

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.N<sup>o</sup> 31032Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~

having

Poop, Bridge, &amp; Forecastle.

(Type of Superstructures.)

Port of Survey

Sunderland.

Date of Survey

8<sup>th</sup> September 1932.

Name of Surveyor

A. J. Paton.

Ship's Name

"ROSLAGEN"

Nationality and Port of Registry

Swedish  
Stockholm.

Official Number

7200

Gross Tonnage

1841

Date of Build

1925.  
5 Mo.

Moulded Dimensions: Length 264.7' Breadth 42.5' Depth 20.5'

Moulded displacement at moulded draught = 85 per cent. of moulded depth 4346 tons

Coefficient of fineness for use with Tables

.776

Particulars of Classification

+100 A.I.  
S.S. for. No. 1-30

## Depth for Freeboard (D)

Moulded depth ... .. 20.5'

Stringer plate ~~62~~... 53... .. .04

Sheathing on exposed deck

$$T \left( \frac{L-S}{L} \right) =$$

Depth for Freeboard (D) = 20.54'

## Depth correction

(a) Where D is greater than Table depth

$$(D - \text{Table depth}) R =$$
$$(20.54 - 17.65) 2.036 = + 5.88 \checkmark$$

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

$$(\text{Table depth} - D) R =$$

If restricted by superstructures  $\checkmark$ 

## Round of Beam correction

Moulded Breadth (B) 42.50'

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} = 10.20 \checkmark$$

$$\text{Ship's Round of Beam} 10\frac{1}{2}'' = 10.50'' \checkmark$$

Difference .30''

Restricted to

$$\text{Correction} = \frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.30}{4} \times .5285 = -.04'' \checkmark$$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	23.67'	23.67	7.0'	$\checkmark$	23.67
" overhang ... ..					
R.Q.D. enclosed ... ..					
" overhang ... ..					
Bridge enclosed... ..	67.0'	67.00	7.0'	$\checkmark$	67.00
" overhang aft ... ..	6.0'	4.50			4.50
" overhang forward ... ..	2.0'	1.00			1.00
F'dle enclosed <del>open</del> ... ..	30.75	28.61	7.0'	$\checkmark$	28.61
" overhang ... ..					
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" " forward ... ..					
Total ... ..	129.42	124.78			124.78

Standard Height of Superstructure 6.15  $\checkmark$ " " R.Q.D.  $\checkmark$ Deduction for complete superstructure 32.47  $\checkmark$ Percentage covered  $\frac{S}{L} = 48.90\% \checkmark$ " "  $\frac{S_1}{L} = 47.15\% \checkmark$ " "  $\frac{E}{L} = 47.15\% \checkmark$ 

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 33.58%  $\checkmark$ 

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 32.47 x .3358 = - 10.90  $\checkmark$ 

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..	36.47	1	36.47	33.5	33.50	1	33.50
$\frac{1}{2}$ L from A.P. ... ..	16.23	4	64.92	15.2	15.20	4	60.80
$\frac{3}{8}$ L " ... ..	4.01	2	8.02	3.79	3.79	2	7.58
Amidships ... ..		4		0		4	
$\frac{3}{8}$ L from F.P. ... ..	8.02	2	16.04	8.42	-8.42	2	16.84
$\frac{1}{2}$ L " ... ..	32.46	4	129.84	33.77	-33.77	4	135.08
F.P. ... ..	72.94	1	72.94	77.00	77.00	1	77.00
Total ... ..			328.23				330.80

Mean actual sheer aft = Deficient. above .75.

Mean standard sheer aft

Mean actual sheer forward = Excess.

Mean standard sheer forward

Length of enclosed superstructure forward of amidships = .094  $\checkmark$ 

L

" " aft of " = .159  $\checkmark$ 

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{2.57}{18} (.75 - .2845) = -.07''$$

If limited on account of midship superstructure.  $.07 \times \frac{194}{200} = -.07''$  If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.

## Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = Ft.  $\checkmark$ 

Summer freeboard = 2.73

Moulded draught (d) = 17.81

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 4.45 = 113  $\checkmark$ Addition for Winter North Atlantic Freeboard (if required) = 51  $\checkmark$ 

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

=

TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~

Correction for coefficient

$$\frac{.68 \times .776}{1.36} = \frac{1.456}{1.36}$$

+ -

Depth Correction ... .. 5.88  $\checkmark$ Deduction for superstructures ... .. - 10.90  $\checkmark$ Sheer correction ... .. - .07  $\checkmark$ Round of Beam correction ... .. - .04  $\checkmark$ 

Correction for Thickness of Deck amidships ... .. -

Other corrections, scantlings, etc. ... .. -

5.88 11.01 - 5.13  $\checkmark$ Summer Freeboard = 32.76  $\checkmark$ SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:— 832  $\checkmark$ 

Tropical Fresh Water Line above Centre of Disc ... ..

Fresh Water Line " " ... ..

Tropical Line " " ... ..

Winter Line below " " ... ..

Winter North Atlantic Line " " ... ..

Tropical Fresh Water Freeboard ... ..

Fresh Water " " ... ..

Tropical " " ... ..

