

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

No. 101016.

now named "Hammerland" of Helsingfors (7/6/37)

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey <u>Liverpool</u>
having <u>Prop. Bridge & Forecastle Decks</u>					Date of Survey <u>Sept 1932</u>
<u>N/A. Aino Numminen</u>					Name of Surveyor <u>R.R. Ruthven</u>
<u>KARLSHAMN</u>	(Type of Superstructures.)	Nationality and Port of Official Number	Gross Tonnage	Date of Build	Particulars of Classification <u>100. A.I.</u>
Ship's Name	<u>STOCKHOLM</u>	Registry			<u>S.S. Reg. No. 3-H. 211</u>
<u>"JURKO TOPIC"</u>	<u>YUGOSLAV</u>	<u>SWEDISH</u>	<u>3715</u>	<u>1911-11m.</u>	<u>S.S. No. 1-29</u>
Moulded Dimensions: Length <u>L.W.L. 347.8</u> Breadth <u>49.87</u> Depth <u>25.11 1/2</u>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>8716</u> tons					
Coefficient of fineness for use with Tables <u>.794</u>					

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth ...	<u>25.11 1/2</u>	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	<u>49.87</u>
Stringer plate ...	<u>.40</u>	<u>(25.99 - 23.19) 2.675 = + 7.49</u>		Standard Round of Beam = $\frac{B \times 12}{50}$	<u>11.97</u>
Sheathing on exposed deck <u>3 1/2" White on Teak</u>		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Ship's Round of Beam =	<u>12</u>
$T \left(\frac{L-S}{L} \right) =$				Difference	<u>.03</u>
Depth for Freeboard (D) =	<u>25.99</u>	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right)$	<u>.03/4 (1 - .43/11) = .01</u>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<u>23.08</u>	<u>23.08</u>	<u>7.3</u>	<u>✓</u>	<u>23.08</u>
" overhang ...	<u>.25</u>	<u>.12</u>			<u>.12</u>
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed...	<u>93.75</u>	<u>93.75</u>	<u>7.0</u>		<u>93.75</u>
" overhang aft ...	<u>.25</u>	<u>.19</u>			<u>.19</u>
" overhang forward	<u>1.25</u>	<u>.62</u>			<u>.62</u>
Fore enclosed <u>open</u>	<u>31.95</u>	<u>31.95</u>	<u>7.0</u>		<u>31.95</u>
" overhang ...	<u>.25</u>	<u>.25</u>			<u>.25</u>
Trunk <u>Wings</u>	<u>4.0</u>				
" forward ...					
Tonnage opening aft ...					
" forward					
Total ...	<u>150.78</u>	<u>149.96</u>			<u>149.96</u>

Standard Height of Superstructure	<u>6.98</u>
" " R.Q.D.	<u>✓</u>
Deduction for complete superstructure	<u>38.52</u>
Percentage covered $\frac{S}{L} =$	<u>43.35</u>
" " $\frac{S_1}{L} =$	<u>43.11</u>
" " $\frac{E}{L} =$	<u>43.11</u>
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	<u>30.14</u>
Interpolation for bridge less than 2L (if required)	
Deduction = $38.52 \times .3014$	<u>= - 11.61</u>

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>44.78</u>	<u>1</u>		<u>44.78</u>	<u>51.0</u>	<u>54.50</u>	<u>1</u>		<u>54.50</u>
1/2 L from A.P. ...	<u>19.93</u>	<u>4</u>		<u>79.72</u>	<u>21.0</u>	<u>22.71</u>	<u>4</u>		<u>90.84</u>
3/4 L " ...	<u>4.93</u>	<u>2</u>		<u>9.86</u>	<u>4.0</u>	<u>5.68</u>	<u>2</u>		<u>11.36</u>
Amidships ...		<u>4</u>			<u>✓</u>		<u>4</u>		
3/4 L from F.P. ...	<u>9.85</u>	<u>2</u>		<u>19.70</u>	<u>12.5</u>	<u>11.85</u>	<u>2</u>		<u>23.70</u>
1/2 L " ...	<u>39.86</u>	<u>4</u>		<u>159.44</u>	<u>47.5</u>	<u>47.40</u>	<u>4</u>		<u>189.60</u>
F.P. ...	<u>89.56</u>	<u>1</u>		<u>89.56</u>	<u>103.0</u>	<u>103.00</u>	<u>1</u>		<u>103.00</u>
Total ...				<u>403.08</u>					<u>475.00</u>

