

AMBLER
33621

Rpt. C.11.

Req 9 attached. B.T. COPY

CARDIFF

14 APR 1932

Index. No.

33825

(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tugboat					Port of Survey <i>Cardiff</i>
having <i>Poop, Bridge and Forecastle.</i>					Date of Survey <i>11th April 1932</i>
(Type of Superstructures.)					Name of Surveyor <i>J. Locking</i>
Ship's Name SEA VENTURE	Nationality and Port of Registry <i>British Dover</i>	Official Number <i>149166</i>	Gross Tonnage <i>2827</i>	Date of Build <i>1930.9.</i>	Particulars of Classification <i>+100A1</i>
Moulded Dimensions: Length <i>290.0</i> Breadth <i>42.83</i> Depth <i>20.10</i>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>4919</i> tons					
Coefficient of fineness for use with Tables <i>.783</i>					

Depth for Freeboard (D)		Depth correction	Round of Beam correction
Moulded depth ... <i>20.10</i> ... <i>20.83</i>		(a) Where D is greater than Table depth (D - Table depth) R = <i>(20.83 - 19.33) x 2.23 = +3.44</i>	Moulded Breadth (B) <i>42.83</i>
Stringer plate ... <i>.875</i> ... <i>.04</i>		(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{42.83 \times 12}{50} = 10.28$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures	Ship's Round of Beam = <i>10.25</i>
Depth for Freeboard (D) = <i>20.87</i>			Difference <i>.03</i>
			Restricted to
			Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.03}{4} \times \left(1 - \frac{.4065}{.5935} \right) = .002$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	<i>26.62</i>	<i>26.62</i>	<i>7.6</i>	<i>✓</i>	<i>26.62</i>	Standard Height of Superstructure <i>6.40</i>
„ overhang ...	<i>✓</i>					„ „ R.Q.D. <i>✓</i>
R.Q.D. enclosed ...	<i>✓</i>					Deduction for complete superstructure <i>34.67</i>
„ overhang ...	<i>✓</i>					Percentage covered $\frac{S}{L} = \frac{40.86}{40.65} = 1.005$
Bridge enclosed ...	<i>66.0</i>	<i>66.00</i>	<i>7.6</i>	<i>✓</i>	<i>66.00</i>	„ „ $\frac{S_1}{L} = \frac{40.65}{40.65} = 1.00$
„ overhang aft ...	<i>2.5</i>	<i>1.87</i>			<i>1.87</i>	„ „ $\frac{E}{L} = \frac{40.65}{40.65} = 1.00$
„ overhang forward ...	<i>✓</i>					Percentage from Table, Line A. (corrected for absence of forecastle (if required))
Forecastle enclosed ...	<i>23.37</i>	<i>23.37</i>	<i>7.6</i>	<i>✓</i>	<i>23.37</i>	Percentage from Table, Line B. <i>28.05</i>
„ overhang ...	<i>✓</i>					(corrected for absence of forecastle (if required))
Trunk aft ...						Interpolation for bridge less than .2L (if required) <i>✓</i>
„ forward ...						Deduction = <i>34.67 x 28.05 = -9.72</i>
Tonnage opening aft ...						
„ „ forward ...						
Total ...	<i>118.49</i>	<i>117.86</i>			<i>117.86</i>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	<i>39.00</i>	<i>1</i>	<i>✓</i>	<i>39.00</i>	<i>42</i>	<i>42.00</i>	<i>1</i>	<i>✓</i>	<i>42.00</i>	Mean actual sheer aft = <i>excess</i>
$\frac{1}{8}L$ from A.P. ...	<i>17.35</i>	<i>4</i>	<i>✓</i>	<i>69.40</i>	<i>21.52</i>	<i>21.52</i>	<i>4</i>	<i>✓</i>	<i>86.08</i>	Mean standard sheer aft
$\frac{2}{8}L$ „ ...	<i>4.29</i>	<i>2</i>	<i>✓</i>	<i>8.58</i>	<i>5.38</i>	<i>5.38</i>	<i>2</i>	<i>✓</i>	<i>10.76</i>	Mean actual sheer forward = <i>excess</i>
Amidships ...	<i>-</i>	<i>4</i>	<i>✓</i>	<i>-</i>	<i>0</i>	<i>-</i>	<i>4</i>	<i>✓</i>	<i>-</i>	Mean standard sheer forward
$\frac{3}{8}L$ from F.P. ...	<i>8.58</i>	<i>2</i>	<i>✓</i>	<i>17.16</i>	<i>10.66</i>	<i>10.66</i>	<i>2</i>	<i>✓</i>	<i>21.32</i>	Length of enclosed superstructure forward of amidships = <i>.103L</i>
$\frac{4}{8}L$ „ ...	<i>34.71</i>	<i>4</i>	<i>✓</i>	<i>138.84</i>	<i>42.66</i>	<i>42.66</i>	<i>4</i>	<i>✓</i>	<i>170.64</i>	„ „ aft of „ = <i>.125L</i>
F.P. ...	<i>78.00</i>	<i>1</i>	<i>✓</i>	<i>78.00</i>	<i>84</i>	<i>84.00</i>	<i>1</i>	<i>✓</i>	<i>84.00</i>	
Total ...				<i>350.98</i>					<i>414.80</i>	
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{63.82}{18} \left(.75 - \frac{.2043}{.5457} \right) = -1.93$										
If limited on account of midship superstructure. <i>✓</i>										If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. <i>✓</i>

