

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for ^{Motor} Steamer, Sailing Ship, Tanker

ing *a poop, bridge and fore-castle.*

Port of Survey

Date of Survey *16/6/31*

Name of Surveyor

(Type of Superstructures.)

| | | | | |
|--|--|-------------------|--|---------------|
| Ship's Name MAH MACY | Nationality and Port of Registry <i>Hungary</i> | Official Number | Gross Tonnage | Date of Build |
| Dimensions: Length <i>128.0</i> | Breadth <i>17.37</i> | Depth <i>9.60</i> | Displacement at moulded draught = 85 per cent. of moulded depth <i>15120 metric tons</i> | |
| Correction for use with Tables <i>.813</i> | | | | |

Particulars of Classification *+100 A1*
Carrying petroleum in bulk
longitudinal framing

| | | |
|-----------------------------|--|--|
| Freeboard (D) | Depth correction | Round of Beam correction |
| <i>9.60</i> | (a) Where D is greater than Table depth $8.33(D - \text{Table depth}) R =$ $8.33(9.62 - 8.53) \times 30 = +.272$ | Moulded Breadth (B) <i>17.37</i> |
| <i>.02</i> | (b) Where D is less than Table depth (if allowed) (Table depth - D) R = | Standard Round of Beam = $\frac{B \times 1.25}{50} = .347$ |
| Freeboard (D) = <i>9.62</i> | If restricted by superstructures | Ship's Round of Beam = <i>.356</i> |
| | | Difference = <i>.009</i> |
| | | Restricted to |
| | | Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) = \frac{.009}{4} \times .588 = -.001$ |

DEDUCTION FOR SUPERSTRUCTURES.

| Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|-------------------------|--|-------------|-------------------|----------------------|
| <i>29.79</i> | <i>29.79</i> | <i>2.44</i> | - | <i>29.79</i> |
| <i>10.37</i> | <i>10.37</i> | <i>2.44</i> | | <i>10.37</i> |
| <i>1.05</i> | <i>.79</i> | | | <i>.79</i> |
| <i>1.05</i> | <i>.52</i> | | | <i>.52</i> |
| <i>11.28</i> | <i>11.28</i> | <i>2.44</i> | | <i>11.28</i> |
| <i>53.54</i> | <i>52.75</i> | | | <i>52.75</i> |

Standard Height of Superstructure *2.29*

" " R.Q.D. ✓

Deduction for complete superstructure *1.067*

Percentage covered $\frac{S}{L} = 41.83\%$

" " $\frac{S_1}{L} = 41.21\%$

" " $\frac{E}{L} = 41.21\%$

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

Percentage from Table, ~~Line B. Tanker~~ *32.2/2*.
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) *Tanker: does not apply*

Deduction = $1.067 \times .3221 = -.344$

SHEER CORRECTION.

| Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|-------------------|----------|---------------|--------------|-----------------|--------------------|----------|---------------|--------------|
| <i>321</i> | <i>1</i> | <i>1.321</i> | <i>1.321</i> | <i>1.588</i> | <i>1.588</i> | <i>1</i> | <i>1.588</i> | <i>1.588</i> |
| <i>587</i> | <i>4</i> | <i>2.348</i> | <i>.610</i> | <i>.610</i> | <i>.610</i> | <i>4</i> | <i>2.440</i> | <i>2.440</i> |
| <i>145</i> | <i>2</i> | <i>.290</i> | <i>.127</i> | <i>.127</i> | <i>.127</i> | <i>2</i> | <i>.254</i> | <i>.254</i> |
| <i>291</i> | <i>2</i> | <i>.582</i> | <i>.343</i> | <i>.343</i> | <i>.343</i> | <i>2</i> | <i>.686</i> | <i>.686</i> |
| <i>1.175</i> | <i>4</i> | <i>4.700</i> | <i>1.447</i> | <i>1.447</i> | <i>1.447</i> | <i>4</i> | <i>5.788</i> | <i>5.788</i> |
| <i>2.642</i> | <i>1</i> | <i>2.642</i> | <i>3.302</i> | <i>3.302</i> | <i>3.302</i> | <i>1</i> | <i>3.302</i> | <i>3.302</i> |
| | | <i>11.883</i> | | | | | <i>14.058</i> | |

Mean actual sheer aft = *58 cm*
Mean standard sheer aft

Mean actual sheer forward = *58 cm*
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = } *Tanker: Does not apply.*
" " aft of " = }

Difference between sums of products $(.75 - \frac{S}{2L}) = \frac{2.175}{18} (.75 - .209) = -.065$

account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

| | | | |
|---|--|--|--------------|
| Tropical Freeboard. | Deduction for Fresh Water. | TABULAR FREEBOARD corrected for Flush Deck (if required) | <i>1.712</i> |
| Winter and Winter North Atlantic Freeboard. | Displacement in salt water at summer load water line | Correction for coefficient $\frac{.813 + .68}{1.26} =$ | <i>1.879</i> |
| Freeboard Deck = <i>9.62</i> | $\Delta =$ | Depth Correction | <i>.272</i> |
| Freeboard = <i>1.74</i> | Tons per inch immersion at summer load water line | Deduction for superstructures | <i>-.344</i> |
| Moulded draught (d) = <i>7.88</i> | T = | Sheer correction | <i>-.065</i> |
| Tropical freeboard and addition for | Deduction = $\frac{\Delta}{40T}$ inches | Round of Beam correction | <i>-.001</i> |
| Freeboard = $\frac{d}{48} \times 164 = 1.64$ | = | Correction for Thickness of Deck amidships | <i>-</i> |
| Winter North Atlantic Freeboard (if required) = <i>1.05</i> | | Other corrections, scantlings, etc. | <i>-</i> |
| | | Summer Freeboard = <i>1.741</i> | |

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck: *1.74 metres.*

| | | | |
|---|------------|---------------------------------------|-------------|
| Tropical Fresh Water Line above Centre of Disc | <i>.32</i> | Tropical Fresh Water Freeboard | <i>1.42</i> |
| Fresh Water Line " " | <i>.16</i> | Fresh Water " " | <i>1.58</i> |
| Tropical Line " " | <i>.16</i> | Tropical " " | <i>1.58</i> |
| Winter Line below " " | <i>.16</i> | Winter " " | <i>1.90</i> |
| Winter North Atlantic Line " " | <i>.27</i> | Winter North Atlantic " " | <i>2.01</i> |

Deckhouses on Flush Deck

