

AMENDED

3 DEC 1951

Rpt. C.11 (Comp.).

Index No. 33442
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Nº 34/85

Ship's Name <i>M/V. DONGEDUK - CONVERTED M/V. DELFTDYK</i>	Official Number	Nationality and Port of Registry <i>NETHERLANDS. ROTTERDAM.</i>	Gross Tonnage <i>12,203</i>	Date of Build <i>10-1929 CONVERTED 12-1951</i>	Port of Survey <i>SCHIEDAM</i>
Moulded Dimensions: Length <i>53.30 M</i> Breadth <i>19.66 M</i> Depth <i>12.192 M</i> (<i>T=9.34 M ABOVE BASELINE</i>)					Surveyor's Signature <i>M. J. Thelma</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth (<i>T=10.373</i>) <i>22903</i> ^{M³}					Particulars of Classification <i>T 100 A 1</i>
Coefficient of fineness for use with Tables <i>.735</i>					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... <i>12.192 M</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>8.33(12.242 - 10.220) 30 = +505</i>	Moulded Breadth (B) <i>19.66 M</i>
Stringer plate ... <i>0.0135 M</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 393$
Sheathing on exposed deck		Ship's Round of Beam = <i>0.305 M</i>
$T \left(\frac{L-S}{L} \right) = \frac{89 \times 43.66}{153.30} = .025$	If restricted by superstructures	Difference <i>-88</i>
Depth for Freeboard (D) = <i>12.242</i>		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S}{L} \right) = \frac{88}{4} \times (.5085) = +11$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)	
Poop enclosed	<i>12.27</i>	<i>12.270</i>	<i>2.44</i>	-	<i>12.270</i>	Standard Height of Superstructure <i>2290</i>
" overhang						" " R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure <i>1067</i>
" overhang						Percentage covered $\frac{S}{L} = 49.30$
Bridge enclosed	<i>45.36</i>	<i>45.360</i>	<i>2.60</i>	-	<i>45.360</i>	" " $\frac{S_i}{L} = 49.15$
" overhang aft						" " $\frac{E}{L} =$
" overhang forward	<i>17.492</i>	<i>17.492</i>			<i>17.492</i>	Percentage from Table, Line A.
Fore enclosed	<i>17.492</i>	<i>17.492</i>			<i>17.492</i>	(corrected for absence of forecastle (if required))
" overhang	<i>2.24</i>	<i>2.24</i>	<i>2.44</i>	-	<i>2.24</i>	Percentage from Table, Line B. <i>35.27</i>
Trunk aft	<i>4.48</i>					(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than .2L (if required)
Tonnage opening aft						Deduction = <i>1067 x .3527 = -376</i>
" forward						
Total	<i>75.570</i>	<i>75.346</i>			<i>75.346</i>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	<i>1531</i>	<i>1</i>	<i>1531</i>	<i>1332</i>	<i>1332</i>	<i>1332</i>	<i>1</i>	<i>1332</i>	<i>1332</i>	Mean actual sheer aft = <i>Deficient</i>
$\frac{1}{8}L$ from A.P.	<i>680</i>	<i>4</i>	<i>2720</i>	<i>565</i>	<i>565</i>	<i>565</i>	<i>4</i>	<i>2260</i>	<i>2260</i>	Mean standard sheer aft = <i>83.95%</i>
$\frac{2}{8}L$ "	<i>170</i>	<i>2</i>	<i>340</i>	<i>133</i>	<i>133</i>	<i>133</i>	<i>2</i>	<i>266</i>	<i>266</i>	Mean actual sheer forward = <i>Excess</i>
Amidships	-	<i>4</i>	-	<i>0</i>	<i>0</i>	<i>0</i>	<i>4</i>	-	-	Mean standard sheer forward =
$\frac{2}{8}L$ from F.P.	<i>340</i>	<i>2</i>	<i>680</i>	<i>419</i>	<i>419</i>	<i>419</i>	<i>2</i>	<i>838</i>	<i>838</i>	Length of enclosed superstructure forward of amidships =
$\frac{1}{8}L$ "	<i>1361</i>	<i>4</i>	<i>5444</i>	<i>1393</i>	<i>1393</i>	<i>1393</i>	<i>4</i>	<i>5572</i>	<i>5572</i>	" " aft of " =
F.P.	<i>3062</i>	<i>1</i>	<i>3062</i>	<i>2949</i>	<i>2949</i>	<i>2949</i>	<i>1</i>	<i>2949</i>	<i>2949</i>	
Total			<i>13777</i>					<i>13217</i>		

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{560}{18} \left(.75 - \frac{2465}{5035} \right) = +16$

