

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT SURVEY FOR FREEBOARD

STEAMER, TANKER, SAILER: *S/S "Derma" ex "Indiana"* ~~WITH~~ TIMBER DECK CARGO
WITHOUT

Nationality *Panamanian* Builders' Name and No. of Ship *BREMER Vulkan. VEGESACK.*

Port of Registry *Panama*

Official Number *5751* Owners *Bienvenida S/S Co Ltd Panama*

Gross Tonnage *1915.* *Dos OCEANOS COMPAÑIAS DE NAVEGACION S.A. PANAMA SA PANAMA*

Date of Build *1915.* Port and Date of survey *Marseilles (France) - July 1948*

Particulars of Classification *BS.* Name of Surveyor *M. Frager*

Type of Superstructures *Forecastle - Long poop deck - Bridge deck*

Trade of Ship *Ocean going*

Service Endorsement if any

SUMMER FREEBOARD recommended amidships from centre of disc to top of deck line, (.....wood.....steel)

TROPICAL FRESH WATER LINE above centre of disc	12"	Corresponding Freeboard	6'-0"
FRESH WATER LINE " " "	6"	" "	5'-0"
TROPICAL LINE " " "	6"	" "	5'-6"
WINTER LINE below " "	6"	" "	5'-6"
WINTER NORTH ATLANTIC LINE " " "	-	" "	6'-6"

SUMMER TIMBER FREEBOARD recommended amidships from top of deck line

TROPICAL FRESH WATER Timber line above L.S.		Corresponding Freeboard	
FRESH WATER " " " "		" "	
TROPICAL " " " "		" "	
WINTER " " below "		" "	
WINTER NORTH ATLANTIC " " " "		" "	

Number of years recommended for load line certificate

Date of issue -
re-survey Aug 4 1953.

The scantlings and protective arrangements being in accordance with the Load Line Rules it is submitted that the freeboards be assigned

Ass't Chief Surveyor

Passed at a meeting of the Committee of Management of the British Corporation Register of Shipping and Aircraft

on the *6th* Oct 1948



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COMPUTATION OF FREEBOARD

Length on summer load line 420'-8" Moulded Breadth 56'-2" Moulded Depth 30'-8" Depth of Keel
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth
 Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85} = 155.72$
 Displacement and tons per inch immersion in salt water at summer load line
 Moulded depth 30.667 Deduction for Fresh Water $\frac{\Delta}{401} = \frac{1}{4} = 6"$ inches
 Stringer Plate .033 Round of Beam Correction
 Sheathing on exposed deck T $\left(\frac{L-S}{L}\right)$ - Ships Round of Beam 11.81 inches
 Rise of floor (in sailers) - Standard Round of Beam $\frac{B \times 12}{50} = \frac{13.44}{50}$
 Depth for Freeboard (D) 30.700 Difference 1.63.
 Table Depth $\frac{1}{15} = 28.043$ Restricted to
 Depth Correction $3 \times 2.657 = 7.971$ Correction $\frac{\text{Difference}}{4} \times \left(1 - \frac{E}{L}\right) = .408 \times .0830 = .0338$
 If restricted by superstructures

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop	332.15	-	7'-6"	332.15	-	332.15
Raised Quarter Deck						
Bridge		F				
		A				
Forecastle	43.0		8'-6"	54.95		53.62
Trunk Aft						
Forward						
Tonnage Opening Aft						
Forward						
Totals				387.10		386.77

Standard Height of Superstructure 7'-6"
 " " R.Q.D. -
 Percentage covered S/L = 92.02%
 " " E/L = 91.70%
 " from Table line A, B, (corrected for absence of forecastle if required) 89.79%
 Percentage from Table by interpolation for Bridge less than .2L if required = -
 Deduction = $42 \times .8979 = 37.72$
 Percentage from Table for Tankers (or Timber ships) = -
 Deduction = -

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.	63.0	52.07	63.0	1	63.00
$\frac{1}{3}$ L from A.P.	17.72	23.16	17.72	4	70.88
$\frac{1}{3}$ L from A.P.	1.97	5.73	1.97	2	3.94
Amidships	-	-	-	4	-
$\frac{1}{3}$ L from F.P.	5.90	11.46	5.90	2	11.80
$\frac{1}{3}$ L " "	43.31	46.32	43.31	4	173.24
F.P.	106.3	104.44	106.30	1	106.30
				18	429.16

