

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. **14195**
(For London Office only.)

25 JUL 1932

19 JUN 1933

 Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~
 having *Prop, bridge and fore-castle decks.*
Port of Survey *Trelleborg.*Date of Survey *21st July, 1932.*Name of Surveyor *Asundin*
 Particulars of Classification ∇ *100 A1*
S.S. for 2nd No. 3-5, 25
S.S. Amm. No. 30

 (Type of Superstructures.)
 Ship's Name *S/S "BALTIA"* Nationality and Port of Registry *Sweden to Trelleborg.* Official Number *3578* Gross Tonnage *2280* Date of Build *1900-1901*
 Moulded Dimensions: Length *302'6"* Breadth *42'8"* Depth *22'3"*
 Moulded displacement at moulded draught = 85 per cent. of moulded depth *5554* tons
 Coefficient of fineness for use with Tables *792*

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	<i>22'3"</i>	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	<i>42'8"</i>
Stringer plate	<i>0'4"</i>	$(22'34 - 20'17) 2'328 = +5'05$		Standard Round of Beam = $\frac{B \times 12}{50} =$	<i>10'28"</i>
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam =	<i>10'12"</i>
$T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures		Difference	<i>22"</i>
Depth for Freeboard (D) =	<i>22'34"</i>			Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$	$\frac{22}{4} \left(1 - \frac{4373}{4} \right) = -03$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>21'0"</i>	<i>21'00"</i>	<i>7'3" + 3" wide</i>		<i>21'00"</i>
" overhang					
R.Q.D. enclosed					
" overhang	<i>79'33"</i>	<i>79'33"</i>	<i>7'3"</i>		<i>79'33"</i>
Bridge enclosed <i>See sketch</i>	<i>78'6"</i>	<i>79'33"</i>			<i>79'33"</i>
" overhang aft	<i>75"</i>	<i>56"</i>			<i>56"</i>
" overhang forward					
Fore enclosed <i>See sketch</i>	<i>30'26"</i>	<i>30'26"</i>			<i>30'26"</i>
" overhang <i>Centre</i>	<i>2'34"</i>	<i>1'17"</i>	<i>7'0" + 3" wide</i>		<i>1'17"</i>
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	<i>133'68"</i>	<i>132'32"</i>			<i>132'32"</i>

 Standard Height of Superstructure *6'526"*
 " " R.Q.D. *35'51"*
 Deduction for complete superstructure *35'51"*
 Percentage covered $\frac{S}{L} =$ *44'18"*
 " $\frac{S_1}{L} =$ *43'73"*
 " $\frac{E}{L} =$ *43'73"*
 Percentage from Table, Line A.
 (corrected for absence of fore-castle (if required))
 Percentage from Table, Line B. *30'67"*
 (corrected for absence of fore-castle (if required))
 Interpolation for bridge less than 2L (if required)
 Deduction = *35'51" + 30'67" = -10'89"*

SHEER CORRECTION.

Station	Standard Ordinate	S. M	Product	Actual Ordinate	Effective Ordinate	S. M	Product
A.P. ...	<i>40'26"</i>	1	<i>40'26"</i>	<i>36'0"</i>	<i>36'0"</i>	1	<i>36'00"</i>
$\frac{1}{4}$ L from A.P. ...	<i>17'92"</i>	4	<i>71'68"</i>	<i>16'2"</i>	<i>16'20"</i>	4	<i>64'80"</i>
$\frac{3}{4}$ L " ...	<i>4'43"</i>	2	<i>8'86"</i>	<i>4'0"</i>	<i>4'04"</i>	2	<i>8'08"</i>
Amidships ...		4		0		4	
$\frac{3}{4}$ L from F.P. ...	<i>8'86"</i>	2	<i>17'72"</i>	<i>9'0"</i>	<i>8'96"</i>	2	<i>17'92"</i>
$\frac{1}{4}$ L " ...	<i>35'84"</i>	4	<i>143'36"</i>	<i>36'0"</i>	<i>35'94"</i>	4	<i>143'76"</i>
F.P. ...	<i>80'52"</i>	1	<i>80'52"</i>	<i>84'0"</i>	<i>84'00"</i>	1	<i>84'00"</i>
Total			<i>362'40"</i>				<i>354'56"</i>

 Mean actual sheer aft = *Deficient*
 Mean standard sheer aft =

 Mean actual sheer forward = *Excess*
 Mean standard sheer forward =
Length of enclosed superstructure forward of amidships = *131*" " aft of " = *127*
 aft $\frac{S}{L} =$ *40'26"* *36'00"* *1* *40'26"* *36'00"*
17'92" *16'20"* *3* *53'76"* *48'60"*
4'43" *4'04"* *3* *13'29"* *12'12"*
107'31" *96'72"* = *90'14%*

 Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{7'84"}{18} \left(\frac{75-2209}{2} \right) = +23$

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.

