

1 JUN 1932

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

R.P. C.11.

R.T. COPY

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having TRUNK DECK & FORECASTLE.

Port of Survey NEWCASTLE

Date of Survey 30th MAY. 1932

Name of Surveyor J. Young

Particulars of Classification + 100 A.I.

Ship's Name TEESPOOL. Nationality and Port of Registry BRITISH WEST HARTLEPOOL Official Number 119888 Gross Tonnage 4577 Date of Build 1905-12.

Moulded Dimensions: Length 351.5 Breadth 52.8 Depth 30.4 To Deck 33.17 Moulded displacement at moulded draught = 85 per cent. of moulded depth 10783 tons

Coefficient of fineness for use with Tables .789

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	33.17	(a) Where D is greater than Table depth (D - Table depth) R = (33.23 - 23.43) 2.704		Moulded Breadth (B)	52.8
Stringer plate	.60	9.80 x 2.704 + 26.50		Standard Round of Beam = $\frac{B \times 12}{50}$	12.67
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	13.4
Depth for Freeboard (D) =	33.22	If restricted by superstructures		Difference	.58
				Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	.58 (1 - .0467) = .5533

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	32.5	16.25	7.0		16.25
" overhang	.80	.15	+ 3' sheathing		.15
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	32.80	16.40			16.40

Standard Height of Superstructure 7.015

" R.Q.D. 38.76

Deduction for complete superstructure 38.76

Percentage covered $\frac{S}{L} = 9.33$

" $\frac{S_1}{L} = 4.67$

" $\frac{E}{L} = 4.67$

Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) .023

Percentage from Table, Line B.
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) NO BRIDGE

Deduction = $38.76 \times .023 = .89$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	45.15	1		45.15			1		
$\frac{1}{4}L$ from A.P.	20.09	4		80.36			4		
$\frac{2}{4}L$	4.97	2		9.94			2		
Amidships		4					4		
$\frac{3}{4}L$ from F.P.	9.93	2		19.86			2		
$\frac{1}{4}L$	40.18	4		160.72			4		
F.P.	90.30	1		90.30			1		
Total				406.33					

Mean actual sheer aft = Deficient.
Mean standard sheer aft

Mean actual sheer forward = Deficient.
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = } Trunk deck
aft of " = } no bridge

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{406.33}{18} \left(.75 - .0467 \right) = + 15.88$

If limited on account of midship superstructure.

If limited to maximum allowance of $\frac{1}{4}$ ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient
Depth to Freeboard Deck = 30.38	$\Delta = 103.41$	$\frac{789 + 68}{1.36} = \frac{1469}{1.36}$
Summer freeboard = 5.73	Tons per inch immersion at summer load water line	Depth Correction
Moulded draught (d) = 24.65	T = 38.35	Deduction for superstructures
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.16 = 6.2	Deduction = $\frac{\Delta}{40 T}$ inches = 6.73 = 6.4	Sheer correction
Addition for Winter North Atlantic Freeboard (if required) =		Round of Beam correction
		Correction for Thickness of Deck amidships
		Other corrections, <u>SAVING DEPTH</u> , etc.
		42.38 35.23 + 7.15
		Summer Freeboard = 68.64

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

Tropical Fresh Water Line above Centre of Disc	13	Tropical Fresh Water Freeboard	4.72
Fresh Water Line	6.2	Fresh Water	5.2
Tropical Line	6.2	Tropical	5.2
Winter Line below	6.2	Winter	6.3
Winter North Atlantic Line		Winter North Atlantic	

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

*Are wood fore and afters steel shod at all bearing surfaces? YES ✓
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 ✓

Particulars of fiddley, funnel and ventilator coamings:—

Stakehold gratings protected by hinged steel covers. ✓
 Tunnel & Vents in excellent condition. ✓
 E-R Skylight of steel well constructed ✓
 Flaps of 2" solid teak 2'-6" square with 2-9" diam
 deadlights in each. ✓

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways :—

Entrance to lower Crew Space in Goncastle passage. Door $1'10" \times 5'6"$ made of $1"$ thick B. Pine. Sill $7"$ high. ~~both sides~~ ^{both sides} operated both sides.

Entrance to P.O. quarters aft. Companionway of steel $3'2" \times 4'2" \times 5'1"$ high. Door $4'10" \times 3'9\frac{1}{2}"$ $1\frac{1}{8}"$ Solid P. Pine. fastened by ~~both sides~~ ^{both sides} operated both sides. Sill $15"$

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

all air pipes are 4" above deck and fitted with screw cap cover.
air pipe to aft peak 2" diam 24" high straight with wood plug.

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

On Forecastle to Crew Spaces.

	11" diam	15" above Wood Dk	✓
"	8"	18"	✓
" To Peak Stone	4"	12"	✓
5" diam 9" high			

To Bunker spruce S.N. 4" diam 36 1/2" to mouth.
 To back of clearing on stakehold bulkhead 5 1/2" diam 1 1/2" high
 Tunnel 6 1/2" diam 31" high
 To across aft & store M.V.s. 6" diam 6" high

Coamings are all in very
good condition and wood
plug & canvas cover for each
is on board. ✓

Particulars of Gangway Cargo and Coaling Ports:—

Hinged steel doors in trunk side
3 forward & 2 aft each side

Note:- These doors have not been used for a long time.