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 $\frac{783 + .68}{1.36} = 1.463$	<i>41.00</i>
Depth to Freeboard Deck = <i>20.87</i>	$\Delta = 4996$	Depth Correction ... <i>3.44</i>	<i>44.11</i>
Summer freeboard = <i>3.00</i>	Tons per inch immersion at summer load water line	Deduction for superstructures ... <i>9.72</i>	
Moulded draught (d) = <i>17.87</i>	T = <i>25.48</i>	Sheer correction ... <i>1.93</i>	
Deduction for Tropical freeboard and addition for	Deduction = $\frac{\Delta}{40T} = \frac{4996}{40 \times 25.48} = 4.90 = 5$	Round of Beam correction ... <i>-</i>	
Winter freeboard = $\frac{d}{4}$ inches = <i>4.47 = 4.5</i>		Correction for Thickness of Deck amidships ... <i>-</i>	
Addition for Winter North Atlantic Freeboard (if required) = <i>2.0</i>		Other corrections, scantlings, etc. ... <i>-</i>	
		<i>3.44 11.65 - 8.21</i>	
		Summer Freeboard = <i>35.90</i>	

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

Tropical Fresh Water Line above Centre of Disc ... <i>9.2</i>	Tropical Fresh Water Freeboard ... <i>2.22</i>
Fresh Water Line „ „ ... <i>5</i>	Fresh Water „ „ ... <i>2.7</i>
Tropical Line „ „ ... <i>4.5</i>	Tropical „ „ ... <i>3.17</i>
Winter Line below „ „ ... <i>4.5</i>	Winter „ „ ... <i>3.17</i>
Winter North Atlantic Line „ „ ... <i>6.2</i>	Winter North Atlantic „ „ ... <i>3.17</i>

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
FREEBOARD DECK						BIN BRIDGE SPACE		SUPERSTR. DECKS			
Description of Hatchway	No.1	No.2	X BUNKER	No.3	No.4	PORT 1ST BRIDGE	PORT 1ST BRIDGE	FORECASTLE	BRIDGE 1ST BRIDGE	POOP	
Dimensions of Hatchway	32' x 27' 1" x 30'	32' x 30'	4' 11" x 30'	30' x 30'	28' x 27' x 30'	3' 9" x 3' 6"	4' 0" x 3' 6"	2' 5" x 1' 11"	3' 7" x 3' 3"	2' 6" x 2' 8"	
COAMINGS	Height above Deck	3' 7"	3' 7"	3' 7"	3' 7"	3' 7"	9"	2' 0"	2' 6"	1' 6"	
	Thickness	.44	.44	.44	.44	.44	.45	.40	.40	.40	
	Sides	.44	.44	.44	.44	.44	.45	.40	.40	.40	
	Stiffeners	7 x 3 x 38 BA	7 x 3 x 38 BA	7 x 3 x 38 BA	7 x 3 x 38 BA	7 x 3 x 38 BA	None	None	None	None	
	Brackets, Stays	3 BA 6 x 3 x 40	3 BA 6 x 3 x 40	None	2 BA 6 x 3 x 40	2 BA 6 x 3 x 40	None	None	None	None	
HATCH BEAMS	Number	5	5		5	4					
	Spacing	5' 4"	5' 4"		5' 0"	5' 7"					
	Scantling and Sketch			None			None	None	None	None	
	Bearing Surface	3"	3"		3"	3"					
FORE AND AFTERS	Number										
	Spacing										
	Unsupported Lengths										
	Scantling* and Sketch	None	None	None	None	None	None	None	None	None	
	Bearing Surface										
HATCH COVERS	Material	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	
	Thickness	3"	3"	3"	3"	3"	2 3/8"	2 3/8"	2 3/8"	2 3/8"	
	How fitted	F + A	F + A	F + A	F + A	F + A	THWARTS	THWARTS	THWARTS	THWARTS	
	Bearing Surface	3 x 12 1/2' x 6"	3 x 12 1/2' x 6"	3"	3 x 12 1/2' x 6"	3 x 12 1/2' x 6"	2"	2"	2"	2"	
Spacing of Cleats	15"	15"	15"	15"	15"	2' 2"	2' 6"	17"	2' 5"	18"	
Number of Tarpaulins	2	2	2	2	2	2	2	2	2	2	

