

REC'D NEW YORK JAN - 6 1922

REPORT No 4297

Index No. 30378  
(For London Office only.)

JAN 24 1922

## Lloyd's Register of Shipping

## SURVEYS FOR FREEBOARD - STEAM SHIPS.

REGULARS RELATING TO ALL STEAM SHIPS EITHER FLUSH DECKED, OR WITH  
TOP GALLANT FORECASTLES, SHORT POOPS AND BRIDGE HOUSES DISCONNECTED, OR  
WITH TOP GALLANT FORECASTLES HAVING LONG POOPS, OR RAISED QUARTER DECKS  
CONNECTED WITH BRIDGE HOUSES, OR OTHERWISE.

SUN S.B. Co., No 43.

COMPLETE SHELTER DECK VESSEL.

Port of Survey PHILADELPHIA.

Date of Survey while building.

Name of Surveyor E. J. Evans.

Ship's Name

"DELAWARE SUN."

Port of Registry and Nationality.  
PHILADELPHIA.  
U. S. A.

Official Number.

Gross Tonnage.  
9100  
APPROX.Date of Build.  
1922.Particulars of Classification.  
+100A1 SHELTER DECK WITH  
FREEBOARD. CARRYING PETROLEUM  
IN BULK. (CONTEMPLATED)

Number in Register Book

Registered dimensions from Ship's Register.	LENGTH.	BREADTH.	DEPTH.	UNDER DECK TONNAGE.
	480.5	66.0	36.8	8813.90
Length on LOADLINE.	480.0			
RECTED ENSIONS.	480.0	65.88	36.89	8911.46

Moulded Depth as measured to SHELTER Dk. 37.0"  
WOOD DECK LESS STRINGER - 3  
Addition for Keel below base line for draught record 2.58 inches.

NOTE. - If the depth is measured when vessel is afloat, the details of measurement should be reported.

## CORRECTION FOR LENGTH.

Length of Ship on Loadline.....	480.0
Length in Table .....	441.0
Difference .....	39.0
Correction for 10ft., Table A. ....	1.7
× Difference divided by 10 .....	6.63 (if required.)
If 10ths length covered divide by 2 ✓	+6.34

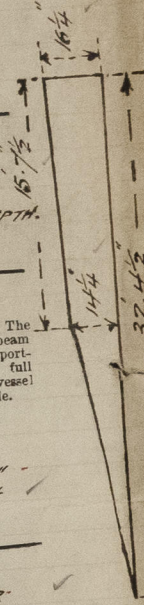
## CORRECTION FOR IRON DECK.

Proportion covered, if less than 10ths length covered .....	✓
Thickness of usual wood deck, less stringer .....	ALLOWED IN REDUCED MOULDED DEPTH.

## CORRECTION FOR ROUND OF BEAM.

Breadth at Gunwale amidships.....	64.75
Round of Beam .....	16.66
Normal round... EQUAL TO .....	16.19
Difference .....	47 ÷ 2 = 23.5
Proportion of Deck uncovered (Para. 19) .....	✓

NOTE. - The round of beam should be reported on the full breadth of vessel at the gunwale.



efficient of fineness.....  
modification necessary  
[Para. 4 (a) to (e)]\*  
efficient as corrected .....

Stem.....	121.00	182.62 ÷ 2 = 91.31	Mean	3.83 = .106
Sternpost ...	61.62			
Stem .....	38.50	60.00 ÷ 2 = 30.00	Mean	
Sternpost .....	21.50			
radual mean Sheer .....	54.17			
andard mean Sheer [Table, Para. 18] .....	58.00			
Difference.....	3.83	÷ 4 =	.96	
If limited as Para. 18 (f) .....				

Rise in Sheer { At front of bridge house.....  
rom amidships {  
Para. 18 (e) } At after end of forecastle .....

Fall in Sheer {  
Para. 18 (d) } ÷ 2 =  
length uncovered .....

## ALLOWANCE FOR DECK ERECTIONS :-

Freeboard, Table C.....	✓
Correction for Length, if required (Para. 12, 13, and 14) .....	✓
Freeboard by Table A. corrected for sheer, and for length, if required (Para. 12, 13, and 14) .....	✓
Difference .....	✓
Percentage as below.....	✓

Correction for R. Q. Dk. if engine and boiler openings not covered by bridge house (Para. 11) ✓  
Allowance for Deck Erections .....

	Length.	Length allowed.	Height.
Forecastle.....	43.8	✓	7.6
Bridge House .....	✓		
Raised Qr. Dk.....	✓		
Op.....	✓		
Total .....			
Length of Ship .....			

