

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having *a* *Forecastle*

Port of Survey *London*

Date of Survey *9<sup>th</sup> Sept. 1936*

Name of Surveyor *J.G. Buchanan*

Particulars of Classification *+100 A1.*  
*whaler.*

(Type of Superstructures.)

Ship's Name *WILLIAM SCORESBY*

Nationality and Port of Registry *British Stanley F.I.*

Official Number *148757*

Gross Tonnage *324*  
*326*

Date of Build *1926-6.*

Moulded Dimensions: Length *125'* Breadth *26* Depth *14'5"*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *778 (estmd.)* tons

Coefficient of fineness for use with Tables *.68.*

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	14'50	(a) Where D is greater than Table depth (D - Table depth) R = (14'69 - 8'33) .961 = 6'11		Moulded Breadth (B)	26'0
Stringer plate	.02	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Standard Round of Beam = $\frac{B \times 12}{50}$	6'24
Sheathing on exposed deck <i>2 1/4" Oak.</i>				Ship's Round of Beam	6'5
$T \left( \frac{L-S}{L} \right) = .19 \times .904$	.17			Difference	.26"
Depth for Freeboard (D) =	14'69	If restricted by superstructures ✓		Restricted to	
				Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$\frac{.26}{4} \times .9154 = .06$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						Standard Height of Superstructure 6'00
" overhang ...						" " R.Q.D. ✓
R.Q.D. enclosed ...						Deduction for complete superstructure 18'50
" overhang ...						Percentage covered $\frac{S}{L} = 9'60$
Bridge enclosed ...						" " $\frac{S_1}{L} = 8'46$
" overhang aft ...						" " $\frac{E}{L} = 8'46$
" overhang forward ...						Percentage from Table, Line A. 4'23
Fore enclosed ...	12'0	10'58	6'4	✓	10'58	(corrected for absence of forecastle (if required)) ✓
" overhang ...						Percentage from Table, Line B. ✓
Trunk aft ...						(corrected for absence of forecastle (if required)) ✓
" forward ...						Interpolation for bridge less than 2L (if required) ✓
Tonnage opening aft ...						Deduction = 18'50 × .0423 = .78"
" " forward						
Total ...	12'0	10'58			10'58	

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product	
A.P. ...	22'50	1	22'50	63'50	22'50	1	22'50	Mean actual sheer aft = Excess.
1/4 L from A.P. ...	10'01	4	40'04	33'00	10'01	4	40'04	Mean actual sheer forward = Deficient (88'18" standard)
1/2 L " ...	2'47	2	4'94	12'25	2'47	2	4'94	
Amidships ...	-	4	-	-	-	4	-	Length of enclosed superstructure forward of amidships = } Deficient
3/4 L from F.P. ...	4'95	2	9'90	1'00	1'00	2	2'00	aft of " = } Sheer
1/4 L " ...	20'03	4	80'12	18'50	18'50	4	74'00	
F.P. ...	45'00	1	45'00	47'25	47'25	1	47'25	
Total ...			202'50				190'73	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{11'77}{18} \left( .75 - \frac{0'48}{2} \right) = + .46"$

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 = *14'71*

Summer freeboard = *1'54*

Moulded draught (d) = *13'17*

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = *3'29 = 3 1/4"*

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

$\frac{d}{4} = 3 1/4"$

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient ✓

Depth Correction ... 6'11

Deduction for superstructures ... .78

Sheer correction ... .46

Round of Beam correction ... .06

Correction for Thickness of Deck amidships ... .21

Other corrections, scantlings, etc. ...

	+	-
Depth Correction	6'11	-
Deduction for superstructures	-	.78
Sheer correction	.46	-
Round of Beam correction	-	.06
Correction for Thickness of Deck amidships	.21	-
Other corrections, scantlings, etc.	-	-
<b>Total</b>	<b>6'78</b>	<b>.84</b>

Summer Freeboard = *18'44*

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

Tropical Fresh Water Line above Centre of Disc ...	6 1/2"	Tropical Fresh Water Freeboard ...	1'0"
Fresh Water Line " " ...	3 1/4"	Fresh Water " " ...	1'3 1/4"
Tropical Line " " ...	3 1/4"	Tropical " " ...	1'3 1/4"
Winter Line below " " ...	3 1/4"	Winter " " ...	1'9 1/4"
Winter North Atlantic Line " " ...	5 1/4"	Winter North Atlantic " " ...	1'11 3/4"

