

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Rpt No 9501

Computation of Freeboard for ~~Steamer, Sailing Ship, Tanker~~

having

after bridge, bridge, foremast.

Port of Survey

Trieste

(Type of Superstructures.)

Date of Survey

Jenny Construction

Name of Surveyor

A. H. H. H.

Ship's Name

R. L. HAGUE

Nationality and Port of Registry

Dangij

Official Number

Gross Tonnage

Date of Build

1932

Moulded Dimensions: Length 520'9" Breadth 70'0" Depth 38'75"

Moulded displacement at moulded draught = 85 per cent. of moulded depth 27518 tons

Coefficient of fineness for use with Tables 802

Particulars of Classification 100.A.1

Carrying Petroleum or bulk.

Depth for Freeboard (D)				Depth correction		Round of Beam correction	
Moulded depth	...	...	38'9"	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	70'0"
Stringer plate	...	...	1"	(38.83 - 34.73) 3 = + 12.30		Standard Round of Beam = $\frac{B \times 12}{50}$	16.80
Sheathing on exposed deck	✓			(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	17.5
$T \left(\frac{L-S}{L} \right) =$						Difference	.70
Depth for Freeboard (D) =	38.83			If restricted by superstructures	✓	Restricted to	
						Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$= \frac{.70}{4} \times \left(1 - \frac{.7425}{11.2575} \right) = -.13$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
AFTER BRIDGE					
Deck enclosed ...	54.85	54.85	7'6"	✓	54.85
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	40.03	40.03	7'6"	✓	40.03
" overhang aft ...					
" overhang forward ...					
Fore enclosed ...	39.22	39.22	7'6"	✓	39.22
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	134.10	134.10			134.10

Standard Height of Superstructure 7.5

" " R.Q.D.

Deduction for complete superstructure 42.00

Percentage covered $\frac{S}{L} = 25.75\%$ " " $\frac{S_1}{L} = 25.75\%$ " " $\frac{E}{L} = 25.75\%$ Percentage from Table, Line A. TANKER 18.02
(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 = 42.00 × .1802 = - 7.57"

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	62.09	1	62.09	89.8	89.80	1	89.80
$\frac{1}{2}$ L from A.P. ...	27.63	4	110.52	35.75	35.75	4	143.00
$\frac{2}{3}$ L " ...	6.83	2	13.66	8.03	8.03	2	16.06
Amidships ...	✓	4	✓	0	✓	4	✓
$\frac{2}{3}$ L from F.P. ...	13.66	2	27.32	10.11	10.11	2	20.22
$\frac{1}{2}$ L " ...	55.26	4	221.04	58.60	58.60	4	234.40
F.P. ...	124.18	1	124.18	136.5	136.50	1	136.50
Total ...			558.81				639.98

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{81.17}{18} \times \left(.75 - \frac{.6213}{12.87} \right) = - 2.80$

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

Ft.

Depth to Freeboard Deck = 38.83

Summer freeboard = 8.53

Moulded draught (d) = 30.30

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 7.57

Addition for Winter North Atlantic Freeboard (if required) = 5.21"

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 25014$

Tons per inch immersion at summer load water line

 $T = 78.29$ Deduction = $\frac{\Delta}{40T}$ inches

= 7.99

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{802 + .68}{1.36} = 1.482$

Depth Correction ... 12.30 ✓

Deduction for superstructures ... 7.57 ✓

Sheer correction ... 2.80 ✓

Round of Beam correction13 ✓

Correction for Thickness of Deck amidships ... ✓

Other corrections, scantlings, etc. ... ✓

12.30 10.50 + 1.80

Summer Freeboard = 102.38

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:— 102.38" = 2.60 METRES

Tropical Fresh Water Line above Centre of Disc

Fresh Water Line " "

Tropical Line " "

Winter Line below " "

Winter North Atlantic Line " "

15.56 = .39 M

7.99 = .20 M

7.57 = .19 M

7.57 = .19 M

12.78 = .32 M

Tropical Fresh Water Freeboard ...

