

ST JAMES

Lloyd's Register of Shipping

SURVEYS FOR FREEBOARD - STEAMERS

(Under the Provisions of the U. S. A. Load Line Act of March 2, 1929)

New York Office Index No.

Port of Survey... *Moan Lo... Ala.*Date of Survey... *While building*Name of Surveyor... *Kammit*

| | | | | | |
|---|--|--|--|-------------------------------|--|
| Ship's Name, M.S. WILLIAM C McTARNAHAN | Port of Registry and Nationality. NEW YORK AMERICAN | Official Number. - | Gross Tonnage. 7300 <i>Approx.</i> | Date of Build. 1941 | Particulars of Classification. +100 A1 Carrying Petroleum in Bulk <i>(Class Contemplated)</i> |
| Number in Register Book..... | Owner... <i>National Bulk Carriers</i> | Builder... <i>Ataman, Republic S.S. Co</i> | Hull No.... 222 | | |
| Moulded dimensions 416' x 56' x 35' (85% = 29.75') | | | | | |
| Moulded displacement at a moulded draught of 85 per cent. of moulded depth..... | | | | | 162.50 tons |
| Coefficient of fineness for use with tables..... | | | | | 821 |

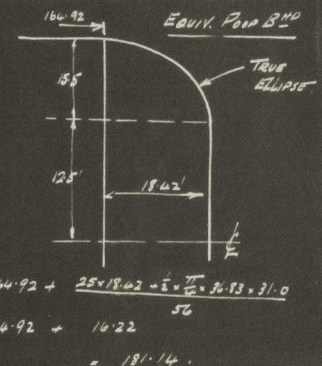
| DEPTH FOR FREEBOARD. | | CORRECTION FOR DEPTH. | | CAMBER | |
|----------------------------|--------------|--|---------------|---|-------------|
| Moulded depth | 35.00 | (a) When D is greater than $\frac{L}{15}$ | | Standard $\frac{56 \times 12}{50} = \dots$ | 13.4 |
| Stringer plate | .06 | $(D - \frac{L}{15}) \times R = (35.06 - 27.73) \times 3 \dots$ | +21.99 | Ship $\frac{1}{2}$ per ft. equiv. \dots | 10.5 |
| Sheathing in wells | | (b) When D is less than $\frac{L}{15}$ (if allowed) | | Difference \dots | 2.9 |
| $T(\frac{L-S}{L}) = \dots$ | ✓ | $(\frac{L}{15} - D) \times R = \dots$ | | Restricted to \dots | |
| Depth D = | 35.06 | If restricted by height of superstructures | | Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S}{L}) = \frac{2.9}{4} \times (1 - \frac{3}{416}) = \dots$ | 2.9 |

| | | SUPERSTRUCTURES. | | | | |
|----------------------|---|------------------------|--|---------|------------------------|-------------------|
| | | Mean Covered Length S. | Effective Length S _e (Uncorrected for Height) | Height. | Correction for Height. | Effective Length. |
| Poop enclosed | ✓ | 18' 1" 14 | 18' 1" 14 | 7.75 | | 18' 1" 14 |
| " overhang | ✓ | | | | | |
| R.Q.D. enclosed | ✓ | | | | | |
| " overhang | ✓ | | | | | |
| Bridge enclosed | ✓ | | | | | |
| " overhang aft | ✓ | | | | | |
| " overhang forward | ✓ | | | | | |
| Fore enclosed | ✓ | 39' 4" 2 | 39' 4" 2 | 7.75 | | 39' 4" 2 |
| " overhang | ✓ | | | | | |
| Trunks forward | ✓ | | | | | |
| " aft | ✓ | | | | | |
| Tonnage opening | ✓ | | | | | |
| Total = | | 220' 5" 4 | 326' 0" 1 | | | 277' 9" 1 |
| Length of ship (L) = | | 416 | | | | |
| % Covered = | | 66.81 | | | | |

Corresponding %, corrected for absence of forecastle if required **✓**

Allowance = **5927** × **42** = **24.80**

Correction for Bridge less than 2 L if required



TRUNK $\frac{183.75 \times 32.375}{56} = 106.85$

SHEER.

| Station. | Actual Sheer. | Standard Sheer. | Allowed Sheer. | S. M. | Products. |
|----------|---------------|-----------------|----------------|-------|-----------|
| A.P. 1 | 3' 8" 2 5 | 5' 1" 6 | 3' 8" 2 5 | 1 | 3' 8" 2 5 |
| 2 | 5' 5" | 2' 3" 0 | 5' 5" | 4 | 22' 0" |
| 3 | 0 | 5' 7" | 0 | 2 | 0 |
| 4 | 0 | 0 | 0 | 4 | 0 |
| 5 | 0 | 1' 1" 3 | 0 | 2 | 0 |
| 6 | 1' 5" 7 5 | 4' 5" 9 | 1' 5" 7 5 | 4 | 6' 3" 0 |
| F.P. 7 | 8' 6" 0 | 1' 0" 3 2 | 8' 6" 0 | 1 | 8' 6" 0 |

