

Forecastle?

pt. C.11.

B.T. COPY WRITTEN.

24 SEP 1932

Index. No. 29760  
(For London Office only.)

No. 101099.

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

the fore end?

Bulwarks?

at after end?

weather?

assigned under the

under Shelter Deck Rules.

satisfactory.

s, &c., &c.

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having *Prop. Bridge and Forecastle decks.*

Port of Survey *Liverpool*

Date of Survey *Sept 1932.*

Name of Surveyor *R.R. Ruthven*

Particulars of Classification *100. H.1.*

*S.S. Liv. No. 2-30*

Ship's Name *"DIPLOMAT"*  
Nationality and Port of Registry *British Liverpool*  
Official Number *145878*  
Gross Tonnage *8240*  
Date of Build *1921-9.m.*  
Moulded Dimensions: Length *480.16* Breadth *58.0* Depth *35.10*  
Moulded displacement at moulded draught = 85 per cent. of moulded depth *See list on back page.* tons  
Coefficient of fineness for use with Tables *.766*

Depth for Freeboard (D) *35.87*  
Moulded depth *35.10*  
Ringer plate *50*  
Leathing on exposed deck  
 $T \left( \frac{L-S}{L} \right) =$   
Depth for Freeboard (D) = *35.87*

Depth correction  
(a) Where D is greater than Table depth  
(D-Table depth) R =  $(35.87 - 32.0) = 3.87$   
 $= + 11.58$   
(b) Where D is less than Table depth (if allowed)  
(Table depth-D) R =  $3.87$   
If restricted by superstructures ☒

Round of Beam correction  
Moulded Breadth (B) *58.0*  
Standard Round of Beam =  $\frac{B \times 12}{50} = 13.92$   
Ship's Round of Beam = *17*  
Difference *3.08*  
Restricted to  
Correction =  $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{3.08^2}{4} \times 4.008 = -1.5$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poep enclosed ...	<i>53.29</i>	<i>53.29</i>	<i>7.3</i>		<i>53.29</i>
" overhang ...	<i>1.0</i>	<i>.50</i>			<i>.50</i>
R.Q.D. enclosed ...					
" overhang ...	<i>177.82</i>	<i>177.82</i>	<i>8.0</i>		<i>177.82</i>
Bridge enclosed ...	<i>183.5</i>	<i>5.13</i>			<i>5.13</i>
" overhang aft ...	<i>2.75</i>	<i>1.37</i>			<i>1.37</i>
" overhang forward ...	<i>51.16</i>	<i>49.59</i>	<i>7.6</i>		<i>49.59</i>
F'cle enclosed ...					
" overhang ...	<i>2.5</i>				
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<i>292.87</i>	<i>287.70</i>			<i>287.70</i>

Standard Height of Superstructure *7.50*  
" " R.Q.D. ☒  
Deduction for complete superstructure *42.00*  
Percentage covered  $\frac{S}{L} = 60.99\%$   
" "  $\frac{S_1}{L} = 59.92\%$   
" "  $\frac{E}{L} = 59.92\%$   
Percentage from Table, Line A.  
(corrected for absence of forecastle (if required))  
Percentage from Table, Line B.  
(corrected for absence of forecastle (if required)) *45.92%*  
Interpolation for bridge less than 2L (if required)  
Deduction =  $42.00 \times .4592 = 19.29$

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
P. ...	<i>58.02</i>	<i>1</i>		<i>58.02</i>	<i>62.0</i>	<i>62.00</i>	<i>1</i>		<i>62.00</i>
L from A.P. ...	<i>25.82</i>	<i>4</i>		<i>103.28</i>	<i>26.0</i>	<i>26.95</i>	<i>4</i>		<i>107.80</i>
" ...	<i>6.38</i>	<i>2</i>		<i>12.76</i>	<i>6.0</i>	<i>6.74</i>	<i>2</i>		<i>13.48</i>
midships ...	<i>✓</i>	<i>4</i>		<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>4</i>		<i>✓</i>
L from F.P. ...	<i>12.77</i>	<i>2</i>		<i>25.54</i>	<i>17.0</i>	<i>14.56</i>	<i>2</i>		<i>29.12</i>
" ...	<i>51.64</i>	<i>4</i>		<i>206.56</i>	<i>59.0</i>	<i>58.25</i>	<i>4</i>		<i>233.00</i>
P. ...	<i>116.04</i>	<i>1</i>		<i>116.04</i>	<i>135</i>	<i>134.00</i>	<i>1</i>		<i>134.00</i>
Total ...				<i>522.20</i>					<i>579.40</i>

