

14 MAY 1936

Index. No. 34916
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

15691

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Forecastle Bridge and raised quarter deck.

(Type of Superstructures.)

Port of Survey Middlesbrough.

Date of Survey White building

Name of Surveyor Cyril D. Scour.

Particulars of Classification 100 A.1.

Ship's Name SMITH'S DOCK CO. LTD. No. 9945
"JOLLY GIRLS"

Nationality and Port of Registry BRITISH
HARWICH

Official Number 163012

Gross Tonnage 450.

Date of Build 1936.

Moulded Dimensions: Length 158'0" Breadth 26'10 1/2" Depth 10'6"

Moulded displacement at moulded draught = 85 per cent. of moulded depth 782 tons 10.184 tons

Coefficient of fineness for use with Tables 722.

Depth for Freeboard (D)

Moulded depth 10'6"

Stringer plate 1'02 1/2"

Sheathing on exposed deck

$T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) = 10'6 1/2"

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R = ✓

(b) Where D is less than Table depth (if allowed)
(Table depth - D) R = (10'53 - 10'52) 1'21 1/2"
= -0'12"

If restricted by superstructures Yes No

Round of Beam correction

Moulded Breadth (B) 26'87"

Standard Round of Beam = $\frac{B \times 12}{50} =$ 64.45

Ship's Round of Beam 10'00"

Difference Excess 3'55"

Restricted to

Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{3.55^2}{4} \times .2047 = -0'18"$

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 ...	<u>96'75"</u>	<u>96'75"</u>	<u>3'6"</u>	<u>✓</u>	<u>96'75"</u>
" overhang ...					
Bridge enclosed ...	<u>10'50"</u>	<u>10'50"</u>	<u>6'9"</u>	<u>✓</u>	<u>10'50"</u>
" overhang aft ...					
" overhang forward ...					
F'cle enclosed <u>Regd.</u>	<u>18'00"</u>	<u>18'41"</u>	<u>6'9"</u>	<u>✓</u>	<u>18'41"</u>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<u>125'66"</u>	<u>125'66"</u>			<u>125'66"</u>

Standard Height of Superstructure 6'00"

" " R.Q.D. 3'6" 3'387"

Deduction for complete superstructure 21'80"

Percentage covered $\frac{S}{L} =$ 79.53%

" " $\frac{S_1}{L} =$ 79.53%

" " $\frac{E}{L} =$ 79.53%

Percentage from Table, Line A. 74.72%

(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 = 21'80" × .7472 = -16'29"

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>25'80"</u>	<u>1</u>		<u>25'80"</u>	<u>44'25"</u>	<u>45'61"</u>	<u>1</u>		<u>45'61"</u>
1/2 L from A.P. ...	<u>11'48"</u>	<u>4</u>		<u>45'92"</u>	<u>17'25"</u>	<u>18'61"</u>	<u>4</u>		<u>74'44"</u>
3/4 L " ...	<u>2'84"</u>	<u>2</u>		<u>5'68"</u>	<u>2'25"</u>	<u>3'60"</u>	<u>2</u>		<u>7'20"</u>
Amidships ...	<u>✓</u>	<u>4</u>		<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>4</u>		<u>✓</u>
3/4 L from F.P. ...	<u>5'68"</u>	<u>2</u>		<u>11'36"</u>	<u>10'00"</u>	<u>10'00"</u>	<u>2</u>		<u>20'00"</u>
1/2 L " ...	<u>22'96"</u>	<u>4</u>		<u>91'84"</u>	<u>30'25"</u>	<u>30'25"</u>	<u>4</u>		<u>121'00"</u>
F.P. ...	<u>51'60"</u>	<u>1</u>		<u>51'60"</u>	<u>60'00"</u>	<u>60'00"</u>	<u>1</u>		<u>60'00"</u>
Total ...	<u>232'20"</u>			<u>232'20"</u>					<u>328'25"</u>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ $\frac{96'05"}{18} (.75 - .3976) = -1'88"$

If limited on account of midship superstructure. ✓

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

Mean actual sheer aft = Excess

Mean standard sheer aft = Excess

Mean actual sheer forward = Excess

Mean standard sheer forward = Excess

Length of enclosed superstructure forward of amidships = > 1/2

" " aft of " = > 1/2

Actual R.Q.D. 3'50"