Fresh Water " "

Tropical " "

Winter " "

Winter North Atlantic " "

86.82" = 2.21 "

94.31" = 2.40 "

94.81" = 2.41 "

109.95" = 2.79 "

115.16" = 2.92 "

21 JUN 1932

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
		3 OFF	1 OFF	6 OFF	21 OFF	9 OFF			
Description of Hatchway		CARGO HOLD STORE ROOM CARGO	CARGO HOLD FORO.	CARGO HOLD STOWING TANKS, W.B. TANKS.	WIRE TANKS BUNKERS.	CARGO TANKS.			
Dimensions of Hatchway		3'-11 1/2" x 3'-9 1/2"	5'-9" x 4'-10"	23'6" x 11'0"	4'-11" x 2'-1"	6'-4" x 4'-0 7/8"			
COAMINGS	Height above Deck	1'-7" ✓	2'-7 1/2" ✓	2'-0" ✓	2'-7 1/2" ✓	2'-7 1/2" ✓			
	Thickness { Sides ... ..	.38 ✓	.43 ✓	.38 ✓	.40 ✓	.44 ✓		
	{ Ends ... ..	.38 ✓	.43 ✓	.38 ✓	.40 ✓	.44 ✓		
	Stiffeners	✓	7 x 3 x 1/4" ✓	✓	✓	✓			
	Brackets, Stays	✓	✓	✓	✓	✓			
HATCH BEAMS	Number	✓	✓	✓	✓	✓			
	Spacing	✓	✓	✓	✓	✓			
	Scantling and Sketch	✓	✓	✓	✓	✓			
	Bearing Surface	✓	✓	✓	✓	✓			
FORE AND AFTERS	Number	✓	✓	✓	✓	✓			
	Spacing	✓	✓	✓	✓	✓			
	Unsupported Lengths	✓	✓	✓	✓	✓			
	Scantling* and Sketch	✓	✓	✓	✓	✓			
	Bearing Surface	✓	✓	✓	✓	✓			
HATCH COVERS	Material	Steel ✓	Steel ✓	Steel ✓	Steel ✓	Steel ✓			
	Thickness ... ..	.38 ✓	.38 ✓	.38 ✓	.42 ✓	.53 ✓		
	How fitted	lashed ✓	lashed ✓	lashed ✓	lashed ✓	lashed ✓			
	Bearing Surface	new roofing ✓	new roofing ✓	new roofing ✓	new roofing ✓	new roofing ✓			
Spacing of Chocks		22" ✓	24" ✓	3' ✓	15" ✓	15" ✓			
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 fiddley, funnel and ventilator coamings:— Fiddley casing 5'-3" above after bridge deck. "Fr scallings see under
~~escape window~~ ^{escape window} ~~erect on superstructure, a deck.~~ ^{erect on superstructure, a deck.} On the fiddley top, over the M.S. there are two ^{sub-penalty} ~~sub-penalty~~
~~plates~~ ^{plates} ~~each side 10'-0" x 8'-6"~~ ^{each side 10'-0" x 8'-6"} ~~plates~~ ^{plates} ~~10'-0" thick~~ ^{10'-0" thick} ~~apart~~ ^{apart} ~~4'-0" x 2'-6" c/c's.~~ ^{4'-0" x 2'-6" c/c's.} No skylights. ✓
 Over the Area. Coals off. there are 3 gratings each side 7'-0" x 2'-6" ~~set~~ ^{set} ~~with~~ ^{with} ~~brayed~~ ^{brayed} ~~disched~~ ^{disched} ~~plate covers.~~ ^{plate covers.}
 The funnel is 5'2" high, outside difference and stepped directly on the fiddley top. - ✓
 , showed 4'-3 1/2"