Mean Actual sheer aft = LESS THAN 1.
 " Standard " "

Mean Actual sheer forward = LESS THAN 1.
 " Standard " "

Length of enclosed superstructure forward of amidships =
 Length of Ship

Length of enclosed superstructure aft of amidships =
 Length of Ship

Sheer Correction = Difference $\times \left(75 - \frac{S}{2L}\right) = 2.20 \times .2899 = .64$
 If limited on account of midship superstructure = -
 " to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. = -

Effective Mean Sheer = 23.84.
 Standard " " .05L + 5 = 26.04
 Difference 2.20.

TABULAR FREEBOARD corrected for flush deck if required = 78.01

Correction for co-efficient = $\frac{140}{136} = 80.31$ DRAUGHTS AND SEASONAL CORRECTIONS

	+	-	Sailor, Tanker, Steamer	Timber
Depth correction	7.97			
Deduction for superstructures		37.72		
Sheer correction	.64			
Round of Beam correction	.03			
Correction for thickness of deck amidships				
Other corrections, scantlings, etc.	20.77			
	29.41	37.72 - 8.31		
Summer Freeboard in inches	6'-0"	= 72.00		
Additional allowance for superstructures on Timber carrying ships				
Summer Timber Freeboard in inches				

Depth to Freeboard Deck in feet 30.700
 Summer Freeboard in feet 6.000
 Moulded Draught (d) 24.700 (d1)
 Addition for Keel
 Extreme draught
 Deduction for Tropical and addition for Winter freeboard $d/4 = 6"$ ins.
 Addition for Winter North Atlantic (if required) = - ins.
 Deduction for Tropical Timber Freeboard $d/4$ ins.
 Addition for Winter " " $d/3$ ins.
 " " N.A. Timber Freeboard (if required) = ins.

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD

CONDITIONS OF ASSIGNMENT

SHIP'S NAME *Derna ex Indiana* OFFICIAL NUMBER
 Nationality and Port of Registry *Panamanian Panama*

PARTICULARS OF SUPERSTRUCTURES, TRUNKS, CASINGS, DECKHOUSES

Coaming	Plating	Stiffeners	Spacing	End Attachments	No. and size of Openings	Height of Sills	Height of Casings
Long Poop Bulkhead	steel 8 mm			on extension of long fore shearstrake forming bracket	No openings		
R.Q.D. "							
Bridge Aft Bulkhead	steel forming aft end of machinery casing fitted with steel doors						
" Forward "	steel 8 mm			as long fore bulkhead	No openings		
Forecastle Bulkhead	steel 8 mm			as long fore bulkhead			
Trunk, Aft					two alleyways leading to rear quarters		
" Forward							
Exposed Machinery Casings on Freeboard or R.Q. Decks							
Exposed Machinery Casings on superstructure decks							
Machinery Casings within Superstructures not fitted with Cl. 1 closing appliances							
Deckhouses on flush deck ships							

PARTICULARS OF CLOSING APPLIANCES (state if capable of being manipulated from both sides)

Long Poop Bulkhead	No openings (except portholes)
R.Q.D. "	
Bridge Aft Bulkhead	3 wood doors (coaming 280 mm) ; 2 steel doors (coaming 435 mm)
" Forward "	No openings (except portholes)
Forecastle Bulkhead	
Exposed Machinery Casings on Freeboard or R.Q. decks	
Exposed Machinery Casings on superstructure decks	
Machinery Casings within superstructures not fitted with Cl. 1 Closing Appliances	
Deck houses on Flush Deck ships	

PARTICULARS OF FREEING ARRANGEMENTS

	Length of Bulwark	Height of Bulwark	No. and size of Freeing Ports each side	Area each side	Rule Area
After Well					
Forward Well					

No freeing ports (handrails)

State fore and aft position and height above deck to bottom of port, for each port

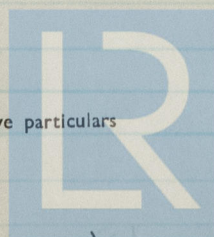
After Well

Forward Well

State whether freeing ports are fitted with shutters, bars or rails, and give particulars

