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THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD

H 86.
0

STEAMER, TANKER, SAILER: AMARAPOOEA S.S. WITH TIMBER DECK CARGO
 WITHOUT

Nationality British Builders' Name and No. of Ship Wm Denny & Bros Ltd N^o 1062

Port of Registry Glasgow Owners British & Burmese S.N. Co. Ltd & Burmah Steamship Co. Ltd

Official Number 144211 Port and Date of Survey Alagoas. 7/1920

Gross Tonnage 8012 Name of Surveyor William Gray

Date of Build 7/1920 Names of Sister Ships "PEGU"

Particulars of Classification B.S*

Type of Superstructures Poop, Bridge and Forecastle

Give full particulars of the following:—

Fiddley and Funnel Coamings (state height of coamings, type of fiddley covers, and if these are permanently attached in their proper positions)

Fiddley, 12" above Boat deck. Steel plate, hinged.

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

None.

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)

In Poop, Steel brace, 12" coaming, strong wood doors, both sides.

Ventilators in exposed positions on freeboard, ^{raised quarter} and superstructure decks (state height of steel coamings, pitch of rivets in deck connection, type of closing arrangements)

Poop 21" tyffe vents canvas covers, 18" coal vents wood plugs and canvas covers, 17" coal vents, wood plugs and canvas covers, 18" tyffe vents, canvas covers. Fore well 6'-9" & 2'-9" coal vents, wood plugs and one mushroom vent 6'-9". Bridge 18" tyffe vents canvas covers, Q.P. Well 36" and demile pot vents, wood plugs & canvas covers. 18" tyffe vents canvas covers. Rivets 4"

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

Fore. gossenecks, 16" canvas covers, Fore. Well, 51" + 36" canvas covers. Bridge do. 18" do do. Q.P. do. 52" do do.

^{and sanitary} Scuppers and Sanitary Discharge Pipes (state material, type and number of valves)

<u>Fore. Between decks.</u>	<u>Iron,</u>	<u>brass non-return valves</u>	<u>1.P. + 1.S.</u>	} <u>Effective temporary means of closing provided inboard.</u>
<u>Bridge do do</u>	<u>do do do</u>	<u>do do do</u>	<u>2.P. + 2.S.</u>	
<u>Poob. do do</u>	<u>do do do</u>	<u>do do do</u>	<u>1.P. + 1.S.</u>	

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

Forecastle hinged deadlights, Bridge. non flung, Poop non flung.

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

Poop and Forecastle 3'-4" 3 rails
Bridge 3'-4" 4 rails and 1 teak rail.



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COMPUTATION OF FREEBOARD.

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10-4

Length on summer load line 465' Moulded Breadth 59'-0" Moulded Depth 33'-4" Depth of Keel 10'-4"

Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth 16,625 Tons

Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times 85} = .7485$

Displacement and tons per inch immersion in salt water at summer load line 15547 + 53.5

Moulded depth 33.333 Deduction for Fresh Water $\frac{\Delta}{40T} = 7.26 = 7''$ inches

Stringer Plate 15 .042 Round of Beam Correction

Sheathing on exposed deck T $(\frac{L-S}{L})^{\frac{3}{2}} \times .411 = .103$ Ships Round of Beam 12.5 inches

Rise of floor (in sailers) ✓ Depth for Freeboard (D) 33.478

Table Depth 31 Difference 1.66

Depth Correction 3 x 2.478 Restricted to

restricted by superstructures = 7.434 Correction $\frac{\text{Difference}}{4} \times (1 - \frac{E}{L}) = .415 \times .4134 = .17$

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop	53.37	mean .72	7'-6"	54.09	✓	53.73
Raised Quarter-Deck						
Bridge	171	F 0	8'	172	✓	171.75
Forecastle	46.77	A 12" mean .98	7'-6"	47.75	✓	47.26
Trunk Aft						
Forward						
Tonnage Opening Aft						
Forward						
Totals				273.84		272.74