Mean actual sheer aft = Excess
Mean standard sheer aftMean actual sheer forward = Excess
Mean standard sheer forwardLength of enclosed superstructure forward of amidships = .151
" " aft of " = .119Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{71.92}{18} (.75 - .2167) = - 2.13$

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.

Ft.
Depth to Freeboard Deck = 25.99
Summer freeboard = 4.54
Moulded draught (d) = 21.45

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 5.36 = 5 3/4

Addition for Winter North Atlantic Freeboard (if required) =

For

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$

Tons per inch immersion at summer load water line

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.777 + .680}{1.36} = \frac{1.457}{1.36}$

	+	-
Depth Correction ...	<u>7.49</u>	
Deduction for superstructures ...		<u>11.61</u>
Sheer correction ...		<u>2.13</u>
Round of Beam correction...		
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc. ...		
	<u>7.49</u>	<u>13.74</u>

Summer Freeboard = 54.44

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

Extr	Tropical Fresh Water Line above Centre of Disc ...	
str	Fresh Water Line " " ...	
Machin	Tropical Line " " ...	
tures	Winter Line below " " ...	<u>5 1/4</u>
Applie	Winter North Atlantic Line " " ...	
Deckhouse		

Tropical Fresh Water Freeboard ...	
Fresh Water " " ...	
Tropical " " ...	
Winter " " ...	<u>4 11 3/4</u>
Winter North Atlantic " " ...	

"TURKO TOPIC

Particulars of fiddley, funnel and ventilator coamings:—

Engine room skylight steel
hunnell, Eng & Fildley
hinged steel covers over Fildley seatings
Deck Hatch on casing top 4-0 x 15-9, framing 15 x 30. covers 2 3/4" dia. bearing 2", cleats 20" apart, 2. Tarpanalms
Hatch over donkey boiler space 3-4 x 5-0, framing 19 x 30, steel hinged cover fastened with 2 chys

Zone

Zone

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:									
Vent	Pks on Sls	85 dia, branning	28 x 25	to crew.	1 Vent.	3 on upper 5th aft	12 dia branning	36 x 30	to hold
1	Pks	10	27 x 25	to hold	1	Pks	12	36 x 30	
1	Pks	7	12 x 25	crew	1	Ch	6	9 x 25	shaft tunnel
1	upper 5th fwd	12	36 x 30	hold	1	10.0 Vent	15	strong, braced, bracket to poop 2x	
1	P	12	36 x 30		1 Vent	Ch	4	branning	21 x 18 to upper peak.
1	Pks - Bridge 25	13	36 x 30	to turn over hold	1	Pks	58	24 x 25 to poop turn 2x	
1		8 1/2	24 x 25	side bunkers				1 Vent. 3 on poop 5th 8 1/2 dia, branning	24 x 25 to poop store

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

1 - 4" dia on Side 58" in bow, 11" high, Cast-iron	To peak	1. 15" dia derrick post on Bridge deck. PYS.
1 - 3 1/2" - " upper end, Side from 58" high to S.B. Tank.		Strongly constructed
1 - 3 1/2" - " - " at fore mast 59		wood plugs & canvas covers to all
1 - 3 1/2" - " - " aft Bridge end 59		Cowl Vents, Coamings
1 - 3 1/2" - " - " at main mast 59		wood plugs provided for air pipes

None.