Mean actual sheer aft = *Excess*  
Mean standard sheer aft

Mean actual sheer forward = *Excess*  
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = *.21*  
" " aft of " = *.16*

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{57.20}{18} \left( .75 - \frac{30.49}{2 \times 480.16} \right) = -1.41$

If limited on account of midship superstructure. ☒

If limited to maximum allowance of 1 1/2 ins. per 100 ft. ☒

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

Depth to Freeboard Deck = *Ft.*  
Summer freeboard =  
Moulded draught (d) =

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches =  
Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.  
Displacement in salt water at summer load water line  
 $\Delta =$   
Tons per inch immersion at summer load water line  
 $T =$   
Deduction =  $\frac{\Delta}{40 T}$  inches =

TABULAR FREEBOARD corrected for Flush Deck (if required)  
Correction for coefficient  $\frac{.766 + .68}{1.36} = \frac{1.446}{1.36}$

	+	-
Depth Correction ...	<i>11.58</i>	<i>-</i>
Deduction for superstructures ...	<i>-</i>	<i>19.29</i>
Sheer correction ...	<i>-</i>	<i>1.41</i>
Round of Beam correction ...	<i>-</i>	<i>.31</i>
Correction for Thickness of Deck amidships ...	<i>-</i>	<i>-</i>
Other corrections, scantlings, etc. ...	<i>-</i>	<i>-</i>
	<i>11.58</i>	<i>21.01</i>
Summer Freeboard =	<i>93.00</i>	<i>96.35</i>

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

Tropical Fresh Water Line above Centre of Disc ...	...	Tropical Fresh Water Freeboard ...	...
Fresh Water Line " " ...	...	Fresh Water " " ...	...
Tropical Line " " ...	...	Tropical " " ...	...
Winter Line below " " ...	...	Winter " " ...	...
Winter North Atlantic Line " " ...	...	Winter North Atlantic " " ...	...



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
UPPER DK → BRIDGE DK → UPPER DECK										
Description of Hatchway	1	2	3	4	5	6	7	3	4	
Dimensions of Hatchway	15-6x16-10	32-5x16-11	17-5x16-11	14-11x16-11	12-5x16-11	77-5x16-11	17-11x16-10	17-5x16-11	14-11x16-11	
COAMINGS	Height above Deck	30	as	30	as	as	as	as	18	
	Thickness	.55	as	.44	as	as	as	as	.50	
	Sides	.50	as	.38	as	as	as	as	.44	
	Stiffeners	7x3 B.A.	as	7x3 B.A.	as	as	as	as	as	
HATCH BEAMS	Brackets, Stays	✓	✓	✓	✓	✓	✓	✓	✓	
	Number	2	6	3	2	2	5	3	2	
	Spacing	5-2	4-7 1/2	4-4	5-0	4-2	4-7	5-0	4-4	
	Scantling and Sketch	16x38 angles 4x3x38 8x3 1/2x50A 3 1/2	as	as	as	as	as	as	18x38 angles as	
FORE AND AFTERS	Bearing Surface	3 1/2	as	as	as	as	as	as	as	
	Number									
	Spacing									
	Unsupported Lengths									
HATCH COVERS	Scantling* and Sketch									
	Bearing Surface									
	Material	W.W.								
	Thickness	2 3/4								
Spacing of Cleats	How fitted	7+0								
	Bearing Surface	3								
	Number of Tarpaulins	3								

\*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

Particulars of fiddle, funnel and ventilator coamings:—

Engine Room skylights, steel, efficient  
 Funnel & ventilator coamings are efficient  
 Hinged steel covers over fiddle gratings  
 Coal hatch coaming top. 5'-0" x 18'-0" coaming 7x3 B.A. W.W. covers 2 3/4 7+0. Bearing 2.  
 Cleats 26" apart. 2 Tarpaulins