Standard Height of Superstructure 7.5 ✓
 " " R.Q.D.
 Percentage covered S/L = 58.9 ✓
 " " E/L = 58.66 ✓
 " from Table line A, B, (corrected for absence of forecastle if required) 44.66 ✓
 Percentage from Table by interpolation for Bridge less than .2L if required ✓
 Deduction = 42 x .4466 = 18.76 ✓
 Percentage from Table for Tankers (or Timber ships) = ✓
 Deduction =

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.	76	56.5	76	1	76
1/2 L from A.P.	32.5	25.14	32.5	4	130
1/2 L from A.P.	6.5	6.21	6.5	2	13
Amidships	0	0	0	4	0
1/2 L from F.P.	13	12.43	13	2	26
1/2 L	58.5	50.28	58.5	4	234
F.P.	130	113	130	1	130
				18	609

Mean Actual sheer aft = over 1
 " Standard " " =
 Mean Actual sheer forward = over 1
 " Standard " " =
 Length of enclosed superstructure forward of amidships = over 1
 Length of Ship
 Length of enclosed superstructure aft of amidships =
 Length of Ship
 Sheer Correction = Difference X $(.75 - \frac{S}{2L}) = 5.583 \times .4555 = 2.543$ ✓
 If limited on account of midship superstructure = ✓
 " to maximum allowance of 1 1/2 ins. per 100 ft. = ✓

Effective Mean Sheer = 33.833 ✓
 Standard " " .05L + 5 = 28.25 ✓
 Difference = 5.583 ✓

Checked 19-5-32

TABULAR FREEBOARD corrected for flush deck if required = 91.75 ✓
 Correction for co-efficient = $\times \frac{1.4285}{1.36} = 96.37$ ✓

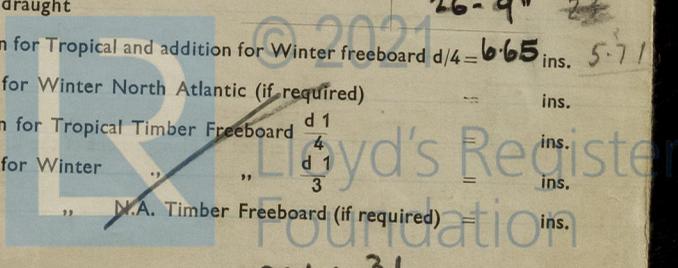
draughts AND SEASONAL CORRECTIONS

	+	-
Depth correction	7.43	
Deduction for superstructures		18.76
Sheer correction		2.54
Round of Beam correction	.17	
Correction for thickness of deck amidships		1.23
Other corrections, scantlings, etc. ✓		
	7.6	22.53
		- 14.93

