

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 24533
(For London Office only.)

13 JUL 1932

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Prop. Bridge & Vole.

(Type of Superstructures.)

Ship's Name <u>1/2 "FAKEN"</u> (No 20726 in Reg. Book.)	Nationality and Port of Registry <u>Swedish.</u> <u>Gothenburg.</u>	Official Number <u>6140.</u>	Gross Tonnage <u>4107.</u>	Date of Build <u>1919-6.</u>
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Moulded Dimensions: Length 355.21' Breadth 505' Depth 28.16' 28.14'
Moulded displacement at moulded draught = 85 per cent. of moulded depth 9820 tons
Coefficient of fineness for use with Tables .800

Port of Survey Gothenburg.
Date of Survey 5th July 1932.
Name of Surveyor M. Pith Andersen.
Particulars of Classification 100. A. 1
S.S. Immo. No. 2-27

<p>Depth for Freeboard (D)</p> <p>Moulded depth ... <u>28.14'</u> <u>28.16'</u></p> <p>Stringer plate (.46") ... <u>.04</u></p> <p>Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$</p> <p>Depth for Freeboard (D) = <u>28.21'</u></p>	<p>Depth correction</p> <p>(a) Where D is greater than Table depth (D-Table depth) R = $(28.21 - 23.68) \times 2.432 = (+) 12.34'$</p> <p>(b) Where D is less than Table depth (if allowed) (Table depth-D) R =</p> <p>If restricted by superstructures</p>	<p>Round of Beam correction</p> <p>Moulded Breadth (B) <u>50.5'</u></p> <p>Standard Round of Beam = $\frac{B \times 12}{50} = 12.12'$</p> <p>Ship's Round of Beam = <u>12.5'</u></p> <p>Difference <u>excess .38'</u></p> <p>Restricted to</p> <p>Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.38}{4} \times .5841 = (+) .06'$</p>
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	18.0'	18.00'	7'	4/4.052	18.01'
" overhang29'	.14'			
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed...	89.92'	89.92'	7'	4/4.052	90.46'
" overhang aft ...	1.42'	1.04'			
" overhang forward	.29'	.14'			
Fore enclosed EQUIV...	37.16'	37.16'	7'	4/4.052	38.19'
" overhang ...	2.63'	1.31'			
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward					
Total ...	149.71'	147.44'			146.66'

Standard Height of Superstructure 4.052'

" " R.Q.D. 39.01'

Deduction for complete superstructure 39.01'

Percentage covered $\frac{S}{L} = 42.14'$

" " $\frac{S_1}{L} = 41.59'$

" " $\frac{E}{L} = 41.29'$

Percentage from Table, Line A.
(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 28.59'
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $.2859 \times 39.01' = 11.15'$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	45.52	1		45.52	37.25	37.25	1		37.25
1/8 L from A.P. ...	20.26	4		81.04	15.75	15.75	4		63.00
2/8 L " ...	5.01	2		10.02	2.50	2.50	2		5.00
Amidships ...	-	4		-	-0.375	-	4		-
2/8 L from F.P. ...	10.01	2		20.02	11.63	11.63	2		23.26
1/8 L " ...	40.51	4		162.04	43	43.00	4		172.00
F.P. ...	91.04	1		91.04	98.75	98.75	1		98.75
Total ...				409.68					399.26

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{10.42}{18} \left(.75 - \frac{2.107}{2} \right) = (+) .31'$

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.

Depth to Freeboard Deck = 28.21'
Summer freeboard = 5.38'
Moulded draught (d) = 22.83'

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 5.71'

Addition for Winter North Atlantic Freeboard (if required) =

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 $\frac{.80 + .68}{1.36} = \frac{1.48}{1.36}$

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

58.01'
63.13'

	+	-
Depth Correction	12.34	
Deduction for superstructures		11.15
Sheer correction	.31	
Round of Beam correction		.06
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	12.68	11.21

Summer Freeboard = 64.60'

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Steel, Deck: 64.60' = 16.41'

Tropical Fresh Water Line above Centre of Disc ...