*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.*

IN ADDITION THERE ARE TWO HATCHWAYS, ONE FORWARD ONE AFT, ON RAISED WINCH DECK BETWEEN MAIN DECK. HATCHWAYS, PORT SIDE, RAISED WINCH DECK IS 2' 8" ABOVE UPPER. THESE HATCHWAYS ARE 3' 8" x 2' 2", 2' 6" HIGH, 40" THICK, SIDE STAYS, NO BRACKETS OR STIFFENERS, BEARING SURFACE 2" CLEATS 2' 7" APART, 2 3/8" W.P. COVERS, THWARTS, 2 TARPULINS.

Particulars of fiddley, funnel and ventilator coamings:—

*Stokehold gratings covered by strong steel, hinged covers.
 Fiddley, funnel and ventilator coamings in efficient condition.
 Engine skylight of steel strongly constructed.*

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways:—

Two companionways to accommodation in poop, in steel companion 6' 0" x 5' 2" x 6' 6" with 2-1/2" beam doors on afterside, workable from both sides. Steel 18".

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

*Foremast 10' 5" dia 36" high 30" thick to foremast.
 10' 11" dia 36" high 35" thick to hold.
 Mainmast 12' 15" dia 36" high 40" " " " on Raised wind deck.
 10' 11" dia 36" high 35" " " " 2' 6" above upper deck.
 10' 15" dia 36" high 35" " " "*

*Bridge deck 10' 15" dia 36" high 38" thick to hold.
 20' 25" dia 36" high 38" " " to hold.
 Aft well 10' 15" dia 33" high 38" thick to hold.
 10' 15" dia 36" high 38" " " to hold on Raised.
 10' 14" dia 36" high 32" thick to hold.
 Poop 10' 14" dia 36" high 38" thick to hold.
 10' 9" dia 27" high 32" thick to hold.*

Wood plugs & canvas covers provided for all ventilators

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

*Foremast 10' 25" dia 10" high 8" high from fore peak.
 10' 25" dia 10" high 10" " fore peak filling - screw up.
 10' 2" dia 10" high 10" " from D.B. tank.
 10' 2" dia 10" high 3' 3" " from D.B. tank.
 Poop 10' 15" dia 10" high 16" high E.R. tank filling - screw up.*

*aft well 2 @ 2" dia W.I. 3' 0" high from D.B. tank.
 Poop 2 @ 3" dia W.I. 10" high from aft. peak tank.*

no means of stowing. no snifting holes. except when mentioned.

Wood plugs & canvas covers fitted for all air pipes

Particulars of Gangway Cango and Coaling Ports:—

None.

Particulars of Scuppers and Sanitary Discharge Pipes —

Scuppers - Fore well - 2p 2s 6" dia through deck overboard.
aft well 3p 3s 6" dia through deck overboard.
from Bridge deck 2p 2s 3" dia through deck overboard.
from Bridge space 2p 2s 2 1/2" dia through deck overboard S.V.
NO WOOD PLUGS FITTED.
S.V. = STORM VALVE FITTED.

