



Sun Ship Historical Society's Ships History Page

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Name: MS *Pennsylvania Sun* Hull No: 168

Hope you enjoy this 'Ship's History Page'. As always, if you have any additional information, suggestions or corrections, please let me know.

Note 1: While due diligence has been applied in the research of this information, responsibility for any errors is the ultimate responsibility of the end-user.

Note 2: Information has been obtained from various sources to enhance the history of Sun Ship and where possible, sources have been identified

Note 3: Please let us know if there are any errors or information you would like to share with us.

Revision Date: 2022.07.19

Thank You,
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SSHS
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1. Ship's Information:

1.1 Sun Ship Archives^[1]

Hull No: 168
Name: MS *Pennsylvania Sun*
Sailing Port: Philadelphia, PA
Contract: 1937.03.01
Keel: 1937.08.19
Launch: 1938.05.20
Del Promised: 1938.06.15
Delivery: 1938.07.13
Yard/Shipway: CY/1
Time-on-Ways: 275D
Time-Wet-Basin: 54D
Time-Total: 329D
Length: 521'0"
Breadth: 70'0"
Depth: 40'0"
Tons DWT: 17,870
Type: Tanker
Propeller: 1

Propulsion: Sun Doxford-5 Cyl.
HP: 7,200 (See Note 1)
Speed Knots: 14
Class: Lloyds/ABS
Draft: N/A
Cap. BBLs: 157,248
Sponsor: Miss Mary C. Pew
Owner: Sun Oil Co.
ON Number: 237658
USMC Hull No: 7578

Note 1: Ship's HP of 7,200 is shown in the official 'Record of Ships Built by Sun Ship' and is Brake Horsepower at 100 RPM

1.2: Ships Specifics

SSHS: 68_02_168_01^[4]

Single Screw Tanker					
Cont. #	168-M/S "Pennsylvania Sun"				
Built on Way #	1	D.W.T. Tonnage:	17,870		
Owner:	Sun Oil Company				
Sponsor:	Miss Mary C. Pew				
Keel Laid	8-19-37	On Ways	275	Days	
Launched	5-20-38	Wet Dock	54	Days	
Delivered	7-13-38	Total	329	Days	
Hull Steel	Tons	Base Price			
Plates	4930	39.55			
Shapes	661	FRT. 2.80			
Total	5591	42.35			
Fabricating Cost Per Ton:	27.40				
Total Rivets Driven:	242,089				
Cost Per Rivet:	Labor .058	Burden .035			
Cost	Hull	Per Dwt.	Eng.	Per Dwt.	
Labor	383,890.	21.48	261,542.	14.64	
Burden	232,225.	13.00	190,208.	10.64	
Mat'l	467,373.	26.15	716,429.	40.09	
Total	1,083,488.	60.63	1,168,179.	65.37	
			Total	Per Dwt.	
Labor			645,432.	36.12	
Burden			422,433.	23.64	
Mat'l			1,183,302.	66.24	
Total			2,251,167.	126.00	
Miscellaneous					
O. T. Bonus			7,704.	.43	
Hull Extras			14,895.	.83	
Errors and Defects			19,483.	1.09	
Misc. Credits			-	-	
Total Cost			2,293,659.	128.35	
Total Sales Price			2,367,775.	132.50	
Profit	3/31/44		74,116.	4.15	
Contract Price			2,351,875.	131.61	
Extras & Changes			15,900.	.89	
Total Sales Price			2,367,775.	132.50	
(Over)					

SSHS: 68_02_168_02^[4]

Sun Doxford - 5 Cyl. 31" - 6000 H.P.	
No. Feet Welding -	326,466
Avg. Cost Per lineal Ft. -	.272

1: Selected text and photos from:
Marine Engineering and Shipping Review
Oct. 1938 Edition

SSHS: 454_24_2714-2721^[8]

Pennsylvania Sun is the largest motor tanker so far built in the United States and is propelled by the largest marine Diesel engine ever built in this country. The Ship's entire tank system is entirely welded with only the bow and stern riveted.

