

DISCLOSED SECTION NO. 426
Rpt. C.11. Lloyd's Register of Shipping. Index. No. 22756
(For London Office only.)
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~
having COMPLETE SUPERSTRUCTURE DECK WITH TONNAGE OPENING AFT.

Port of Survey LONDON

(Type of Superstructures.)

Date of Survey 1st DEC. 1932

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

GONCALO VELHO

PORTUGUESE
PONTA DELGADA

1595.274
1549

1913 3mo

Name of Surveyor G. Scantlebury

Moulded Dimensions: Length 265.5 / Breadth 38.5 / Depth 18.11 / 18.92

Moulded displacement at moulded draught = 85 per cent. of moulded depth 3451 tons

Coefficient of fineness for use with Tables 735

Particulars of Classification 100A1
Shelter deck with freeboard.
S.S. Ant. No. 3-126.
S.S. Lis. No. 1-30.

Depth for Freeboard (D)

Moulded depth ... 18.92

Stringer plate ... 18.92

Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) = 18.95

Depth correction

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

$(18.95 - 17.70) 2.042 = + 2.55$

(b) Where D is less than Table depth (if allowed)
(Table depth-D) R =

If restricted by superstructures

Round of Beam correction

Moulded Breadth (B) 38.5

Standard Round of Beam = $\frac{B \times 12}{50} = 9.24$

Ship's Round of Beam = 9.34

Difference 0.10

Restricted to

Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{0.10}{4} \times 0.084 = \text{Nil}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	22.25	22.25	7.6		22.25
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...	238.71	238.71	7.6		238.71
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...	4.54	2.27	7.6		2.27
" " forward ...					
Total ...	265.50	263.23			263.23

Standard Height of Superstructure 6.155

" " R.Q.D.

Deduction for complete superstructure 32.55

Percentage covered $\frac{S}{L} = 100\%$

" $\frac{S_1}{L} = 99.16$

" $\frac{E}{L} = 99.16$

Percentage from Table, Line A. 98.96

(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 = $32.55 \times 98.96 = - 32.21$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	36.55	1		36.55	45.00	61.14	1		61.14
$\frac{1}{2}$ L from A.P. ...	16.26	4		65.04	22.12	27.21	4		108.84
$\frac{2}{3}$ L " ...	4.02	2		8.04	5.53	6.73	2		13.46
Amidships ...		4					4		
$\frac{2}{3}$ L from F.P. ...	8.04	2		16.08	9.48	10.80	2		21.60
$\frac{1}{2}$ L " ...	32.53	4		131.12	37.92	43.67	4		174.68
F.P. ...	73.10	1		73.10	82.00	98.14	1		98.14
Total ...				328.93					477.86

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{328.93 - 477.86}{18} \left(.75 - \frac{.50}{2} \right) = - 2.07$

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 = 18.95

Summer freeboard = .44

Moulded draught (d) = 18.51

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = $4.63 = 118\%$

Addition for Winter North Atlantic Freeboard (if required) =

$2 = 51\%$

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

$4.63 = 118\%$

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient

$\frac{735 + .68}{1.36} = \frac{1.415}{1.36}$

+

-

Depth Correction ... 2.55

Deduction for superstructures ... 32.21

Sheer correction ... 2.07

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

2.55 34.28 - 31.73

Summer Freeboard = 5.26

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

Tropical Fresh Water Line above Centre of Disc ... 7.89 = 0.201

Fresh Water Line " " ... 3.26 = 0.083

Tropical Line " " ... 4.63 = 0.118

Winter Line below " " ... 6.63 = 0.169

Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard MINUS

Fresh Water " " ...

Tropical " " ...

Winter " " ...

Winter North Atlantic " " ...

8 DEC 1932

5m. 9.32.

008087-008095-0285 1/2

MARKING FORM

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RECEIVED 12

RECEIVED 7 AUG 1934

RECEIVED 8 FEB 1933

Concalo Velho.

Particulars of fiddle, funnel and ventilator coamings:—
Stokehold gratings covered by strong steel hinged covers. Fiddle funnel and vents in efficient condition. Engine room skylight of steel strongly constructed.

Particulars of Companionways:—
One steel companion 5.0' x 2.6' x 6.0' high on Shelter Deck aft. leading to Crew Quarters has doors of wood with 14" sills. Operated from both sides.

All vents provided with wool plugs and canvas covers.

Particulars of Gangway Cargo and Coaling Ports :—

Scuppers and Sanitary Discharge Pipes :—
Sanitary discharges fitted with storm valves.

Overboard scuttles from the shelter house deck and the freeing ports in the foremast well have been permanently closed by welded plates and the coaming scuttles on each side of the foremast well has been replaced by a 120 m² steel down non return valve which is capable of being opened from the shelter deck.

Equipped with hinged headlights

Particulars of Guard Rails:— and Bulwarks on Shelter Deck as per sketch 2'-2" high fitted with 2 rods and stanchions 4'-6" apart.

