No. 30073

Lloyd's Register of Shipping
SURVEYS FOR FREEBOARD – STEAMERS
(Under the Provisions of the U. S. A. Load Line Act of March 2, 1929)

No. 243

New York Office Index No. 160

Port of Survey. Mobile

Date of Survey. 1st & 2nd March 1933

Name of Surveyor. A. W. Murray

	Ship's Name.	Port of Registry and Nationality.	Official Number.	Gross Tonnage.	Date of Build.	Particulars of Classification.
S.S. M.S.	J. Fletcher Farrell	New York U.S.A.	221450	7061	1921-7	+100 A1. Carrying Petroleum in bulk

Number in Register Book. 74419

Owner. Sinclair Nav. Co. Inc.   Builder. Bethlehem S. B. Co. (Sparrows Point)   Hull No. 1396

Moulded dimensions   430·0 × 59·0 × 33·25′ (85% = 28·26′)

Moulded displacement at a moulded draught of 85 per cent. of moulded depth......16,625 Tons.

Coefficient of fineness for use with tables........·812

'DEPTH FOR FREEBOARD.

Moulded depth	33.25	
Stringer plate ... ... ·64″	·05′	
Sheathing in wells $T\left(\dfrac{L-S}{L}\right)=$	✓	
Depth $D=$ ...	33.30	

CORRECTION FOR DEPTH.

(a) When D is greater than $\dfrac{L}{15}$

$$\left(D-\dfrac{L}{15}\right)\times R = (33.30 - 28.67)\times 3 = \ +13.89$$

(b) When D is less than $\dfrac{L}{15}$ (if allowed).

$$\left(\dfrac{L}{15}-D\right)\times R = \ ✓$$

If restricted by height of superstructures ... ... ✓

CAMBER

Standard $\dfrac{59\times 12}{50}=$ ...	14·16′	
Ship	15·00′	
Difference	·84′	
Restricted to	✓	
Allowance $=\dfrac{\text{Difference}}{4}\times\left(1-\dfrac{S_1}{L}\right)=\dfrac{·84\times ·545}{4}=-·11$		

SUPERSTRUCTURES.

	Mean Covered Length S	Effective Length S_1 (Uncorrected for Height)	Height.	Correction for Height.	Effective Length.
Poop enclosed	134·00	134·00	7·75	✓	134·00
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	36·54	36·54	7·75	✓	36·54
" overhang aft ...					
" overhang forward					
F'cle ~~enclosed~~ Open ...	40·37	25·04	7·75	✓	25·04
" overhang ...					
Trunks forward ...					
" aft ...					
Tonnage opening					
TOTAL =	210·91	195·58			195·58
Length of ship (L) =	430	430			430
% Covered... ... =	49·05%	45·48%			45·48%

Corresponding %, corrected for absence of forecastle if required } A = Tanker   ·B= 36·48%   Correction for Bridge less than ·2 L if required } Tanker does not apply.

Allowance ... = 42·0 × ·3648 = − 15·32

Sheer forward

=	4	=
3·5	2	7·0
34·0	4	136·0
120·0	1	120·0
		263·0

Standard sheer forward

6·62	1	26·48
26·50	2	53·00
59·62	4	238·48
106·00	1	106·00
		423·96

No sheer for ¼ length amidships

SHEER.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	6 0 0 0	53 0 0	6 0 0 0	1	6 0 0 0
2	17 5 0	29 8 8	17 5 0	4	70 0 0
3	2 0 0	13 2 5	2 0 0	2	4 0 0
4		3 3 1		4	
5				2	
6		6 6 2		4	7 0 0
7	3 5 0	26 5 0	3 5 0	2	
F.P. 8	34 0 0	59 6 2	34 0 0	4	136 0 0
9	120 0 0	106 0 0	120 0 0	1	120 0 0
				~~24~~ 18	397·00

Mean effective sheer... ... ... = 16·54

Standard sheer ·05 L + 5 = = 26·50

Difference (Df) ... ... = 9·96

Allowance = Df × $\left(·75 - \dfrac{S}{2L}\right)$ = 9·96 (·75 − ·245) = + 5·03

If limited on account of amidship superstructure ... = ✓

If limited on account of excess sheer (1½ in. per 100 ft.) ... = ✓

If excess sheer forward and deficient sheer aft:—

$\dfrac{\text{Actual sheer aft}}{\text{Standard sheer aft}}$ =

$\dfrac{\text{Actual sheer forward}}{\text{Standard sheer forward}} = \dfrac{263}{423·96} = 62·03\%$

∴ allow 62·03% of open forecastle

$\dfrac{\text{Length of enclosed superstructure}}{L}$

Forward of amidships = ✓

Aft of amidships = ✓

DRAFTS.

