

C.S.D. CONDITION

LLOYD'S REGISTER OF SHIPPING

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER~~)

For LONDON OFFICE ONLY

Received
Index No.
Govt. Copy
Owners C11

Ship's Name CORINTHIAN	Official Number 166246	Nationality and Port of Registry BRITISH LIVERPOOL	Gross Tonnage	Date of Build 1938	Port of Survey LONDON OFFICE
Moulded Dimensions: Length 339.5 Breadth 49.83 Depth 32.75					Date of Survey 29/6/62
Freeboard Length 340.00 To EL5 on 26' LWL					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing)					Particulars of Classification
Coefficient of fineness for use with Tables .710					

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	32.75	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	49.83
Stringer plate	.50	(32.82 - 22.67) 2.615 = 26.54"		Standard Round of Beam = $\frac{B \times 12}{50}$	11.96
Wood Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Ship's Round of Beam	12.50
T $\left(\frac{L-S}{L}\right) = 21 \times \frac{55.25}{340.00}$.03			Difference	.54
Depth for Freeboard (D) =	32.82	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S}{L}\right)$	$\frac{.54}{4} \times .9287 = .13$

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	22.00	6.97	NIL	22.00
" overhang WITHIN 1/2	2.25	"	"	2.25
Trunk aft				
" forward				
Tonnage opening aft				
" forward				
Total	24.25	24.25		24.25

Standard Height of Superstructure **6.9**

R.Q.D.

Deduction for complete superstructure **38.00**

Percentage covered $\frac{S}{L} = 7.13$

Percentage from Table, Line A. **3.565**
(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 = $38 \times .03565 = 1.35$

SHEER CORRECTION.							
Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	44.00	1		44.12	44.12	1	44.12
1/2 L from A.P.	19.58	4		19.74	19.74	4	78.96
1/2 L	4.84	2		4.73	4.73	2	9.46
Amidships	0	4	0	0	0	4	0
1/2 L from F.P.	9.68	2		9.68	9.68	2	19.36
1/2 L	39.16	4		39.48	39.48	4	157.92
F.P.	88.00	1		88.56	88.56	1	88.56
Total			396.00				398.38

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{2.38}{18} [.75 - .0357] = \text{NIL}$

If limited on account of midship superstructure. **YES.**

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 " = }

Deduction for Tropical Freeboard.		Deduction for Fresh Water.		TABULAR FREEBOARD corrected for Flush Deck (if required)	
Addition for Winter and Winter North Atlantic Freeboard.		Displacement in salt water at summer load water line		Correction for coefficient	
Depth to Freeboard Deck = 32.79		$\Delta = 8740$		$\frac{53.70 + 1.5 \times 3.4 (1 - .713)}{1.36} = 1.398$	55.16
Summer freeboard = 6.75		Tons per inch immersion at summer load water line			56.38
Moulded draught (d) = 26.04		T = 33.15			
Keel allowance =		Deduction = $\frac{\Delta}{40 T}$ inches			
Extreme draught =		= 6.59			
Deduction for Tropical freeboard and addition for = 6.51		= 6 1/2"			
Winter freeboard = $\frac{d}{4}$ inches = 6 1/2"					
Addition for Winter North Atlantic Freeboard (if required) =					

	+	-
Depth Correction	26.54	
Deduction for superstructures		1.35
Sheer correction		
Round of Beam correction		.13
Correction for Thickness of Deck amidships		.36
Other corrections, scantlings, etc.		
	26.54	1.84
Summer Freeboard =	81.08	

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

Tropical Fresh Water Line above Centre of Disc	12 1/2"	Tropical Fresh Water Freeboard	5 1/2"
Fresh Water Line	6 1/2"	Fresh Water	6 1/2"
Tropical Line	6 1/2"	Tropical	6 1/2"
Winter Line below	6 1/2"	Winter	7 1/2"
Winter North Atlantic Line	NOT REQUIRED	Winter North Atlantic	NOT REQUIRED

7 JUL 1962

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.

$$G = .666 + \left[.85 - .85 \left(\frac{23.25}{32.75} \right) \right] \cdot 180$$

$$= \underline{.710}$$

SHEERS CORRECTED FROM OSD

	OSD	FACTOR	CS.D.
A.P.	43.87	$\frac{169.87^2}{169.38^2}$	44.12
$\frac{1}{6}$	19.50	$\frac{113.46^2}{112.75^2}$	19.74
$\frac{1}{3}$	4.75	$\frac{56.54^2}{56.63^2}$	4.73
$\frac{1}{3}$	9.62	$\frac{56.80^2}{56.63^2}$	9.68
$\frac{1}{6}$	39.00	$\frac{113.46^2}{112.75^2}$	39.48
F.P.	87.75	$\frac{170.13^2}{169.38^2}$	88.56

Trade of ship.....

Names of sister ships.....

Builder's name and yard number.....

Owners

Fee £.....

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950", paragraph 11.)



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