Fresh Water Line " " ...

Tropical Line " " ...

Winter Line below " " ... 5.71' = 145 7/8"

Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard ...

Fresh Water " " ...

Tropical " " ...

Winter " " ...

Winter North Atlantic " " ...

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22 AUG 1932

64.60' = 16.41'

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	No. 1 & 4	No. 2 & 3	Hatchway on bridge	Hatches on bridge	Hatches on bridge	Hatches on bridge	Hatches on bridge	Hatches on bridge	Hatches on bridge
Dimensions of Hatchway	32' x 18'	34' x 18'	4' x 1' 10"	4' x 2' 5 1/2"	3' x 3' 3"	10' 4" x 3' 0"	4' x 2' 14' 10"		
COAMINGS	Height above Deck	33 1/2"	32"	18"	10"	10"	6"		
	Thickness	48"	40"	40"	48"	42"	32"		
	Stiffeners	8' x 3' x 46"	None	40"	48"	42"	32"		
	Brackets, Stays	3 off	filled	✓	✓	✓	✓		
	Bearing Surface	3 1/2"							
HATCH BEAMS	Number	26	26	Deck beam	Deck beam	None	Deck beam	None	
	Spacing	4' x 3' x 44"		carried through	carried through	filled	carried through	filled	
	Angles	4' x 3' x 44"							
	Web	16' x 36"							
	Bearing Surface	3 1/2"							
FORE AND AFTERS	Number								
	Spacing								
	Unsupported Lengths								
	Scantling and Sketch								
	Bearing Surface								
HATCH COVERS	Material	Wood	Wood	Wood	Wood	Wood	Wood		
	Thickness	3"	3"	3"	2 1/2"	2 1/2"	3"		
	How fitted	F. & A.	F. & A.	F. & A.	Match	Match	F. & A.		
	Bearing Surface	3"	2 1/4"	2 1/4"	Match	Match	2"		
	Spacing of Cleats	22 1/2"	18"	25"	28"	23"	22"		
	Number of Tarpaulins	3	2	2	2	2	2		

*Are wood fore and afters steel shod at all bearing surfaces? *None fitted.*
 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 can be closed by hinged steel covers.
Vents to engine rooms and funnel on top of 7'0" high fiddle casing in good condition.

Particulars of Flush Bunker Scuttles:— *None fitted.*

Particulars of Companionways:—

Fiddle: Steel 4'1" x 3'3" x 6" ab. woodck, steel door 4'9" x 1'11" capable of being manip. from both sides, sill 13" above woodck.
Poop: 4' x 2'8" x 6'5" steel, 4'10" x 2'2" 12 1/2" steel

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

Forecastle: 4 off 6" diam 3'6" ab. woodck. 24" coam.
Poop: 1 - 12" x 3'3" steelck. 32"
Remainder of vents have a coaming 8'0" high & are efficiently stayed to deckhouses.

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

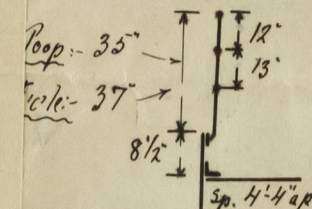
Distance from opening to deck: Fiddle 7"
F. Well 3'9"
Bridge 2'10"
A. Well 3'9"
Canvas covers supplied for air pipes.

Particulars of Gangway Cargo and Coaling Ports:— *None fitted.*

Particulars of Scuppers and Sanitary Discharge Pipes —
No scuppers through ship's sides below freeboard.
Sanitary Discharge Pipes are fitted with N.R.V.

