = 6.48

Moulded draught (d) = 24.74

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches =  $6.18 = 6\frac{1}{4}"$ 

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 12925$ 

Tons per inch immersion at summer load water line

T = 48

Deduction =  $\frac{\Delta}{40T}$  inches=  $\frac{12925}{40 \times 48} = 6.73$ =  $6\frac{3}{4}"$ 

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.68 + .793}{1.36} = \frac{1.473}{1.36}$ 

Depth Correction ... 9.93

Deduction for superstructures ... 17.11

Sheer correction ... 1.80

Round of Beam correction ... .09

Correction for Thickness of Deck amidships ... 1.08

Other corrections, scantlings, etc. ... .73

Summer Freeboard = 77.70

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

Tropical Fresh Water Line above Centre of Disc	13" = .330
Fresh Water Line	6 $\frac{3}{4}$ " = .171
Tropical Line	6 $\frac{1}{4}$ " = .159
Winter Line below	6 $\frac{1}{4}$ " = .159
Winter North Atlantic Line	

Tropical Fresh Water Freeboard	6' - 5 $\frac{3}{4}$ " = 1975
Fresh Water	5' - 4 $\frac{3}{4}$ " = 1645
Tropical	5' - 11" = 1804
Winter	5' - 11 $\frac{1}{2}$ " = 1816
Winter North Atlantic	7' - 0" = 2134

31 AUG 1933

009161-009169-0104 1/2

MARKING FORM  
117 JUL 1936MARKING FORM  
115 JUL 1935MARKING FORM  
25 JAN 1934



RECEIVED

RECEIVED

RECEIVED



PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway		Nº 1	Nº 2	TRUNK HATCH ON BR. DECK	Nº 4	Nº 5	Nº 6		
Dimensions of Hatchway		20'-8" x 14'	29' x 14'	10' x 8'-6"	24'-10" x 14'	20'-8" x 14'	12'-6" x 12'		
COAMINGS	Height above Deck	2'-9"	2'-9"	2'-9"	2'-9"	2'-9"	2'-8"		
	Thickness	4.5	4.5	4	4.5	4.5	4		
	Sides	4	4	4	4	4	4		
	Stiffeners	4	4	4	4	4	4		
HATCH BEAMS	Brackets, Stays	none	none	none	none	none	none		
	Number	1 web and 2 division 24' from end.	2	2	2	1	1		
	Spacing	9'-1"	9'-8"	none	8'-7"	10'-4"	8'-3"		
	Scantling and Sketch	3" x 4.5" x 4.0" 	As Nº 1	none	As Nº 1	As Nº 1	As Nº 1		
FORE AND AFTERS	Bearing Surface	3" x 4.5" x 4.0" 	As Nº 1	3"	As Nº 1	As Nº 1	As Nº 1		
	Number	3	3	1	3	3	3		
	Spacing	3'-6"	3'-6"	5'	3'-6"	3'-6"	3'		
	Unsupported Lengths	8'-11"	9'-2"	8'	7'-1"	9'-10"	5'-9"		
HATCH COVERS	Material	2" dia.	As Nº 1	As Nº 1	As Nº 1	As Nº 1	As Nº 1		
	Thickness	2" dia.	As Nº 1	As Nº 1	As Nº 1	As Nº 1	As Nº 1		
	How fitted	As Nº 1	As Nº 1	As Nº 1	As Nº 1	As Nº 1	As Nº 1		
	Bearing Surface	As Nº 1	As Nº 1	As Nº 1	As Nº 1	As Nº 1	As Nº 1		
Spacing of Cleats		26"	As Nº 1	As Nº 1	As Nº 1	As Nº 1	As Nº 1		
Number of Tarpaulins		2	As Nº 1	As Nº 1	As Nº 1	As Nº 1	As Nº 1		

\*Are wood fore and afters steel shod at all bearing surfaces? *Yes*  
Are battens and wedges efficient and in good condition? *Yes*  
Are tarpaulins in good condition and in accordance with rule requirements? *Yes*  
Are lashings provided in accordance with rule requirements? *Yes*

Particulars of fiddle, funnel and ventilator coamings:—  
*Fiddle, funnel and ventilator coamings in efficient condition. Engine room skylight of steel strongly constructed. Stanchion girders fitted with strong, hinged steel covers.*

Particulars of Flush Bunker Scuttles:—  
*None*

Particulars of Companionways:—  
*One on poop leading to steering gear compartment. 4'-7" x 4'-6" x 7' high. Strongly constructed of steel with double steel hinged doors, manipulated from outside only.*

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—  
*On forecastle deck vent. openings are from 10" to 20" dia. 30" to 36" high. On forward decks openings are 15" to 20" dia. 33" high. On bridge deck openings are 18" dia. 33" high. On poop deck openings are 16" to 20" dia. 33" high. All openings constructed to rule requirements and provided with wood plugs and canvas covers or steel covers with canvas covers.*

