

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index No. 31879
(For London Office only.)29 JUL 1932
6 AUG 1932

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having *Complete superstructure with tonnage opening off.*

(Type of Superstructures.)

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
<i>M/S ANNIE JOHNSON</i>	<i>Swedish Stockholm</i>	<i>7235</i>	<i>4896</i>	<i>1925</i> <i>11 mo.</i>

Moulded Dimensions: Length *390'* Breadth *52'6"* Depth *28'0"*
Moulded displacement at moulded draught = 85 per cent. of moulded depth *10470* tons
Coefficient of fineness for use with Tables *.752*

Port of Survey *Gothenburg*
Date of Survey *25th July 1932*
Name of Surveyor *G. Hjorngren*
Particulars of Classification **100 A1.*
with freeboard
SS No. 1-30

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <i>28.00</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(28.03 - 26.00) 3 = 6.09</i>	Moulded Breadth (B) <i>52.5</i>
Stringer plate <i>.03</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 12.6$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <i>12.5</i>
Depth for Freeboard (D) = <i>28.03</i>		Difference <i>-10</i>
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>nil</i>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>26'0"</i>	<i>26.00</i>	<i>9'0"</i>		<i>26.00</i>
" overhang	<i>2'2"</i>	<i>1.08</i>	"		<i>1.08</i>
R.Q.D. enclosed					
" overhang					
Bridge enclosed	<i>357'0"</i>	<i>357.00</i>	<i>9'0"</i>		<i>357.00</i>
" overhang aft	<i>4"</i>	<i>.25</i>	"		<i>.25</i>
" overhang forward					
Fore enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft	<i>4'6"</i>	<i>2.83</i>	<i>9'0"</i>		<i>2.83</i>
" forward					
Total	<i>390.0</i>	<i>387.16</i>			<i>387.16</i>

Standard Height of Superstructure *7.40*
" " R.Q.D. *41.33*
Deduction for complete superstructure *41.33*
Percentage covered $\frac{S}{L} = 100$
" " $\frac{S_1}{L} = 99.28$
" " $\frac{E}{L} = 99.28$
Percentage from Table, Line A. *99.12*
(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 = *41.33 × 99.12 = 40.96*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<i>49.00</i>	1		<i>49.00</i>	<i>53' H92</i>	<i>72.20</i>	1		<i>72.20</i>
$\frac{1}{4}$ L from A.P.	<i>21.81</i>	4		<i>87.24</i>	<i>13.22</i>	<i>29.00</i>	4		<i>116.00</i>
$\frac{2}{4}$ L "	<i>5.39</i>	2		<i>10.78</i>	<i>-23</i>	<i>6.90</i>	2		<i>13.80</i>
Amidships		4		<i>0</i>			4		
$\frac{3}{4}$ L from F.P.	<i>10.78</i>	2		<i>21.50</i>	<i>12.40</i>	<i>13.99</i>	2		<i>27.98</i>
$\frac{1}{4}$ L "	<i>43.61</i>	4		<i>174.44</i>	<i>44.50</i>	<i>56.61</i>	4		<i>226.44</i>
F.P.	<i>98.00</i>	1		<i>98.00</i>	<i>108.0</i>	<i>127.20</i>	1		<i>127.20</i>
Total				<i>441.02</i>					<i>583.62</i>

Mean actual sheer aft = *Excess*
Mean standard sheer aft = *Excess*
Mean actual sheer forward = *Excess*
Mean standard sheer forward = *Excess*
Length of enclosed superstructure forward of amidships = *Excess*
" " aft of " = *Excess*

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{142.60}{18} \times .25 = 1.98$
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.		Deduction for Fresh Water.		TABULAR FREEBOARD corrected for Flush Deck (if required)	
Addition for Winter and Winter North Atlantic Freeboard.		Displacement in salt water at summer load water line		Correction for coefficient $\frac{752 + 68}{1.36}$	
Ft.		$\Delta = 11160$		Depth Correction <i>6.09</i>	
Depth to Freeboard Deck = <i>2803</i>		Tons per inch immersion at summer load water line		Deduction for superstructures <i>40.96</i>	
Summer freeboard = <i>2.93</i>		T = <i>40.09</i>		Sheer correction <i>1.98</i>	
Moulded draught (d) = <i>25.10</i>		Deduction = $\frac{\Delta}{40T}$ inches = <i>6.96</i>		Round of Beam correction <i>—</i>	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>6.27</i>				Correction for Thickness of Deck amidships <i>—</i>	
Addition for Winter North Atlantic Freeboard (if required) = <i>159</i>				Other corrections, scantlings, etc. <i>—</i>	
				Summer Freeboard = <i>35.17</i>	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, *5000*, Steel, Deck:— *35.17 = 893 m/m*