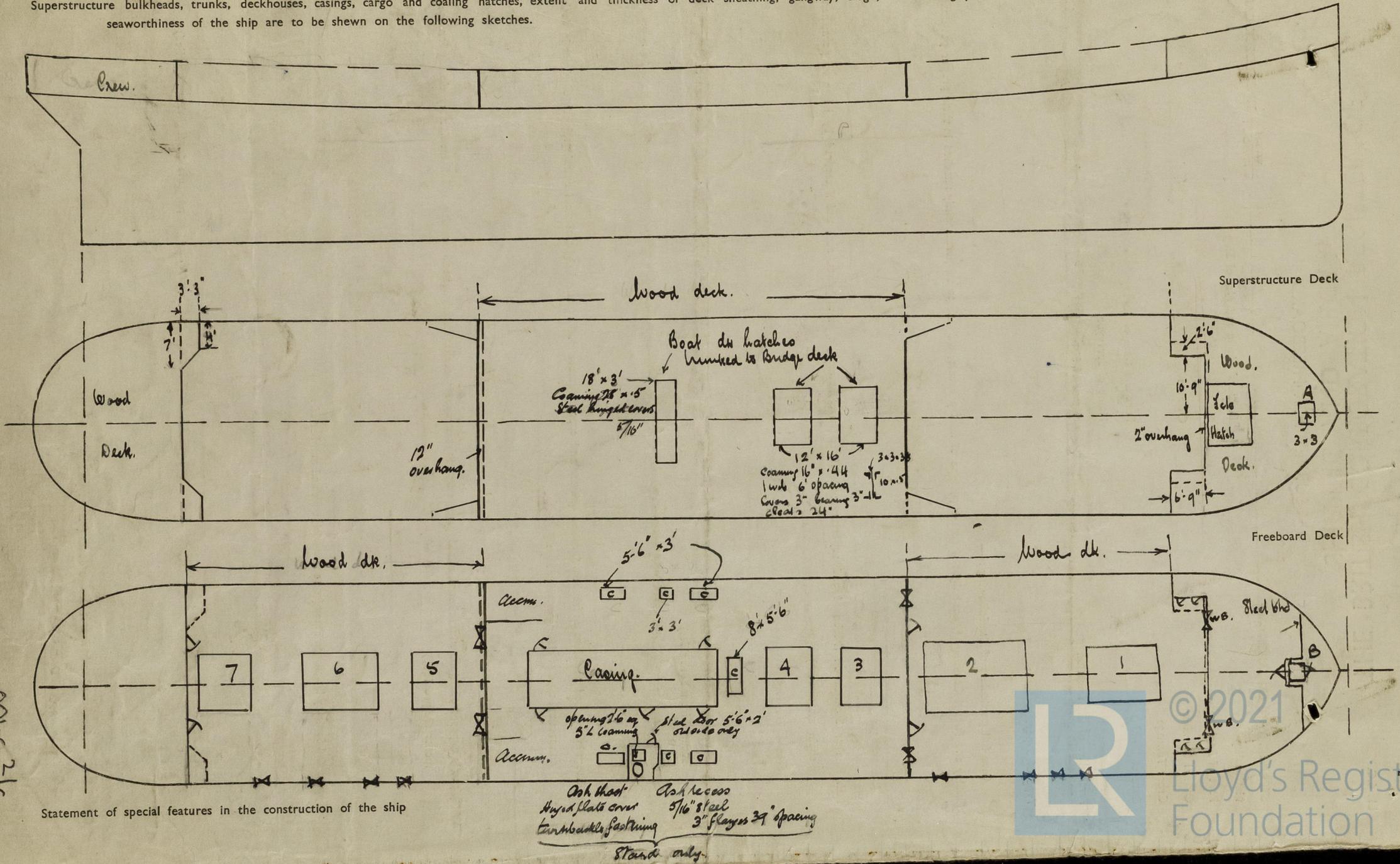
Sailor, Tanker, Steamer Timber
 Depth to Freeboard Deck in feet 33.375 ✓
 Summer Freeboard in feet 6.787
 Moulded Draught (d) 26.588 = 26'-7" at 6'-9" (44")
 Addition for Keel 2
 Extreme draught 26'-9" 23
 Deduction for Tropical and addition for Winter freeboard d/4 = 6.65 ins. 5.71
 Addition for Winter North Atlantic (if required) = ins.
 Deduction for Tropical Timber Freeboard $\frac{d}{4} = 6.65$ ins.
 Addition for Winter " " $\frac{d}{3} = 8.64$ ins.
 " " N.A. Timber Freeboard (if required) = ins.

Summer Freeboard in inches = 81.44
 Additional allowance for superstructures on Timber carrying ships = 6.65
 Summer Timber Freeboard in inches = 74.79

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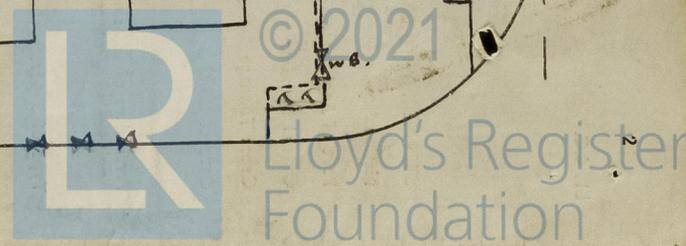


Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatches, extent and thickness of deck sheathing, gangway, cargo, and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches.



