

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name ELSINORE N° 304.	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 299.00 Breadth 44.50 Depth 21.50					Date of Survey 10.7.50
Moulded displacement at moulded draught = 85 per cent. of moulded depth 5020 tons					Surveyor's Signature
Coefficient of fineness for use with Tables .723					Particulars of Classification

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 21.50	(a) Where D is greater than Table depth (D - Table depth) R = (21.57 - 19.93) 2.3 = + 3.77	Moulded Breadth (B) 44.50
Stringer plate07	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 10.68
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = 10.41
Depth for Freeboard (D) = 21.57		Difference 0.73
		Restricted to
		Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.73}{4} \times .2800 = -.05$

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 8.25 ...	187.40	187.40	5.25	<input checked="" type="checkbox"/>	187.40
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	25.48	25.48	7.39	<input checked="" type="checkbox"/>	25.48
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	212.88	212.88			212.88

Standard Height of Superstructure	6.49
" " R.Q.D.	4.653
Deduction for complete superstructure	35.27
Percentage covered $\frac{S}{L} =$	71.20
" $\frac{S_1}{L} =$	
" $\frac{E}{L} =$	
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	64.48
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	64.48
Interpolation for bridge less than .2L (if required)	
Deduction = $35.27 \times .6448 =$	22.74

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	39.90	1	39.90	32.70	39.86	1	39.86
$\frac{1}{2}$ L from A.P. ...	17.75	4	71.00	12.99	15.84	4	63.36
$\frac{3}{4}$ L " ...	4.39	2	8.78	2.76	3.36	2	6.72
Amidships ...	<input checked="" type="checkbox"/>	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4	<input checked="" type="checkbox"/>
$\frac{3}{4}$ L from F.P. ...	8.78	2	17.56	8.27	8.27	2	16.54
$\frac{1}{2}$ L " ...	35.51	4	142.04	35.43	35.43	4	141.72
F.P. ...	79.80	1	79.80	81.10	81.10	1	81.10
Total ...			359.08				349.30

Mean actual sheer aft	Definit. 7.75	Actual height of R.Q.D. 5.250
Mean standard sheer aft		Standard " 4.653
Mean actual sheer forward	Definit.	Transverse 5.97
Mean standard sheer forward		7.16
Length of enclosed superstructure forward of amidships = $\frac{L}{2}$		
" " aft of " = $\frac{L}{2}$		

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{9780}{18} \left(.75 - \frac{3560}{3940} \right) = + 0.21$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck =	26.82
Summer freeboard =	7.40
Moulded draught (d) =	19.42

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches =

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

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient

	+	-
Depth Correction	3.77	<input checked="" type="checkbox"/>
Deduction for superstructures	22.74	<input checked="" type="checkbox"/>
Sheer correction	.21	<input checked="" type="checkbox"/>
Round of Beam correction	.05	<input checked="" type="checkbox"/>
Correction for Thickness of Deck amidships	63.00	<input checked="" type="checkbox"/>
Other corrections, scantlings, etc.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Summer Freeboard = **88.72**

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

Tropical Fresh Water Line above Centre of Disc	...	Tropical Fresh Water Freeboard	...
Fresh Water Line	"	Fresh Water	"
Tropical Line	"	Tropical	"
Winter Line below	"	Winter	"
Winter North Atlantic Line	"	Winter North Atlantic	"