Tropical Fresh Water Line above Centre of Disc <i>336.7m</i>	Tropical Fresh Water Freeboard <i>557</i>
Fresh Water Line " " <i>177</i>	Fresh Water " " <i>716</i>
Tropical Line " " <i>159</i>	Tropical " " <i>734</i>
Winter Line below " " <i>159</i>	Winter " " <i>1052</i>
Winter North Atlantic Line " " <i>—</i>	Winter North Atlantic " " <i>—</i>

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
Hatchway				Hatchway				Hatchway			
Description of Hatchway				Dimensions of Hatchway				Dimensions of Hatchway			
COAMINGS				HATCH BEAMS				FORE AND AFTERS			
Height above Deck				Number				Number			
Thickness				Spacing				Spacing			
Stiffeners				Unspaced Lengths				Unspaced Lengths			
Brackets, Stays				Scantling* and Sketch				Scantling* and Sketch			
Bearing Surface				Bearing Surface				Bearing Surface			
HATCH COVERS				Material				Material			
Thickness				How fitted				How fitted			
Spacing of Cleats				Number of Tarpaulins				Number of Tarpaulins			
Number of Tarpaulins				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?				Are tarpaulins in good condition and in accordance with rule requirements?			
Are lashings provided in accordance with rule requirements?				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:— *No fiddling; motor ship*
Funnel and vent on top of motor casing in good condition

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways:—

Access to crew quarters: 2" wood doors operated from both sides 15" sill, forward
2 " " " " " 14 " aft.

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

Fore: 1 @ 12" diam 35" x 34" coaming Sh deck: 2 @ 21" diam 10' x 34" (well supported) coaming
6 @ 12" " 31" x 34" " 4 @ 21" " 36" x 30" coaming
1 @ 5 1/2" " 30" x 25" " 10 @ 14" " 36" x 38" "
3 @ 11" " 36" x 36" "
1 @ 12" " 36" x 36" "

All ventilators fitted with steel caps and canvas covers.

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

All air pipes of steel pipe goose neck with opening 30" above deck and fitted with means of closing.

Particulars of Gangway Cargo and Coaling Ports:—

Particulars of Scuppers and Sanitary Discharge Pipes:—

Scuppers from lower deck led overboard and fitted with non return valve
Sanitary discharge pipes are fitted with non return valve

Particulars of Side Scuttles:—

All side scuttles in crew space fitted with hinged deadlights

Particulars of Guard Rails:—

Bulwark in way of accommodation strongly constructed and supported.
Open rails 3'6" high with 3 rods and stanchion spaced 4'6" apart.

Particulars of Gangways, Lifelines, etc.:—

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 ...	7'	9'	36' x 21"	1		
Forward Well ...						
State position of each freeing port ... After Well:— (F. and A. position and height above deck edge) Forward Well:— 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.						