Diagram illustrating the door hinge assembly:

- TRUNK SIDE
- 5" $\frac{3}{4}$ " CHANNEL FRAME.
- 7- $\frac{1}{4}$ BOLTS
- 30X18" OPENING
- 3'-0" above DECK.
- DOOR HINGED AT BOTTOM

Particulars of Scuppers and Sanitary Discharge Pipes — Scuppers on Inland & Harbour docks are all thro gunwale bars.

Sanitary Discharge pipes, where shown on sketch
Iron pipes with M.C.I. Storm Valves. ✓

Particulars of Side Scuttles:

In cross spaces 8" diam all fitted with hinged deadlight.

Particulars of Guard Rails :—

Forecastle 3'-3" high Stairs 4'-9" apart 2 Rails ✓
 Trunk Dk 3'-1" " " 4'-6" " 2 " ✓
 Harbour Dk 3'-8" " " 5'-7" " 2 " ✓
 Bulwark & on Trunk Dk 3'-3" high. Stays 2" diam 7'-3" apart. ✓

Particulars of Gangways, Lifelines, etc. :—

None

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						
Forward Well						

State position of each freeing port { After Well :—
 (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 :—

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 ...								
Forecastle Bulkhead ...	30	25	$3\frac{1}{2} \times 3\frac{1}{2} \times 42$	max. 2'7"	NONE	$4'0" \times 5'2"$ $2'0" \times 4'7"$	1'6" 1'6"	7'-1½"
Trunk, Aft ...	54	54	$6" \times 3\frac{1}{2} \times 50$	2'0"	(BKTS TOP RV. TO BEAMS AT BOTTOM)	SEE CHARGE BOOK		7'-6"
Trunk, Forward ...	54	54	" "	2'0"				7'-6"
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks ...	40	33	$5\frac{1}{2} \times 3\frac{1}{2} \times 43$	E.R. 3'9" 3'0"	BKTS NONE	$2'0" \times 4'5"$	1'7½"	7'-3"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...								
Deckhouses on Flush Deck Ships ...								

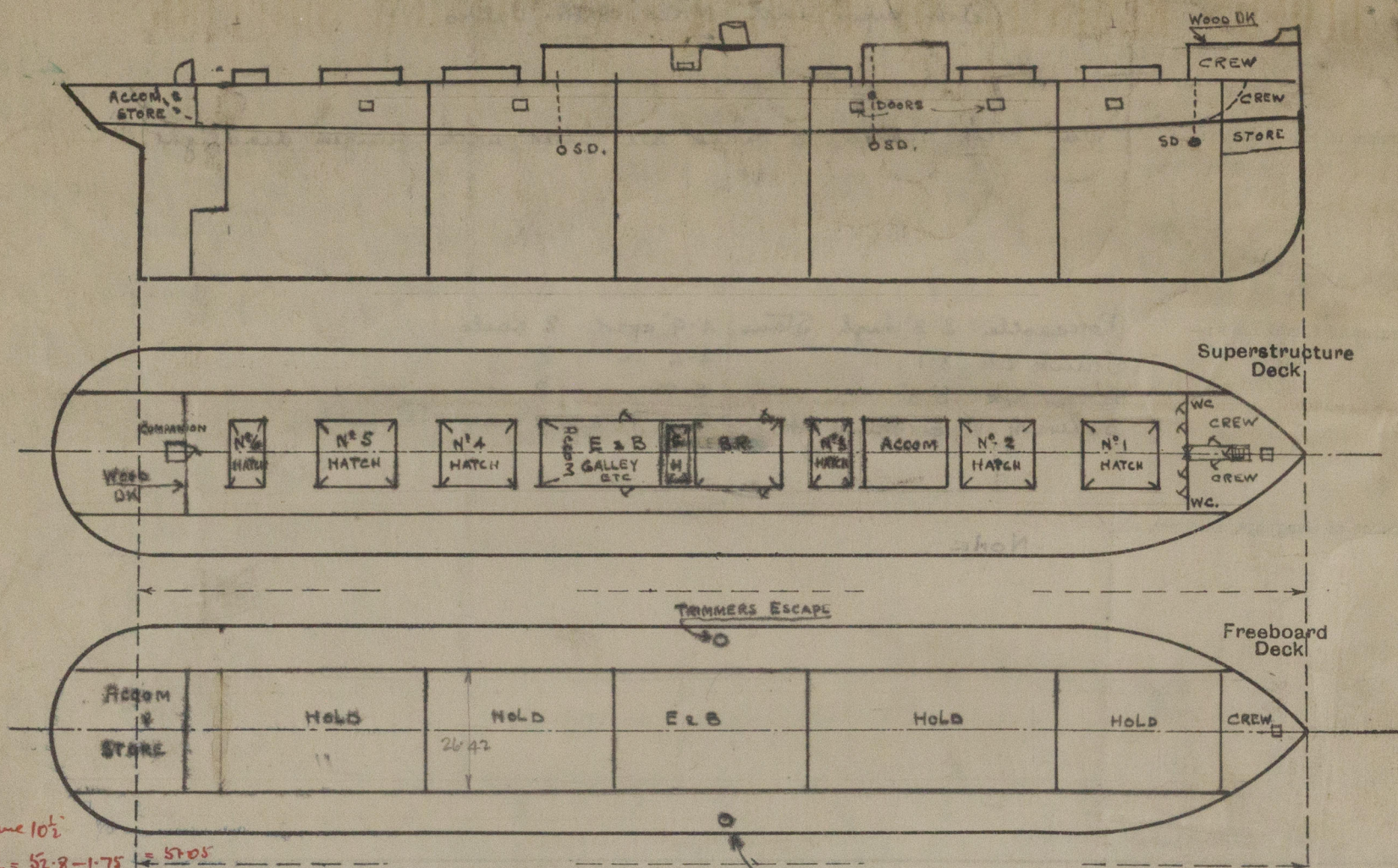
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	...	...	...
Raised Quarter Deck Bulkhead	...	...	...
Bridge, After Bulkhead	...	...	...
Bridge, Forward Bulkhead	...	...	...
Forecastle Bulkhead	...	...	...
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...	...	...
Exposed Machinery Casings on Superstructure Decks	...	...	...
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...	...	...
Deckhouses on Flush Deck Ships	...	...	...

