

CLOSED CONDITION
LLOYD'S REGISTER OF SHIPPING
 UNITED WITH THE BRITISH CORPORATION REGISTER
SURVEYS FOR FREEBOARD
 (COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER~~)

For LONDON OFFICE ONLY

Received

Index No.

Govt. Copy

Owners C11

Ship's Name CINDERELLA	Official Number 1222	Nationality and Port of Registry LIBERIA MONROVIA.	Gross Tonnage 6922	Date of Build 1933	Port of Survey _____ Date of Survey 27.2.58. Surveyor's Signature _____ Particulars of Classification BS.*
Moulded Dimensions: Length _____ Breadth 56.0' Depth 37.18 Freeboard Length 426.5' to 4. Rudder Stock. Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons (excluding bossing) Coefficient of fineness for use with Tables .769.					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 37.18 Stringer plate06 Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = \frac{2\frac{3}{4} \times 55.0}{12 \times 426.5} = .03$ Depth for Freeboard (D) = 37.27	(a) Where D is greater than Table depth (D-Table depth) R = $(37.27 - 28.43) 3.0 = + 26.52$ $\frac{8.84}{3.0}$ (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	Moulded Breadth (B) 56.0' Standard Round of Beam = $\frac{B \times 12}{50} = 13.44$ Ship's Round of Beam = $\frac{14.00}{1} = 14.00$ Difference 0.56 Restricted to Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.56}{4} \times .9033 = .13$

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					
F'cle enclosed	39.10	39.10	7.5	/	39.10
" overhang	2.90	2.15	"	/	2.15
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	42.00	41.25			41.25

Standard Height of Superstructure **7.5'**
 " " R.Q.D. **/**
 Deduction for complete superstructure **42.0'**
 Percentage covered $\frac{S}{L} = 9.85$
 " " $\frac{S_1}{L} = 9.67$
 " " $\frac{E}{L} = 4.84$
 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 = **42.00 x .0484 = 2.03**

SHEER CORRECTION.							
Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S
A.P.	52.65	1		52.65	51.50	51.50	1
$\frac{1}{2}L$ from A.P.	23.43	4		93.72	16.50	16.50	4
$\frac{3}{8}L$ "	8.79	2		11.58	1.75	1.75	2
Amidships	0	4		0	0	0	4
$\frac{3}{8}L$ from F.P.	11.88	2		23.16	2.75	2.75	2
$\frac{1}{2}L$ "	46.86	4		187.44	31.75	31.75	4
F.P.	105.30	1		105.30	105.00	105.00	1
Total				473.85			

Mean actual sheer aft =
 Mean standard sheer aft =
 Mean actual sheer forward =
 Mean standard sheer forward =
 Length of enclosed superstructure forward of amidships =
 " " aft of " =
 Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{115.35}{18} (.75 - .0493) = +4.49$
 If limited on account of midship superstructure. If limited to maximum allowance of 1½ ins. per 100ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD
Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 37.24 Summer freeboard = 10.77 Moulded draught (d) = 26.47 Keel allowance = Extreme draught = Deduction for Tropical freeboard and addition for = Winter freeboard = $\frac{d}{4}$ inches = 6.62 = 6½ Addition for Winter North Atlantic Freeboard (if required) =	Displacement in salt water at summer load water line Δ = Tons per inch immersion at summer load water line T = Deduction = $\frac{\Delta}{40 T}$ inches = 7	79.82 + 1.10 1.449 / 1.36. Correction for coefficient Depth Correction 26.52 Deduction for superstructures 2.03 Sheer correction 4.49 Round of Beam correction13 Correction for Thickness of Deck amidships36 Other corrections, scantlings, etc. corresponding to a S.M. draught of 26.47' (top of keel). 15.61 46.62 Summer Freeboard = 129.25

