

28 MAY 1932

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index No. **25477**
(For London Office only.)

2450

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having R.Q.D., Bridge and Forecastle.

Port of Survey Barrow.

Date of Survey 14th & 23rd May 1932.

Name of Surveyor J. Hodgson.

Particulars of Classification 100 A1.

Ship's Name SOUND FISHER. Nationality and Port of Registry British Barrow. Official Number 142744 Gross Tonnage 500 Date of Build 1919-2.

Moulded Dimensions: Length 142' Breadth 26' Depth 12-25'

Moulded displacement at moulded draught = 85 per cent. of moulded depth ie 10-41' = 490 tons

Coefficient of fineness for use with Tables 42.719

Depth for Freeboard (D) 12-3' $\frac{L}{15} = 9.46$ Depth correction $\frac{L}{150} = 1.092$

Moulded depth 12-3' (a) Where D is greater than Table depth (D-Table depth) R = 12-29' - 9-46' = 3-08'

Stringer plate 44' (b) Where D is less than Table depth (if allowed) (Table depth-D) R = 12-29' - 12-25' = 4'

Sheathing on exposed deck T $\left(\frac{L-S}{L}\right) =$ 12-3-46' If restricted by superstructures ✓

Depth for Freeboard (D) = 12-29'

Round of Beam correction

Moulded Breadth (B) 26-0'

Standard Round of Beam = $\frac{B \times 12}{50} =$ 6-24'

Ship's Round of Beam = 6-50'

Difference 26'

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{26}{4} \times .18 = .01$

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>83-0</u>	<u>83-0</u>	<u>4-25</u>	-	<u>83-0</u>
" overhang ...	<u>9-65</u>	<u>9-65</u>	<u>6-98</u>	-	<u>9-65</u>
Bridge enclosed ...	<u>9-5</u>	<u>9-5</u>	<u>6-98</u>	-	<u>9-5</u>
" overhang aft ...	-				
" overhang forward ...	-				
Fore enclosed ...	<u>21-1</u>	<u>21-1</u>	<u>6-73</u>	-	<u>21-1</u>
" overhang ...	<u>6-1</u>	<u>3-05</u>	"	-	<u>3-05</u>
Trunk aft ...	-				
" forward ...	-				
Tonnage opening aft ...	-				
" " forward ...	-				
Total ...	<u>119-7-85</u>	<u>116-65-80</u>			<u>116-65-80</u>

Standard Height of Superstructure 6-0

" " R.Q.D. 3-28

Deduction for complete superstructure 14 + 62 x 20 = 20-2

Percentage covered $\frac{S}{L} =$ 84.3 84.40%

" " $\frac{S_1}{L} =$ 82.1 82.25%

" " $\frac{E}{L} =$ 82.1 82.25%

Percentage from Table, Line A. 44.9 78.09%

(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 = 20-2 x 44.9 = 15-44 - 15-77

Sheers measured Aft.

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	<u>24-20</u>	1	<u>24-20</u>	<u>36</u>	<u>36-00</u>	1	<u>47-64</u>
$\frac{1}{2}$ L from A.P. ...	<u>10-77</u>	4	<u>43-08</u>	<u>12</u>	<u>14-22</u>	4	<u>84-80</u>
$\frac{2}{3}$ L " ...	<u>2-66</u>	2	<u>5-32</u>	<u>2</u>	<u>3-55</u>	2	<u>10-48</u>
Amidships ...	✓	4	✓	0	✓	4	✓
$\frac{2}{3}$ L from F.P. ...	<u>5-32</u>	2	<u>10-64</u>	<u>12</u>	<u>7-90</u>	2	<u>15-80</u>
$\frac{1}{2}$ L " ...	<u>21-54</u>	4	<u>86-16</u>	<u>33</u>	<u>31-60</u>	4	<u>126-40</u>
F.P. ...	<u>48-40</u>	1	<u>48-40</u>	<u>60</u>	<u>60-00</u>	1	<u>60-00</u>
Total ...			<u>217-80</u>				<u>345-12-304</u>

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 = $\frac{21-25}{142} = .149$

" " aft of " = $\frac{41}{142} = .51$

Mean Standard Sheer = $.05L + .5 = 12.1$

$\frac{127.32}{18} \times (.75 - .422) = -2.32$

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{(1689 - 121) \cdot 33}{18} = +58$

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.

Depth to Freeboard Deck = 16-54-2-29 Ft.

