

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

27 FEB 1935

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Raised Quarter and Forecastle Decks.

Port of Survey Aberdeen.

(Type of Superstructures.)

Date of Survey whilst building

Ship's Name SEA HORSE JOLLY DAYS.
Nationality and Port of Registry British London
Official Number 163011
Gross Tonnage 351.11
Date of Build 1935.
JOHN LEWIS & SONS NO 132.
Harwich.

Name of Surveyor T. Richardson.

Moulded Dimensions: Length 130.25. Breadth 25.02 Depth 13.18 + 9.78 M.D.
Moulded displacement at moulded draught = 85 per cent. of moulded depth 530. tons
Coefficient of fineness for use with Tables 699

Particulars of Classification 100.A.1.
contemplated.

Depth for Freeboard (D) 59
Moulded depth R.Q.D. 13.18 M.D. 9.78
Stringer plate ... R.Q.D. 32 03
Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$ ✓
Depth for Freeboard (D) = 9.62

Depth correction
(a) Where D is greater than Table depth 935
(D-Table depth) R = $(9.62 - 8.685) \times 1.002$
= + .94"
(b) Where D is less than Table depth (if allowed)
(Table depth-D) R = ✓
If restricted by superstructures ✓

Round of Beam correction 90
Moulded Breadth (B) R.Q.D. 25.02
Standard Round of Beam = $\frac{B \times 12}{50} =$ 6"
Ship's Round of Beam = 6"
Difference Nil
Restricted to
Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ Nil

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>82.75</u>	<u>82.75</u>	<u>3.6"</u>	<u>✓</u>	<u>82.75</u>
" overhang ...					
Bridge enclosed...					
" overhang aft ...					
" overhang forward	<u>16.99</u>	<u>16.98</u>	<u>6.9"</u>	<u>✓</u>	<u>16.98</u>
F'cle enclosed ...	<u>16.99</u>	<u>16.98</u>	<u>6.9"</u>	<u>✓</u>	<u>16.98</u>
" overhang ...	<u>3.6"</u>				
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	<u>99.73</u>	<u>99.73</u>			<u>99.73</u>

Standard Height of Superstructure 6.00'
" " R.Q.D. 3.202'
Deduction for complete superstructure 19.02"
Percentage covered $\frac{S}{L} =$ 76.58%
" " $\frac{S_1}{L} =$ 76.58%
" " $\frac{E}{L} =$ 76.58%
Percentage from Table, Line A. 71.09%
(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 = $19.02 \times .7109 =$ - 13.52"

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>23.02</u>	<u>✓</u>	<u>1</u>	<u>23.04</u>	<u>24</u>	<u>27.58</u>	<u>1</u>	<u>✓</u>	<u>27.58</u>
$\frac{1}{2}$ L from A.P. ...	<u>10.245</u>	<u>✓</u>	<u>4</u>	<u>40.98</u>	<u>10.8</u>	<u>12.27</u>	<u>4</u>	<u>✓</u>	<u>49.08</u>
$\frac{3}{8}$ L " ...	<u>2.53</u>	<u>✓</u>	<u>2</u>	<u>5.06</u>	<u>1</u>	<u>3.03</u>	<u>2</u>	<u>✓</u>	<u>6.06</u>
Amidships ...	<u>✓</u>	<u>✓</u>	<u>4</u>	<u>✓</u>	<u>nil.</u>	<u>✓</u>	<u>4</u>	<u>✓</u>	<u>✓</u>
$\frac{3}{8}$ L from F.P. ...	<u>5.06</u>	<u>✓</u>	<u>2</u>	<u>10.12</u>	<u>10.2</u>	<u>10.50</u>	<u>2</u>	<u>✓</u>	<u>21.00</u>
$\frac{1}{2}$ L " ...	<u>20.49</u>	<u>✓</u>	<u>4</u>	<u>81.96</u>	<u>29</u>	<u>29.00</u>	<u>4</u>	<u>✓</u>	<u>116.00</u>
F.P. ...	<u>46.05</u>	<u>✓</u>	<u>1</u>	<u>46.05</u>	<u>49.3</u>	<u>49.75</u>	<u>1</u>	<u>✓</u>	<u>49.75</u>
Total ...				<u>207.21</u>					<u>269.23</u>

Mean actual sheer aft = Excess (by virtue of excess R.Q.D. height) = 3.58"
Mean standard sheer aft = 3.58"
Mean actual sheer forward = Excess.
Mean standard sheer forward = Excess.
Length of enclosed superstructure forward of amidships = > 1L
" " aft of " = > 1L