Standard 3'387"

Diff = .113"

1'356"

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 14'02"

Summer freeboard = 3'67"

Moulded draught (d) = 10'35"

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 2'59" = 2 1/2"

Addition for Winter North Atlantic Freeboard (if required) = 2" + 2 1/2" = 4 1/2"

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

$\frac{14}{40 \times 22} = 2 1/2"$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.722 + .68}{1.36} = \frac{1.402}{1.36}$

	+	-
Depth Correction ...	-	-
Deduction for superstructures ...	-	<u>16'29"</u>
Sheer correction ...	-	<u>1'88"</u>
Round of Beam correction ...	-	<u>.18"</u>
Correction for Thickness of Deck amidships ...	-	-
Other corrections, scantlings, etc. ...	<u>42'00"</u>	-
	<u>42'00"</u>	<u>18'35" + 23'65"</u>
Summer Freeboard =	<u>40'78"</u>	

16'62

17'13

8'11" 36

18'5"

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

Tropical Fresh Water Line above Centre of Disc ...	<u>2 1/2"</u>	Tropical Fresh Water Freeboard ...	<u>3'8" (limited)</u>
Fresh Water Line " " ...	<u>2 1/2"</u>	Fresh Water " " ...	<u>3'5 1/2"</u>
Tropical Line " " ...	<u>Nil</u>	Tropical " " ...	<u>3'5 1/2" (limited)</u>
Winter Line below " " ...	<u>2 1/2"</u>	Winter " " ...	<u>3'10 1/2"</u>
Winter North Atlantic Line " " ...	<u>4 1/2"</u>	Winter North Atlantic " " ...	<u>4'0 1/2"</u>

19 MAY 1936

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

PARTICULARS OF HATCHWAYS					
HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS					
Description of Hatchway	No. 1 W.D.		No. 2 R.O.C. ^H		
Dimensions of Hatchway	23'6" x 18'0"		47'3" x 18'0"		
COAMINGS { Height above Deck	3'6"		3'6"		
{ Thickness { Sides	40'		40'		
{ Ends	40'		40'		
Stiffeners	3.		6.		
Brackets, Stays	3.		6.		
HATCH BEAMS { Number	4		9		
{ Spacing	8'3 1/2"		4'8 5/8"		
{ Scantling and Sketch	Pl. 16" x 8" x 36" A.T.B. 4" x 3" x 144"		Pl. 16" x 8" x 36" A.T.B. 4" x 3" x 144"		
Bearing Surface	4		4		
FORE AND AFTERS { Number	✓		✓		
{ Spacing					
{ Unsupported Lengths					
{ Scantling* and Sketch					
Bearing Surface					
HATCH COVERS { Material	W.P.		W.P.		
{ Thickness	2 3/8"		2 3/8"		
{ How fitted	SOLID.		SOLID.		
Bearing Surface	3"		3"		
Spacing of Cleats	24"		24"		
Number of Tarpaulins	2.		2.		

HATCH SIDE

10' x 3 1/2" x 45'
3 1/2" x 3 1/2" x 50
3' x 3' x 5
COAMING 40.
STIFFENER ON HATCH ENDS. 6' x 3' x 40
BRACKETS FITTED ON HATCH ENDS AT ENDS
5' x 5' LUGS.

*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.

2 3/4" Stud iron with stretching screws 2 to each section of covers.

Particulars of fiddley, funnel and ventilator coamings:—

Motor Room skylight of steel strongly constructed.
Ventilators efficient.

Particulars of Flush Bunker Scuttles:—

NONE

Particulars of Companionways :—

Entrance to Motor Room through deckhouse. Wood door strongly constructed
4'6" x 2'2" sill 1'9" Door operated from both sides.