Sanitary discharge

Bridge space - 3. 3rd side aft end from deck on bridge deck.
through sheer above foreboard bulkhead. S.V.
1 3rd side 1" through sheer. S.V.
1 3rd side 1 1/2" through sheer. S.V.
1 3rd side 1" through sheer. S.V.
from poop. 5p 5s. all with S.V.

Particulars of Side Scuttles:

6 ports 6 starboard to poop space all fitted with hinged scudlights.
all scuttles of substantial construction.

Particulars of Guard Rails:—

Forecastle - efficient bulwark at sides. Guard rails at end uprights 5'0" apart 3 rails.
Bulge - efficient bulwark at sides. Guard rails at aft end uprights 5'0" apart 3 rails.
Poop - all round. Guard rails uprights 5'0" apart 3 rails.
all rails 3'6" high.

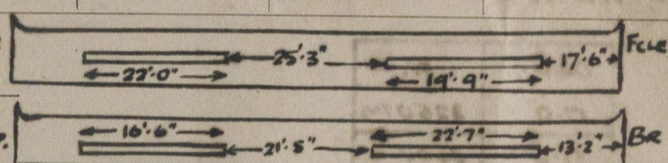
Particulars of Gangways, Lifelines, etc.:—

None. Lifelines provided between bridge & poop for protection of crew

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Fore Well ...	79.5 82.0	4'0"	22'7" and 16'6" x 8"	2	26.18 sq	15.9 sq
Forward Well ...	92.01	4'0"	19'9" and 22'0" x 8 1/2"	2	29.64 sq	18.4 sq

State position of each freeing port ... After Well:—
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.