Summer freeboard = 4-42 17

Moulded draught (d) = 12-12

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3-04 3

Addition for Winter North Atlantic Freeboard (if required) = 3+2 = 5

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$ 901

Tons per inch immersion at summer load water line

T = 7.26

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

= 901

40 x 7.26

= 3-1

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{72+68}{136} \times 14.46 = 1.36$

Depth Correction 3-09 15-77

Deduction for superstructures 13-08 15-74

Sheer correction 2-13 15-58

Round of Beam correction 01

Correction for Thickness of Deck amidships

Height of Raised Quarter Deck 54-08 17-91

Other Corrections, scantlings, etc. 3-09 14-33

Summer Freeboard = 51-04 14-46

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :- 4-5

Tropical Fresh Water Line above Centre of Disc ...	3"
Fresh Water Line " " ...	3"
Tropical Line " " ...	nil.
Winter Line " " ...	3"
Winter North Atlantic Line " " ...	5"

Tropical Fresh Water Freeboard ...

Fresh Water " "

Tropical " "

Winter " "

Winter North Atlantic " "

Sound Fisher

Longitudinal Section.
Through Cross Bunker Hatch.

Gallery Top

Tarpsaulin

flar Chest

Bosier Cooring Top

Angles

2 1/2 Wood Cover.

The fore end coaming has at sometime been cut away and hatches and lampoons are now fitted as shown.

Particulars of Flush Bunker Scuttles:— on. Raised Quarter Deck. 4 @ 18" diam with Cast Iron. ^{and} Covers having Bayonet joints ~~no deep chains~~ ^a attachments

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

on Forecastle Deck	1 Vent. 32" diam. Coaming 51" x 28" behind Bow chock to Intact Fole. was stayed
" " "	1 Store funnel. 7° diam. 60" high x 24" Coaming 8" unstayed. also one 8" Coaming for Store funnel now filled with canvas cover. 1 C.I. Gooseneck Vent 5" diam. 14" high
" " "	1 Vent 1 1/2" diam. Coaming 36" 30" high above Fole extending through open part of Fole to Hold.
" Bridge "	2. C.I. Goosenecks 5" diam 14" high to Intact Bridge. (Ventils in Efficient Condition constructed to Rule Requirements)
" R & D. "	1 Vent 12" diam Coaming 30" x 18" high was stayed to Hold. (Wood plies & covers to Vent on R & D only.)

Particulars of Gangway Cargo and Coaling Ports:—

None

Particulars of Guard Rails:— Guard Rails on Forecastle 3'-0" high two rods with stanchions 4'-6" apart.
 " Steel Bulwark on Foreboard deck in fore well. 4'-3" high efficiently constructed and supported.
 " " " Raised Quarter deck. 3'-0" " " " " "
 " " " Bridge deck. 3'-0" " " " " "

Particulars of Gangways, Lifelines, etc. :—

~~None~~ req'd in fore well.
Gangways and lifelines provided
in well for protection of the crew.

State position of each freeing port } After Well:— *from midships. aft 1-5', 29-25'* 3" above deck edge.
(F. and A. position and height above deck edge) } Forward Well:— " " *forwa 25-0', 30-5'* 8 1/2" " " "
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—
Balanced Steel Shutters Steel pins in Steel Sockets
Additional area where sheer is less than standard.)