0016-2-16

Statement of special features in the construction of the ship



Assgd. 20/5/32

29.5.32
10 1/2 - 6 1/2
F.W. 5 1/2" per C.S. 100

Line	Position	Measurement	Material	Corresponding Freeboard
SUMMER FREEBOARD	recommended amidships from centre of disc to top of deck line,		wood	6'-9 1/2" 10.62-2
TROPICAL FRESH WATER LINE	above centre of disc	14"	steel	5'-7 1/2" 9.71
FRESH WATER LINE	" " "	7" 5 1/2"	" "	6'-2 1/2" 10-0-13/4
TROPICAL LINE	" " "	7" 5 1/2"	" "	6'-2 1/2" 10-1-3
WINTER LINE	below " "	6 1/2" 5 1/2"	" "	7'-4" 11.0-1 1/2
WINTER NORTH ATLANTIC LINE	" " "	-	" "	-

Line	Position	Measurement	Material	Corresponding Freeboard
SUMMER TIMBER FREEBOARD	recommended amidships from centre of disc to top of deck line			
TROPICAL FRESH WATER Timber line	above centre of disc			
FRESH WATER	" " " " "			
TROPICAL	" " " " "			
WINTER	" " below " " "			
WINTER NORTH ATLANTIC	" " " " "			

	Coaming	Plating	Stiffeners	Spacing	End Attachments	No. and size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	.44	.38	7 x 3 1/2 x .46 O.A.	30	lug attachments	2 @ 5' x 3'	15"	-
R.Q.D. "								
Bridge Aft Bulkhead	3/8	5/16	Steel partitions	27"	lugs	2 @ 4' full ht	3'	-
" Forward "	.5	.44	10 x 3 1/2 x .46 O.A.	35"	lugs	2 @ 5' x 3' X	18"	-
Forecastle Bulkhead	5/16	5/16	3 x 3 x .40	35"	None.	2 @ 4' x 3'	20"	-
Trunk, Aft						1 @ 4'-6" x 31"	15"	-
" Forward						round top		-
Exposed Machinery Casings on Freeboard or R.Q. Decks					Bridge for	2 @ 4'-6" x 3'	18"	-
Exposed Machinery Casings on superstructure decks								
Machinery Casings within Superstructures not fitted with Cl. 1. closing appliances	7/16"	1/4"	4 x 3 x 3/8	36"		2 @ 4'-6" x 2'-6"	21"	round top
						3 @ 4' x 2'-0"	21"	do
Deckhouses on flush deck ships								

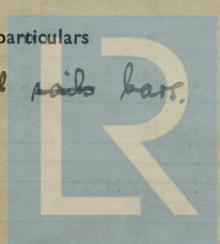
PARTICULARS OF CLOSING APPLIANCES (state if capable of being manipulated from both sides)

Poop Bulkhead	Hinged steel w.t. Doors, outside only
R.Q.D. "	
Bridge Aft Bulkhead	Weather boards full height in channels riveted to shell
" Forward "	Hinged steel w.t. Doors (5' openings) outside only & bolted plates 1/2" x 6"
Forecastle Bulkhead	Weatherboards in channels riveted to bulkhead and bolted plates
Exposed Machinery Casings on Freeboard or R.Q. decks	
Exposed Machinery Casings on superstructure decks	Protected by side houses.
Machinery Casings within superstructures not fitted with Cl. 1. Closing Appliances	Hinged steel doors, both sides
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	98'-0"	4'	4 @ 36" x 20"	20 sq	19.6
Forward Well	90'-8"	4'	do	do	18.13
State fore and aft position and height above deck to bottom of port, for each port		After Well	Shewn as sketch, 9" sills		
		Forward Well			

State whether freeing ports are fitted with shutters, bars or rails, and give particulars
 Steel hinged shutters 2 horizontal side bars.
 Give particulars of freeing port area, etc., on superstructure decks
 open rails