If excess sheer forward and deficient sheer aft:—

Actual sheer aft =
Standard sheer aft =
Actual sheer forward =
Standard sheer forward =

Mean effective sheer $\dots = 11.52$
Standard sheer $\times .05 \ L + 5 = \dots = 25.80$
Difference (Df) $\dots = 14.28$
Allowance $= Df \times (.75 - \frac{S}{2L}) = 14.28 (75 - 26.81) = \dots = 6.92$
If limited on account of amidship superstructure $\dots = \checkmark$
If limited on account of excess sheer (1½ in. per 100 ft.) $\dots = \checkmark$

Length of enclosed superstructure

Forward of amidships = \checkmark
Aft of amidships = \checkmark

| DRAFTS. | | F. W. ALLOWANCE | TABULAR FREEBOARD (corrected for flush deck if required) | |
|-----------------------------------|--------------|-----------------------------|---|--------------|
| Moulded Depth D = | 35.00 | Displacement = 15600 | Corrected for Coefficient $\frac{821 + .68}{1.36} = \frac{1.501}{1.36} = \dots$ | 66.40 |
| Stringer Plate = | .06 | Tons per inch = 50 | Correction for Depth \dots | 73.29 |
| Freeboard | 35.06 | | Superstructures \dots | |
| Moulded draught 28' 7" 2 | 28.60 | | Sheer \dots | 24.89 |
| Addition for keel below base line | .07 | | Camber \dots | |
| Extreme draught 28' 8" | 28.67 | | Thickness of deck \dots | |
| | | | Scantlings, etc. \dots | |
| | | | Summer Freeboard = | 77.47 |

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, *Upper* Deck **6' 5" 1/2**

| | | | |
|--|----------------|--------------------------------|-------------------|
| Tropical Fresh Water Line (above center of Disc) | 15" | Tropical Fresh Water Freeboard | 5' 2 3/4" |
| Fresh Water Line | 7 1/4" | Fresh Water | 5' 9 3/4" |
| Tropical Line | 7 1/4" | Tropical | 5' 10 3/4" |
| Winter Line (below " " ") | 7 1/4" | Winter | 7' 0 3/4" |
| Winter North Atlantic Line | 11 1/2" | Winter North Atlantic | 7' 8" |

Note:—The Rules referred to below are the Load Line Regulations of the United States Department of Commerce.
(These should be consulted when completing the report.)

Is the poop or raised quarter deck connected with the bridge? *No Bridge*
Has the poop or raised quarter deck an efficient steel bulkhead at the fore end? *Yes*
Give particulars of the means of closing the openings in this bulkhead (Rules 43 and 44) *No openings*
Has the bridge an efficient steel bulkhead at the fore end? *Yes*
Give particulars of the means of closing the openings in this bulkhead *Yes*
Has the bridge an efficient steel bulkhead at the after end? *Yes*
Give particulars of the means of closing the openings in this bulkhead *Yes*
Has the forecastle an efficient steel bulkhead at the after end? *Yes*
Give particulars of the means of closing the openings in this bulkhead *Stable steel plate attached by hook bolts (N.T. done in steel plate operation from back side)*
Are the engine and boiler openings covered by a bridge, poop, raised quarter-deck, or enclosed by a strong steel deckhouse? *Poop*
If the openings are not so protected, are the exposed parts of the casing efficiently constructed? *Yes*
Give thickness of plating, scantlings and spacing of stiffeners.
Are Rules Nos. 19, 20, 21 and 22 complied with (where applicable)? *Yes*

Particulars of bulkheads of erections:

| | Poop or Raised Quarter-Deck Bulkhead | Bridge front bulkhead | Bridge after bulkhead | Forecastle bulkhead |
|---|--------------------------------------|-----------------------|-----------------------|----------------------------------|
| Thickness of bulkhead plating | <i>.44</i> | | | <i>.32</i> |
| Scantlings of stiffeners | <i>8" 4" 7/16"</i> | | | <i>3 1/2" 3" 7/16"</i> |
| Spacing of stiffeners, and if bracketed | <i>31" bulk</i> | | | <i>32 1/2" 1 1/2" top unless</i> |
| Height of sills of openings above deck | <i>No openings</i> | | | <i>12"</i> |

Particulars of weather deck hatchways.