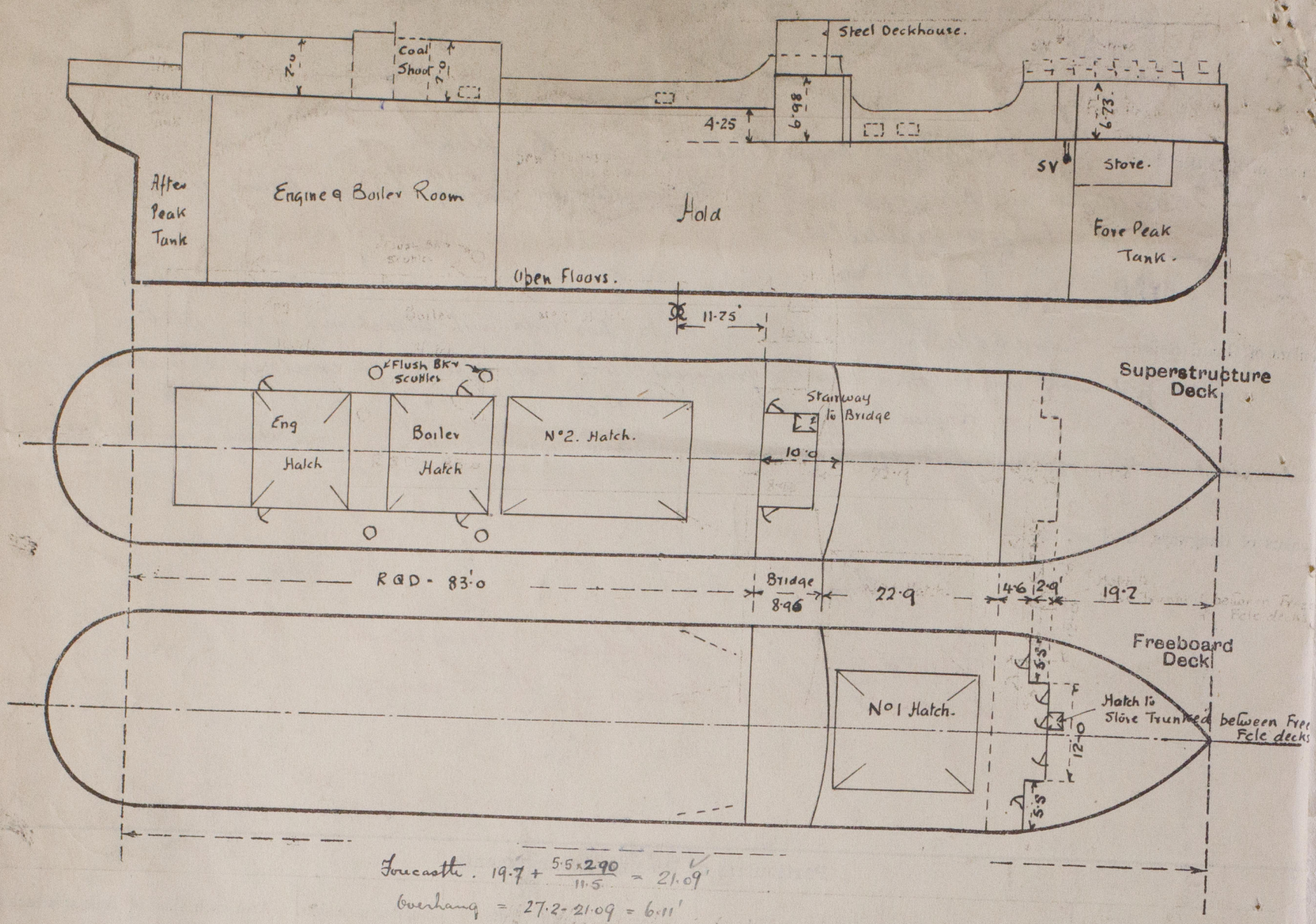
	Plating	Studs	Ribbing	Longitudinal Bulkheads	Transverse Bulkheads	Diagonal Bracing	Other	Total Weight
Raised Quarter Deck Bulkhead } ...				Deep Brackets at Breast end.				
Bridge, After Bulkhead ... ..	.28 ✓	.28 ✓	L 3½ × 3 × .36 ✓	30" ✓	None ✓	None ✓	-	295 above R & L
Bridge, Forward Bulkhead ... ..	.30 ✓	.28 ✓	L 6 × 3 × .114 ✓	30 ✓	Bracketed ✓	None ✓	-	4-0
Forecastle Bulkhead ... ..	.24 ✓	.24 ✓	L 3 × 3 × .28 ✓	40" ✓	None ✓	4'-6" × 2-0 ✓	18" ✓	6'-9"
Trunk, Aft			9 Longl. Bulkhd's.					
Trunk, Forward								
Exposed Machinery Casings on Lower Deck Raised Quarter Decks ...	.30 ✓	.26 ✓	3 × 3 × .32 ✓	24" to 30" ✓	Bracketed at top ✓	4'-5" × 1-10 ✓	24	4-0 ✓
Exposed Machinery Casings on Superstructure Decks								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Unkown as Plank Deck Skins								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Port Bulkhead	✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	✓
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	✓
Exposed Machinery Casings on Fore- castle or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Super- structure Decks	✓
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships ...	✓

No openings
No openings
No openings
Strong Hinged Doors to Forecastle, 2 Wood, & 2 Steel operated from both Sides
Strong Hinged Steel Weatherlight door through Bulkhead to Companion Hatch to Store below Fore and Deck operated from both sides
Steel Hinged Doors operated from both sides

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Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



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

The Vessel has been examined afloat and the survey confined to the parts detailed on this Report.

18 1/2 sqft. of freeboard area

Builder's name and yard number Archrossan. D D T S B Co. Ltd N° 302.

Names of sister ships ✓

Owners J. Fisher & Sons Ltd.

Fee £ 6 : 16 : -

Received by me



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