

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

No 32157

Ship's Name **CORABELLA** Official Number **165561** Nationality and Port of Registry **BRITISH LONDON** Gross Tonnage **5682** Date of Build **1937**

Port of Survey **Sunderland**

Date of Survey **Whilst Building**

Surveyor's Signature **J. B. Miller**

Particulars of Classification **+100A1**

class contemplated

Moulded Dimensions: Length **401.00** Breadth **57.375** Depth **31.58**

Moulded displacement at moulded draught = 85 per cent. of moulded depth **13346** tons

Coefficient of fineness for use with Tables **75.84.756**

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth	31.58	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	57.42
Stringer plate	51.04	(31.62 - 26.73) × 3 = +14.67		Standard Round of Beam = $\frac{B \times 12}{50}$	13.77
Sheathing on exposed deck	✓	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	4.89	Ship's Round of Beam	37.414
$T \left(\frac{L-S}{L} \right) =$			✓	Difference	.23
Depth for Freeboard (D) =	31.62	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{.23^2}{4} \times .5285 = -.03$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	36.25	36.25	7.5	-	36.25
.. overhang ...	-	-	-	-	-
R.Q.D. enclosed ...	-	-	-	-	-
.. overhang ...	-	-	-	-	-
Bridge enclosed ...	121.50	121.50	7.5	-	121.50
.. overhang aft ...	-	-	-	-	-
.. overhang forward ...	-	-	-	-	-
Fore enclosed ...	30.25	30.25	7.5	-	30.25
.. overhang ...	2.00	1.07	-	-	1.07
Trunk aft ...	-	-	-	-	-
.. forward ...	-	-	-	-	-
Tonnage opening aft ...	-	-	-	-	-
.. forward ...	-	-	-	-	-
Total ...	190.00	189.07			189.07

Standard Height of Superstructure **7.5'**

" " R.Q.D.

Deduction for complete superstructure **42**

Percentage covered $\frac{S}{L} = 47.38$

" " $\frac{S_1}{L} = 47.15$

" " $\frac{E}{L} = 47.15$

Percentage from Table, Line A. -

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. **33.57**

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) ✓

Deduction = **42 × 33.57 = -14.10**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	50.10	1		50.10	36"	36.00	1		36.00
1/4 L from A.P. ...	22.295	4		89.18	15 7/8"	15.875	4		63.50
1/2 L ..	5.51	2		11.02	3 7/8"	3.875	2		7.75
Amidships ...	-	4		-	0"	-	4		-
3/4 L from F.P. ...	11.02	2		22.04	4 3/8"	4.375	2		8.75
1/4 L ..	44.59	4		178.36	19 1/8"	19.125	4		76.50
F.P. ...	100.20	1		100.20	72"	72.00	1		72.00
Total ...				450.90					264.50

Mean actual sheer aft = **Deficient**

Mean standard sheer aft

Mean actual sheer forward = **Deficient**

Mean standard sheer forward

Length of enclosed superstructure forward of amidships = } **Deficient**

" " aft of " = } **Sheer.**

Sheer forward.

11.02	3	33.06	4.375	3	13.125
44.59	3	133.77	19.125	3	57.375
100.20	1	100.20	72.00	1	72.000
		267.03			142.50

$\frac{142.50}{267.03} = 53.42 \text{ Standard}$

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{186.4}{18} \left(\frac{.75 - .2369}{.5131} \right) = +5.31$

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 = **31.62**

Summer freeboard = **6.81**

Moulded draught (d) = **24.81**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **6.20 = 6 1/4**

Addition for Winter North Atlantic Freeboard (if required) = ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 12287$

Tons per inch immersion at summer load water line

T = **46.66**

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

= **6.58 = 6 1/2**

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient

$\frac{.756 + .68}{1.36} = \frac{1.436}{1.36} =$

Depth Correction	14.67	-
Deduction for superstructures	-	14.10
Sheer correction	5.31	-
Round of Beam correction	-	.03
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-

19.98 14.13 + 5.85

Summer Freeboard = **81.67**

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

Tropical Fresh Water Line above Centre of Disc	12 3/4"
Fresh Water Line	6 1/2"
Tropical Line	6 1/4"
Winter Line	6 1/4"
Winter North Atlantic Line	-

Tropical Fresh Water Freeboard	6 - 9 3/4"
Fresh Water	5 - 9"
Tropical	6 - 3 1/4"
Winter	6 - 3 1/2"
Winter North Atlantic	7 - 4"

6 - 9 3/4"

5 - 9"

6 - 3 1/4"

6 - 3 1/2"

7 - 4"

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Corabella

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Actual displacement at actual draft 25'0" = 12287 tons
Tons per inch = 46.66

Trade of ship

Names of sister ships

Builder's name and yard number

Messrs J. L. Thompson & Sons Ltd No. 581

Owners

The Penar S.S. Co. Ltd.

Fee £

16

Will be charged on completion



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Foundation