{ Centre Passage opening closed by 3" boards to 3'-9" above deck
Door to W.C. is 1 1/2" solid P.P. Deck & knobs operated both sides ✓

Stokholm Steel door. Latch operated both sides. ✓ E.R. Steel door lock & handle operated both sides ✓

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:—



Tumble home 10 1/2"

W.L. @ d.h. = 52.8 - 1.75 = 51.05

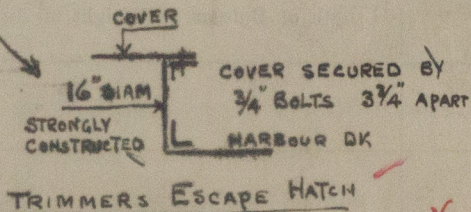
Tumble ht 7'-7" side 7'-10" mean ht 7'-7" + (2/3 x 3") = 7'-9"

AREA OF TRUNK = 26.42 x 7.75

add to mld depth $\frac{26.42 \times 7.75 \times 7}{51.05} = 2.81 + \frac{1.25 \times 1.50 \times 7}{2 \times 25.53} = .03$

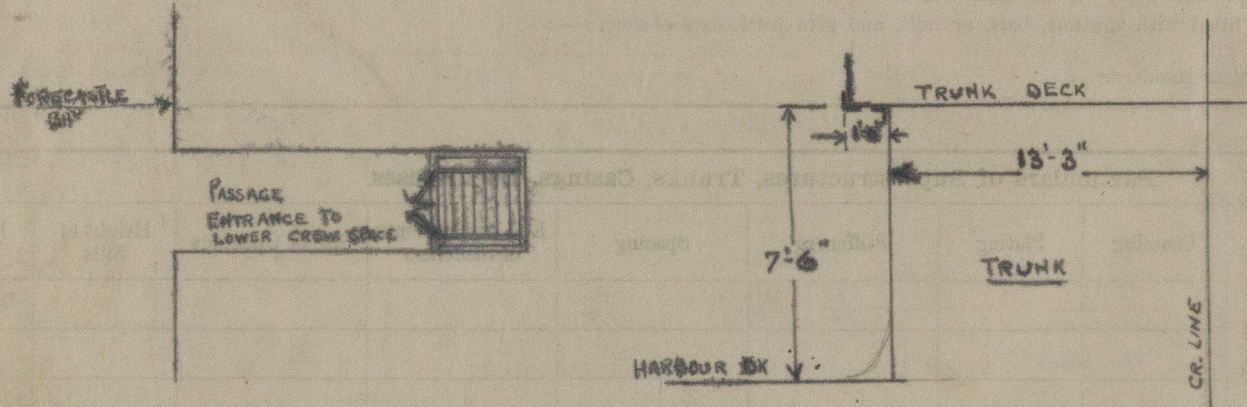
Equiv MD = 2.84 + 30.38 = 33.17

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



Keel 1 1/2"

85% mld D = 25.78' = 25'-9" = 25'-11"



from 1" scale 1 1/2"

STAG. No.

mld A @ 85% = 10783

mld A @ 24.65 mld = 10270
= 10321 3/4

TD, for FE blue form

SURVEY MADE WHILE VESSEL AFLOAT.

10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1

Builder's name and yard number

ROPNER & SON STOCKTON

Names of sister ships

Owners

POOL SHIPPING CO. SIR R. ROPNER & CO. WEST HARTLEPOOL

Fee £

12

: 15

: 0

Received by me



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