

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

21484
27 SEP 1945

Ship's Name S.S. EMPIRE CONQUEST EX "HUBERT SCHRÖDER"	Official Number 180764	Nationality and Port of Registry London	Gross Tonnage 1391	Date of Build
Moulded Dimensions: Length 239.2' Breadth 36.3⁰⁸ Depth 16.6^{19.00}				Port of Survey LEITH
Moulded displacement at moulded draught = 85 per cent. of moulded depth				Date of Survey 21.9.45.
Coefficient of fineness for use with Tables .77 (assumed)				Surveyor's Signature [Signature]
				Particulars of Classification CLASS CONTENT!

Depth for Freeboard (D). 19.00 Moulded depth 16.6 Stringer plate5 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$.04 Depth for Freeboard (D) = 19.04	Depth correction. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(19.04 - 15.94) \times 1.84 = + 5.70$ $\frac{3.10}{3.10}$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = - If restricted by superstructures <input checked="" type="checkbox"/>	Round of Beam correction. .08 Moulded Breadth (B) 36.3 Standard Round of Beam = $\frac{B \times 12}{50} =$ 8.66 Ship's Round of Beam = 9 Difference = .34 Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{.34^2}{4} \times \frac{5281}{4} =$ -.04
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>equivalent</i>	24.45 23.50	24.45 23.50	4.6"	-	24.45 23.50
„ overhang ...	-	-	-	-	-
R.Q.D. enclosed	-	-	-	-	-
„ overhang ...	-	-	-	-	-
Bridge enclosed...	56.50	56.50	4.6"	-	56.50
„ overhang aft ...	3.90	2.25	4.6"	-	2.25
„ overhang forward	2.45	1.37	4.6"	-	1.37
Fore enclosed <i>equivalent</i>	24.25.45	24.45	4.6"	-	24.45
„ overhang ...	2.05	1.02	4.6"	-	1.02
Trunk aft ...	-	-	-	-	-
„ forward ...	-	-	-	-	-
Tonnage opening aft ...	-	-	-	-	-
„ „ forward	-	-	-	-	-
Total ...	112.00	110.04			110.04

113.20

Standard Height of Superstructure	6.0
„ „ R.Q.D.	-
Deduction for complete superstructure	29.92
Percentage covered $\frac{S}{L} =$	47.33
„ „ $\frac{S_1}{L} =$	47.19
„ „ $\frac{E}{L} =$	47.19
Percentage from Table, Line A.	<input checked="" type="checkbox"/>
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B.	33.61
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	<input checked="" type="checkbox"/>
Deduction =	29.92 x 33.61 = -10.05

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P. ...	33.92 41.15.09	1	33.92	41"	41	1	41
$\frac{1}{8}L$ from A.P. ...	14" 3.73	4	60.36	14"	17	4	68
$\frac{3}{8}L$ „ ...	4"	2	7.46	4"	4	2	8
Amidships ...	0" 7.46	4	-	0"	-	4	-
$\frac{3}{8}L$ from F.P. ...	10" 30.18	2	14.92	10"	10	2	20
$\frac{1}{8}L$ „ ...	38"	4	120.72	38"	38	4	152
F.P. ...	44"	1	67.84	44"	77	1	77
Total ...	67.84		305.22				366

Mean actual sheer aft =
Mean standard sheer aft = } *excess*

Mean actual sheer forward =
Mean standard sheer forward = }

Length of enclosed superstructure forward of amidships = **> .1**
aft of „ = **> .1**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{60.78 - 77}{18} \left(\frac{.75 - .2366}{.5134} \right) = -1.73$
If limited on account of midship superstructure. *No.* If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

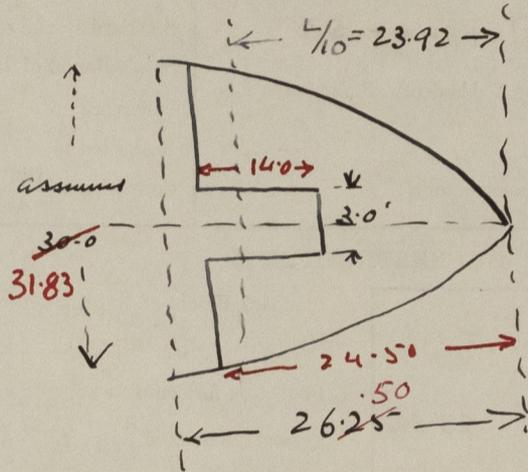
Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Ft. Depth to Freeboard Deck = 19.04 Summer freeboard = 2.17 Moulded draught (d) = 16.87 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 4.22 = 4 1/4 Addition for Winter North Atlantic Freeboard (if required) = 6 1/4	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 = $\frac{\Delta}{40T}$ inches = 4 1/4	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.08 + .77}{1.36} = \frac{1.45}{1.36}$ <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">+</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Depth Correction</td> <td style="text-align: center;">5.70</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Deduction for superstructures</td> <td style="text-align: center;">-</td> <td style="text-align: center;">10.05</td> </tr> <tr> <td>Sheer correction</td> <td style="text-align: center;">-</td> <td style="text-align: center;">1.73</td> </tr> <tr> <td>Round of Beam correction</td> <td style="text-align: center;">-</td> <td style="text-align: center;">.04</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td></td> <td style="text-align: center;">5.70</td> <td style="text-align: center;">11.82</td> </tr> </table> Summer Freeboard = 26.073		+	-	Depth Correction	5.70	-	Deduction for superstructures	-	10.05	Sheer correction	-	1.73	Round of Beam correction	-	.04	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	-	-		5.70	11.82
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Water~~ Steel, Deck:

Tropical Fresh Water Line above Centre of Disc7" 8 1/2 Fresh Water Line „ „ ... 4 1/4 4 1/4 Tropical Line „ „ ... 2 1/4 4 1/4 Winter Line below „ „ ... 2 1/4 4 1/4 Winter North Atlantic Line „ „ ... 4 1/4 6 1/4	Tropical Fresh Water Freeboard ... 2'-2" Fresh Water „ „ ... 1'-7" Tropical „ „ ... 1'-9 1/4" Winter „ „ ... 1'-11 3/4" Winter North Atlantic „ „ ... 2'-4 1/4" Winter North Atlantic „ „ ... 2'-6 1/4"
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as assigned by Submarine gunners
18.10.45

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.



$$\begin{array}{r} 24.50 \\ 26.25 \\ 23.92 \\ \hline 233 \\ 58 \end{array}$$

allow 23.92

$$\frac{.58 \times 28.83}{31.83} = \frac{.53}{24.45}$$

$$\begin{array}{r} 26.50 \\ 24.45 \\ \hline 2.05 \end{array}$$

Port

$$\begin{array}{r} 23.5 \\ 3.75 \times 4.42 \\ \hline 17.42 \\ \hline 24.45 \end{array}$$

Trade of ship

Names of sister ships

Builder's name and yard number L. SMIT & ZOON - KINDERDIJK.

Owners MINISTRY OF WAR TRANSPORT. (MATTHEW TAYLOR - METHIL)

Fee £ 10-0-0

Smit



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