Give particulars of freeing port area, etc., on superstructure decks

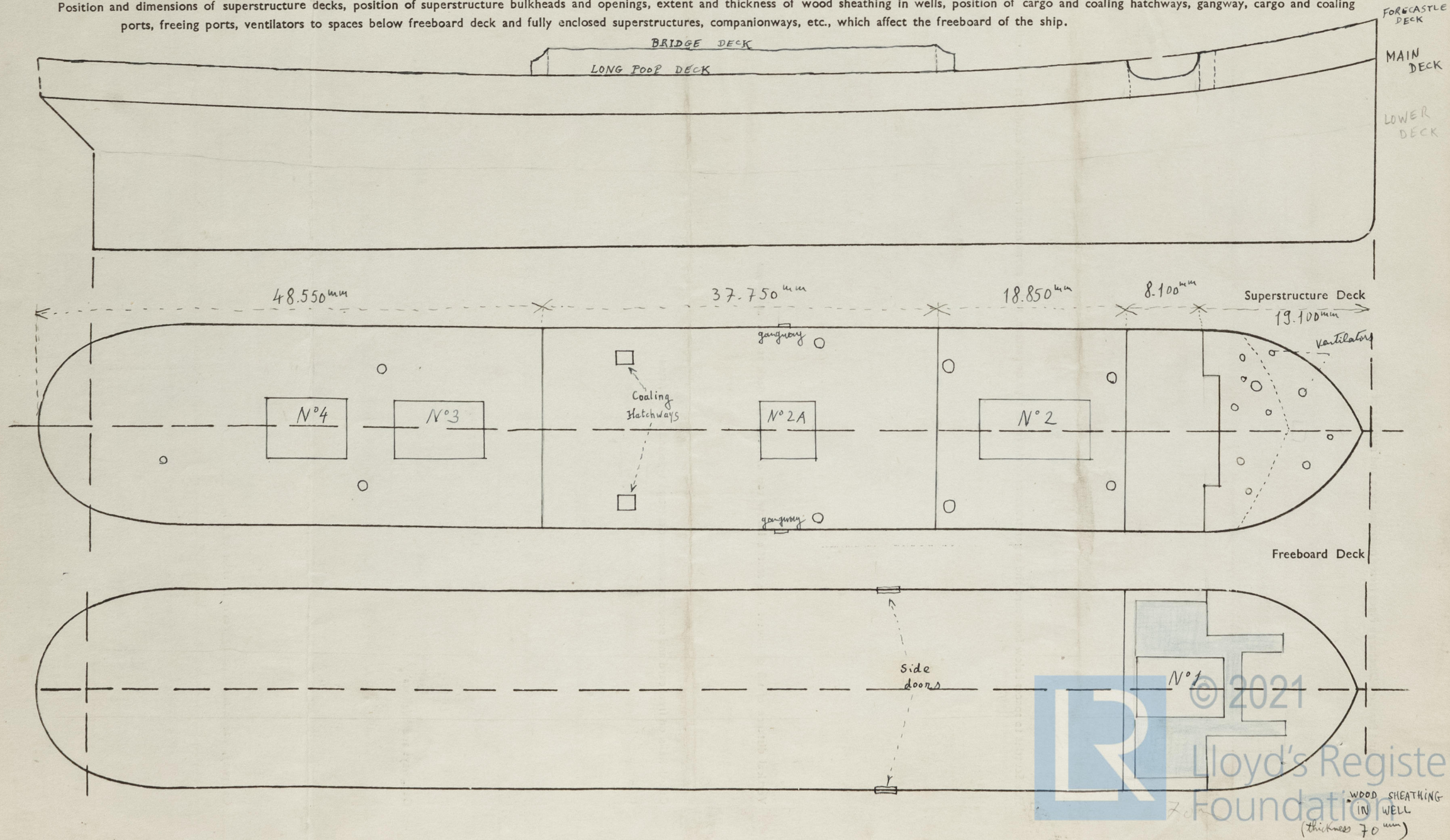
No freeing ports on superstructure decks (handrails)



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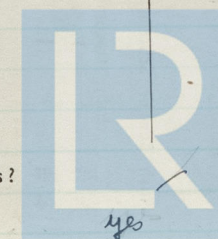
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Position and dimensions of superstructure decks, position of superstructure bulkheads and openings, extent and thickness of wood sheathing in wells, position of cargo and coaling hatchways, gangway, cargo and coaling ports, freeing ports, ventilators to spaces below freeboard deck and fully enclosed superstructures, companionways, etc., which affect the freeboard of the ship.



PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Number and description of Hatchway from forward		N°1 (Hold n°1)	N°2 (Hold n°2)	N°2 A (crossbunkers)	N°3 (Hold n°3)	N°4 (Hold n°4)	Forecastle Store room Hatchway	Coaling Hatchways (1st port 1st hold) on bridge deck	Aft poop Store room Hatchway
Dimensions of Hatchway		8750 x 5320 mm	10750 x 5320 mm (above steel)	4700 x 5320 mm	8100 x 5320 mm (above steel)	7400 x 5320 mm (above steel)	1180 x 820 mm	1000 x 635 mm	760 x 760 mm
COAMINGS	Height above { steel { deck { wood {	840 mm	900 mm	840 mm	900 mm	900 mm	310 mm	780 mm	430 mm
	Thickness { sides { ends	11 mm 11 mm	11 mm 11 mm	11 mm 11 mm	11 mm 11 mm	11 mm 11 mm	18 mm 18 mm } (doubled)	10 mm	8 mm
	Stiffeners (sides only)	200 mm	as N°1	150 x 85 mm	as N°A2	as N°A2	No	Moulded 1/2 round	
	Brackets or Stays	No	No	No	5 small stays each side	No	No	No	
HATCH BEAMS	Number	3	4	1	3	3			
	Spacing	2250 mm	2050 mm	2450 mm	2050 mm	1 1380 mm 3 2050 mm			
	Scantling and Sketch			same beams for hatchways		all			
	Bearing Surface and thickness of carriers or sockets	as for n°1	as for n°1	as for n°1	as for n°1	as for n°1			
FORE AND AFTERS	Number								
	Spacing								
	Unsupported lengths								
	Scantling and Sketch								
HATCH COVERS	Bearing Surface and thickness of carriers or sockets								
	Material	wood	wood	wood	wood	wood		wood	
	Thickness	65 mm	65 mm	65 mm	65 mm	65 mm			
	How Fitted	longitudinal	longitudinal	longitudinal	longitudinal	longitudinal			
HATCH COVERS	Bearing Surface	100x470 mm at each end	as for n°1	as for n°1	as for n°1	as for n°1			
	Spacing of Cleats	600 mm	575 mm	575 mm	550 mm	600 mm			
	Number of Tarpaulins	3	3	3	3	3			
	Are tarpaulins in good condition and in accordance with rule requirements?			yes					
HATCH COVERS	Are lashings provided in accordance with rule requirements?			yes					
	Are wood fore and afters steel shod at all bearing surfaces?								
HATCH COVERS	Are battens and wedges efficient and in good condition?								



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0210 5/8

Give full particulars of the following :—

Fiddle, Funnel and Vent Coamings, Engine Room skylight and other openings in Machinery Casing tops and their means of closing (state height of coamings, type of fiddle covers, and if these are permanently attached in their proper positions)

Fiddle enclosed in house up to boats deck. Fiddle top covered by steel grating and flat steel doors
Fiddle top, lower part of funnel and boiler room ventilators are enclosed in a rectangular open steel casing 1^m 30 high

Engine room skylight : ten steel covers (each fitted with four port lights) manipulated from engine room.

Flush Bunker Scuttles on freeboard and superstructure decks (state material, type of joints, etc., and if secured by hinge or permanent chain attachment)

Three port, three starboard on bridge deck, made of cast iron, diameter 530^{mm} screwed on

Companionways on freeboard and superstructure decks (state material, height of doorway sills, type of doors, and if these can be closed and secured from both sides)

One companionway for aft crew space, steel, coaming 380^{mm} (enclosed in a steel house of equal coaming); steel doors which can be closed from both sides.