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—  
*On forecastle, bridge, poop and well decks air pipes are 3 1/2" dia. 12" to 20" high fitted with grommets and provided with wood plugs.*

Particulars of Gangway Cargo and Coaling Ports:—  
*One coaling port each side of bridge space 4'-10" x 4'-10" closed by steel double doors, efficiently framed, stiffened and secured.*

Particulars of Scuppers and Sanitary Discharge Pipes:—  
*One scupper each side from bridge space led astern below forecastle deck fitted with anti-M.R. valve at ship's side. Sanitary discharges from above bridge deck led through bridge side above forecastle deck and fitted with storm valves at outer ends. Discharges from fore space led through side above forecastle deck and fitted with storm valves at outer ends.*

Particulars of Side Scuttles:—  
*None below forecastle deck. In poop and forecastle spaces, scuttles are of substantial construction and fitted with hinged steel deadlights.*

Particulars of Guard Rails:—  
*Forecastle, bridge and poop deck stanchions 3'-3" to 3'-6" high pitched 4'-0" with 3 rails.*

Particulars of Gangways, Lifelines, etc.:—  
*Suitable provision made for rigging lifelines which are available for use in any part of the ship which may have to be used by the crew in the regular working of the ship.*

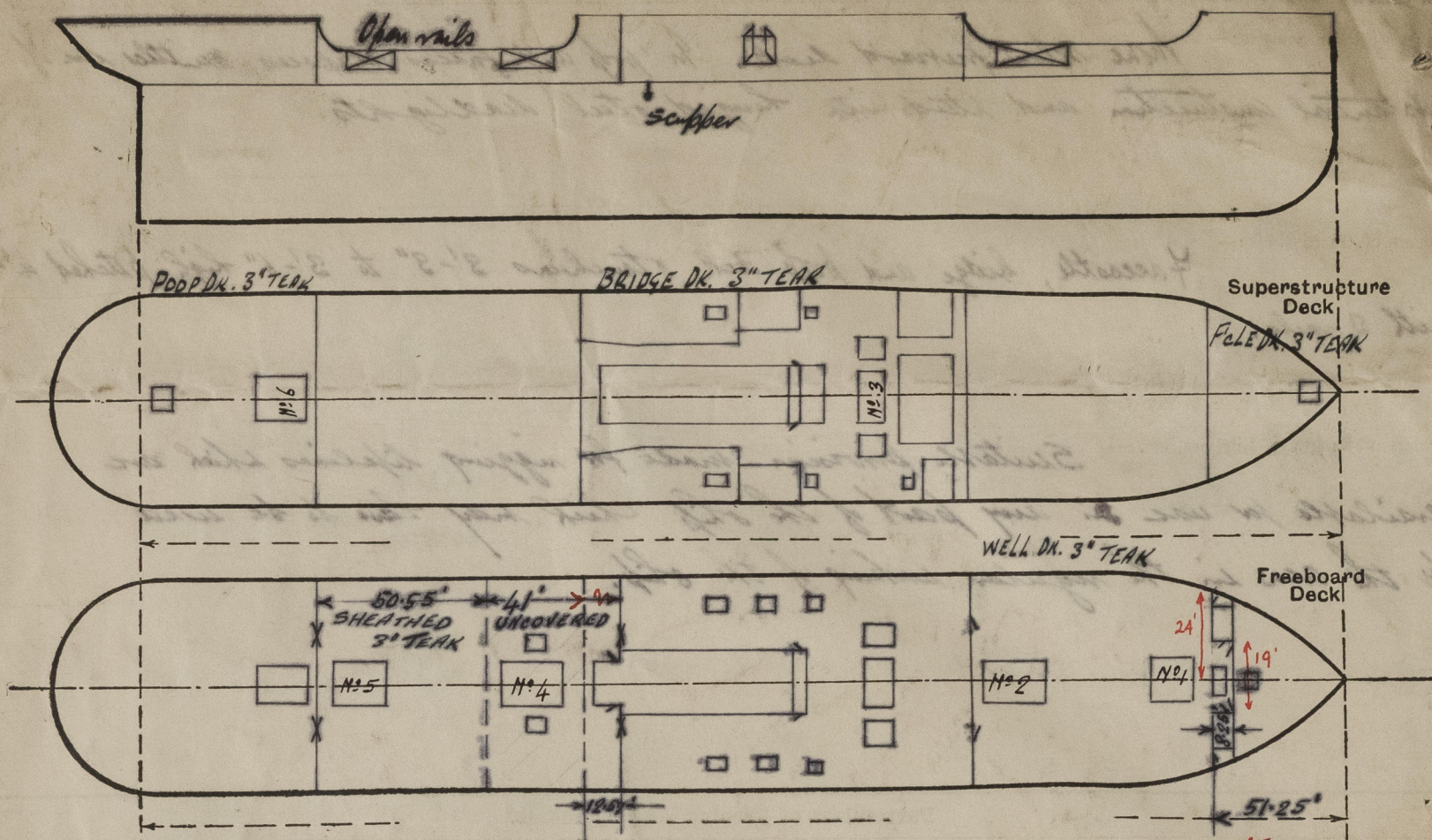
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	91.55'	3'-9" above wood deck	Two patterns from rails 20' and 18'	"	"	18.3 f
Forward Well	93.8'	3'-9" above wood deck	One pattern from rails 28'	"	"	18.8 f
State position of each freeing port (F. and A. position and height above deck edge) { After Well:— 11' 4" x 5' 6" lattice } 1'-0" above wood deck 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	16" x 4	.32	6" x 3" x 4.5 BA	36"	Brackets to 1/4 bottom	20' 4" x 3' 3"	16"	7'-3"
Raised Quarter Deck Bulkhead						20' 5" x 2' 1" x 9"		
Bridge, After Bulkhead	16" x 35	.3	5 1/2" x 2 1/2" BA	30"	none	20' 3" x 4' 9" x 18"	18"	7'-3"
Bridge, Forward Bulkhead	15" x 45	.4	9" x 2 1/2" BA	30"	Brackets to 1/4 bottom	20' 5" x 2' 6"	15"	7'-3"
Forecastle Bulkhead	9" x 35	.3	2 1/2" x 2 1/2" x 3	40"	none	60' 5" x 2'	13"	7'-3"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								
Exposed Machinery Casings on Superstructure Decks	none	.3	3" x 2 1/2" x 3	32"	none	20' 5" x 2' 2"	10"	7'-3"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	none	.3	5 1/2" x 2 1/2" BA	30"	none	20' 5" x 2'	12"	7'-3"
Deckhouses on Flush Deck Ships								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	3" frame full height in riveted channels.
Raised Quarter Deck Bulkhead	3" frame full height in riveted channels.
Bridge, After Bulkhead	3" frame full height in riveted channels. From top of side bulk manipulated from both sides.
Bridge, Forward Bulkhead	3" frame full height in riveted channels. From top of side bulk manipulated from both sides.
Forecastle Bulkhead	3" frame full height in riveted channels. From top of side bulk manipulated from both sides.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	3" frame full height in riveted channels. From top of side bulk manipulated from both sides.
Exposed Machinery Casings on Superstructure Decks	3" frame full height in riveted channels. From top of side bulk manipulated from both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	3" frame full height in riveted channels. From top of side bulk manipulated 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 shewn on the following sketches:—