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways:—

None

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

3 Vents on Fore DK	6" dia, coaming 12x30 To Cabin	2 Vents on Bridge DK	14" dia, coaming 26x36 To Bunkers
1 Vent, upper dk in Fore Tank S/S	10" " 12x32 To Peak Tank	2 " " " "	9 " " 15x32 To Eng Room S/S
1 " " " " P.T.S.	12 " " 15x34 " Chain Locker	1. Prot & Vent	15 " Strongly constructed To Bunkers
2 Vents " " in Fore Tank S/S	18 " " 36x40 " Holds &c	1 Vent, upper dk aft	14 " coaming 33x36 To Tank S/S
4 " " " " Forw.	18 " " 48x40 " " "	1 " " " "	14 " " 33x36 " deep tank
5 " Bridge DK	18 " " 26x40 " " "	1 " " " "	14 " " 48x36 " " "
		1 " " " "	14 " " 48x36 " " "
		5 Vents " " "	18 " " 48x40 " Holds &c
		1 Vent " " "	12 " " 48x34 " Shaft Tunnel
		2 " S Poop DK	15 " " 15x36 " Poop Tank S/S
		1 Vent " " "	18 " " 24x40 " Holds &c
		1 " " " "	12 " " 15x34 " Tunnel coaming
		1 " " " "	12 " " 15x32 " Poop Tank S/S
		1 " " " "	9 " " 15x34 " Steering gear
		1 " " " "	12 " " " "

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

1- 3" dia, upper dk in Fore Tank S/S	P.T.S. 12" high To D.B. Tanks
2- 3 " " " " " "	26 " " " " " "
1- 3 " Bridge DK	13 " " " " " "
2- 3 " " " " " "	26 " " " " " "
2- 2 1/2 " " " " " "	26 " " " " " "
1- 2 1/2 " " " " " "	26 " " " " " "

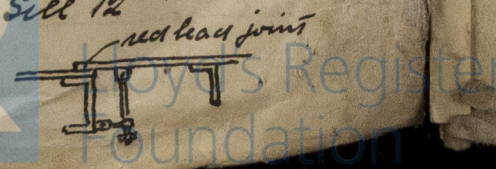
Particulars of Gangway Cargo and Coaling Ports:—

1- 2 1/2" dia	10'
1- 3	12'
2- 3	26'
1- 3	17'
1- 2	10'

2 Wood plugs provided  
 No Sighting Notes

Coaling Ports

1. P.T.S. Bridge Tank coams. 5'-6" x 5'-0", Sill 12"
2. Vent Shifter 5' x 3 1/2' x 5'5"
- 4 clips each side + 2 Top & Bottom





## Particulars of Scuppers and Sanitary Discharge Pipes:—

Sanitary discharge pipes, fitted with storm valves, about 12" above upper DL, AFT, D + 2" from space above upper DL.  
 Scupper pipes from Bridge & Bridge Twin DKS fitted with storm valves, about 3'-0" below upper + Bridge DKS.  
 Scupper pipe from No. 3 Bridge Twin DKS, led to bilge, grating at deck. *permanently closed*

## Particulars of Side Scuttles:—

Side Scuttles in Bridge & Bridge Twin DKS & Lazarets aft fitted with deadlights.  
 " " " Poop Twin DKS & steering gear space. *NOT* fitted with deadlights.

## Particulars of Guard Rails:—

On Poop & Side decks 3'-7" high, 4 rods, stanchions about 4'-6" apart.  
 Steel bulwark on Bridge DKS 3'-9" high. Portable rails abreast No. 3 Hatch, 4 rods.

## Particulars of Gangways, Lifelines, etc.:—

None.

