

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 15 MAY 1933
 Index. No. **24351**
 (For London Office only.)

 DISCLOSED
 MAY No. 20-1

Computation of Freeboard for Steamer, Sailing Ship, Tanker
 having Complete Awning Deck. Flush Deck.

Port of Survey BARCELONA

Date of Survey 23-4-33.

Name of Surveyor Chas. J. Thomas

Particulars of Classification F100A1.
awning deck with freeboard

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
"RICARDO R"	Spanish.	-	1542	1916-9

Moulded Dimensions: Length 230' Breadth 34.5' Depth 23'-4" to awning dk.
 Moulded displacement at moulded draught = 85 per cent. of moulded depth 3476 tons
 Coefficient of fineness for use with Tables .78

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	7.112	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	34.5
Stringer plate	.011	8.33 (7.123 - 4.674) 1.770 = + 361		Standard Round of Beam = $\frac{B \times B}{50}$	8.28
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	8.25
Depth for Freeboard (D) =	7.123	If restricted by superstructures		Difference	NIL
				Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	NIL

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						
" overhang ...						
R.Q.D. enclosed ...						
" overhang ...						
Bridge enclosed ...						
" overhang aft ...						
" overhang forward ...						
F'cle enclosed ...						
" overhang ...						
Trunk aft ...						
" forward ...						
Tonnage opening aft ...						
" forward ...						
Total ...						

Standard Height of Superstructure _____
 " " R.Q.D. _____
 Deduction for complete superstructure _____
 Percentage covered $\frac{S}{L} =$ _____
 " " $\frac{S_1}{L} =$ _____
 " " $\frac{E}{L} =$ _____
 Percentage from Table, Line A.
 (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 = NIL

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	Mean actual sheer aft =	Mean standard sheer aft =
A.P. ...	838	1	838	28	711	711	1	28	711	Deficient. (1.5536)	
$\frac{1}{8}L$ from A.P. ...	372	4	1488	7.9	165	165	4	31.6	660	Mean actual sheer forward =	Mean standard sheer forward =
$\frac{2}{8}L$ " ...	93	2	186	1.9	10	10	2	3.8	20	Excess. 1	
Amidships ...	0	4	0	0			4	0	376	Length of enclosed superstructure forward of amidships =	
$\frac{3}{8}L$ from F.P. ...	726	2	1452	7.8	196	188	2	15.6	3024	" " aft of " =	
$\frac{4}{8}L$ " ...	297	4	1188	31.6	798	756	4	126.4	1714		
F.P. ...	66	1	66	73	1854	1714	1	73	1714		
Total ...	7542		7540					6505			

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{1035}{18} (.75 - 0) = +43$

If limited on account of midship superstructure. _____

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. _____

Mean actual sheer aft = Deficient. (1.5536)
 Mean standard sheer aft = _____
 Mean actual sheer forward = Excess. 1
 Mean standard sheer forward = _____
 Length of enclosed superstructure forward of amidships = _____
 " " aft of " = _____

Sheer Aff. Standard. Actual.
 838 1 838 - 711 1 711
 372 3 1116 - 165 3 495
 93 5 279 - 10 3 30
 2233 1236

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Corrected for Flush Deck (if required)
Depth to Freeboard Deck = <u>7.123</u>	$\Delta =$	Correction for coefficient
Summer freeboard = <u>1.587</u>	Tons per inch immersion at summer load water line	
Moulded draught (d) = <u>5.536</u>	T =	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>1.15</u>	Deduction = $\frac{\Delta}{40T}$ inches = <u>1.15</u>	
Addition for Winter North Atlantic Freeboard (if required) = <u>51</u>		

Summer Freeboard = 1587

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: 1587 - 62.48

Tropical Fresh Water Line above Centre of Disc	230.7	= 9.06	Tropical Fresh Water Freeboard
Fresh Water Line	115.7	= 4.53	Fresh Water
Tropical Line	115.7	= 4.53	Tropical
Winter Line below	115.7	= 4.53	Winter
Winter North Atlantic Line	166.7	= 6.53	Winter North Atlantic

Particulars of fiddley, funnel and ventilator coamings:—

liddley top grating with steel cover attached by ~~hook~~ bolts

Particulars of Flush Bunker Scuttles:—

None fitted.

Particulars of Companionways :—

Companion ways :-			
<u>ford</u> - to Crew's Space.		<u>aft</u> to Crew's space	
Length	3'-9½"	Length	3'-6"
Beam	4'-3"	Beam	4'-3"
Stk.	5'-5"	Stk.	5'-7½"
Stk.	12"	Stk.	19"

Both Companionways of Steel
shining but filled with
leak down of light construction
1 1/2 frames & panelled.

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

no ventilators with crannings. more than 36' in height.
all vents with plugs + canvas covers.

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

Air & Sounding flush with deck. Filled with Sealed plugs
(a number of plugs are ~~immediately~~ have been recommended
to be replaced).

Particulars of Gangway Cargo and Coaling Ports :—

name fitted.

Particulars of Scuppers and Sanitary Discharge Pipes —

Sanitary Discharge for S.S. 24 1/2" below load dh - fitted with nonreturn valve
 Amidships S.S. 26" " " " "
 Amidships P.S. 27 1/2" " " " " "

Particulars of Side Scuttles:

Food:- 4P r 4S. Sil 22" below floor dh. - litter into dead pig slip
 2P :- 2P r 2S Sil 14" below floor dh. - " " " "

Particulars of Guard Rails :—

Arrangement as per sketch.
skin chips spaced 4'-6" to 4'-8"
Ht. 38"
3 Rails 1" dia.
Back stumps 3 each side on foot deck.

