

LLOYD'S REGISTER OF SHIPPING

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received
 Index No.
 Govt. Copy
 Owners C11

Ship's Name ADELPHOTIS II. EX VENUS.	Official Number	Nationality and Port of Registry LIBERIA MONROVIA.	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 349.25' Breadth 50.0' Depth 25.75'					Date of Survey 31/12/57
Freeboard Length 349.25'					Surveyor's Signature [Signature]
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 848/ tons					Particulars of Classification B.S. X.
Coefficient of fineness for use with Tables 777					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 25.75	(a) Where D is greater than Table depth (D-Table depth) R = (25.75 - 23.28) 2687 = + 6.72"	Moulded Breadth (B) 50.0'
Stringer plate03	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 12.00"
Wood Sheathing on exposed deck $\frac{1}{2} \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 12.50"
Depth for Freeboard (D) = 25.78		Difference + .50
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.50}{4} \times .4709 = -.06"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	39.97	39.97	9.0'		39.97
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	106.17	106.17	9.0'		106.17
" overhang aft					
" overhang forward					
F'cle enclosed	38.66	38.66	8.5		38.66
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	184.80	184.80			184.80

Standard Height of Superstructure **6.99'**

" " R.Q.D. **✓**

Deduction for complete superstructure **38.62**

Percentage covered $\frac{S}{L} =$ **52.91**

" " $\frac{S_1}{L} =$

" " $\frac{E}{L} =$

Percentage from Table, Line A.
(corrected for absence of forecastle (if required))

Percentage from Table, Line B. **38.91**
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = **38.91 × 38.62 = 15.03**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	44.93	1	44.93	48.00	48.00	1	48.00
$\frac{1}{8}L$ from A.P.	19.99	4	79.96	21.50	21.50	4	86.00
$\frac{2}{8}L$ "	4.94	2	9.88	5.50	5.50	2	11.00
Amidships	0	4	0	0	0	4	0
$\frac{3}{8}L$ from F.P.	9.88	2	19.76	12.00	12.00	2	24.00
$\frac{4}{8}L$ "	39.98	4	159.92	48.00	48.00	4	192.00
F.P.	89.85	1	89.85	108.00	108.00	1	108.00
Total			404.30				469.00

Mean actual sheer aft
Mean standard sheer aft = **EXCESS**

Mean actual sheer forward
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **11.00**

" " aft of " = **11.00**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - \frac{S}{2L}}{.75} \right) = \frac{64.70}{18} \left(\frac{.75 - .2646}{.75} \right) = -1.74"$

If limited on account of midship superstructure. **NO**

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100ft. **NO**

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **25.78**

Summer freeboard = **4.17**

Moulded draught (d) = **21.61**

Keel allowance =

Extreme draught =

Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{4}$ inches = **5.40 = 5 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

= $\frac{814}{40 \times 512} = 5 1/2"$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient **1.457/1.36**

Depth Correction **6.72**

Deduction for superstructures **15.03**

Sheer correction **1.74**

Round of Beam correction **.06**

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

	+	-
Depth Correction	6.72	
Deduction for superstructures		15.03
Sheer correction		1.74
Round of Beam correction		.06
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	6.72	16.83
Summer Freeboard =	50.19	

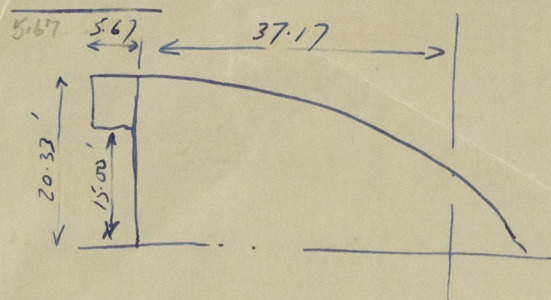
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck :-

GERMANISCHER LLOYD	Tropical Fresh Water Line above Centre of Disc	...	1 1/2"
FREEBOARDS	Fresh Water Line	"	6"
REASSIGNED.	Tropical Line	"	5 1/2"
13.1.58	Winter Line below	"	5 1/2"
	Winter North Atlantic Line	"	✓

Tropical Fresh Water Freeboard	4.2"
Fresh Water	3.2 1/2"
Tropical	3.8"
Winter	3.8 1/2"
Winter North Atlantic	4.4 1/2"

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



$$\begin{aligned}
 \text{Length of side} &= 37.17 = 37.17' \\
 + \frac{(20.33 - 15.00) \cdot 5.67}{20.33} &= \frac{1.49}{38.66} = 1.49 \\
 + 5.67 \frac{(40.67 - 30.00)}{40.67} &= \frac{1.49}{38.66} = 1.49 \\
 &= 38.66'
 \end{aligned}$$

AP		
-0		7 1/2
0-11 @ 2'-0		22'-0
11-148 @ 2'-2		296'-10
148-162 @ 2'-0		28'-0
162-FP		1-9 1/2
		<u>349-3</u>

$$\begin{aligned}
 \text{Breakoff side} - 145 &= 0-10 \\
 145-148 @ 26" &= 6-6 \\
 148-162 @ 24 &= 28-0 \\
 162-FP &= 1-10 \\
 37-2 &= 37.17'
 \end{aligned}$$

Trade of ship

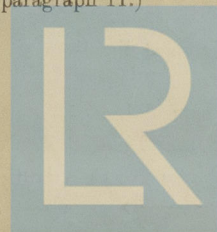
Names of sister ships

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