Addition for Winter and Winter North Atlantic Freeboard.

 Depth to Freeboard Deck = *22'34"*
 Summer freeboard = *3'50"*
 Moulded draught (d) = *18'84"*

 Deduction for Tropical freeboard and addition for
 Winter freeboard = $\frac{d}{4}$ inches = *4'71" = 120%*

 Addition for Winter North Atlantic Freeboard (if required) = *51 + 120 = 171*

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ *5569*

Tons per inch immersion at summer load water line

T = *269*Deduction = $\frac{\Delta}{40T}$ inches= *5'176"*= *131%*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{792+68}{1'36} = \frac{1'472}{1'36}$

	+	-
Depth Correction	<i>5'05"</i>	
Deduction for superstructures		<i>10'89"</i>
Sheer correction	<i>23"</i>	
Round of Beam correction		<i>03"</i>
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	<i>5'28"</i>	<i>10'92"</i>
Summer Freeboard	<i>42'04"</i>	

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

 Tropical Fresh Water Line above Centre of Disc ... *25'*
 Fresh Water Line " " ... *131*
 Tropical Line " " ... *120*
 Winter Line below *4'3/4"* ... *120*
 Winter North Atlantic Line " " ... *171*

 Tropical Fresh Water Freeboard ... *1068*
 Fresh Water " " ... *817*
 Tropical " " ... *937*
 Winter " " ... *948*
 Winter North Atlantic " " ... *1188*
1239

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...
COAMINGS	Height above Deck	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	Sides	...	...	...	...	...	...	...	...
	Ends	...	...	...	...	...	...	...	...
	Stiffeners	...	...	...	...	...	...	...	...
HATCH BEAMS	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
	Scantling and Sketch	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
	
FORE AND AFTERS	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
	Unsupported Lengths	...	...	...	...	...	...	...	...
	Scantling* and Sketch	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
HATCH COVERS	Material	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	How fitted	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
	
Spacing of Cleats	...	...	...	...	...	...	...	...	...
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?									

Particulars of fiddle, funnel and ventilator coamings:— Fiddle opening fitted with permanently attached steel cover. Funnel plating .24" B-room vents. - D = 24" Hgt. of coaming 9" Thickness .20" " " " " " " " 30" " .24" E - " " " " " " " 20" " .20"

Particulars of Flush Bunker Scuttles:— None.

Particulars of Companionways:— Poop - Steel plating .28"-30" Opening 52" x 39". Hgt. of sill 16". Wood doors capable of being manipulated from both sides. Forecastle - Steel plating .30. Opening 44" x 40" Hgt. of sill 16". Steel doors capable of being manipulated from both sides.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:— Tole - D = 9 1/2" H = 12" T = 20" 1-gooseneck 14" high. Wells - D = 15" H = 36" T = 32" 2 - D = 6" H = 30" T = 24" (Tunnel) Bridge deck - D = 9 1/2" H = 30" T = 26". Poop " - D = 6" H = 14" T = 15" 1-gooseneck 4" high. Ordinary 2 gooseneck vent. coamings with means for closing.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:— 6 gooseneck air pipes 11"-30" high, with means for closing same. All other air pipes flush with deck and fitted with brass screen covers.

Particulars of Gangway Cargo and Coaling Ports:— None.

Rpt. 9a.

Port of

Malmö

Freeboard

Continuation of Report No. 1142 dated 22nd July, 1932 on the5/8" Battia" of Tralleborg.Bulwarks:- Plating 24 increased at breaks.

Rail 6 1/2" x 3" x 40 bulb angle.