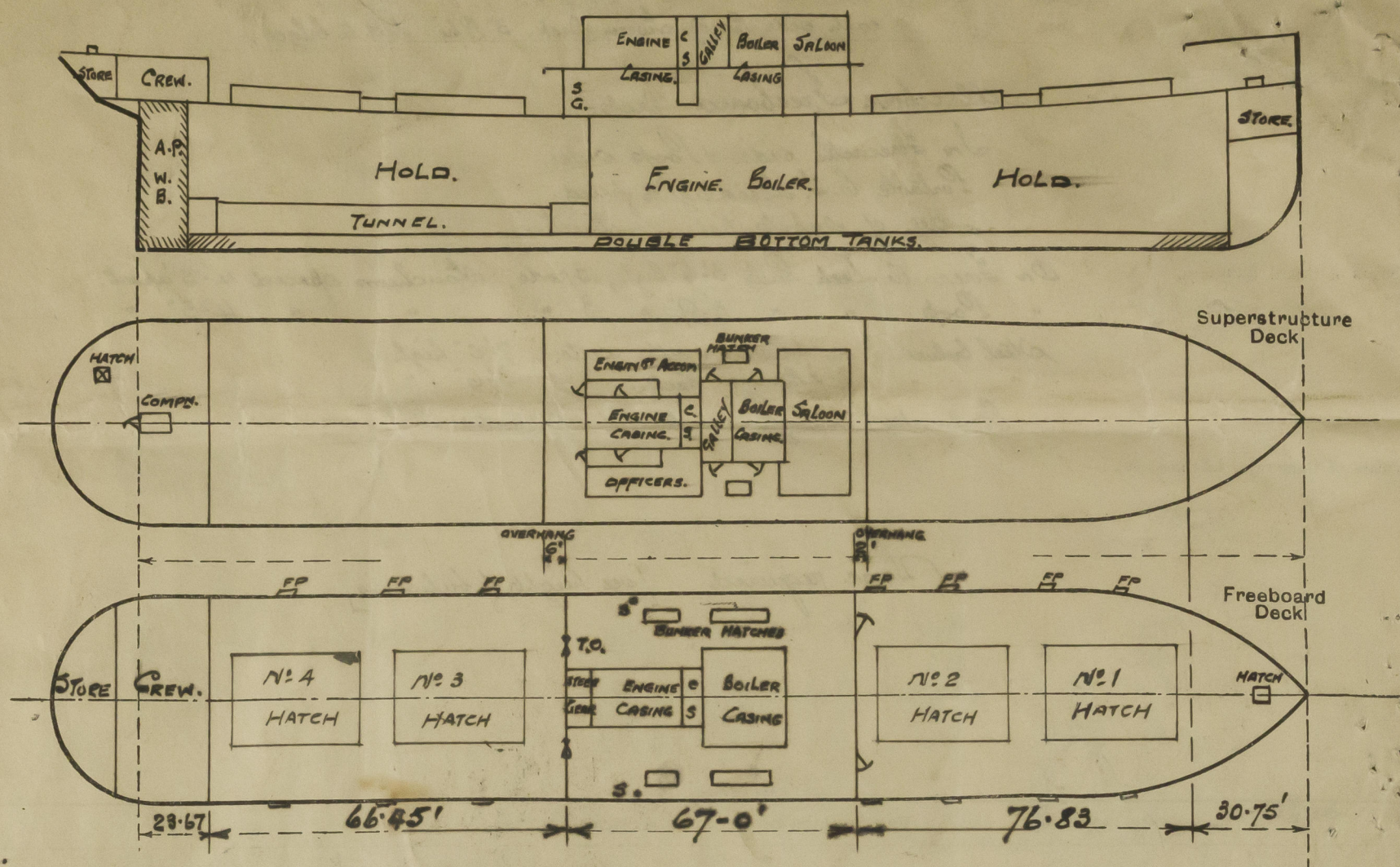
Winter " " 945  $\checkmark$ Winter North Atlantic " " 996  $\checkmark$







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 shown on the following sketches:—



Est Displacement @ 75% MLD. DEPTH. 3835 Tons. T.P.I. 21.95.  
 " " @ 85% " " 4380 " " 22.13.  
 " " @ 95% " " 4930 " " 22.30.

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

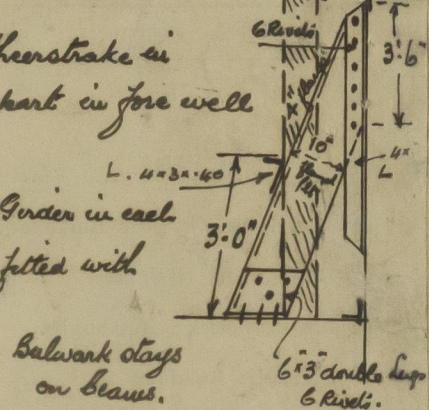
The vessel has been examined in Dry Dock.  
 She is also undergoing damage repairs which will be completed at this time.

A Timber Deck Cargo freeboard is also required.

Settings for UPRIGHTS are as follows:— A continuous 4" x 3" x 40' angle bar is fitted to the face of the bulwark stays, in both forward & after wells, 3'-0" above deck. [see sketch].

Eyeplates for lashings rivetted to sheerstrake in both wells. spaced 6'-6" to 8'-0" apart in fore well & 7' to 8' apart in aft well.

The lightning holes 2 1/2" dia. in Centre Girders in each frame space for 1/2 L amidships, are being fitted with wood plugs.



Builder's name and yard number *Akt. Linderholmen Motala. Gothenburg.*

Names of sister ships

Owners *Rederiaktiebolaget Roslagen [P.G. Thulien Manager]*

*No. 170 @ 19.50, 604*

Fee £ *8* : *14* : Received by me