

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, <i>Sailing Ship, Tug</i>					Port of Survey <i>Landskrona.</i>
having <i>Raised Quarter, Bridge and Forecastle decks.</i>					Date of Survey <i>16, 17, 23 January, 1933.</i>
(Type of Superstructures.)					Name of Surveyor <i>J. Ahlsson</i>
Ship's Name <i>S.S. "JAN"</i>	Nationality and Port of Registry <i>Swedish. Landskrona.</i>	Official Number <i>7377</i>	Gross Tonnage <i>862</i>	Date of Build <i>1893-11</i>	Particulars of Classification <i>100 A 1.</i>
Moulded Dimensions: Length <i>64.61 m.</i> Breadth <i>9.45</i> Depth <i>4.52</i>					<i>S.S. Cpn. 2nd No 3-12.19.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>1738</i> tons					<i>S.S. Cpn No. 2.27.</i>
Coefficient of fineness for use with Tables <i>.741</i>					

<b>Depth for Freeboard (D)</b>	<b>Depth correction</b>	<b>Round of Beam correction</b>
Moulded depth ... <i>4.52 m.</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>8.33(4.531 - 4.307) 16.32 = + 30%</i>	Moulded Breadth (B) <i>9.45 m.</i>
Stringer plate ... <i>12 mm.</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{113.4}{50} = 2.268$ m.
Sheathing on exposed deck <i>3" wood sheathing on fore-castle &amp; bridge etc.</i>		Ship's Round of Beam = <i>2.30 m.</i>
$T \left( \frac{L-S}{L} \right) =$		Difference <i>.032</i>
Depth for Freeboard (D) = <i>4.531</i>	If restricted by superstructures	Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.032}{4} \times \left( 1 - \frac{.032}{9.45} \right) = .007$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
„ overhang ...					
R.Q.D. enclosedd ...	33.00	33.00	12.20		33.00
„ overhang ...					
Bridge enclosed... ..	5.00	5.00	19.80		5.00
„ overhang aft ...					
„ overhang forward					
F'cle enclosed ...	7.04	7.04	20.60		7.04
„ overhang ...			20.60		
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward					
Total ...	45.04	45.04			45.04

Standard Height of Superstructure	18.30
„ „ R.Q.D.	11.41
Deduction for complete superstructure	6.91
Percentage covered $\frac{S}{L} =$	69.71
„ „ $\frac{S_1}{L} =$	69.71
„ „ $\frac{E}{L} =$	69.71
Percentage from Table, Line A.	62.51
(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 =	6.91 x .6251 = - 4.33

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	792	1		792	610	587	1		587
L from A.P. ...	352	4		1408	208	261	4		1044
L „ ...	88	2		176	30	64	2		128
Amidships ...	—	4		—	0	—	4		—
L from F.P. ...	176	2		352	150	152	2		304
L „ ...	704	4		2816	650	495	4		1980
F.P. ...	1584	1		1584	1524	1270	1		1270
Total ...				7128					5313

Mean actual sheer aft	Deficient
Mean standard sheer aft	
Mean actual sheer forward	Deficient
Mean standard sheer forward	
Length of enclosed superstructure forward of amidships	See sketch.
„ „ aft of „	—
sheer measured afloat.	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{1815}{18} \left( .75 - \frac{3485}{4015} \right) = + 40\%$

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

<b>Deduction for Tropical Freeboard.</b>	<b>Deduction for Fresh Water.</b>	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)
<b>Addition for Winter and Winter North Atlantic Freeboard.</b>	Displacement in salt water at summer load water line	Correction for coefficient $\frac{7414.180}{1.36} = 5451.53$
Depth to Freeboard Deck = <i>5.751</i>	Δ =	
Summer freeboard = <i>1.526</i>	Tons per inch immersion at summer load water line	
Moulded draught (d) = <i>4.225</i>	T =	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{48}$ inches = <i>88%</i>	Deduction = $\frac{\Delta}{40T}$ inches = <i>88%</i>	
Addition for Winter North Atlantic Freeboard (if required) = <i>+ 51% - 139</i>		

Depth Correction	30	—
Deduction for superstructures	—	432
Sheer correction	40	—
Round of Beam correction	—	—
Correction for Thickness of Deck amidships	1.220	—
Other corrections, scantlings, etc.		
	1.290	432
		+ 858
		Summer Freeboard = 1.526

### SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, *Wood, Steel, Deck* :— *1.526 m/m.*

Tropical Fresh Water Line above Centre of Disc ...	176	Tropical Fresh Water Freeboard ...	1350
Fresh Water Line „ „ ...	88	Fresh Water „ „ ...	1438
Tropical Line „ „ ...	88	Tropical „ „ ...	1438
Winter Line below „ „ ...	88	Winter „ „ ...	1614
Winter North Atlantic Line „ „ ...	139	Winter North Atlantic „ „ ...	1665



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS						
Description of Hatchway	No 1	No 2	No 3	On R. Q. deck	On R. Q. deck	On R. Q. deck
Dimensions of Hatchway	3400 x 3700	3600 x 3700	3600 x 3700	890 x 890	1000 x 1100	1100 x 2750
COAMINGS	Height above Deck	900	900	550	755	230
	Thickness	11	11	10	8	10
	Stiffeners	180 x 75, 12 B.F. at both ends	180 x 75, 12 B.F. at both ends	180 x 75, 12 B.F. at both ends	180 x 75, 12 B.F. at both ends	180 x 75, 12 B.F. at both ends
	Brackets, Stays	None	None	None	None	None
HATCH BEAMS	Number	None	None	None	None	None
	Spacing	2800	2800	2800	2800	2800
	Scantling and Sketch	900	1050	1050	1050	1050
	Bearing Surface	80 x 12	80 x 12	80 x 12	80 x 12	80 x 12
FORE AND AFTERS	Number	3	3	3	3	3
	Spacing	925	925	925	925	925
	Unsupported Lengths	3700	2800	2800	2800	2800
	Scantling* and Sketch	170 x 160	180 x 180	180 x 180	180 x 180	180 x 180
HATCH COVERS	Material	Wood	Wood	Wood	Wood	Wood
	Thickness	65	65	65	65	65
	How fitted	Thwartships	Thwartships	Thwartships	Thwartships	Thwartships
	Bearing Surface	2550	2050	2050	2550	4850
Spacing of Cleats	550	550	550	550	550	550
Number of Tarpaulins	2	2	2	2	2	2

\*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 openings closed by 3 mm. hinged steel plates. 2 vents to hold 2000 x 4 - 500; funnel coaming 600 mm; E.P. and galley skylight wood with wooden coamings and covers, 260 and 160 mm. above the boat deck; 2 vents to engine room 1000 x 10 - 500 mm.*

*All placed on top of boat deck, 1980 mm above the R. Q. deck.*

Particulars of Flush Bunker Scuttles:— *None.*

*One hatch inside forecabin to stowage for peak, flush with wood sheathing, 910 x 910, wooden covers 60 mm with 70 mm bearing surfaces.*

Particulars of Companionways:—

*One on forecabin deck, all of steel and backed to wood deck. 1000 x 750 x 1100; sill 100 mm. Closed by hinged steel doors.*

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

*Fore deck: 1 funnel p.e.s. 150 x 12 - 100; 1 gross water p.e.s. 200 x 12 - 100 mm.*

*Fore well: 1 vent. coaming forward No 1 hatch 910 x 10 - 340 mm.*

*Bridge deck: 1 " p.e.s. 150 x 10 - 580 mm; 1 funnel coaming on p.s. 200 x 8 - 170 mm.*

*R. Q. deck: 1 " L hold aft 900 x 10 x 340 mm; 1 dith to funnel 700 x 12 - 150 mm.*

