

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name CASTLE MONTJUEH	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 126.15m Breadth 16.90m Depth 11.62m					Date of Survey 13/6/52
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 16809 ton					Surveyor's Signature
Coefficient of fineness for use with Tables .782					Particulars of Classification

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 11620	(a) Where D is greater than Table depth (D-Table depth) R = 8.33(11635-8410)30 = +806	Moulded Breadth (B) 16900
Stringer plate ... 15	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 338
Sheathing on exposed deck		Ship's Round of Beam = Nil
$T \left(\frac{L-S}{L} \right) =$		Difference 338
Depth for Freeboard (D) = 11635	If restricted by superstructures	Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S}{L} \right) = \frac{338}{4} \times 90.33 = +76$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
F'cle enclosed ...	11663	11663	2394	-	11663
„ overhang ...	1067	534			534
Trunk aft ...					
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total ...	12730	12197			12197

Standard Height of Superstructure **2.290**
 „ „ R.Q.D. **-**
 Deduction for complete superstructure **1067**
 Percentage covered $\frac{S}{L} = 10.09$
 „ „ $\frac{S_i}{L} = 9.67$
 „ „ $\frac{E}{L} = 4.84$
 Percentage from Table, Line A. **4.84**
 (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 = **1067 × 0.484 = 52m**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	1305	1	1305	1900	1900	1	1900
$\frac{1}{2}$ L from A.P. ...	580	4	2320	450	450	4	1800
$\frac{3}{4}$ L „ ...	145	2	290	-	-	2	-
Amidships ...	=	4	-	-	-	4	-
$\frac{3}{4}$ L from F.P. ...	290	2	580	-	-	2	-
$\frac{1}{2}$ L „ ...	1160	4	4640	420	420	4	1680
F.P. ...	2610	1	2610	2235	2235	1	2235
Total ...			11745				7615

Mean actual sheer aft = **Deficient**
 Mean standard sheer aft = **Deficient**
 Mean actual sheer forward = **Deficient**
 Mean standard sheer forward = **Deficient**
 Length of enclosed superstructure forward of amidships = **Nil**
 „ „ aft of „ = **Deficient**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{4130}{18} \left(\frac{.75 - .0505}{2} \right) = +161m$
 If limited on account of midship superstructure. **16995** If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient 782 + 1.68 = 1462
Depth to Freeboard Deck = 11635	$\Delta =$	Depth Correction ... 806
Summer freeboard = 3065	Tons per inch immersion at summer load water line	Deduction for superstructures ... 52
Moulded draught (d) = 8570	T =	Sheer correction ... 161
Keel allowance =	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction ... 26
Extreme draught		Correction for Thickness of Deck amidships ...
tion for Tropical freeboard and addition for		Other corrections, scantlings, etc. ...
Winter freeboard = 179	201	1043 52 + 991
Addition for Winter North Atlantic Freeboard (if required) =		Summer Freeboard = 3065

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

Same as Spanish	Tropical Fresh Water Line above Centre of Disc 380m	Tropical Fresh Water Freeboard 2682
	Fresh Water Line „ „ 201	„ „ „ 2861
	Tropical Line „ „ 179	„ „ „ 2883
	Winter Line below „ „ 179	„ „ „ 3241
	Winter North Atlantic Line „ „	„ „ „

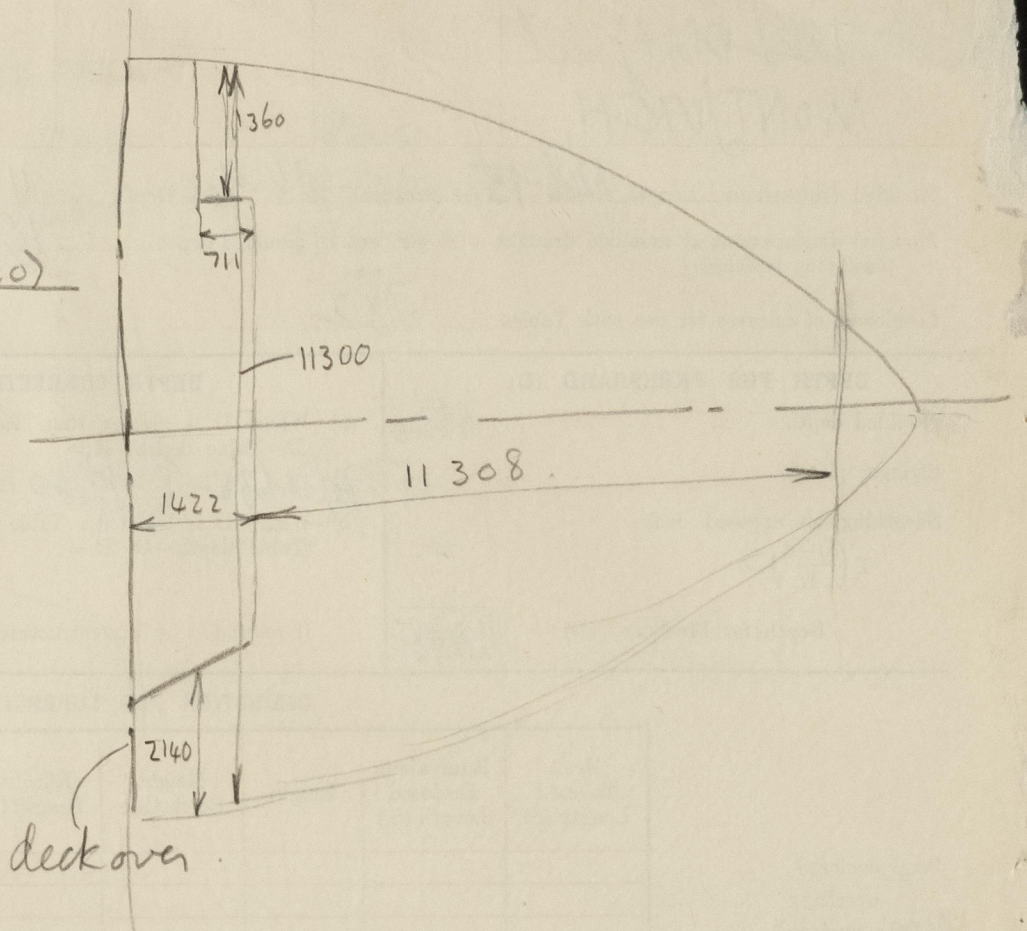
A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Forecastle

$$\text{Equiv} = 11308 + \frac{(711 \times 1360) + (1422 \times 2140)}{11300}$$

$$= 11663$$

$$\%H = 1422 - 355 = 1067$$



Sheerford

Actual

0	3	0
420	3	1260
2235	1	2235
		<u>3495</u>

Standard

290	3	870
1160	3	3480
2610	1	2610
		<u>6960</u>

$$\frac{\text{Actual}}{\text{Standard}} = .502$$

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____



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