None fitted. ✓

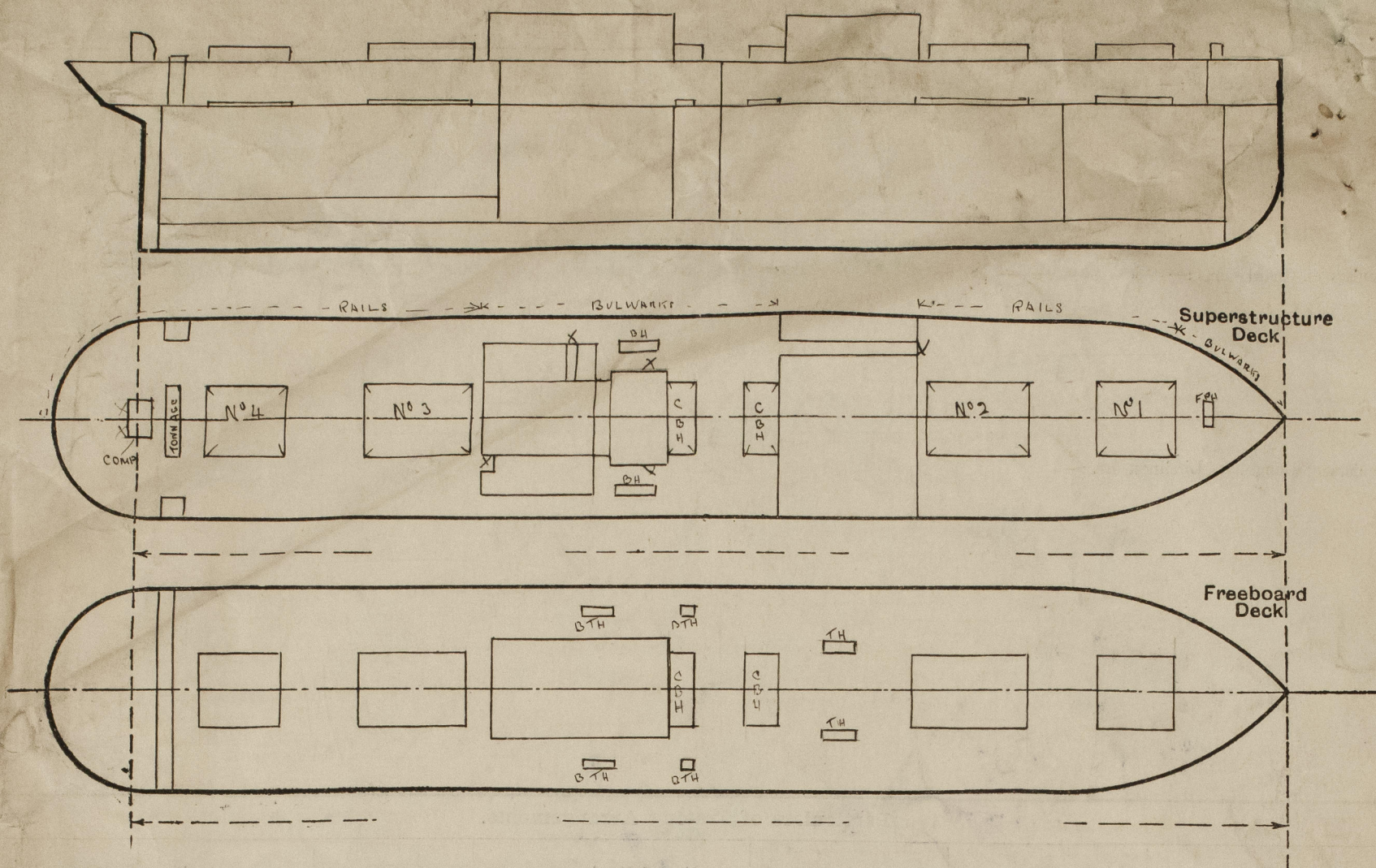
Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead } ...	22	26	3 1/2 x 2 x 20	27	BR 12 @ Top.	NONE	✓	7-6"
Raised Quarter Deck Bulkhead } ...	22	26	3 1/2 x 2 x 20	27	BR 12 @ Top	2 @ 4-10 x 2-0'	1'-11"	7-6"
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks	24	20	3 x 2 1/2 x 22	27	NONE	2 @ 5-0' x 2-0' 1 @ 5-0' x 1-9'	18" 18"	7-6"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	24	20	3 x 2 1/2 x 22	20	NONE	NONE	-	7-6"
Deckhouses on Flush Deck Ships ...								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	No opening.
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	5" Sliding in channels riveted full height.
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	✓
Exposed Machinery Casings on Free-board, or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Superstructure Decks	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships ...	✓

Steel hinged doors operated from both sides. One unward door 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 and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



Survey carried out afloat and confined to above.
Freeboard Deck not sheathed

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

SMALL HATCHES

ON SHELTER DECK.

Hatch forward F.R.H. 3'-0" x 2'-0" x 2'-4" high fitted with wood covers tarpaulins and cleats.
Bunker Hatches C.B.H. one @ 6'-0" x 14'-0" x 2'-6" " " " " " " " "
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ON FREEBOARD DECK.

Trimming Hatches T.H. one P.S. 4'-6" x 2'-6" x 9" high fitted with wood covers tarpaulins and cleats.
" " " " " " " " " " " " " "
" " " " " " " " " " " " " "
" " " " " " " " " " " " " "

14.25 = 3020

Tons 18'-6" = 2740 Tons.
18'-2 1/2" = 2670 "
17'-6" = 2500 "
17'-0" = 2360 "

85% DM = 16.08

.08

16.16

14.25

1.91 x 12 x 19 1/2

448

7468

17

3451

Builder's name and yard number MURDOCK & CO NO 253

Names of sister ships

Owners CIA DE NAV. CARREGADORES ACOREANOS

Fee £ 9 : 7 : 0

Received by me

(5 DEC 1932)



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