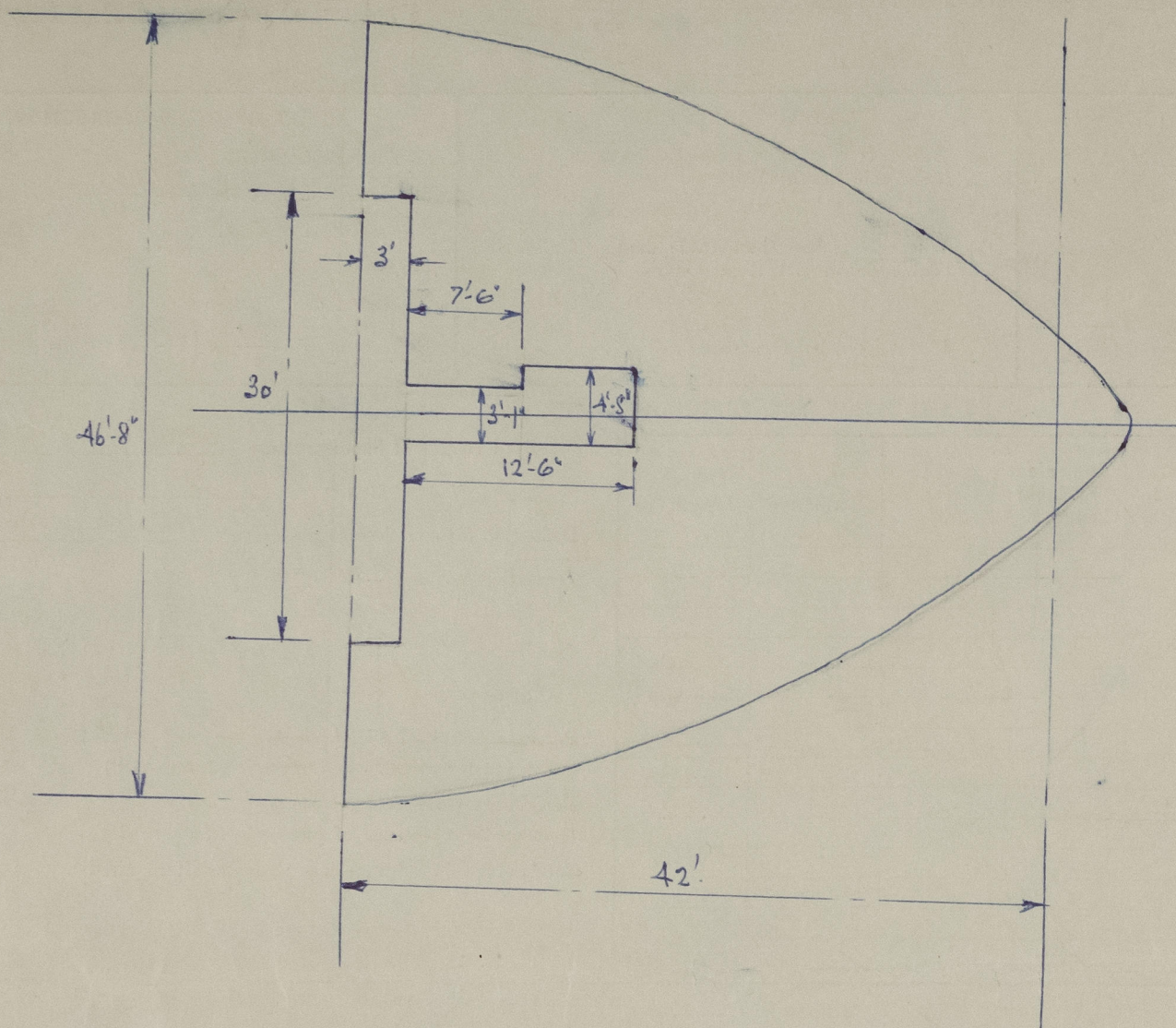
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	...	12½'	Tropical Fresh Water Freeboard	...	10' 9¼"
Fresh Water Line	"	7"	Fresh Water	"	10' 2¼"
Tropical Line	"	6½"	Tropical	"	10' 2¾"
Winter Line	below	6½"	Winter	"	11' 3¾"
Winter North Atlantic Line	"	...	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.

Sheer Prod.	Actual	Standard.
2.75	3 8.25	11.88 3 34.74
31.75	3 95.25	46.86 3 140.58
105.00	1 105.00	105.30 1 105.30
	<u>208.50</u>	<u>280.62</u>

$$\frac{208.5}{280.62} = 74.3\% = \text{allowable Page Folic o/r.}$$



Equiv Length of Forecastle.

$$42.00 - \frac{22.10 \times 5.0 + 23.1 \times 3.08 + 90 \times 3.0}{46.67}$$

$$42 - \frac{135.2}{46.67}$$

$$= 39.10.$$

$$o/h = 2.90.$$

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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Foundation