*Efficient lifelines & suitable  
 supports provided in forward and  
 after well on port & starboard sides*

## 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 ... ..	104-6	3-11	42+16 42x16	4 } 17	17 1/2 X	20.90 21 1/2
Forward Well ... ..	86-9	3-11	42x16	4	17	17 3/8

State position of each freeing port ... .. After Well:—  
 (F. and A. position and height above deck edge) 1/2 Forward Well:—  
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—  
*Hinged steel shutters + 1 horizontal rail*

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 ... ..	.44	.38	6x3 B.A.	27	✓	58x31 58x24	18 1/2	7-3.
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead ... ..	vert. plating .34		3" flanges	33	✓	62x42	18 1/2	8-0
Bridge, Forward Bulkhead ... ..	.44	.44	9 1/2 x 3 B.A.	30	Knee T & B	✓	✓	8-0
Forecastle Bulkhead <i>Sidehouses</i> ...	.32	.32	3x3x38	30	✓	56x24	18 1/2	7-6
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ... ..	.40	.32	3x3x38	36	Knee at Top	60x24	18 1/2	7-10
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	vert. plating .34		4 1/2 x 3 x 40 on outside	60	attached to beam over	62x54 Gal. sheet 60x24	18 1/2	8-0
Deckhouses on Flush Deck Ships ...								

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

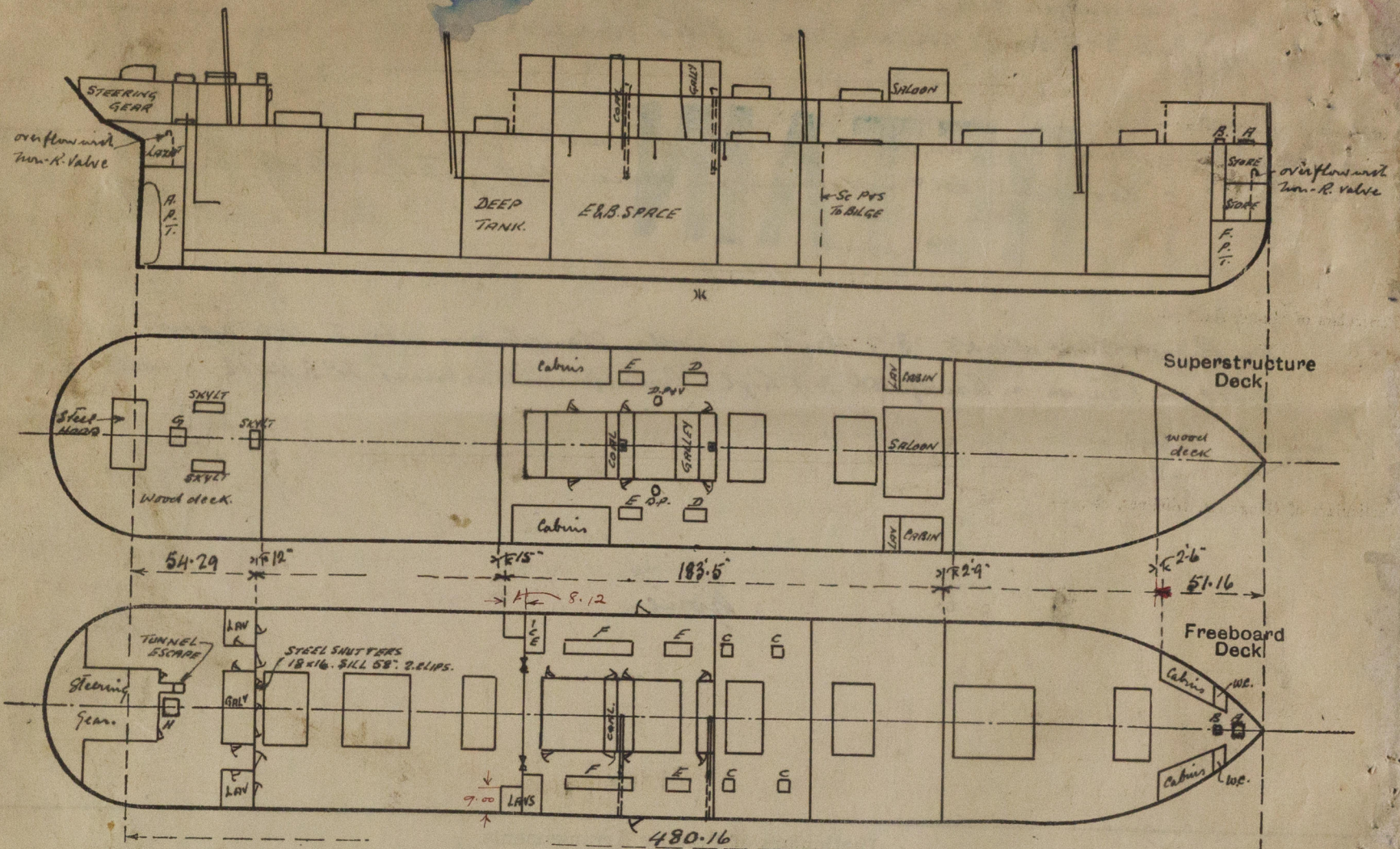
Poop Bulkhead ... ..	wood doors. operated from both sides
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead ... ..	openings Rivet channels, 3" wood stuffing boards, full height
Bridge, Forward Bulkhead ... ..	✓ no openings
Forecastle Bulkhead <i>Sidehouses</i> ...	wood doors in sidehouse. operated from both sides <i>open</i>
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Superstructure Decks ... ..	Hinged steel doors, operated from both sides
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	Hinged steel doors operated from both sides. First & Eng casing clips on outside. Gal. sheet.
Deckhouses on Flush Deck Ships ...	