Particulars of Gangways, Lifelines, etc. :—

~~No provision made.~~
Sufficient provision made for the rigging of life-lines
available for use in all parts of the ship.

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 <i>Anischips</i>	40' - 0"	3' - 0"	20" x 12"	one	1.67 sq. ft.	
Forward Well						

State position of each freeing port } After Well — *Anischips 9" from dk. bulk* 8" above dk.
(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 :— *one bar.*

* Additional area where sheer is less than standard.

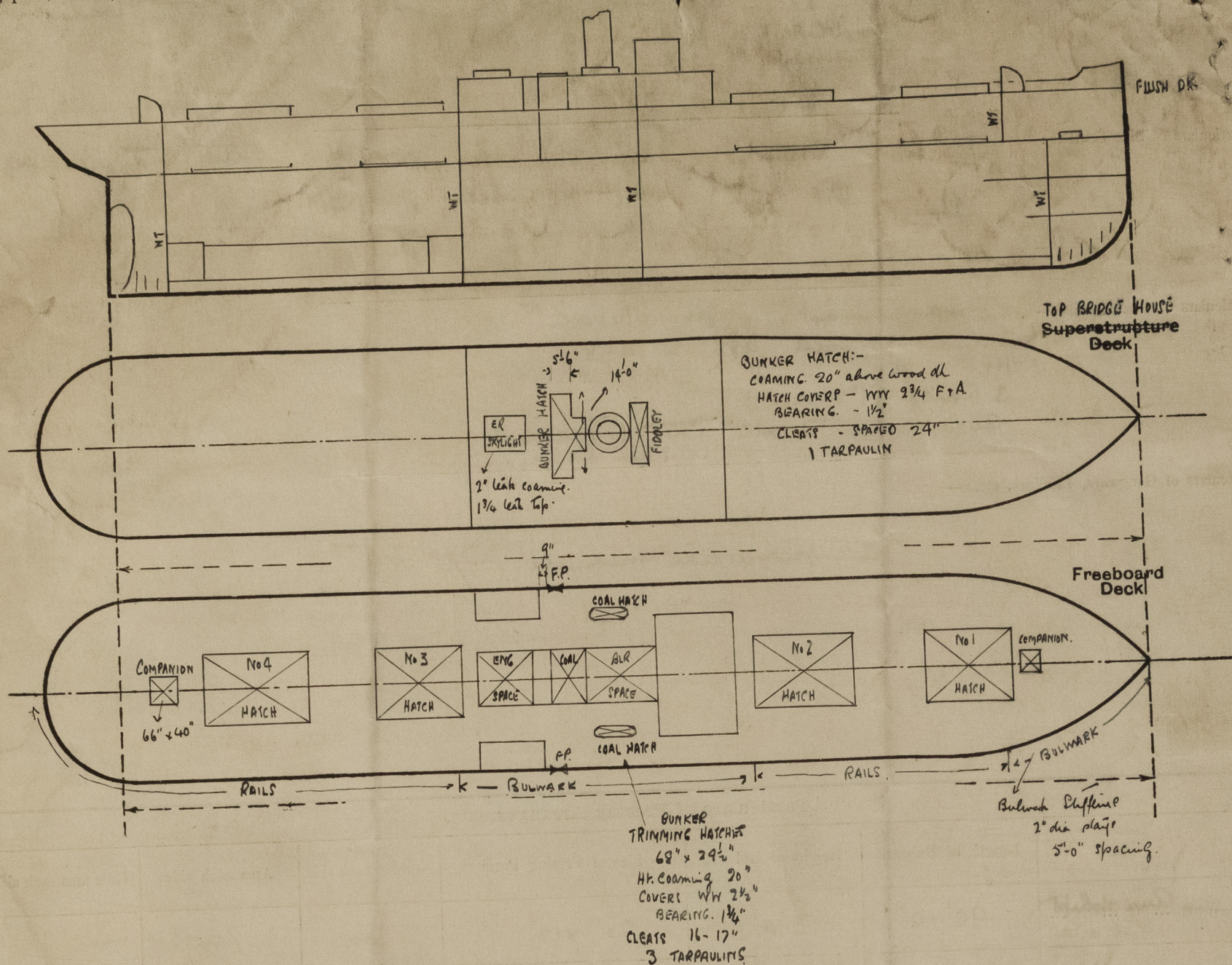
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead								
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead	18" x 10 1/4"	7 1/2"	Not obtainable	3 1/2" to 3'-6"	None.	✓	-	2100 1/2"
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	46" x 10 1/4"	7 1/2"	< 80 x 80 x 10 1/4"	80 cms	To bridge bulk	24" x 56"	18"	2100 1/2"
Exposed Machinery Casings on Super-structure Decks								
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, ^{HOSE} After Bulkhead	...	...	1 1/2" teak door? operated from both sides.	
Bridge, ^{HOSE} Forward Bulkhead	...	...	None.	
Forecastle Bulkhead	...	...
Exposed Machinery Casings on Flush board or Raised Quarter Decks	...	...	7/8" steel door operated from inside only.	
Exposed Machinery Casings on Superstructure Decks	...	...	7/8" steel door operated from both sides.	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...	...
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 shown on the following sketches:—



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

Survey held with vessel afloat after examination in dry dock. As the request for survey was not received until after the vessel had left the dry dock, the sheer could only be checked very roughly with the vessel afloat.

Builder's name and yard number Artilleros del Nervion, Bilbao.

Names of sister ships

Owners Hijo de Ramon A Ramon, Barcelona.

Fee 600/- pks Received by me ✓



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