[illegible]

Side Scuttles in Fore Turn ~~two~~ ^{two} ~~quarters~~ ^{quarters}. fitted with deadlights.
 " " " Aft and bridge turn ~~two~~ ^{two} ~~quarters~~ ^{quarters} " "

On Tails & Prop Deck 38" high, 2 wets, Stanchions about 65" apart, 12" in board
Steel bulwark on Bridge Deck. 38" high efficiently supported by built plate stays

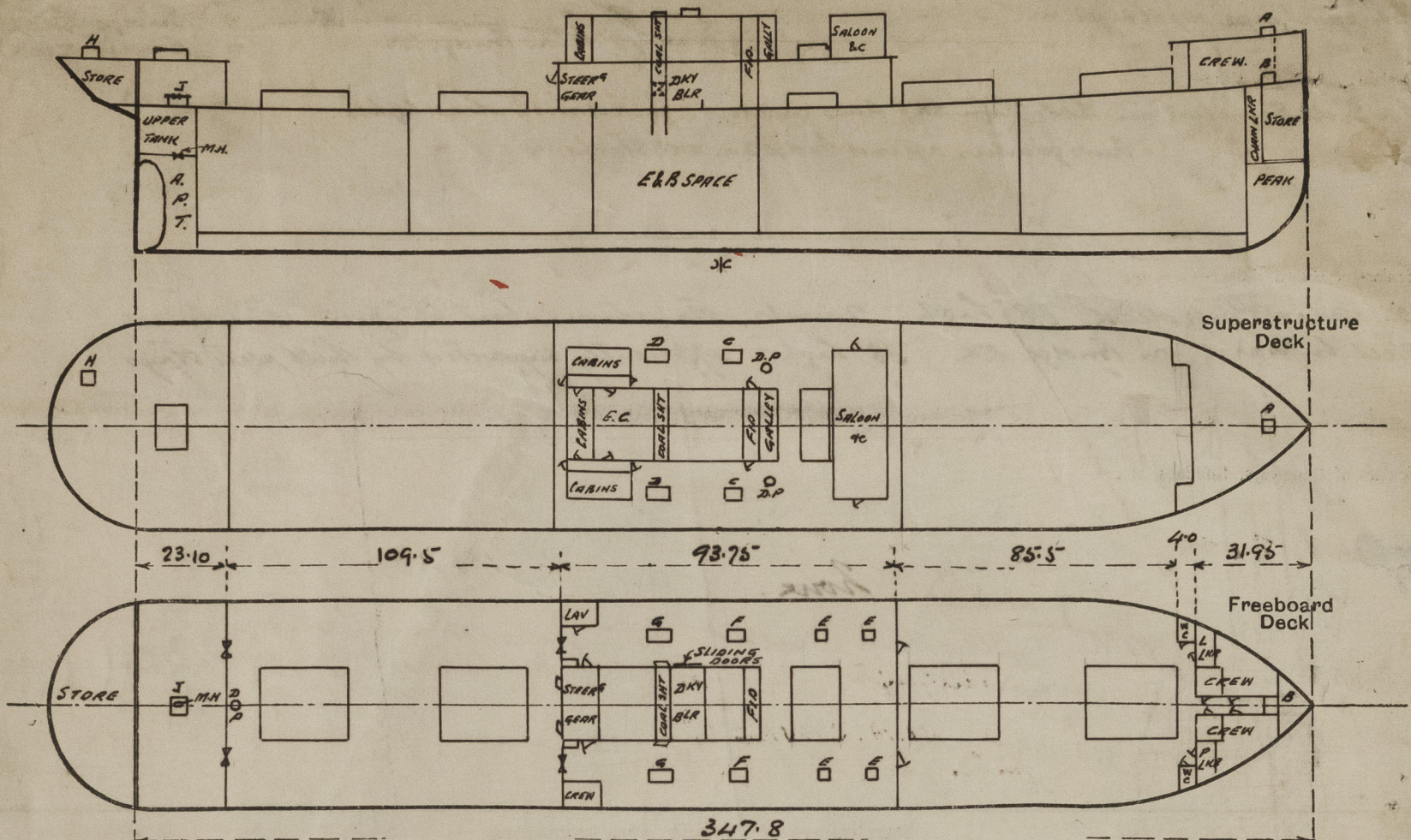
Zone.
Palate staunchers in sockets P.S. provided a Hatchways, web eye plate
in one cheekhead & lifelines in both wells