Ventilators in exposed positions on freeboard, raised quarter and superstructure decks to spaces below freeboard decks and fully enclosed superstructures enclosed by Class 1 appliances (state height of steel coamings, pitch of rivets in deck connection, type of closing arrangements)

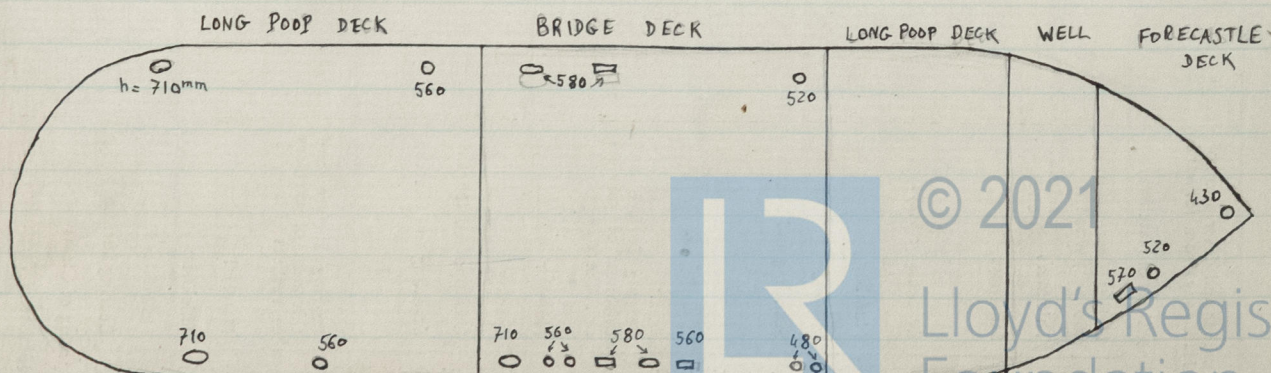
Forecastle deck : 11 ventilators, 4 forward of sea breaker (height of steel coaming 760^{mm})
7 aft of sea breaker (coaming 530^{mm} to 760^{mm}). Pitch of rivets : 100^{mm}

Long poop deck forward in way of hatch no 2 : 2 ventilators (1 port, 1 stbd) abreast fore mast (coaming 750^{mm}); 2 ventilators next bridge deck front bulkhead (used as spare derricks posts)
Pitch of rivets : 100^{mm}

Bridge deck : 1 ventilator port and 1 stbd in way of hatchway no 2A forward port; coaming 800^{mm}

Poop deck : 2 ventilators (1 port, 1 stbd) abreast aft mast (coaming : 700 and 750^{mm}), 1 ventilator poop aft (coaming 430^{mm})

Airpipes in exposed positions on freeboard, raised quarter and superstructure decks (state height to opening and if satisfactory closing arrangements are provided)



NO CLOSING ARRANGEMENTS PROVIDED

0210 6/8

Scuppers and Sanitary Discharge Pipes (state material, type and number of valves)

5 Portside, 4 starboardside, all with galvanized steel pipes fitted on shell with non return valves

Side Scuttles to spaces below freeboard and superstructure decks (state type or pattern, and if permanent or portable deadlights are supplied)

No side scuttle

Vertical distance of sill of lowest side scuttle below top of freeboard deck at side amidships

Guard Rails on freeboard and superstructure decks (state type and where fitted)

Forecastle deck : hand rail 3 rows all around

Well : on each side : bulwark (2^m, 050) ; handrail 3 rows (4^m, 100) ; bulwark (2^m, 050)

Long poop deck forward : Handrail 3 rows all around except 2^m, 050 bulwark at fore end (each side).

Bridge deck : Bulwark all around except handrail 3 rows at aft part.

Poop deck : handrail 3 rows except 2^m, 050 bulwark at fore end (each side)

Gangways and Lifelines

1 gangway in bridge deck bulwark each side amidships

Life line in well deck

Gangway, Cargo and Coaling Ports in sides of ship

Two gangway watertight steel doors on each side above main deck in way of frame n° 116

No coaling ports on ship's side.



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SUPPLEMENTARY REQUIREMENTS FOR STEAMER CARRYING TIMBER DECK CARGOES

Do Superstructure and Machinery Casings comply with rules?

Is provision made for protection of steering gear?

Is emergency steering gear provided?

Are efficient sockets and eyes for lashings provided and properly spaced?

State particulars of longitudinal subdivision in double bottom

State particulars of Bulwarks and Rails

Particulars of any Special Features in the construction of the Ship

Endorsement at first survey and at surveys for Renewal of Certificate:—

The fittings and appliances are in accordance with the particulars shown in the form and are in good condition



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0210 8/8