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

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

1 Ventilator on Raised Quarter deck	led to hold, boaming	30" x 36" 14" dia.	P.S.
1 " " "	" " "	" " "	S.S.
1 " " "	upper deck led to hold	boaming 36" x 36" 14" dia.	S.S.

all Ventilators constructed in accordance with the rules and learnings closed with wood pluffs and canvas cover. ✓

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

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

3" C.I.	air pipe to fore peak led through forecastle front	3'0" above deck (Upper)	✓
4" S.I.	" " " D.B.T. at forecastle front.	3'0" above upper deck	✓
3" C.I.	" " " D.B.T. on Raised quarter deck	3'0" high 1 P & 15.	✓
2" C.I.	" " " Side tanks in engine room	3'0" high on R.Q.D.K.	✓
2" C.I.	" " " after peak on R.Q.D.K.	2'2" high	✓

all air pipes closed with
wood plugs

all sounding pipes flush
with deck (brass caps) ✓

Particulars of Gangway Cargo and Coaling Ports:—

NONE FITTED. ✓

Particulars of Scuppers and Sanitary Discharge Pipes:—

No scuppers discharging below upper deck!
Sanitary discharges fitted with gunmetal storm valves at ship's side & with non return valves at inner end. Discharging above upper deck. ✓

Particulars of Side Scuttles:—

All side scuttles to crew spaces in Forecastle & Bridge provided with trimped deadlights. ✓
All scuttles of substantial construction. ✓

Particulars of Guard Rails:—

Guard rails on Forecastle deck. ✓
Bridge deck. ✓
Steel bulwark on upper deck and raised quarter deck 3'6" high efficiently constructed and supported. ✓

Particulars of Gangways, Lifelines, etc.:—

Life line in well fitted on hatchway. ✓

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	96.75.	3'6"	7'0" x 9"	4.	21.00	19.35 18.35
Forward Well	29.9	3'6"	7'0" x 9"	2.	10.50	9.5

State position of each freeing port } After Well:— FROM B.E. 8'9" 15'9" 15'9" 19'6" 8 1/2' above deck
(F. and A. position and height above deck edge) } Forward Well:— B.F. 3'6" 7'0" 9' above deck.
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— No shutters or bars.
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	✓	20	3' x 2 1/2' x 28'	2'3"				
Bridge, Forward Bulkhead	✓	30	4' x 3' x 30'	2'3"	LUGS AT TOP.	✓	✓	3'6"
Forecastle Bulkhead	✓	20	5' x 3' x 30'	2'3"	LUGS T & B.	2011 ✓	✓	6'9"
Trunk, Aft		20	3' x 2 1/2' x 26'	2'6"	NOT ATTACHED.	4'3" x 2'0"	2'0"	6'9"
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓	26	3' x 28'	3'6"	✓	5'3" x 1'10"	12"	3'6"
Exposed Machinery Casings on Superstructure Decks								
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	No openings
Bridge, After Bulkhead	No openings.
Bridge, Forward Bulkhead	No openings.
Forecastle Bulkhead	HINGED STEEL DOOR STARS' SIDE & WOOD PORT SIDE MANIPULATED FROM BOTH SIDES.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	HINGED STEEL DOOR IN AFTER END OF CASING MANIPULATED FROM BOTH SIDES.
Exposed Machinery Casings on Superstructure Decks	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships	