FROM D.W. SCALE:—

DRAUGHT	D.W.	TONS/IN.
25'-9"	9000	
24'-11"		48
24'-10"	8500	
24'-00"	8000	

State any special features in the construction of the ship:—

DRAUGHT	D.W.	TONS/IN.
23'-1 1/2"	7500	
22'-5"	7000	
21'-7"		4 1/2
21'-4"	6500	

$$\text{To calculate } 51.25 - \frac{19 \times 8.25}{48} = 47.98'$$

Standard	Actual
11.44 3/4	14.00 3/4
46.28 3/4	45.00 3/4
104.00 1/4	116.00 1/4
277.16	293.00

$$277.16 + \frac{(293 - 277.16) \times \frac{3}{25}}{1} = 277.16 + 1.90 = 279.06$$

### Small Latches.

File dk. Hatch to F.P. 4'-6" x 4'-6" framing 1 1/2" x 3/4", 3" cover, 2 1/2" landings, cleats 24"

Bridge dk. Two coaling latches 8'-6" x 5' framing 3/2" x 1/4" 3" " 2 1/2" " " 22" each side

" " " 5'-0" x 3'-0" " 2 1/2" x 3/4" 3" " 2" " " 24"

" " " 4'-0" x 3'-9" " 3 1/4" x 1/4" 3" " 2" " " 20"

Hatch to bridge space 3'-8" x 3'-0" " 3 3/4" x 1/4" 3" " 2" " " 20"

Bridge space. Two latches ahead trunk Hatch 8'-6" x 5' framing 1 1/2" x 1/4" W.T. plate cover secured by wing nuts & bolts.

Two coaling latches 5'-8" x 3'-0" framing 1 1/2" x 1/4", 3" cover, 2" landings, cleats 24"

Four " " 6'-4" x 4'-0" " 1 1/2" x 1/4" 3" " 2" " " 24"

Wx well. Two latches ahead H. 4 8'-6" x 5'-0" framing 3/2" x 1/4" W.T. plate cover secured by wing nuts and bolts.

File space. Hatch 12'-6" x 12' framing 1 1/2" x 1/4". Other particulars as H. 6 Hatch on both decks.

File space Hatch 4'-0" x 4'-0" framing 1 1/2" x 1/4" cover 3", landings 2", cleats 20"

All other latches, except W.T. latches, fitted with tarpaulins and lashing arrangements.

Builder's name and yard number J.C. TECKLENBORG A.G., WESERMÜNDE-9.

Names of sister ships "VIDOVDAH"

Owners Jugoslavenski Lloyd. A.D.

Fee D.M. 4416

Received by me



© 2021

Lloyd's Register Foundation