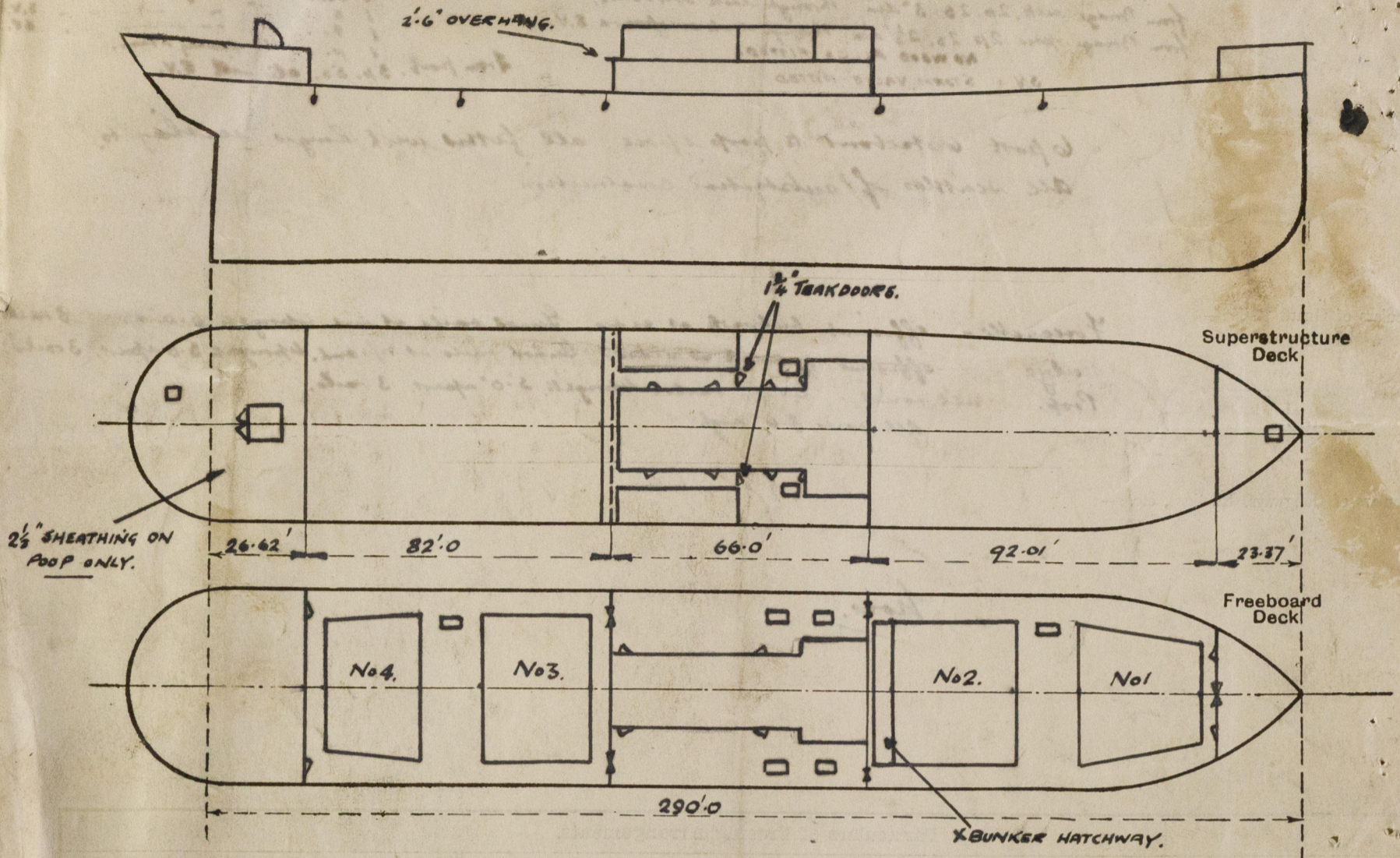
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Fore Bulkhead ...	.36	.36	5 x 3 x 32	30"	large bolt ends	22'4'6" x 2'	18"	7'6"
Raised Quarter Deck Bulkhead ...								
Bulge, After Bulkhead ...	None	.26	3" pl. fl. and L 3 x 2 1/2 x 24	2'2"	None	22'4'6" x 3'3"	18"	7'6"
Bridge, Forward Bulkhead ...	.45"	.40	7 1/2 x 3 x 40 BA	30"	large bolt ends	22'4' x 3'6"	28"	7'6"
Forecastle Bulkhead ...	None	.32	3 1/2" pl. fl. and L 3 x 2 1/2 x 28 L	30"	None	12'4'6" x 3'3" 22'4'6" x 2'0"	18" 18"	7'6" 7'6"
Trunk, Aft ...								
Trunk, Forward ...								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ...	.32	.28	3 x 2 1/2 x 28	30"	Brackets as for in way of ER only	22'4'8" x 2'0"	18"	7'9"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	.32	.28	3 x 2 1/2 x 28	30"	✓	22'4'8" x 2'0" 12'4'6" x 2'6" 22'4'8" x 2'4"	18" 18" 18"	7'6" 7'6" 7'6"
Deckhouses on Flush Deck Ships ...								

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

Poop Bulkhead ...	2 openings 22'4'6" x 2'0" steel door workable from both sides.
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead ...	2 openings 22'4'6" x 3'3" 3" weather boards in riveted channels.
Bridge, Forward Bulkhead ...	2 openings 22'4'0" x 3'6" bolts plates .55" thick. Bolts 3/4" dia 5" pitch. Bolts pass through plate & bed.
Forecastle Bulkhead ...	1 opening 22'4'6" x 3'3" 2 1/2" weather boards in riveted channels. 2 openings 22'4'6" x 2'0" steel door workable from both sides.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	2
Exposed Machinery Casings on Superstructure Decks ...	2 openings 22'4'8" x 2'0" steel door workable from both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	2 openings 22'4'8" x 2'0" steel door workable from both sides. 2 " 22'4'6" x 2'6" " " " " " " 2 " 22'4'6" x 2'4" " " " " " "
Deckhouses on Flush Deck Ships ...	

Sea Venture.

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:—

FROM VESSELS DRAFT - DEADWEIGHT SCALE.

DRAFT.	D.W.
17.0"	3250 TMS.
17.6"	3400
18.0"	3550
18.6"	3710
19.0"	3870

Re Owner's request for Timber deck large freeboard.

Double bottom tanks under engines and boilers only have watertight centre girders.

There are no fittings for uprights.

There are no eyeplates for lashings.

Builder's name and yard number Swan, Hunter, and Wigham Richardson Ltd. Sunderland.

Names of sister ships

Owners

Dover Navigation Company Ltd.

Applied for 13.4.37.

Fee £ 10 : 4 : 0

Received by me



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