Stanchion 8" x 40" bulb plate fitted at every 3rd beam, connected to deck by double lugs and to bulwark plating and rail by double forged angle knees.~~Sockets for uprights fitted and spaced as per Convention~~
~~No sockets are fitted for uprights.~~~~No eyeplates are fitted to the sheer strake but there are strong eyes fitted to the stringer plate and holes will also be made in the bulwark stays for shackles.~~~~Efficient means for securing lashings provided~~
The steering rods-chains are carried on top of bulwark rail (Connection to steering engine drum carried along the bridge after bulkhead).

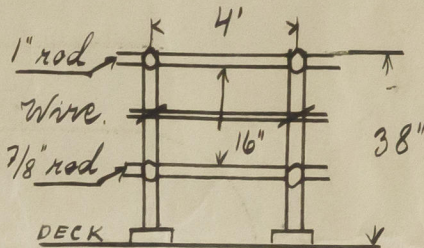
A hand steering gear is fitted on poop deck.

Asunden

Particulars of Scuppers and Sanitary Discharge Pipes:— *No scuppers below freeboard deck.
Sanitary discharge pipes led overboard above freeboard deck,
and are fitted with storm valves.*

Particulars of Side Scuttles:— *Side scuttles are fitted with permanently attached inside deadlights.*

Particulars of Guard Rails:— *Open rail round poop and forecabin also at
after end of bridge. Front and sides of bridge with
bulwarks 36" in height.*



Particulars of Gangways, Lifelines, etc.:— *Gangways 28"x3" wood fitted between hatchways in the wells.
~~No life lines could be obtained (Hessel laid up).~~*

Lifelines fitted in wells forward and aft

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	92'	50"	30" x 15"	3	18.75 ϕ	18.4 ϕ
Forward Well	76'	50"-52"	30" x 15"	3	18.75 "	15.2 "

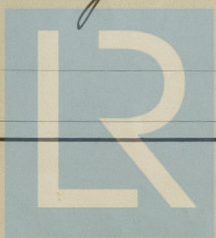
State position of each freeing port (F. and A. position and height above deck edge) } After Well:— *Bridge after bhd. 9.5' 23.5' 28.5'*
Forward Well:— *" fwd. " 9' 18' 22'*
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— *Shutters fitted. No bars.
Height above deck edge 11".*
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	21" x 42"	32"	5" x 3" x 40L	28"-30"	<i>Lugs top Bolt bottom</i>	<i>None</i>	-	7'-3"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead		28"	3" x 3" x 36L	27"-30"	-	6'-0" x 3'-4"	16"	7'-3"
Bridge, Forward Bulkhead	21" x 42"	34"	8" x 3" x 48L	28"-29"	<i>Bolt T. & B.</i>	1'-10" x 1'-10"	50"	7'-3"
Forecastle Bulkhead		26"	3" x 3" x 36L	30"-32"	-	4'-6" x 1'-8"	20"	7'-0"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks	48" x 42"		6" x 3" x 40L 3" x 3" x 40L	28"-50"	-	<i>Ash door 32" x 24"</i>	18"	4'-0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships ...								

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

Poop Bulkhead	
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead	<i>Portable plates with bolts passing through plate & bulkhead, spaced 8" apart.</i>
Bridge, Forward Bulkhead	<i>Hinged steel doors with screw bolts spaced 6"-7" apart.</i>
Forecastle Bulkhead	<i>Hinged steel door capable of being manipulated from both sides.</i>
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	
Exposed Machinery Casings on Superstructure Decks	<i>Ash doors - Hinged steel doors secured from bridge deck.</i>
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships ...	