Particulars of Flush Bunker Scuttles:—	NONE									
		N ^o	POSITION	HEIGHT	DIA.	THICKNESS	LEADS TO:	MEANS OF CLOSING	REMARKS.	
		1	FTLE	(30")	16"	32	BOSON STORE	W.T. LID.		✓
		2	U. PK	10'-0"	16½"	28	FORE HOLD	" "	BUILT ON FORECASTLE GHD.	✓
		3	"	"	12½"	28	FORE PUMP ROOM	" "	" " " "	✓
		4	"	"	16½"	28	FORE HOLD	" "	" " " "	✓
		7-8	U. PK	30'-0"	12"	68-140	PUMP ROOM	CANVAS COVER	DERRICK POST.	✓
		9-10	"	10'-6"	12½"	40	ACCOMMOD.	W.T. LID	BUILT ON FRONT END OF AFTER BR.	✓
		11-12	FLUDDER	31"	18½"	32	" "	CANVAS COVER	✓	✓
		13-14	U. PK	11'-6"	38"	32	MOTOR SP	" "	BUILT ON AFTER DECKHOUSE SIDE	✓
		15	FORE DECKHOUSE	5'-3"	23½"	32	CANDELER SP.	" "	✓	✓
		16	"	(11)	"	"	REFRIG. MACH SP	" "	✓	✓
		17	"	30"	11"	24	" "	" "	✓	✓
		18	U. PK	10'-3"	22½"	32	CANDELER SP.	" "	BUILT ON AFTER DECKHOUSE SIDE.	✓
		19	"	"	"	"	PAINT STORE	" "	" " " "	✓
		20	GALLEY	20"	10½"	24	GALLEY	" "	" " " "	✓

* specially supported

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

down much oscillation on V. OK	21	WATER PUMPING	30"	12 1/2"	'32	PANTRY	"	✓
Height of opening 36"	22-23	U. DK	10' 2"	22 1/2"	'32	MILKWAY & STORE ROOM.	"	BUILT ON AFTER DECKHOUSE SIDE
down much about on F'side OK	24-25	U. DK	10' 0"	11"	'24	STORE ROOM.	"	"
on bridge deck & on after	26-27	APPROX. 700'	5' 3"	33"	'32	MOTOR SP.	"	"
bridge deck. Height of opening	28-29	"	2' 0"	33"	'32	BOILER SP.	"	DERRICK POST.
18" tall yellow clad. on bridge	30-31	"	5' 3"	5 1/2"	'32	"	"	✓
deck. of mainmast on vests	32	"	3' 0"	10"	'32	DAILY SERVICE TRUNK SP.	"	"
on after bridge deck. Height 10"								
down down N.T. cracks.								

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

No.	Locality	Height of exposure	Remarks	Notes
44	to Ballant Sand No. 2	36"	Upper Sand.	All of substantial construction - fitted with W.T. Joints (pipes)
2	"	"	"	
1	"	"	"	
1	from feet.	"	"	
1	"	"	"	
1	to Ballant	18"	After bridge and	✓
1	Bottom	"	"	
1	D. Ballant	18"	Gravelly top.	✓

Particulars of Gangway Cargo and Coaling Ports:—

None. ✓

Particulars of Scuppers and Sanitary Discharge Pipes —

All scuppers and sanitary discharge pipes have automatic non return valves on the ship's side. In addition the discharges from spaces below the foreboard deck are fitted with gate valves in accessible positions. The discharge pipes are of galvanized steel, the stems and coverings of bronze.

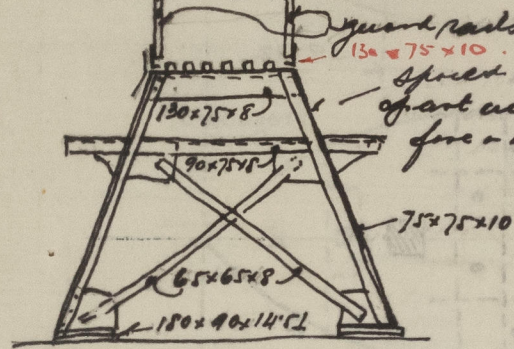
Particulars of Side Scuttles: In way of accommodation on 2nd deck A.-

12" ~~corr~~ framed ~~bird~~ ~~scullies~~, with portable planks on the outside & screen down fringed deadlights on the inside. The sill of the lowest podying it is 38.57 ft above the base line. ✓

Particulars of Guard Rails :—

Height 43". Stairnois 2'3" x 1" added to deck and spaced about 5 ft apart.
Topmost rail 1 1/2" diam. 2nd & 3rd rail 1" diam, equally spaced. ✓

Particulars of Gangways, Lifelines, etc. :—



The gangway is fitted to the level of the superstructure deck between the after & midship bridge & from the midship bridge to the foredeck.