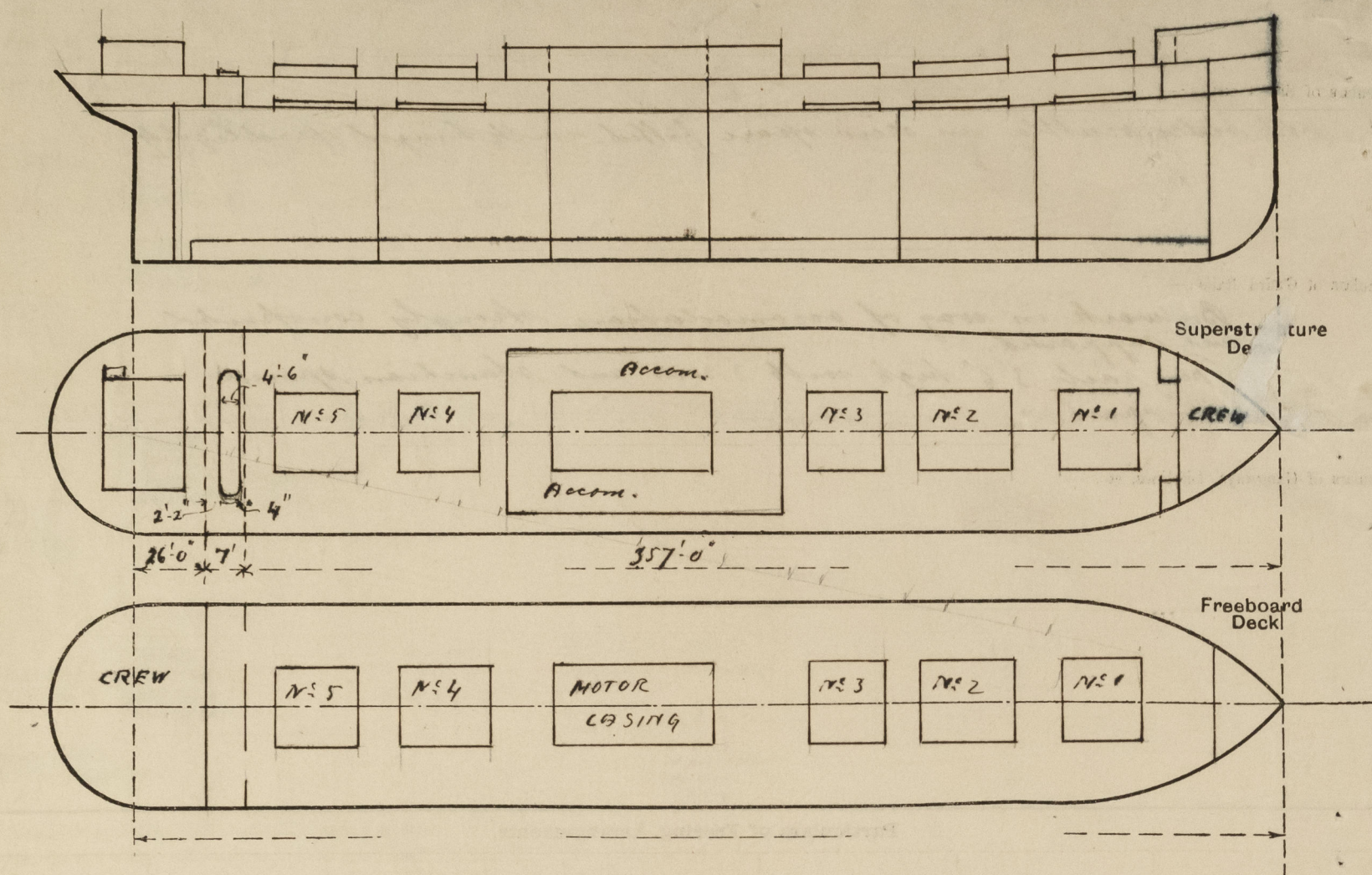
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ...	None	.28				None		9'0"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ...	None	.28	3 1/2' x 2 1/2' x .36	32"	None	9'0" x 3'6"	None	9'0"
Bridge, Forward Bulkhead ...								
Forecastle Bulkhead ...								
Trunk, Aft ...								
Trunk, Forward ...								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ...								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	None	.28	3' x 2 1/2' x .30	28"	Don't beam top cant. bottom	None		9'0"
Deckhouses on Flush Deck Ships ...	Steel deck house on poop					5'1" x 2'3"	14"	8'0"

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

Poop Bulkhead ...	<i>aka opening</i>
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead ...	<i>2 1/2" shifting boards in riveted channels full height</i>
Bridge, Forward Bulkhead ...	
Forecastle Bulkhead ...	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	
Exposed Machinery Casings on Superstructure Decks ...	<i>Hinged steel doors operated from both sides (not exposed)</i>
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	<i>aka opening</i>
Deckhouses on Flush Deck Ships ...	<i>Hinged wood doors operated from both sides.</i>

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:—



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

This vessel carries a Passenger Certificate for Oceanic Traffic.

Displ. on shell at 75% of H. depth	9200 tons	tons/inch	39.7
" " " 85%	10540	"	39.9
" " " 95%	11880	"	40.3

The vessel has been surveyed afloat whilst discharging her cargo

Builder's name and yard number *A.B. Götaverken Yard No. 392*

Names of sister ships *M/S Axel Johnson Yard No. 391*

Owners *Rederiaktiebolaget Nordstjärnan*

Fee *kr 350.-*

Received by me



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