Moulded Depth D =	33′ – 3″	
	3¼″	
Stringer Plate = (or Wood Deck)	33′ – 3¼″	
Freeboard	6′ – 8¼″	
Moulded draught	26′ – 7½″	
Addition for keel below base line	2½″	
Extreme draught	26′ – 10″	

F. W. ALLOWANCE

Displacement = 15710

Tons per inch = 53·0

$\dfrac{15710}{40\times 530} = 7·41$

TABULAR FREEBOARD (corrected for flush deck if required) = 69·90

Corrected for Coefficient $\dfrac{·812 + ·68}{1·36} =$ = 76·68

	+	−
Correction for Depth	13·89	−
" Superstructures		15·32
" Sheer	5·03	−
" Camber	−	·11
" Thickness of deck	−	−
" Scantlings, etc.	−	−
	18·92	15·43

+ 3·49

Summer Freeboard = 80·17

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel,   Deck:— 6′–8¼″

Tropical Fresh Water Line (above center of Disc)	13¾″	Tropical Fresh Water Freeboard	5′–6½″
Fresh Water Line " " "	7¼″	Fresh Water "	6′–1″
Tropical Line " " "	6½″	Tropical "	6′–1¾″
Winter Line (below ")	6¾″	Winter "	7′–3″
Winter North Atlantic Line " " "	11″	Winter North Atlantic "	7′–7″

1 NOV 1933

Is the poop ~~or raised quarter deck~~ connected with the bridge? _No_

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) _Bolted plates secured by 7/8" Bolts 13" apart fore through plate + w_

Has the bridge an efficient steel bulkhead at the fore end? _Yes 2'_

Give particulars of the means of closing the openings in this bulkhead _7/8" Hinged steel doors 26"x60" - 8 dogs to open from both sides_

Has the bridge an efficient steel bulkhead at the after end? _Yes_

Give particulars of the means of closing the openings in this bulkhead _Storm boards to full height of opening in riveted channels (40"x 48")_

Has the forecastle an efficient steel bulkhead at the after end? _No, open_

Give particulars of the means of closing the openings in this bulkhead

Are the engine and boiler openings covered by a bridge, poop, raised quarter-deck, or enclosed by a strong steel deckhouse? _Covered by poop_

If the openings are not so protected, are the exposed parts of the casing efficiently constructed?

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	.50 Coaming .50	.48 Coaming .50	.48 Coaming .50	
Scantlings of stiffeners	10" x 3½" x 3½" x .48 ⌶	10" x 3½" x 3½" x .48 ⌶	6" x 3" bulb LS	_See_
Spacing of stiffeners, and if bracketed	42" Bracketed	43" Bracketed	36 to 43 Bracketed	
Height of sills of openings above deck		22½"	18"	

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).

Bunker Hatches

		Position and Size.		Dummies Tanks F.S.		Cofferdams Cargo Hatch		Hatch Under Forecastle		Poop Hatch	
		No 1 to 9 Tank Hatches									
	Item.	Ship. 72" x 48"	Rule.	Ship. 72" x 48"	Rule.	Ship. 23" Diam.	15' 3 x 8' 0"	Ship. 44" x 44"	Rule.	Ship. 20" x 12"	Rule.
COAMING.	Height above top of DECK	8"		32½ Aft. 28" Ford.		30"	30"	18"		30" to 36"	
	Thickness { Sides	7/16"		7/16"		3/8"	½"	7/16"		½"	
	Thickness { Ends	7/16"		7/16"			½"	7/16"			
SHIFTING BEAMS OR WEB PLATES.	Number										
	Section and Scantlings										
	Material										
* FORE AND AFTERS.	Number									5	
	Section and Scantlings									3x3 LS 7/16	
	Material									Steel	
HATCHES	Thickness	7/16"		7/16"		7/16"	7/16"	3/8"		3" Wood	
	Remarks	Steel + Stiffeners		Steel Stiffeners		Steel	Steel plate Stiffeners 7 x 3½ bulb ⌶ centre	Steel		Steel Fore + Afters 42" apart 3x3 LS + plate Depth 6" ends 10" centre	

* 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? _Yes_

Are hatchway coamings stiffened in accordance with Rule 9? _Yes 7" x 3½" bulb L all round and brackets._

Length of bulwarks in wells—forward: _41_ feet; aft: _56_ 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 { forward well { _42, "5" bulwarks cut away rail + stanchions fitted_ ___ sq. ft.