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

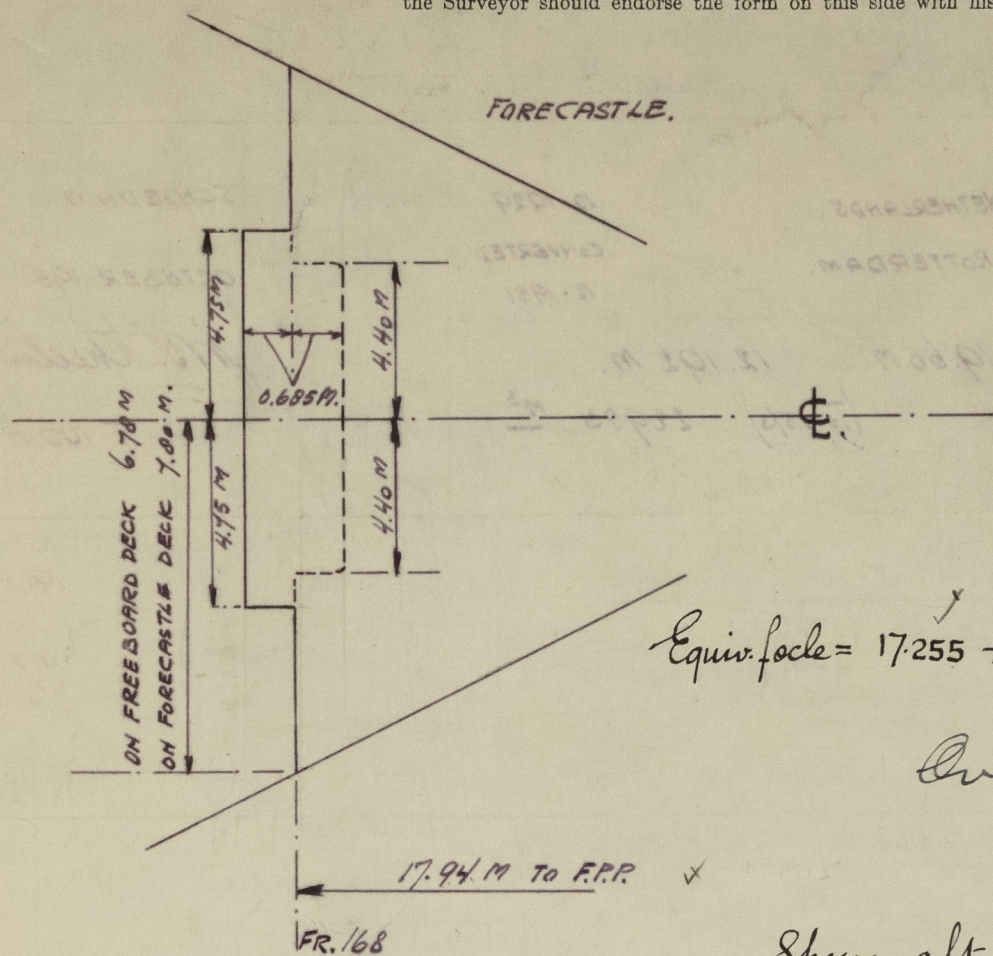
Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.735 + .68}{1.36} = 1.415$
Depth to Freeboard Deck = <i>12.217</i>	$\Delta = 20760 T (T=9.34)$	Depth Correction ... <i>505</i>
Summer freeboard = <i>2.860</i>	Tons per inch immersion at summer load water line	Deduction for superstructures ... <i>376</i>
Moulded draught (d) = <i>9.357</i>	T = <i>62.93 T</i>	Sheer correction ... <i>16</i>
Deduction for Tropical freeboard and addition for	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction ... <i>11</i>
Winter freeboard = $\frac{d}{48} = 19 \text{ cms.}$	= <i>8.248"</i>	Correction for Thickness of Deck amidships ... <i>25</i>
Addition for Winter North Atlantic Freeboard (if required) =	= <i>21 cms.</i>	Other corrections, scantlings, etc. ...
		532 401 + 131
		Summer Freeboard = <i>2859</i>

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

Tropical Fresh Water Line above Centre of Disc	<i>40 cms</i>	Tropical Fresh Water Freeboard	<i>286 cms</i>
Fresh Water Line	<i>21 "</i>	Fresh Water	<i>246 "</i>
Tropical Line	<i>19 "</i>	Tropical	<i>265 "</i>
Winter Line below	<i>19 "</i>	Winter	<i>267 "</i>
Winter North Atlantic Line	<i>19 "</i>	Winter North Atlantic	<i>305 "</i>

DONGEDYK.

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.



$$\text{Equiv. focke} = 17.255 + \frac{2.32 \times 6.85}{6.72} = 17.255 + 0.237 = 17.492$$

$$\text{Overhang} = .685 - .237$$

$$= .448$$

Sheers. aft.

<u>Standard</u>			<u>Actual</u>		
1531	1	✓	1332	1	✓
680	3	✓	565	3	✓
170	3	✓	133	3	✓
<u>4081</u> ✓			<u>3426</u> ✓		
<u>Actual</u>			<u>Standard</u>		
= $\frac{3426}{4081}$ ✓			= 83.95% ✓		

Sheers ford.

Standard

340 / 3	1020	419 / 3	1257 /
1361 / 3	4083	1393 / 3	4179 /
3062 / 1	3062	2949 / 1	2949 /
	<u>8165 /</u>		<u>8385 /</u>

Trade of ship " OCEAN TRADE "

Builder's name and yard number N.V. WILTONS MACH. FABRIEK & SCHEEPSWERF.

Owners NEDERLANDSE AMERIKAANSCH STEAMSHIP M.Y. ROTTERDAM.

Fee Rs 500.-