

AMENDED.

Rpt. C.11 (Comp.)

For LONDON OFFICE ONLY

WAGON.  
No 40957  
(SIMILAR).

# LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

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'KELANTAN'

TANKER H385

Ship's Name <b>STANBELL</b>	Official Number <b>2016</b> <b>180052</b>	Nationality and Port of Registry <b>Libyan</b> <b>BRITISH</b> <b>LONDON</b> <b>Monrovia</b>	Gross Tonnage <b>9804</b> <b>10341</b>	Date of Build	Port of Survey
Moulded Dimensions: Length <b>477.71</b> Breadth <b>68.00</b> Depth <b>36.00</b>				Date of Survey <b>17.11.55</b>	
Freeboard Length				Surveyor's Signature	
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) <b>214.67</b> tons				Particulars of Classification <b>+ 100 AT</b> <b>ORE CARRIER.</b>	
Coefficient of fineness for use with Tables <b>.756</b>					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... <b>36.00</b>	(a) Where D is greater than Table depth (D-Table depth) R = <b>(36.07 - 31.85)3 = +12.66</b>	Moulded Breadth (B) <b>68.00</b>
Stringer plate ... <b>.07</b>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <b>4.22</b>	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{68 \times 12}{50} = 16.32$
Wood Sheathing on exposed deck	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = <b>17.00</b>
$T \left( \frac{L-S}{L} \right) =$		Difference <b>.68</b>
Depth for Freeboard (D) = <b>36.07</b>		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.68^2}{4} \times \left( 1 - \frac{.4473}{4} \right) = .08$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	114.06	114.06	7.5	✓	114.06
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed	34.50	34.50	7.5	✓	34.50
" overhang					
Trunk aft <b>327.21 x 2.4</b>		115.50	7.5	✓	115.50
" forward <b>68</b>					
Tonnage opening aft					
" " forward					
Total	148.56	264.06			264.06

Standard Height of Superstructure **7.5** ✓

" " R.Q.D. ✓

Deduction for complete superstructure **42** ✓

Percentage covered  $\frac{S}{L} = \frac{31.10}{55.27} = .5627$  ✓

" "  $\frac{S_1}{L} = \frac{55.27}{55.27} = 1.00$  ✓

Percentage from Table, Line A **TANKER 46.80** ✓  
(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 .4680 = 19.66** ✓

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	57.77	1		57.77	46 <sup>11</sup> / <sub>8</sub>	46.12	1		46.12
$\frac{1}{4}$ L from A.P.	25.71	4		102.84	21	21.00	4		84.00
$\frac{2}{8}$ L	6.355	2		12.71	5 <sup>5</sup> / <sub>8</sub>	5.625	2		11.25
Amidships	0	4		0	0	0	4		0
$\frac{2}{8}$ L from F.P.	12.71	2		25.42	6 <sup>3</sup> / <sub>4</sub>	6.75	2		13.50
$\frac{1}{4}$ L	51.415	4		205.66	26 <sup>3</sup> / <sub>4</sub>	26.75	4		107.00
F.P.	115.54	1		115.54	62.	62.00	1		62.00
Total				519.94					323.87

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{196.07}{18} \left( .75 - \frac{.1555}{2} \right) = +6.48$  ✓  
If limited on account of midship superstructure. **59.45** If limited to maximum allowance of 1 <sup>1</sup>/<sub>2</sub> ins. per 100ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD
<p>Depth to Freeboard Deck = <b>36.07</b></p> <p>Summer freeboard = <b>8.04</b></p> <p>Moulded draught (d) = <b>28.03</b></p> <p>Keel allowance =</p> <p>Extreme draught =</p> <p>Deduction for Tropical freeboard and addition for =</p> <p>Winter freeboard = <math>\frac{d}{4}</math> inches = <b>7.01</b></p> <p>Addition for Winter North Atlantic Freeboard (if required) = <b>7.01 + 4.78 = 11.79</b></p>	<p>Displacement in salt water at summer load water line <math>\Delta = 19555</math> ✓</p> <p>Tons per inch immersion at summer load water line <b>T = 652</b> ✓</p> <p>Deduction = <math>\frac{\Delta}{40 T}</math> inches = <b>7.50</b> ✓</p> <p>= <b>7 <sup>1</sup>/<sub>2</sub></b> ✓</p>	<p>Correction for coefficient <b>.756 + .68 = 1.436</b> ✓</p> <p>Depth Correction ... <b>12.66</b> ✓</p> <p>Deduction for superstructures ... <b>19.66</b> ✓</p> <p>Sheer correction ... <b>64.8</b> ✓</p> <p>Round of Beam correction ... <b>.08</b> ✓</p> <p>Correction for Thickness of Deck amidships ...</p> <p>Other corrections, scantlings, etc. <b>10.38</b> ✓</p> <p>corrected to a Summer Mld. <b>29.52</b> ✓</p> <p>Summer Freeboard = <b>96.50</b> ✓</p>

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

Tropical Fresh Water Line above Centre of Disc	14 <sup>1</sup> / <sub>2</sub>	Tropical Fresh Water Freeboard	6' - 10"
Fresh Water Line	7 <sup>1</sup> / <sub>2</sub>	Fresh Water	7' - 5"
Tropical Line	7	Tropical	7' - 5 <sup>1</sup> / <sub>2</sub> "
Winter Line below	7	Winter	8' - 7 <sup>1</sup> / <sub>2</sub> "
Winter North Atlantic Line	11 <sup>1</sup> / <sub>4</sub>	Winter North Atlantic	9' - 0 <sup>1</sup> / <sub>4</sub> "