Corresponding percentage (Para. 11, 12, 13, or 14) ✓

FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, Wood (Iron) Deck :-

Fresh Water Line	above centre of Disc
Indian Summer Line	" " "
Winter Line	below " "
Winter North Atlantic Line	" " "

25.1.22

\* If the frames, skin planking, or ceiling are of unusual thickness the breadth of vessel to inside of ceiling should be reported if possible.  
† In vessels obtaining an allowance for deck erections under Para. 11 where the sheer drops abaft amidships the height of the R.Q.D. is to be taken from the level of the top of the amidship beam.  
§ In flush-decked vessels the total standard mean sheer means the sheer measured at the stem and sternpost. In vessels having poops and forecastles, it means the sheer measured at points distant one-eighth of the vessel's length from stem and sternpost.

Correction necessary because clearside amidships, measured in accordance with the Statute is not taken at the intersection of the wood or iron deck with side.

Winter Freeboard from deck line

Summer " " " "

Indian Summer " " " "

N.A. Winter " " " "

N.A. Winter " " " "

N.A. Winter " " " "

N.A. Winter " " " "

N.A. Winter " " " "

N.A. Winter " " " "

N.A. Winter " " " "

N.A. Winter " " " "

N.A. Winter " " " "

N.A. Winter " " " "

State dimensions of freeing port area on back of this form.  
The Surveyor should state whether the fall in sheer as reported is measured relatively to the straight line of keel or to the water line. If measured relatively to water line the survey, and also the usual load draft forward and aft should be reported.

MAKING REPORT

24-1-22

Lloyd's Register Foundation

*Longitudinal Framing.*

Do all the Frames extend to the top height in the Poop? ☒ Raised Quarter Deck? ☒ Bridge House? ☒ Forecastle? *Yes.*

To what height do the Reverse Frames extend? *Longitudinal Framing.*

Has the Poop or Raised Quarter Deck an efficient Iron Bulkhead at the fore end? ☒

Give particulars of the means for closing the openings in Bulkhead ☒

Is the Poop or Raised Quarter Deck connected with the Bridge House? ☒ Has the Bridge House an efficient Bulkhead at the fore end? ☒

Give particulars of the means for closing the openings in Bulkhead ☒

What is the thickness of the Bridge Front plating? ☒ and Coaming plate? ☒

Give scantlings and spacing of the Stiffeners ☒

Are bracket plates fitted at each end of the Stiffeners? ☒ Are hor'l. brackets fitted connecting Bridge Bulk'd. with Bulwarks? ☒

Has the Bridge House an efficient Iron Bulkhead at the after end? ☒

How are the openings closed? ☒

Is the Forecastle at least as high as the main or top-gallant rail? *Yes.* Has the Forecastle an efficient Iron or Wood Bulk'd. at after end? *Steel Sides.*

Are the Engine and Boiler openings covered by a Bridge, Poop, Raised Quarter Deck, or enclosed by a Strong Iron or Steel Deckhouse? *Covered by Wing Houses on Shelter Deck.*

If the openings are not so protected are the exposed parts of the Casings efficiently constructed? *Yes.*

Give thickness of plating; scantlings and spacing of Stiffeners *Plating .30. Stiffeners 7L 4x3x32 spaced 30" apart.*

What is the height of the exposed Casings? *8' 0"* Are suitable means provided for closing all openings in them in bad weather? *Yes.*

Are the Weather Deck Hatchways efficiently constructed and at least equal to the requirements of Section 28 of the Rules for 1904-5? Give particulars below:— *Yes.*

Position and Size.		No 1 - 11' 0" x 17' 0"		No 2 - 12 PAIRS O.T. HATCHES 6' 0" x 4' 0"		No 3 - 5 PAIRS SUMMER TANK HATCHES 9' 0" x 8' 6"					
Item.		Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.
COAMING.	Height above top of DECK	30"		30"		15"					
	Thickness {	Sides.....	.44	✓	.37	✓	.40	✓			
		Ends.....	.44		.37		.40				
SHIFTING BEAMS OR WEB PLATES.	Number .....										
	Section and Scantlings .....	✓	✓	✓	✓	✓	✓				
		Material .....									
* FORE AND AFTERS.	Number .....	3		Steel hinged covers		Steel bolted plate					
	Section and Scantlings .....	Plate 11" x .37		secured by drop		covers .40 thick					
		Material .....	Angled 3 x 3 x .38		bolts spaced about		efficiently stiffened				
HATCHES Thickness .....		Steel		18" apart.		Bolts spaced					
				Covers .38 thick.		about 3 3/4" apart.					
	Remarks.....	Good.									