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PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Number and description of Hatchway from forward	1 upper B ⁺	2 upper B ⁺	3 & 4 upper deck 16x12 16x11	5 upper B ⁺	6 upper B ⁺	7	Forecastle No. Hatchways	Coal Hatches 10' 0" long 20" Bridge Hatch B	Fide. Ladders Hatch A	Hatch A on Side deck
Dimensions of Hatchway	22'-3" x 14'	27' x 19'	16x12 16x11	16' x 15'	24' x 18'	18' x 18'	8' x 8'-1"	3' x 3'	3'-2" x 3'-2"	
COAMINGS	Height above steel wood { deck	2'-7 1/2"	2'-7 1/2"	2'-7 1/2"	2'-7 1/2"	2'-7 1/2"	2'-10"	12"	2"	15"
	Thickness { sides ends	.54 .44	.5	.38	.44	.5 .44	.44 .44	.40	5/16	3/8
	Stiffeners	7x3x-40 B.A.	7x3x-40 B.A.	—	7" B.A.	7" B.A.	7" B.A.	—	—	—
	Brackets or Stays	—	—	—	—	—	—	—	—	—
HATCH BEAMS	Number	4	5	3	2	*3	3	1	—	—
	Spacing	4'-5 1/2"	4'-6 1/4"	3'	5'-11" 0	4'-11" 6"	4'-11" 6"	4'	—	—
	Scantling and Sketch	7" 3x3x-42 13x32	7" 4x3x-44 16 1/2x36	7" 3x3x-4 12x50 14x50	7" 3 1/2x3x-42 15 1/2x34	4x3x-44 as N ^o . 2 7" 1 1/2x-38	7" 3x3x-4 as N ^o . 6	7" 3x3x-4 8x3x-44 B.A.	—	—
	Bearing Surface and thickness of carriers or sockets	3 3/8" 44	3 3/8" as 1.	3 3/8" as 1.	3 3/8" as 1.	3 3/8" as 1.	3 3/8" as 1.	44 3 1/2"	—	—
FORE AND AFTERS	Number	—	—	—	—	—	—	—	—	—
	Spacing	—	—	—	—	—	—	—	—	—
	Unsupported lengths	—	—	—	—	—	—	—	—	—
	Scantling and Sketch	—	—	none	—	none	—	—	—	—
Bearing Surface and thickness of carriers or sockets	—	—	—	—	—	—	—	—	—	
HATCH COVERS	Material	Wood	Wood	Wood	Wood.	Wood.	Wood.	Wood	Wood	Steel
	Thickness	3"	3"	3"	3"	3"	3"	2 1/2"	1" grating	3/8"
	How Fitted	F+A	F+A	F+A	F+A	F+A	F+A	F+A	F+A	bolts 4 1/2" pitch
	Bearing Surface	3'	3'	3'	3'	3'	3'	3'	2"	2" wood 3" angle.
Spacing of Cleats	20	20	32	20	21	20	22	28" max	protected by steel hold (see plan)	—
Number of Tarpaulins	3 weather hatches 2 in Bridge keel deck.									

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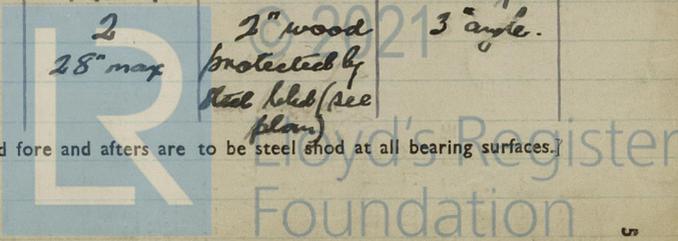
Are wood fore and afters steel shod at all bearing surfaces? _____

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.*

[Surveyors are to note that wood fore and afters are to be steel shod at all bearing surfaces.]



Gangways and Lifelines *In aft well.*

Gangway, Cargo and Coaling Ports in sides of ship

*Bridge sides, 1. Port 1 Stand, 5x3' hinged steel door. W.T.
15' coaming, 2 shangback fastening.*

SUPPLEMENTARY REQUIREMENTS FOR STEAMER CARRYING TIMBER DECK CARGOES

Do Superstructures and Machinery Casings comply with rules?

Is provision made for protection of steering gear, and is emergency steering gear provided?

Are efficient uprights, sockets and lashings provided according to rules?

State particulars of longitudinal subdivision in double bottom

State particulars of Bulwarks and Rails

Approval date of plans and full particulars of arrangements for stowing and securing timber

All well - 2/10/32

1000 lbs. ... 4-20 ...

The scantlings and protective arrangements being in accordance with the Freeboard rules it is submitted that the freeboard be assigned

 © 2011 *[Signature]* Chief Surveyor.
Lloyd's Register
Foundation
[Signature] Secretary.

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

on the *28th* September, 1932

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