18 SEP 1936

RECEIVED



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

## HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Description of Hatchway	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
COAMINGS	{	Height above Deck	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Thickness	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sides	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ends	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
HATCH BEAMS	{	Number	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Spacing	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Scantling and Sketch	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bearing Surface	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
FORE AND AFTERS	{	Number	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Spacing	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Unsupported Lengths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Scantling* and Sketch	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
HATCH COVERS	{	Material	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Thickness	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		How fitted	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bearing Surface	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spacing of Cleats	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Number of Tarpaulins	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

*No HATCHWAYS.*

\*Are wood fore and afters steel shod at all bearing surfaces?  
 Are battens and wedges efficient and in good condition?  
 Are tarpaulins in good condition and in accordance with rule requirements?  
 Are lashings provided in accordance with rule requirements?

Particulars of fiddley, funnel and ventilator coamings:—

Engine Room skylight - steel plates and angles - closed with hinged steel flaps ✓  
 Lidley grating - closed with hinged steel covers ✓  
 Ventilator and Funnel casing in good order ✓

Particulars of Flush Bunker Scuttles:—

To oil fuel bunker - 15" dia. screwed. airtight ✓

Particulars of Companionways:—

On forward deck - built of steel, one opening (p.r.s.) 48" x 22" closed with 1 3/8" hinged hardwood door - Height of sill 15" ✓

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

1-6" vent (p.r.s.) to forward spaces - steel coaming to height of fore deck and stayed to after end same ✓  
 Aft - 1-9" dia - steel coaming 6' high ✓  
 " 1-6" " - steel coaming 12" " ✓  
 also mushroom ventilators - which can be screwed down tight ✓ Wood plugs Canvas covers supplied ✓

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

To Fresh Water Tank - port side - open end inside boiler casing. 5' high ✓  
 To Oil fuel tanks - one (p.r.s.) - open end at height of navigating Bridge ✓  
 To after peak - 19" high - with wood plug & canvas cover ✓

Particulars of Gangway Cargo and Coaling Ports:—

None ✓



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William Scoresby

Particulars of Scuppers and Sanitary Discharge Pipes:—

4 deck scupper openings in skinstrake (p/s)  $5\frac{1}{2} \times 1\frac{1}{2}$ " ✓  
w.c. discharge pipes at shell have flap valves, inboard ends above level of freeboard deck ✓

Particulars of Side Scuttles:—

None ✓

Particulars of Guard Rails:—

On Fore Deck, 2 tiers of steel rods 3' high and stanchions spaced 4' apart ✓

Particulars of Gangways, Lifelines, etc.:—

Wood gangway fitted from Navigating Bridge to Fore Deck ✓  
Lifelines also provided ✓

Particulars of Freeing Arrangements.

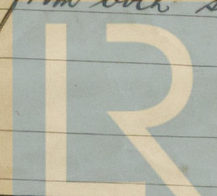
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ... ..	113" ✓	3-0"	2-6" x 1-6"	2	17.5 sq. ft. ✓	17.5 sq. ft. ✓
Forward Well ... ..			2-0" x 1-0"	5		
State position of each freeing port ... .. } After Well:— (F. and A. position and height above deck edge) } Forward Well:— 6" and 12" ✓						
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Balanced shutters ✓						
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 ... ..	✓							
Bridge, Forward Bulkhead ... ..	✓							
Forecastle Bulkhead ... ..	1 1/8" wood bulkhead ✓			✓	✓	4' x 2'	15"	6'-6" ✓
Trunk, Aft ... ..	✓							
Trunk, Forward ... ..	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ... ..	25 ✓	25 ✓	3 x 2 1/2 x 32 ✓	26" ✓	✓	4' x 1'-10"	17" & 20"	5'-0"
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 ... ..	✓
Bridge, After Bulkhead ... ..	✓
Bridge, Forward Bulkhead ... ..	✓
Forecastle Bulkhead ... ..	Hinged white wood doors 1 1/8" thick ✓
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ... ..	Hinged steel doors can be closed & secured 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 ... ..	✓