(In case of complete superstructure vessels having tonnage openings, give, in addition, particulars of 2nd deck hatchways, and also of those in bridge spaces closed by Class 2 appliances, or in open bridges.)

| particulars of 2nd deck hatchways, and also of those in bridge, superstructure, and lower deck. | | | | | | | | | | | | |
|---|--------------------------|-----------------------------------|--|-------------------------------------|-------|---------------------------------|------------------------|-------------------------------|------------------------|--------------------------------|-----------------------|--|
| Class 2 appliances, or in open bridges. | | | | | | | | | | | | |
| Cargo Tank Hatchways | | | | | | | | | | | | |
| Port Deck | | | | | | | | | | | | |
| Position and Size. | | Cargo Tank (30' diam) | | Upper Deck 10' 1/2" x 14' 1/2" tank | | Main Deck 15' 0" x 20' 0" plain | | Hull Deck 6' 0" x 10' 0" beam | | Fore Deck 16' 0" x 20' 0" beam | | |
| Item. | | Ship. | Rule. | Ship. | Rule. | Ship. | Rule. | Ship. | Rule. | Ship. | Rule. | |
| COAMING. | Height above top of DECK | 6' | | 30' | | 20' diam x 4' coaming | | 3' 6" x 4' 0" 3' coaming | | 20' diam x 30' high | | |
| | Thickness | Side | 3/8" | | | 3/8" | | 3/8" | | 3/8" | | |
| | | Ends | | | | | | | | | | |
| SHIPPING BEAMS OR WEB PLATES. | Number | Ortho light "dished" steel covers | | | | | 3/8" W.T. bolted steel | | 3/8" W.T. bolted steel | | 3/8" oil tight bolted | |
| | Section and Scantlings | 3 1/2" thick, secured by strong- | | | | | plate covers. | | cover with 3x3-3/4" | | steel covers | |
| | Material | back | | | | | | | I stiffeners | | lugs. | |
| | | | (Strongback or cover permanently attached) | | | | | (chain attached) | | | | |
| FORE AND AFTERS. | Number | | | | | | | | | | | |
| | Section and Scantlings | | | | | | | | | | | |
| | Material | | | | | | | | | | | |
| HATCHES Thickness | | | | | | | | | | | | |
| Remarks | | | | | | | ✓ | | | | | |

* The depth of Fore and Afters should be stated from the underside of the hatches in all cases.

Are Rules 12, 13, 14, 15, 16, 17, 18 complied with as far as practicable?
Are hatchway coamings stiffened in accordance with Rule 9?

Length of bulwarks in wells—forward: feet; aft: feet.

Area of freeing ports required by regulations (Rules 30 and 100) forward: sq. ft.; aft: sq. ft.

Particulars of freeing ports fitted on each side of vessel

Are Rules 23 and 24 complied with as far as practicable?

Are air pipes to tanks in accordance with Rule 25?

Are all scuppers and sanitary discharge pipes in accordance with Rule 27?

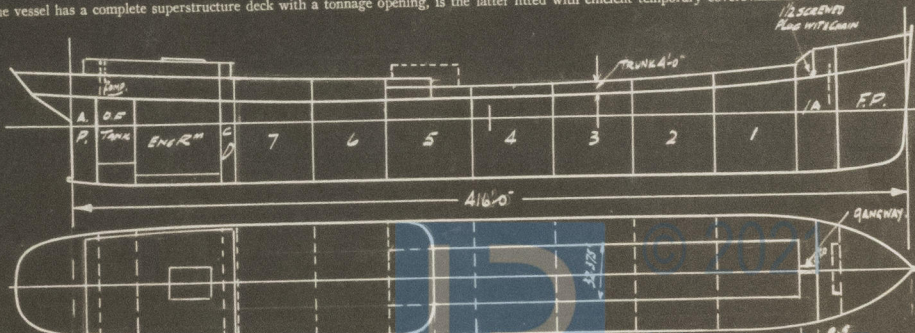
In oil tankers, what is the extent of the fore and aft gangway? *From Tank to fore 4.5'* Are the crew berthed in the forecastle? (Rule 96) *No*

Is the gangway strong and efficiently braced fore and aft? *Yes* State spacing of supports *9.5'* feet.

In oil tankers, are the bulwarks open for at least half the length of the exposed portion of the weather deck? (Rule 100) *Yes*

Are Rules Nos. 95, 97, 98 and 99 complied with as far as practicable? *Yes*

If the vessel has a complete superstructure deck with a tonnage opening, is the latter fitted with efficient temporary covers?



Sister vessels: *M.S. PETROFUEL*
Fee: *\$100*
Expenses (if any): *\$10*
Surveyor to Lloyd's Register of Shipping: *F. J. Rannick*