*All with wood plugs and tarpaulins for closing.*

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

*R. Q. deck: 1 air pipe p.e.s. flush with deck and with screw caps.*

Particulars of Gangway Cargo and Coaling Ports:—

*None.*

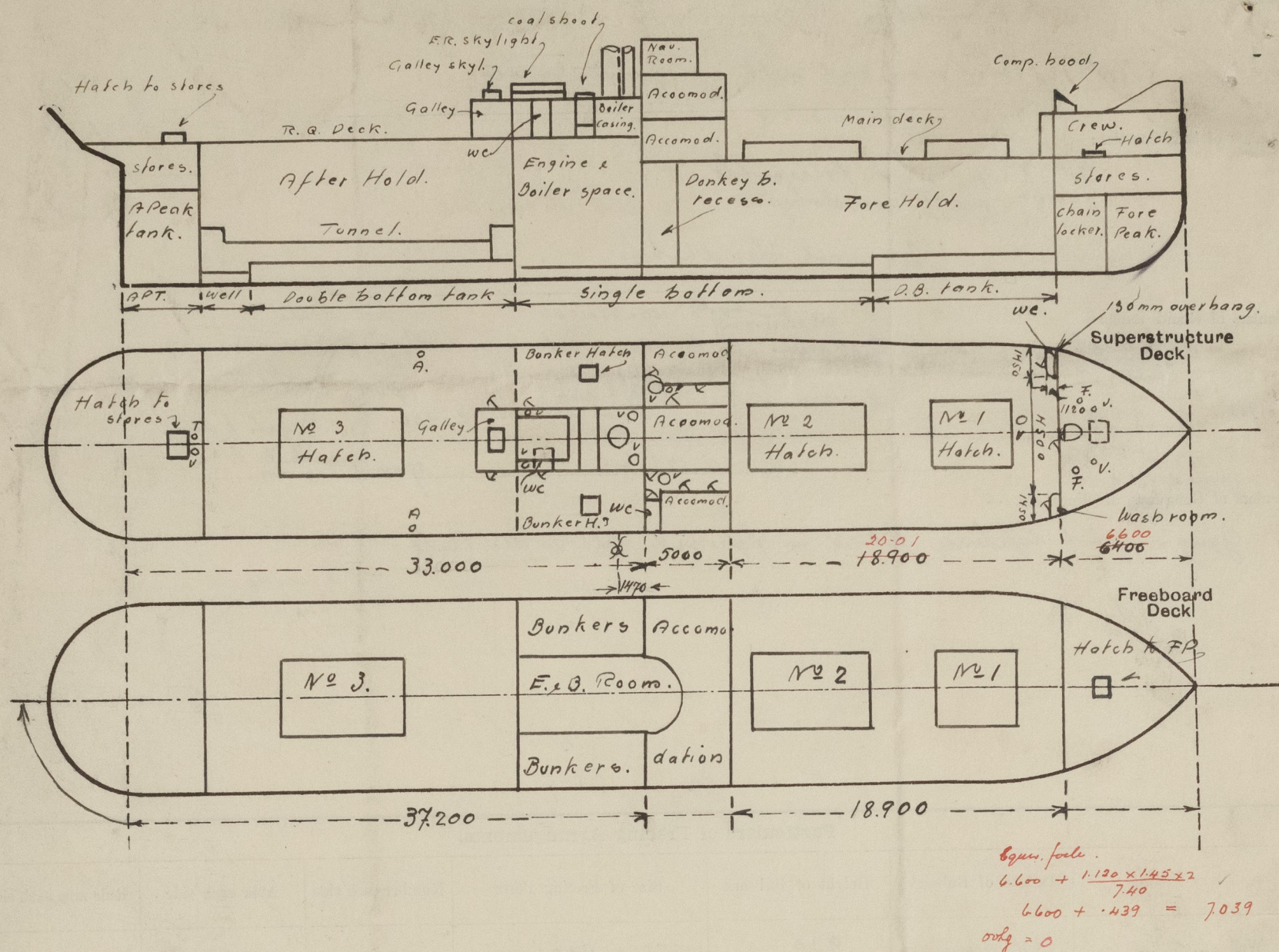
*This ship has changed flag from Swedish to Finnish and registered at "Vaapuri".  
 Gross tonnage now 889 ton. Kfs. letter 24/3/35.  
 Code Letters O.H.X.A.*



0189  $\frac{3}{5}$



Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



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

A timber deck cargo freeboard is also desired. No poop fitted.

The steering arrangement is laid on deck inside bulwark stanchions.

The hand steering gear fitted aft on R.A. deck and protected by tarpaulins.

Double bottom tanks of Mc Intyre type forward below No. 1 hatch and in after hold.

Angle sockets for uprights fitted, but not in order and the spacing of same not in accordance with the Rule.

No eyeplates for lashings fitted.

The vessel laid up at Landskrona; examined during special survey.

Builder's name and yard number Scott & Co, Greenock.

Names of sister ships ✓

Owners Rederi AB Allan, Harry Persson.

Fee Mr. Sw : 150:00

Received by me ✓

Trav. Exp. : 22:10

X. Petersen.



© 2020

Lloyd's Register Foundation