W382-0036 2/2



# Diplomat

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:-



A: Hatch on upper deck 3-6x4-6 to Peak shores  
Coaming 12" B.C.  
W.W. Covers 2 1/2" also grating covers below.  
Bearing 2 1/2"  
Cleats 32" apart  
2 Tarpanlins

B: Hatch on upper deck 2-0x2-0 to chain locker  
Coaming 12" B.C.  
W.W. Covers 2 1/2"  
Bearing 2"  
Cleats 18" apart  
2 Tarpanlins

C: Trimming hatches on upper deck 2-0x2-3  
Coaming 18x36  
W.W. Covers 2 1/2"  
Bearing 2"  
Cleats 18" apart  
2 Tarpanlins

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

D: Coaling Hatches on Bridge deck 9-3x3-8  
Coaming 13x38  
W.W. Covers 2 3/4 Thwart  
Bearing 2"  
Cleats 24" apart  
2 Tarpanlins

E: Coaling hatches on upper deck 7-3x5-0  
Coaming 30x36  
W.W. Covers 2 3/4 Thwart  
Bearing 2"  
Cleats 24" apart  
2 Tarpanlins

G: Hatch on poop deck 3-6x4-0 to store  
Coaming 15 1/2x36  
W.W. Covers 2 3/4 with grating covers below  
Bearing 2"  
Cleats 18" apart  
2 Tarpanlins

H: Hatch on upper deck Poop deck 3-6x4-0  
Coaming 32x32x36  
2 1/2 grating covers  
Locking bar.

Sky lights on Poop deck 2x6-6x2-3  
Coaming 15x32  
Wood top & glass panels.

Manholes to fore & after peak tanks fitted with bolted & jointed steel plate cover

Ash shoots on Bridge deck in fore & after trawl from about 2-6 above Bridge deck led down to ship's side about 6-0 below upper deck. Hopper fitted with steel hinged cover & clip

Tunnel escape in Poop deck 2x3  
Steel trunk. Two doors after end  
Coaming 30" high

	DRAFTS	DEADWEIGHT TONS.
LOAD	28-6 1/2	11960
	28-0	11605
	27-0	10945
	26-0	10285
	25	9625

LIGHT DRAFT = 9-8 1/4

DISPL. = 5300

Survey when vessel afloat for  
Freeboard Assignment only

DMIT

Builder's name and yard number Messrs C. Connell & Co Ltd Glasgow W. 382.

Names of sister ships Astronomer, Defender, Huntsman

Owners Charente, S.S. Co. Ltd. (T & J Harrison)

Fee £ 16 : 3 : 0.

Received by me.

Bridge 183.42  
+ 2.52  
185.94  
- 8.12 = 177.82  
S. H. 177.82  
+ 2.52  
180.34  
+ 1.25  
181.59  
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