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

(If the sill of the lowest side scuttle will be less than 6 inches above the Indian Summer Load Line if assigned under the tables, state vertical distance from top of deck at side amidships to lower edge of lowest side scuttle.)

The following information is to be given in all Cases of vessels dealt with under Paras. 11, 12 (under 15 feet Moulded depth) and under Shelter Deck Rules.

#### SHELTER DK. SHEERS.

STEEL	121.00	1	121.00
1/8	38.50	4	154.00
1/4	3.75	2	7.50
3/8	.00	4	.00
1/2	.00	2	.00
5/8	.00	4	.00
1	1.62	2	3.24
1 1/8	21.50	4	86.00
1 1/4	61.62	1	61.62
8)	433.36		

54.17 EFFECTIVE SHEER.

What is the thickness of the Bridge Sheerstrake? Strake between Main and Bridge Sheerstrakes?

Delete the words } The Crew ~~are~~ are not, berthed in the bridge house.  
that do not apply } The arrangements to enable them to get backwards and forwards from their quarters are, ~~are not~~ satisfactory.

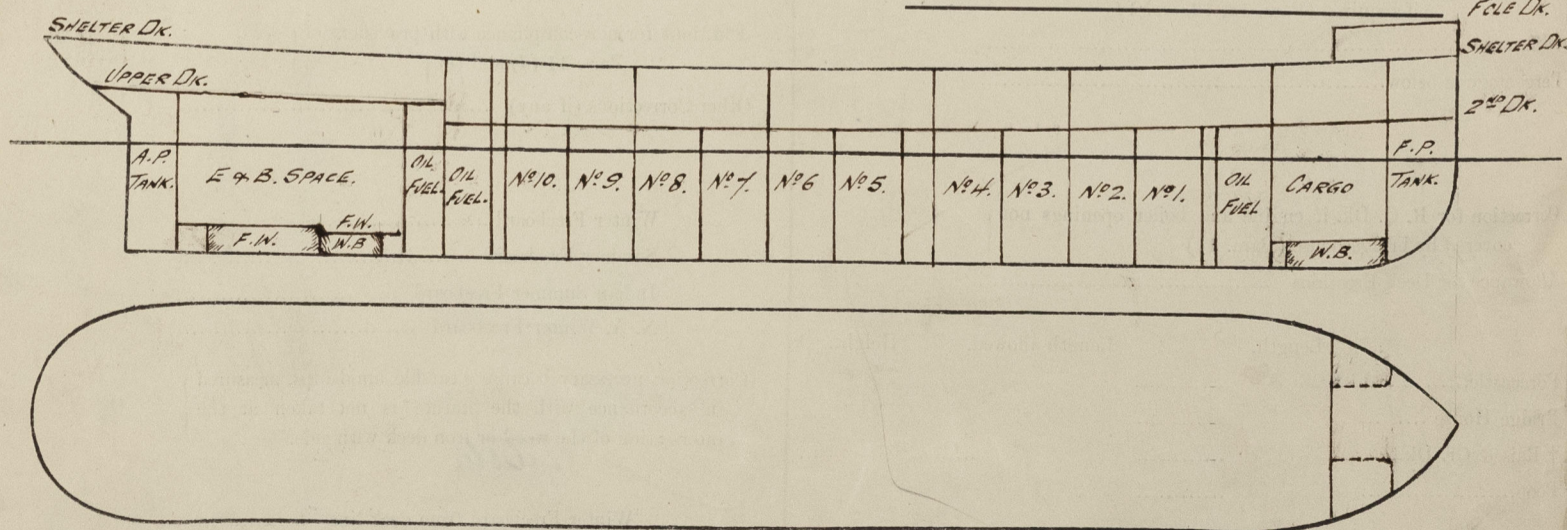
Length of Bulwarks in well

Area of Freeing Ports required by Para. 11 (e) each side of vessel = Sq. ft.

Ft. Tenths. Ft. Tenths. No.

Freeing Ports (each side of vessel) = Sq. ft.

Total deficiency or excess = Sq. ft.



Show hereon line of Floors or Tank Top with position of any Breaks in same; also height of Peak Tank tops, &c., &c.

State any special features in the construction of the Vessel *This is a similar vessel to the steamer "PENNSYLVANIA SUN", Report No. 4266. The signed request form and curves of displacement and tons per inch immersion are forwarded herewith.*

Owners. *Sun Company, Inc.*

Address *Philadelphia, Pa.*

Fee \$120.00. Will be charged with first entry. Received by me

*See H. Report E. J. Brand.*