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	36	30	5½ x 22 x 36 Ang	33-43	Knee at top	See note 1. P. 5. side Pls 64 x 27	66 above sill 19	7-3.
Raised Quarter Deck Bulkhead ...		vert plating 30	4" flanges	36"	Knee at top	Pls. 24 x 21 60 x 27	4-0 19	7-0
Bridge, After Bulkhead		36	7½ x 3½ B.G.	37	Knee T & B.	Pls 49 x 37	21	7-0
Bridge, Forward Bulkhead	42	vert plating 26	4 x 3½ x 34	42	✓	51 x 22.	19½	7-0
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	Horizontal 32	32	6 x 3 B.G. Horizontal	Horizontal 3-6	✓	51 x 22	19	7-0
Exposed Machinery Casings on Super-structure Decks	34	30	3½ x 3 x 36	49 ER. 42 BR.	Knee at top	51 x 22.	23	7-0
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	Horizontal 32	32	6 x 3 B.G. Horizontal	Horizontal 3-6	✓	36 x 36 cent. plate 5-0 x 8-4 sq ft	19	7-0
Deckhouses on Flush Deck Ships ...								

Deckhouses on Flush Deck Ships ...		Particulars of Closing Appliances (state if capable of being manipulated from both sides).
Poop Bulkhead	Scuttles with deadlight openings, channels & boards full height Hinged steel w.t. doors. (21/10/201)
Raised Quarter Deck Bulkhead	openings, channels & boards full height, 2 3/4" thick
Bridge, After Bulkhead	hinged steel vert doors to steering gear space 2. clips on outside. Scuttle starts, with deadlight
Bridge, Forward Bulkhead	hinged steel doors. Bolt's thru's door & bulkhead plating, spaced about 8 apart 1/2" dia
Forecastle Bulkhead	Steel hinged doors, operated from both sides
Exposed Machinery Casings on Free-board or Raised Quarter Decks	hinged steel doors. Lock port side
Exposed Machinery Casings on Super-structure Decks	hinged steel doors. Hickey &c. Engine casing operated from both sides
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	wood doors Vertical hinged doors, clips on outside. Lock short. sliding steel doors. Port side to Tanking Boiler space. No fasteners

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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:—



A: Hatch on fore deck 4-0 x 3-0
To Peak stores
Coaming 30 x 25
W.W. covers 2 1/2 Thwart
Bearing 1 3/4
Cleats 16" apart
2 Tarpanlines

B: Hatch on upper BX in fore turn 4-0 x 4-0
Coaming 30 x 25
W.W. covers 2 1/4 Thwart
Bearing 1 3/4
Cleats 16" apart
Locking bar
2 Tarpanlines

C: Coaling hatches on Bridge deck 4-0 x 2-9
D: " " " " 6-0 x 2-9
Coaming 30 x 25
W.W. covers 2 1/2 Thwart
Bearing 1 3/4
Cleats 20" apart
2 Tarpanlines

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

E: Trimming hatches, upper BX
in Bridge turn 2-3 x 1-10
Coaming 3 x 3 B.A.
W.W. cover 2 3/4
Bearing 2 1/4
Cleats 15" apart
2 Tarpanlines

F: Coaling hatches Bridge turn 4-0 x 2-9
G: " " " " 6-0 x 2-9
Coaming 30 x 30
W.W. covers 2 1/2 Thwart
Bearing 1 3/4
Cleats 20" apart
2 Tarpanlines

H: Hatch on Prop BX 2-8 x 2-8 To Store
Coaming 30 x 30
W.W. cover 2
Bearing 1 3/4
Cleats 16" apart
Locking bar
2 Tarpanlines

I: W.T. Hatch in Prop Turn
2 x 3 3-10 x 3-10
Coaming 30 x 30
Bolted Steel Cover 30
Bolts 3 1/2 apart. 1/2 dia
Main hole in cover fitted with
Steel plate, rubber painted
2 dogs.

Survey when vessel afloat for
Freeboard assignment only.

Builder's name and yard number I. L. Thompson & Sons Ltd Sunderland. N° 483.

Names of sister ships

Owners СЛОБОДНА ПЛОВИДБА ТОРИЧ ДД.

Fee £ 11 : 18 : 0.

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