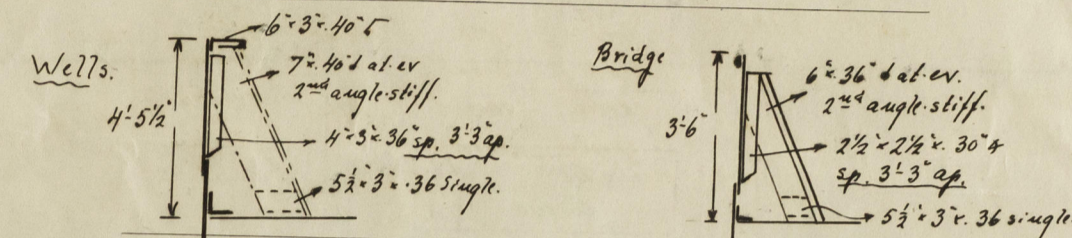
Particulars of Side Scuttles: *All side lights in ship's sides are fitted with perm. attached, hinged dead lights.*

Particulars of Guard Rails:—



Particulars of Gangways, Lifelines, etc.:—

None fitted.



Lifelines fitted in forward & after wells.

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	109'1"	4'5 1/2"	2'11 1/2" x 24"	4	23.66 ft	21.8 ft
Forward Well	96'5"	4'5 1/2"	2'11 1/2" x 24"	4	23.66 ft	19.30

State position of each freeing port ... After Well: 91'7" 62'8" 83'4" 6'4" bridge
 (F. and A. position and height above deck edge) Forward Well: 9'5" 26'5" 45'8" 66'6" 5'11'12"
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— *Hinged plate shutter & one horizontal bar.*
 Additional area where sheer is less than standard.

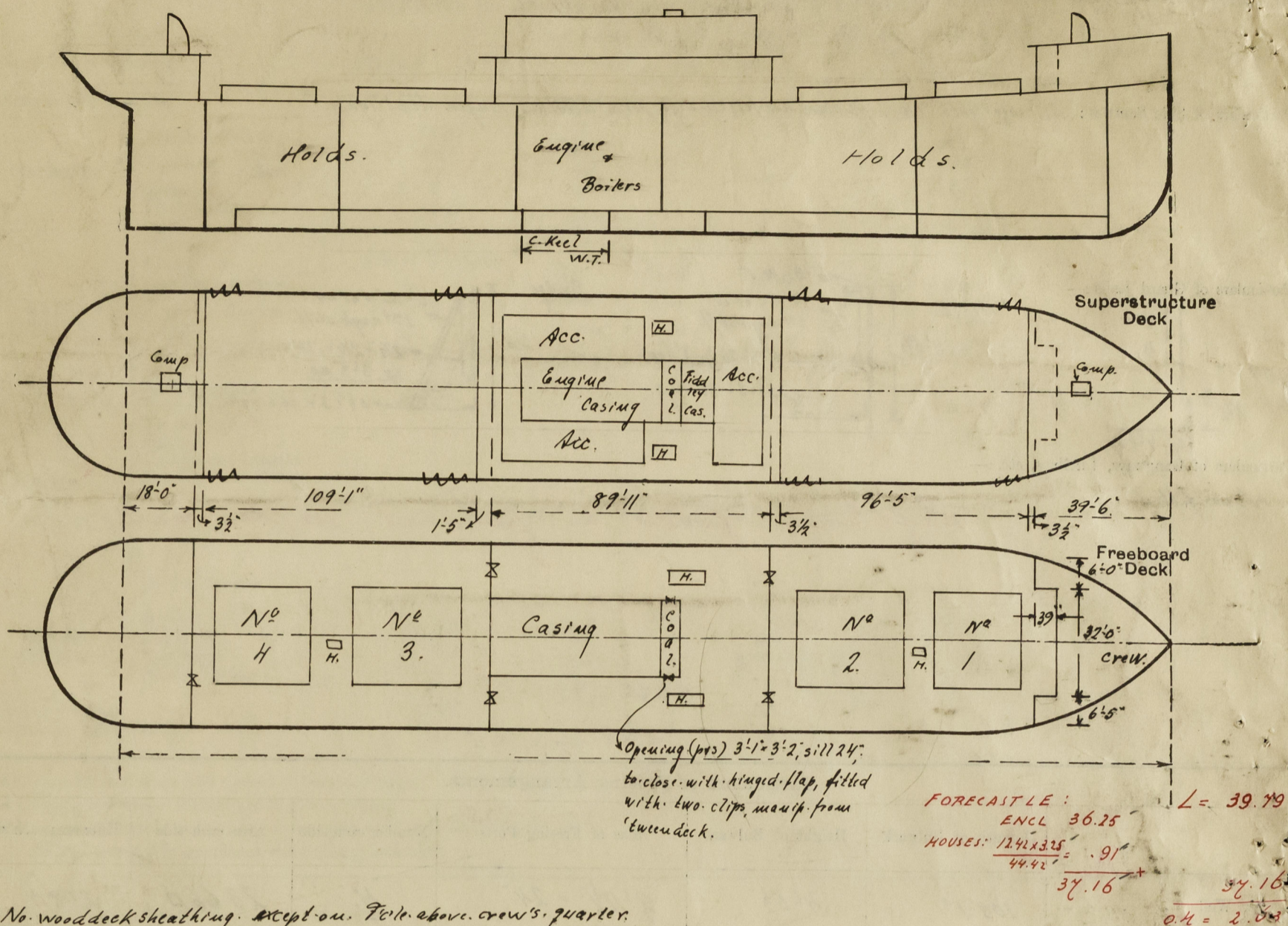
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	Vert. pl.	40"	4' x 3' x 40"	30"	Takes bound. bars	4'11" x 2'3"	13"	7'0"
Raised Quarter Deck Bulkhead	✓							
Bridge, After Bulkhead	Vert. pl.	34"	4' x 3' x 36"	32"	Takes bound. bars	6'9" x 3'1"	None	7'0"
Bridge, Forward Bulkhead	Vert. pl.	40"	10' x 3 1/2' x 48"	30"	Brck. Top & bott.	5'0" x 3'0"	14"	7'0"
Forecastle Bulkhead	Vert. pl.	28"	not accessible - woodclining			4'10" x 1'11 1/2"	18"	7'0"
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Deck	Vert. pl.	34"	4' x 3' x 36"	30"	Takes bound. bars	None	✓	7'0"
Exposed Machinery Casings on Superstructure Decks	Vert. pl.	30"	4' x 3' x 36"	34"	Top - None	4'10" x 1'11"	17 1/2"	7'0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	Vert. pl.	26"	4' x 3' x 36"	34"	Top - None	None	—	7'0"
Deckhouses on Flush Deck Ships	✓							