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			Open rail. ✓			

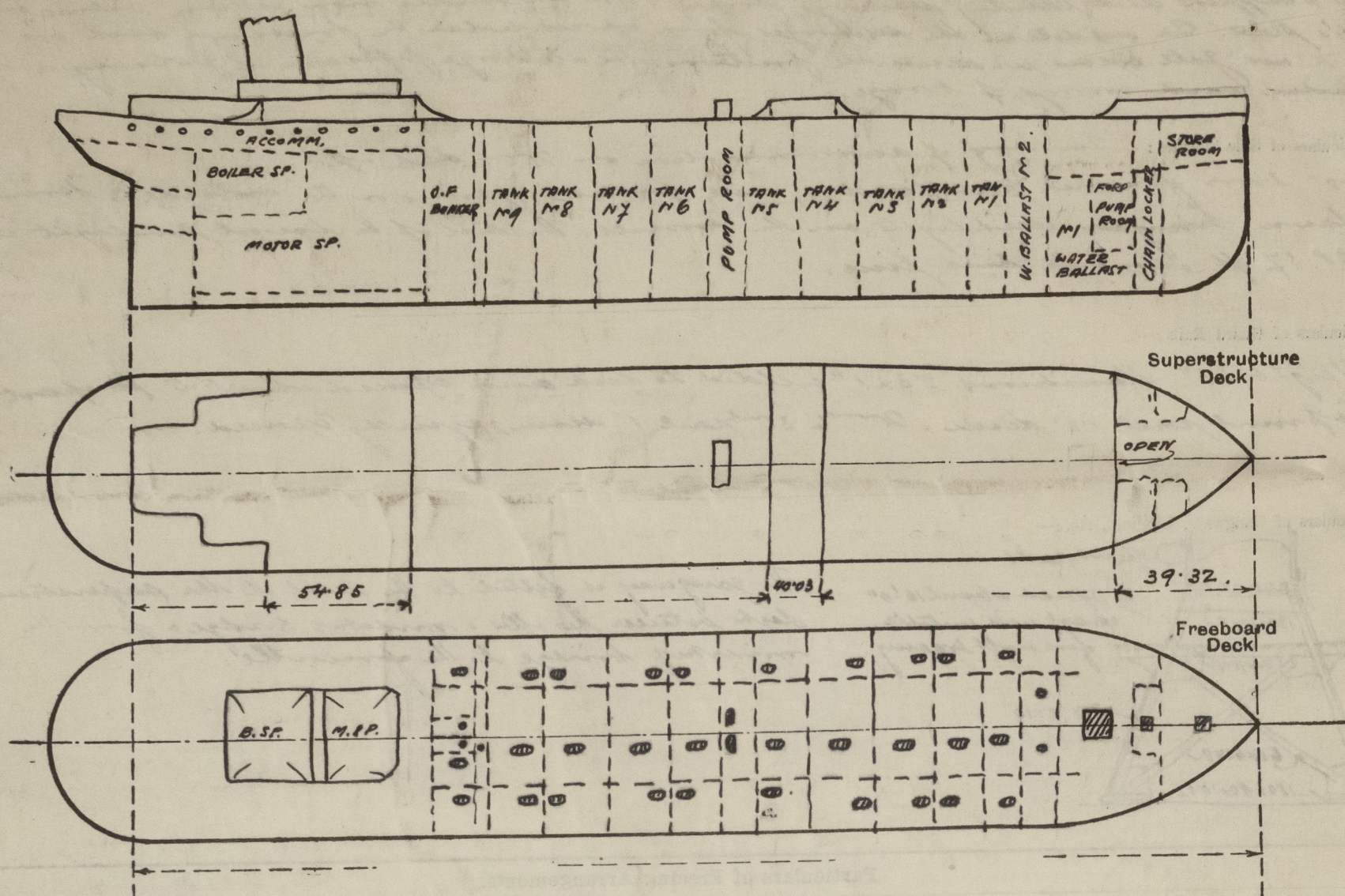
State position of each freeing port } After Well :—
 (F. and A. position and height above deck edge) } Forward Well :—
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :—
 Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
AFTER BULKHEAD FRONT								
Bulkhead	✓ 48	✓ 44	7 11 x 8 1/2 x 48	30" ✓	LOGS. ✓	2 OFF 23 7/8 x 59 3/4 ✓	18" ✓	7'-6" ✓
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead	✓ 40	✓ 36	7 8 x 3 1/2 x 48	30" ✓	Brackets ✓	1 OFF 23 7/8 x 59 3/4 ✓ 2 OFF 38" x 50" ✓	18" ✓ 28" ✓	7'-6" ✓
Bridge, Forward Bulkhead	✓ 48	✓ 44	7 11 x 3 1/2 x 48	30" ✓	Brackets ✓	1 OFF 23 7/8 x 59 3/4 ✓ 2 OFF 30" x 59 3/4 ✓	18" ✓	7'-6" ✓
Forecastle Bulkhead	✓							
DECKHOUSE OVER PUMP ROOM.								
Trunk, Aft	—	CORNER PL. 36 R 4. 32	5 1/4 x 3 x 32 0.9	30" ✓	Brackets ✓	24" x 62" ✓	18" ✓	7'-6" ✓
Trunk, Forward	✓							
Exposed Machinery Casings on Fore-board or Raised Quarter Decks ...	✓ 48	✓ 44	7 11 x 3 1/2 x 48 3 1/2 x 3 x 36 0.9	30" ✓	Brackets ✓	—	—	7'-6" ✓
Exposed Machinery Casings on Superstructure Decks	—	✓ 34	8 1/2 x 6 x 36 0.9 W/ 1/2 IN. B.L.T.	30" ✓	Brackets ✓	—	—	5'-3" ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓							
BEHIND AFTER OR AHD BULKHEAD								
Deckhouses on Flush Deck Ships ...	0.9 10 x 3 1/2 x 48	32 STIFF.	7 6 x 3 x 36 WITH 3/8 IN. ST. 1/4 FORMING 8" GIRDER	29 1/2" MAX ✓	LOGS. ✓	10. 0.9 IN. 23 7/8 x 59 3/4 2 1/2 x 59 3/4 3 1/2 x 59 3/4		

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

DESCRIPTION	REMARKS
AFTER BRIDGE FRONT	
Prop Bulkhead	2 WT hinged steel doors secured by clips capable of being operated from both sides ✓
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	1 WT hinged steel door secured by clips capable of being operated from both sides ✓ 2 portside plates secured by hook bolts spaced 13" apart. ✓
Bridge, Forward Bulkhead	3 WT hinged steel doors secured by clips capable of being operated from both sides ✓
BECKHOUSE OR BUMP ROOM	
Forecastle Bulkhead	1 WT hinged steel door secured by clips capable of being operated from both sides ✓
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	✓
PURVIEW AFTER BE. END QHD.	
Deckhouses on Flush Deck Ships	10 WT hinged steel doors secured by clips capable of being operated from 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 shewn on the following sketches:—



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

Longitudinally framed tanker with 2 longitudinal bulkheads + single deck in way of oil tanks.

Builder's name and yard number

Cantieri Riuniti dell'Adriatico Genova no 249.

Names of sister ships

Cantieri Riuniti dell'Adriatico Genova 250 (building) et 1 (preparing)

Owners

Waried Tank Schiff. Bremer

Fee £

20 : 0 : 0

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