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{62.02 - 26.75}{18} \left(.75 - \frac{.3829}{2} \right) =$ - 1.26"
If limited on account of midship superstructure. ✓
If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. ✓

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

Ft.
Depth to Freeboard Deck = 13.12
Summer freeboard = 3.67
Moulded draught (d) = 9.45

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta =$ 648
Tons per inch immersion at summer load water line
 $T =$ 6.57
Deduction = $\frac{\Delta}{40T}$ inches
= 2.5"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ... 94
Deduction for superstructures ... 13.52
Sheer correction ... 1.26
Round of Beam correction ... 7
Correction for Thickness of Deck amidships ... 42.00
Other corrections, scantlings, etc. of R.Q.D. ... 14.78

Summer Freeboard = 41.376

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:— R.Q.D. 3'-8" Limited

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

1 MAR 1935

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway				N ^o 1. FORWARD MAIN DECK.		N ^o 2. RAISED Q ^d DECK.			
Dimensions of Hatchway				23'6" x 16'0"		29'9" x 16'0"			
COAMINGS	{	Height above Deck	...	3'6" ends. 3'6" $\frac{3}{4}$ middle		3'3" ends. 3'6" middle			
		Thickness	...	38"		38"			
		Stiffeners	...	7" x 3" x 35" B.A.		7" x 3" x 35" B.A.			
		Brackets, Stays	...	2. Plated plates 30 as approved.		2. Plated plates 30 as approved.			
HATCH BEAMS	{	Number	...	4		5			
		Spacing	...	4'8 $\frac{1}{2}$ "		4'11 $\frac{1}{2}$ "			
		Scantling and Sketch	...	Plates 14" x 6" x 3" angles 3" x 3" x 42"		As N ^o 1.			
		Bearing Surface	...	3"		3"			
FORE AND AFTERS	{	Number	...						
		Spacing	...						
		Unsupported Lengths	...						
		Scantling* and Sketch	...	none		none			
HATCH COVERS	{	Material	...	W. Wood					
		Thickness	...	2 $\frac{1}{2}$ "		As N ^o 1.			
		How fitted	...	one + aft.					
		Bearing Surface	...	3"					
Spacing of Cleats				1'10"		1'10"			
Number of Tarpaulins				2.		2.			

"A." Small hatch in fore, 6 Stoves below 2'0" x 2'0". 2 $\frac{1}{2}$ " Wood covers, no tarpaulins. marked "A" on sketch.

"B." Hatch 6 After Peak Stove 18" diam x 12" high. 26 bolted plate cover. 8 @ $\frac{3}{4}$ bolts. Ceamings 26. marked "B" on sketch.

"C." Opening to Coal Bore at after end of Skylight. Port bulks. 2'0" x 2'0". 26 bolted plate top. no coaming. no tarpaulins. marked "C" on sketch.

*Are wood fore and afters steel shod at all bearing surfaces? none.

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? 8.8. Wire lashings, with tightening screws fitted, as approved B.O.T.

Particulars of fiddley, funnel and ventilator coamings :—

Funnel and ventilators in efficient condition. ✓
Engine Room skylight of steel, with steel sashes and prismatic lights, strongly constructed. ✓
Canvas cover provided. ✓
No Stokes Hold fralings. ✓

Particulars of Flush Bunker Scuttles:—

None. ✓

Particulars of Companionways:—

Particulars of Companionways :—

Entrance to Bridge Deck House on R.Q.D. ^K	Teak door 4'4" x 1'10". 1'7" Coaming. ✓
" " Engine Room thro Companion on Starb. side.	Steel door 4'6" x 1'10". 1'9" Coaming. ✓
" " Forecabin.	Steel door. 4'6" x 1'10". 1'7" Coaming. ✓

All doors opened 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.	Vent. on Upper Deck	13½" diam.	Coaming 36" x 36"	led to Hold.	stayed to Fore end
1.	" " R.O. Deck	13½"	" 36" x 36"	" " "	" " "
2.	" " Fore Deck	6"	" 12" x 30"	" " "	Crew space.
3.	" " Bridge Deck	6"	" Height 6" (MUSH.)	" " "	Accommodation in Bridge House.

all Vents constructed in accordance with the Rules, closed with Tin Caps and Canvas Covers.