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

Poop Bulkhead	Hinged steel door to close with clips. Door clip 6" x 1 1/2" sp. 24" apart. Manip. fr. outside only.
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	hoose steel plates fitted with hook bolts sp. 19" apart. (Hook bolts through loose plate only). Manip. fr. outside only.
Bridge, Forward Bulkhead	Hinged steel doors to close with clips Door clip 6" x 1 1/2" sp. 24" apart. Manip. fr. outside only.
Forecastle Bulkhead	Ordinary hinged steel doors cap. of being manip. from both sides.
Exposed Machinery Casings on Freeboard or Raised Quarter Deck	No openings.
Exposed Machinery Casings on Superstructure Decks	Hinged steel doors cap. of being manip. fr. both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	No openings.
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:—



No. wooddeck sheathing. except on. Fore. above. crew's. quarter.

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

Displacement on shell at 75% moulded depth: 8650 Tons. Tons per inch immersion: 37.07.
 " " " 85% " " " 9880 " " " 37.51.
 " " " 95% " " " 11130 " " " 37.95.

Timber Deck. Cargo Freeboards are requested.

Poop is fitted.

Longitudinal Subdivision of D.B. tanks as shown on sketch above.

Bulwarks:— Please see "Guard Rails" page 3. of Report.

Fittings for Uprights:— None fitted. Latches fitted to Convention requirements.

Eyepieces for lashings:— None fitted. Holes drilled in upper part of bulwark stanchions to take lashings.

Steering gear (hand) on poop. — Efficient condition.

This vessel has been surveyed afloat.

Builder's name and yard number: Lindholmens V. A., Gothenburg. Yard No.

Names of sister ships:

Owners: Rederi A/B. Transatlantic (G. Carlsson, Mgr.), Gothenburg.

Fee Kr. 350.-

Received by me:



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