{ after well { _81' bulwarks cut away rail stanchions fitted_ ___ sq. ft.

No. Ft. × Ft.

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

Are air pipes to tanks in accordance with Rule 25? _Yes_

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

In oil tankers, what is the extent of the fore and aft gangway? _All fore + aft_ Are the crew berthed in the forecastle? (Rule 96). _No (in poop)_

Is the gangway strong and efficiently braced fore and aft? _Yes_ State spacing of supports _9_ 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? ✓

FORECSTLE 40·37'

BRIDGE 36·54'

430'

E + B. CASING
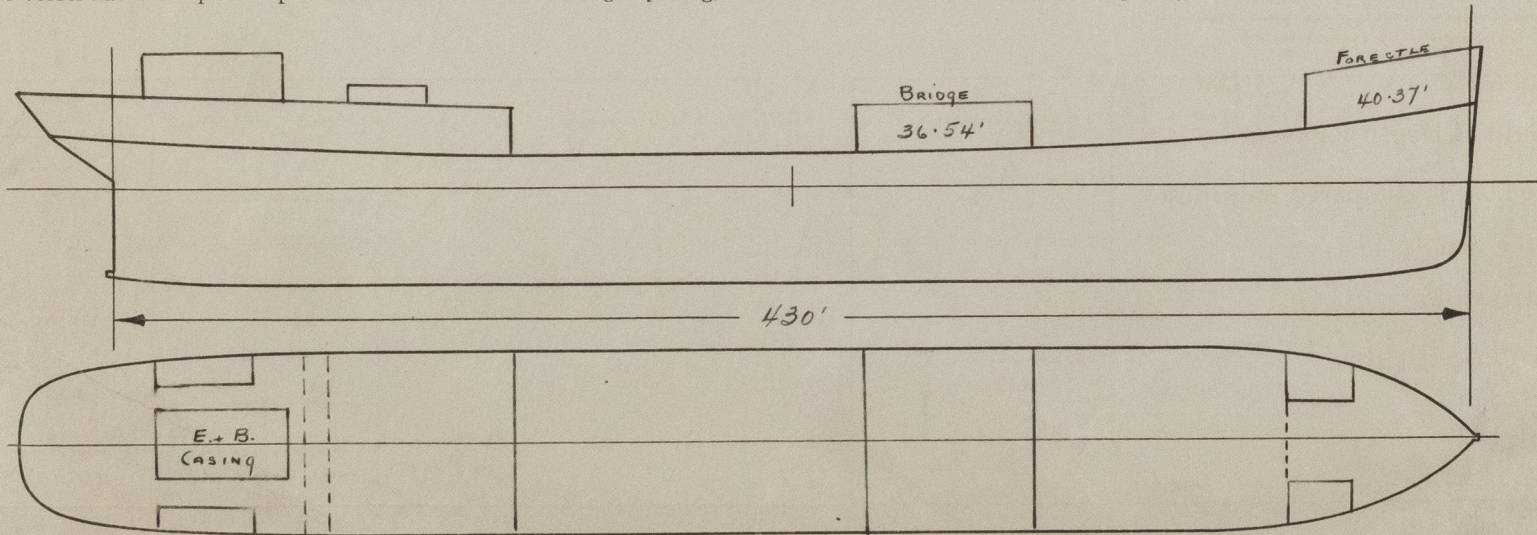
Indicate thickness and extent of any deck covering, and extent of erections, with dimensions, showing overhang (if any). Indicate position of scuppers from tonnage-exempted spaces above freeboard deck.

Sister vessels: _"Wm Boyce Thompson"_ Similar: _"Eugene V.R. Thayer" + "Albert E. Watts"_

Fee: _$100.00_ Expenses (if any) _$2.50_ Signed _W. Murray?_ Surveyor to Lloyd's Register of Shipping.