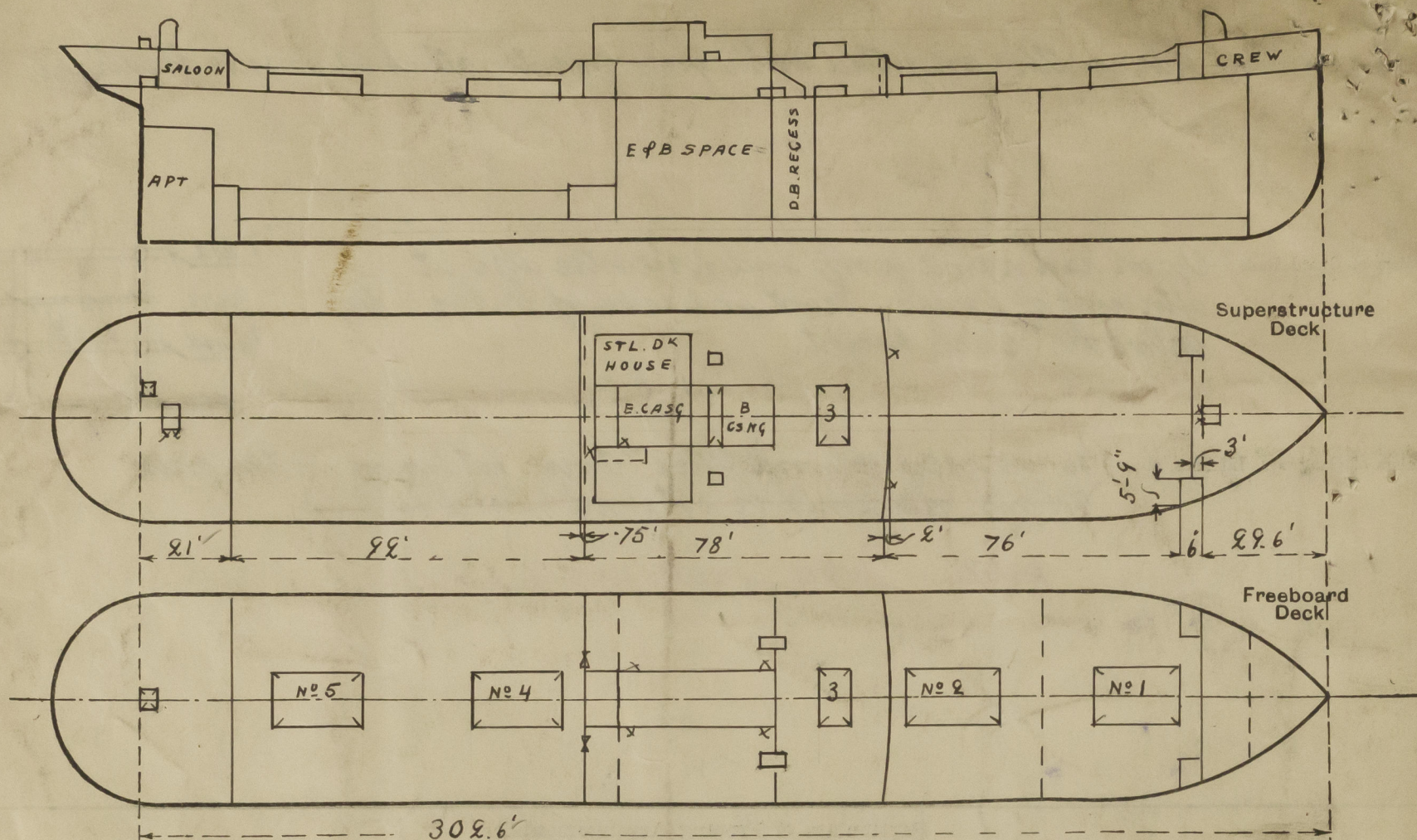


© 2020

Lloyd's Register Foundation

14195

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:—



Vessel examined generally afloat, will be drydocked before she is again placed in commission.
 The vessel's moulded displacement at 85% of the moulded draught and the displacement in salt water and tons per inch immersion at summer load water line could not be obtained, but a loading scale is enclosed herewith.
 A timber deck cargo freeboard is also required.

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

(Continued on sheet II)

$$\begin{aligned} 7 \text{ de} &= 32.6 \\ \frac{6}{10} &= \frac{30.26}{2.34} \end{aligned}$$

$$\begin{array}{r} 19'0'' \text{ w} \cdot 5582 \quad 526.9 \text{ T.P.1} \\ 18.84 \quad 19.00 \\ + 18.72 \quad 18.82 \\ \hline 18.96 \quad 18.82 \\ 1 \quad 12 \\ \hline 18.96 \quad 18.82 \\ 1 \quad 12 \\ \hline 18.96 \quad 18.82 \end{array}$$

Builder's name and yard number W. Gray & Co. Ltd. W. Hartlepool.

Names of sister ships ✓

Owners Rederi AB Gotnia, Trelleborg.

Fee Mr. 230.00

Trav. exp. Mr. 7.00

Received by me ✓



© 2020

Lloyd's Register Foundation