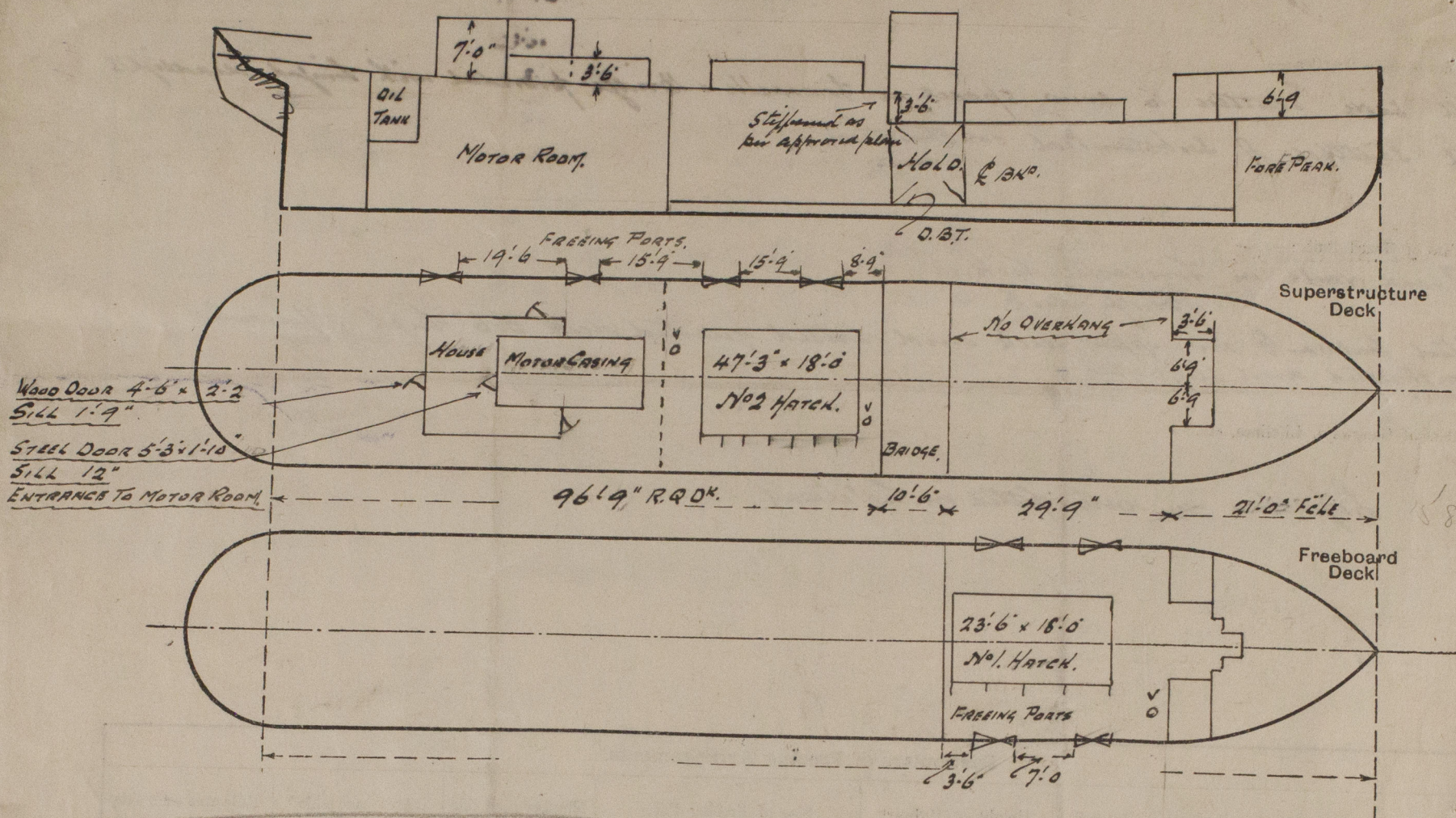


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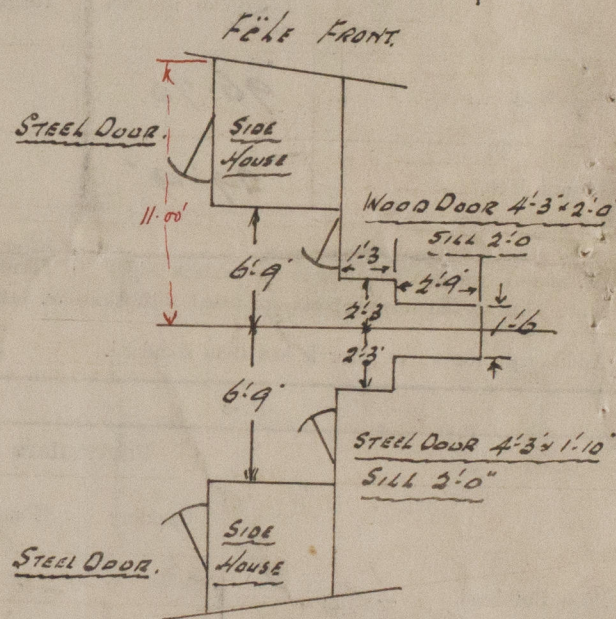
Tally Girls

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:—

Forecastle 21.00'
 Recesses. 13.50 x 3.50 = 47.25'
 4.50 x 1.25 = 5.62' - 2.59'
 2.75 x 1.50 = 4.12' 18.41' equiv.
 56.99'
 22.00'



Builder's name and yard number Smiths Dock Co. No 995.

Names of sister ships ✓

Owners ✓

Fee £ 6 : - : -

Received by me ✓



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