

24 MAR 1937

Index No. 35244
(For London Office only.)

Preliminary Report

Rpt. C.11.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

GLASGOW REPORT No. 58206

Computation of Freeboard for Motor Vessel
 having Poop counted to Raised Quarter deck and Forecastle.
 (Type of Superstructures.)

Ship's Name <u>Cuba S.B. Co. No. 427</u> <i>to centre of rudder stock</i>	Nationality and Port of Registry <u>I.F.S. Dublin.</u>	Official Number <u>-</u>	Gross Tonnage <u>approx 500</u>	Date of Build <u>1937</u>
Moulded Dimensions: Length <u>143' 6"</u>	Breadth <u>24'</u>	Depth <u>12'</u>		
Moulded displacement at moulded draught = 85 per cent. of moulded depth				
Coefficient of fineness for use with Tables = <u>.709</u> <u>.707</u>				

Port of Survey Glasgow
 Date of Survey 23rd March 1937
 Name of Surveyor M. Macleod
 Particulars of Classification F100 A1
contemplated.

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	12.0	(a) Where D is greater than Table depth (D - Table depth) R =	2.71	Moulded Breadth (B)	24.0
Stringer plate	.029	(12.029 - 9.57) 1.104 =	2.71	Standard Round of Beam = $\frac{B \times 12}{50}$	5.76
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	6.0
$T \left(\frac{L-S}{L} \right) =$				Difference	excess = .24
Depth for Freeboard (D) =	12.029	If restricted by superstructures	✓	Restricted to	
				Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{.24}{4} \times \frac{2308}{4} = .01$

B. 5m.10.37.

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	33.33	33.33	4' 6" above R.Q.D.	✓	33.33
„ overhang	32' 0 1/4"		actual 7' 0"		
R.Q.D. enclosed	55' 6 1/2"	56.73	3' 3"	3.25 / 3.291	56.02
„ overhang	57' 4"		7' 9" above U.D.		
Bridge enclosed	56.73				
„ overhang aft					
„ overhang forward					
F'cle enclosed	20' 8 1/4"	20.10	6' 9"	✓	20.10
„ overhang	20.10	.29			.29
Trunk aft	.59				
„ forward					
Tonnage opening aft					
„ forward	110.75				
Total	110.9	110.45			109.74

Standard Height of Superstructure 6.00
 „ „ R.Q.D. 3.291
 Deduction for complete superstructure 20.36
 Percentage covered $\frac{S}{L} = 77.12$
 „ „ $\frac{S_1}{L} = 76.92$
 „ „ $\frac{E}{L} = 76.42$
 Percentage from Table, Line A. 70.89
 (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 = $20.36 \times .7089 = 14.43$

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P.	24.36	1	24.36	36	36.00	1	36.00
1/4 L from A.P.	10.84	4	43.36	15 1/2	15.50	4	62.00
1/2 L	2.68	2	5.36	4 1/2	4.50	2	9.00
Amidships	-	4	-	0	-	4	-
3/4 L from F.P.	5.36	2	10.72	6 1/4	6.25	2	12.50
1/4 L	21.68	4	86.72	23 3/4	23.75	4	95.00
F.P.	48.72	1	48.72	54	54.00	1	54.00
Total			219.24				268.50

Mean actual sheer aft = Excess
 Mean standard sheer aft = Excess
 Mean actual sheer forward = Excess
 Mean standard sheer forward = Excess
 Length of enclosed superstructure forward of amidships = > .1L
 „ „ aft of „ = > .1L
but less than standard height of a raised quarter deck

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{49.26}{18} \left(.75 - \frac{38.76}{2 \times 143} \right) = -1.00$
 If limited on account of midship superstructure. Yes. Nil.
 If limited to maximum allowance of 1 1/2 ins. per 100 ft. 36.54 / 44

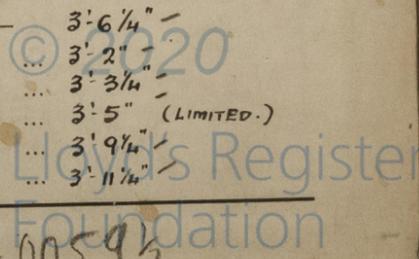
Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	14.67
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.707 + .68}{1.36} = \frac{1.387}{1.36}$	14.96
Depth to Freeboard Deck = 15.279 Ft.	Δ = 834 ✓	Depth Correction	2.71
Summer freeboard = 3.52	Tons per inch immersion at summer load water line	Deduction for superstructures	14.43
Moulded draught (d) = 11.759	T = 7.08	Sheer correction	.01
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 2.94 = 3'	Deduction = $\frac{\Delta}{40 T}$ inches = 2.94 = 3'	Round of Beam correction	
Addition for Winter North Atlantic Freeboard (if required) = 3" + 2" = 5"		Correction for Thickness of Deck amidships	39.00
		Other corrections, scantlings, etc.	
		Summer Freeboard = 42.23	

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

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

5c, 8, 90.

003706-003711-00592



PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS.

Description of Hatchway									
Dimensions of Hatchway									
COAMINGS	Height above Deck								
	Thickness								
	Stiffeners								
	Brackets, Stays								
HATCH BEAMS	Number								
	Spacing								
	Scantling and Sketch								
FORE AND AFTERS	Bearing Surface								
	Number								
	Spacing								
	Unsupported Lengths								
HATCH COVERS	Scantling* and Sketch								
	Bearing Surface								
	Material								
	Thickness								
How fitted									
Bearing Surface									
Spacing of Cleats									
Number of Tarpaulins									

*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 fiddle, funnel and ventilator coamings:—

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways:—

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

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

Particulars of Gangway Cargo and Coaling Ports:—

Particulars of Scuppers and Sanitary Discharge Pipes:—

Particulars of Side Scuttles:—

Particulars of Guard Rails:—

Particulars of Gangways, Lifelines, etc.:—

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						
Forward Well						

State position of each freeing port (F. and A. position and height above deck edge) } After Well:—
 } Forward Well:—
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—
 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								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard 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								

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	
Exposed Machinery Casings on Freeboard 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	

