

Aircraft 36378.
Mooncrest 36409.

T.O. CLOSED. (W.E.)

Lloyd's Register of Shipping.

Index. No. 36378.
(For London Office only).

SURVEYS FOR FREEBOARD.

"FREE MERCHANT" (COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name COULBEG. <i>MARIANNE ISAVLIRIS</i>	Official Number 165992	Nationality and Port of Registry <i>British</i> <i>Glasgow</i>	Gross Tonnage 5137	Date of Build 1940	Port of Survey 30-5-41
Moulded Dimensions: Length 425.54' Breadth 56.00' Depth 36.83'				Surveyor's Signature	
Moulded displacement at moulded draught = 85 per cent. of moulded depth				Particulars of Classification +100A1 <i>with freeboard</i>	
Coefficient of fineness for use with Tables .771 (Estimated)					

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth	36.83'	(a) Where D is greater than Table depth		Moulded Breadth (B)	56.00'
Stringer plate	.75	(D - Table depth) R =	(36.83 - 28.37) 3 = +25.56"	Standard Round of Beam = $\frac{B \times 12}{50}$	= 13.44"
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed)		Ship's Round of Beam	= 14.00"
$T \left(\frac{L-S}{L} \right) =$	✓	(Table depth - D) R =	✓	Difference	.56"
Depth for Freeboard (D) =	36.89'	If restricted by superstructures	✓	Restricted to	✓
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	= $\frac{.56}{4} \times .9188 = -.13"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
Fore enclosed	34.54	34.54	7.5'	✓	34.54
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	34.54	34.54			34.54

Standard Height of Superstructure **7.5'**
" " R.Q.D. **✓**
Deduction for complete superstructure **42.00'**
Percentage covered $\frac{S}{L} =$ } **8.12**
" " $\frac{S_1}{L} =$ }
" " $\frac{E}{L} =$ }
Percentage from Table, Line A. **4.06**
(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 = **42 x .0406 = -1.71"**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	51.55	1		51.55	54	54	1		54
1/2 L from A.P.	23.385	4		93.54	24	24	4		96
3/4 L	5.78	2		11.56	6	6	2		12
Amidships		4					4		
3/4 L from F.P.	11.56	2		23.12	12	12	2		24
1/2 L	46.775	4		187.10	48	48	4		192
F.P.	105.11	1		105.11	108	108	1		108
Total				472.98					486

Mean actual sheer aft =
Mean standard sheer aft = } **Excess**
Mean actual sheer forward =
Mean standard sheer forward = }
Length of enclosed superstructure forward of amidships = } **Nil**
" " aft of " = }
Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{7.5 - S}{2L} \right) = \frac{13.02}{18} \times (7.5 - .0406) = -.51"$
If limited on account of midship superstructure. **Yes, no allowance.** **7.94** 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 = **36.89'**
Summer freeboard = **11.27'**
Moulded draught (d) = **25.62'**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **6.40" = 6 1/2"**

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= **7.0"**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient **771 + 68** **1.451/1.36**Depth Correction ... **25.56** **-**Deduction for superstructures ... **-** **1.71**Sheer correction ... **-** **-**Round of Beam correction ... **-** **.13**Correction for Thickness of Deck amidships ... **-** **-**Other corrections, scantlings, etc. **to correct** **25.41** **-**with a summer moulded draught of **25'-7 1/2"**Summer Freeboard = **135.25**

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

Tropical Fresh Water Line above Centre of Disc ... **13 1/2"**Fresh Water Line " " ... **7"**Tropical Line " " ... **6 1/2"**Winter Line " " below " " ... **6 1/2"**Winter North Atlantic Line " " ... **✓**Tropical Fresh Water Freeboard ... **10'-1 3/4"**Fresh Water " " ... **10'-8 1/4"**Tropical " " ... **10'-8 3/4"**Winter " " ... **11'-9 3/4"**Winter North Atlantic " " ... **✓**

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.

Partial flush-deck penalty

425.54		.1000
212.77		.0812
<u>638.31</u>	x	.188
		<u>= +1.20"</u>

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £