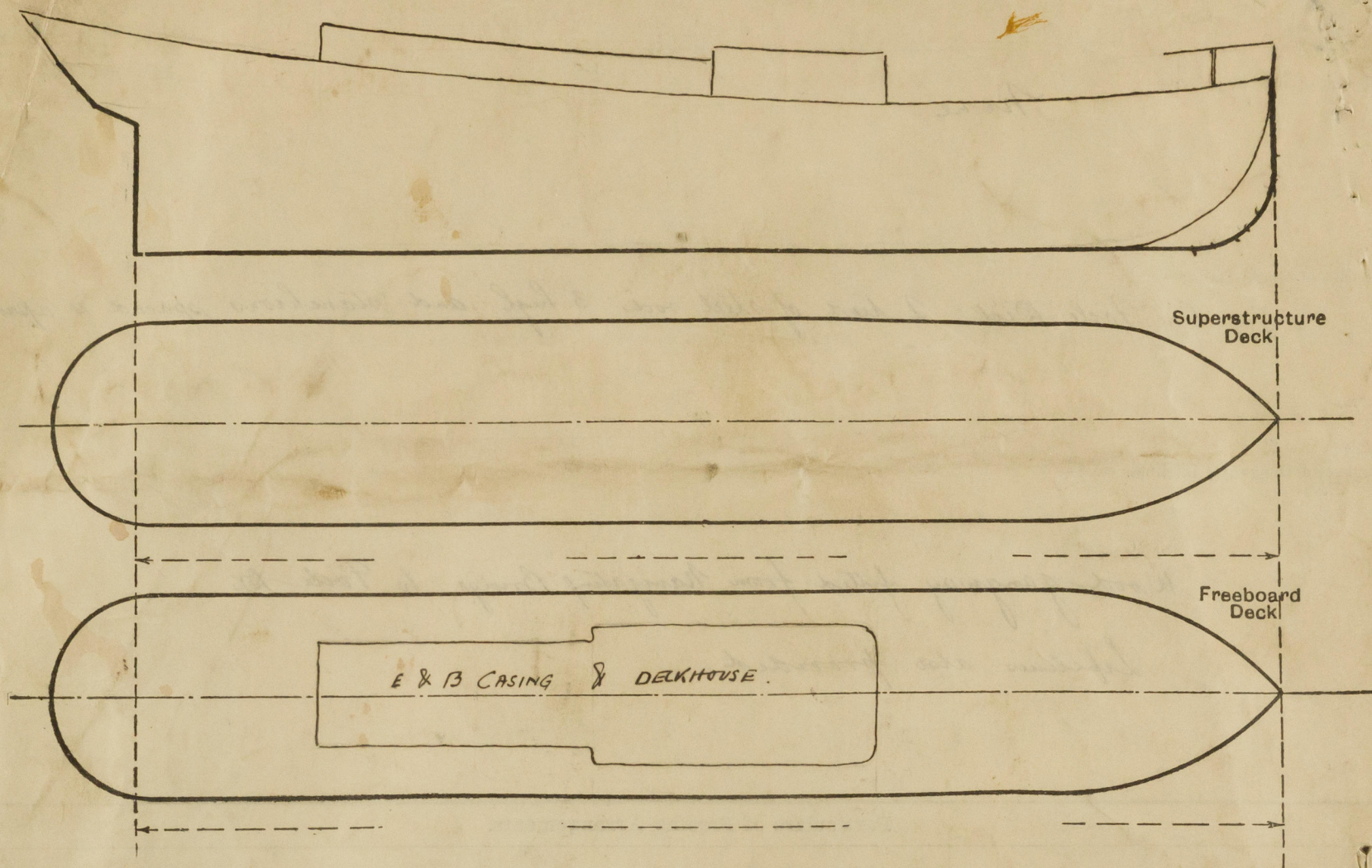
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William Scoreby.

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:—

*Specially built for whaling research.*

File total length 12.00  
x .8818 = 10.58.

Builder's name and yard number *Cook, Welton & Gemmell*

Names of sister ships

Owners *Government of the Falkland Islands*

Fee £

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Received by me

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