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:—									
1.	W.I.	Air pipe on Deck	18" high	2" diam.	from Fore Peak Tank.	all air pipes to Ballast Tanks, have bends at top and are closed with screwed plug attached with chains. Air pipes to Oil Bunkers, have bends at top, mounded and fitted with gauge. ✓			
1.	"	"	18"	2"	"				
2.	"	"	30"	2"	"				
1.	"	"	30"	2"	"				
2.	"	"	30"	2"	"				

Particulars of Gangway Cargo and Coaling Ports :—

None.

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Particulars of Scuppers and Sanitary Discharge Pipes :—

all Scuppers are cut through Gunwale angles, above Freeboard and Raised Quarter D^{ns} ✓
4" diam Discharge from Crews W.C. forward. Cast iron, with mallrable cast iron Storm valve.
at ship's side, out 3'6" below Main D^x ✓

Particulars of Side Scuttles :—

7" diam to Crews space in Forecastle, fitted with hinged dead lights. ✓
10" " " Bridge D^x House (front & sides) " " " " " " ✓
all scuttles of substantial construction. ✓

Particulars of Guard Rails :—

Steel Bulwarks on Freeboard D^x in well 3'6" high. Efficiently constructed and supported. ✓
" " " Raised Quarter D^x 3'0" " " " " " " ✓
Guard rails on Forecastle D^x 3'0" high, with 2 rods and stanchions, spaced about 4'6" apart. ✓

Particulars of Gangways, Lifelines, etc. :—

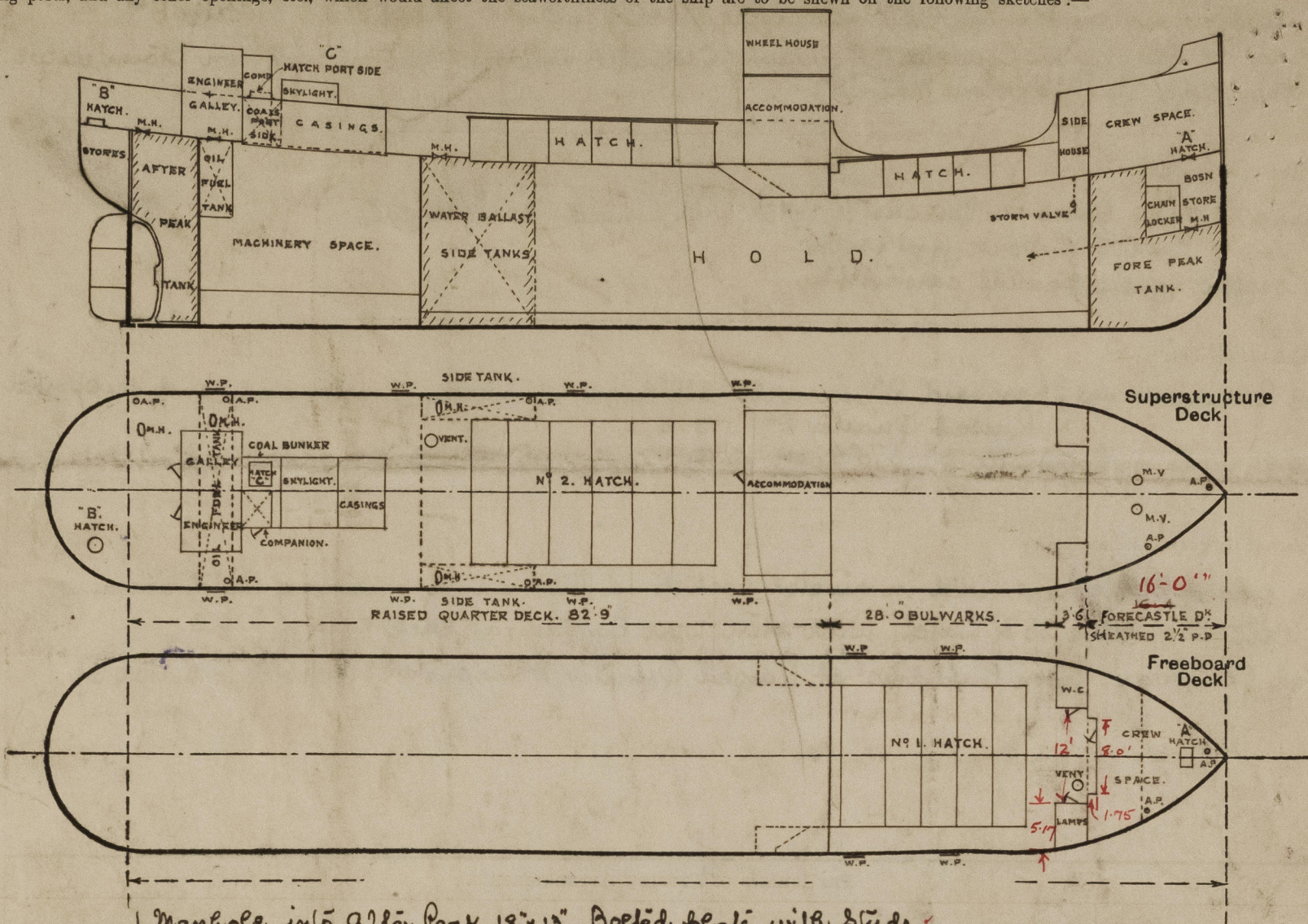
One row of stanchions, fitted in riveted sockets on bulb angles, on side of hatch coaming ✓
in Well, 2'9" above top of hatch, with steel wire lashed at each end of Well. ✓
Wood gangways from Ladders at Raised Quarter D^x front & Forecastle to hatch top. ✓

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 RAISED Q. D ^x	82'9"	3'0"	3'0" x 1'5"	4	16.92 f	16.55 ✓
Forward Well MAIN D ^x	28'0"	3'6"	3'3" x 1'6"	4	9.75 f	9.3 ✓
State position of each freeing port ... { After Well :— From A.P. 9'9", 30'9", 52'0", 72'6", 7 1/2" above R.Q.D ^x (F. and A. position and height above deck edge) { Forward Well :— " Quarter D ^x front. 1'3", 12'9", 9" " " M.D ^x State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :— Fitted with hinged plate shutters on R.Q.D ^x " " one rod & no shutters " M.D ^x ✓ 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 ...	✓	30" ✓	3" x 8" x 30"	30" ✓	none	none	✓	3'6"
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead	✓	26" ✓	2 1/2" x 2 1/2" x 26"	under 36"	none	4'6" x 1'10"	1'7"	6'9"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	30"	Top 26" ✓	3" x 2 1/2" x 30"	30" ✓	9" x 30" knees Top	4'6" x 1'10"	1'9"	3'0"
Exposed Machinery Casings on Superstructure Decks								E.A. COMP. 7'0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships ...	✓	26" ✓	3" x 2 1/2" x 30"	33"	none	4'4" x 1'10"	1'7"	7'0"
Particulars of Closing Appliances (state if capable of being manipulated from both sides).								
Poop Bulkhead								
Raised Quarter Deck Bulkhead ...	✓ No openings							
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead	One Steel Door into Crew space, manipulated both sides. ✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	One Steel Door into Engine Room, manipulated both sides. ✓							
Exposed Machinery Casings on Superstructure Decks								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships ...	One Teak Door into Deck House, manipulated both sides. ✓							

Jolly Days

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:—



1. Manhole into After Peak 18"x13". Boiled plate with studs.
2. Manholes into Side Ballast Tanks 18"x13". Boiled plates with studs.
1. Manhole into Oil Fuel Tank 18"x13". 6" angle coaming $\frac{3}{8}$ " hinged top plate, with 5 Butterfly nuts.

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

This vessel is intended for the Home coasting trade.
Timber Freeboard not required.

Vessel surveyed during construction. I.E. Report will follow on completion.
The particulars given herewith (where relating to items not yet fitted) are as proposed by the Builders, and the completion of same, will be advised, together with Verification form.

Particulars of Displacement etc, as supplied by the Builders.
 External Displacement at 8'0" mean draft 530 Tons. Tons per Inch 6.35.
 " " " 9'0" " " 607 " " " 6.50.
 " " " 10'0" " " 686 " " " 6.65.

Plans of Profile(2) and Midship Section as approved, forwarded herewith for reference.

The S.S. "JOLLY NIGHTS". abn. Report 17956 is a sister vessel.

Builder's name and yard number Messrs John Lewis & Sons Ltd. Yard No. 132 (now building)

Names of sister ship "JOLLY NIGHTS". abn. Report 17956.

Owner Frederick W. Harlock. Mistry, Essex.

Fee £ 6 0 0. Received by me

File

16'00
3'50
17'50
2'51
16'99 equs

Recesses

$\frac{1.75 \times 8.00}{22.34} = .63$

$\frac{3.50 \times 12.00}{22.34} =$

$\frac{1.88}{2.51}$

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