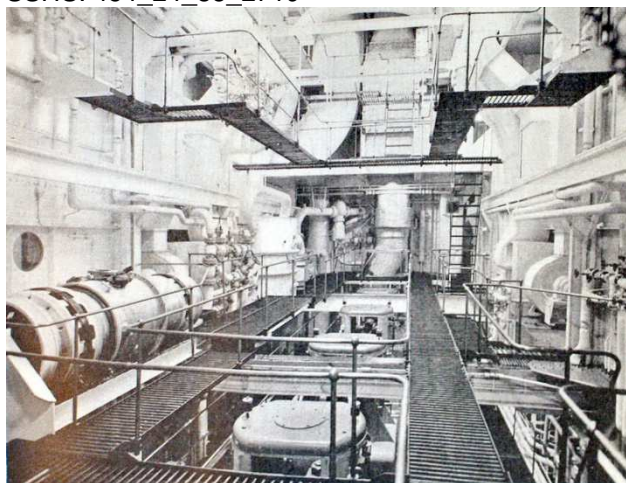
The cargo space is divided into 10 large tanks along the centerline with 9 wing tanks on each side, making a total of 28 cargo tanks.

The propelling engine is a Sun-Doxford unit, of the welded frame type, having five cylinders with a diameter of 31 inches and a combined stroke of 86 inches. Rated 6,000 brake horsepower at 90 revolutions per minute and 7,200 brake horsepower at 100 revolutions per minute.

The engine drives, through a Kingsbury thrust, a 4-bladed bronze propeller, designed by Dr. S. E. Slocum, having a diameter of 19 feet 6 inches and an effective pitch of 15 feet 6 inches at a radius of 6 feet 6 inches. This propeller and the spare each have a finished weight of 31,500 pounds and were made by the American Manganese Bronze Company

View of the engine room showing the Sun-Doxford's Diesel engine cylinder-heads.

SSHS: 454_24_38_2719^[8]



2. Ship's Ownership - Disposition:^[2]

<u>Name</u>	<u>Date</u>	<u>Owner</u>
Pennsylvania Sun	1938	Sun Oil Co.
Stephanitor	1955	Schlüssel-Reederei D.Oltmann & Co
Stephanitor	1960	Schlüssel-Reederei D.Oltmann & Co
Conversion to ore carrier		

Disposition:

Location: La Spezia, Italy
Date: 1963

3. Artifacts:^[1]

Not Applicable

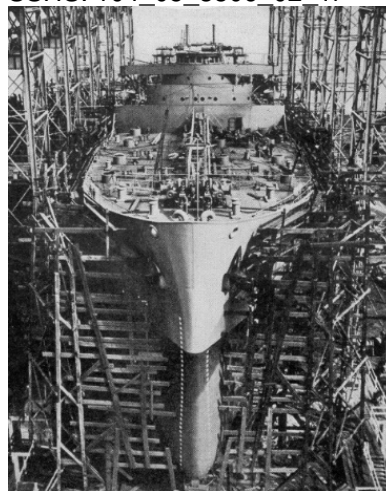
4. Ship's Thumbnail History

1938

4.1: Ship nearing completion on #1 Shipway

Date: 1938

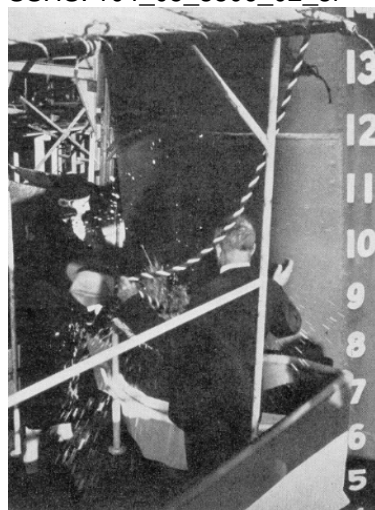
SSHS: 104_05_3806_02_1r^[5]



4.2: Ship being christened by Miss Mary C. Pew

Date: 1938.05.20

SSHS: 104_05_3806_02_3r^[5]



4.3: Photo of sponsor, Miss Mary C. Pew

Date: 1938.05.20

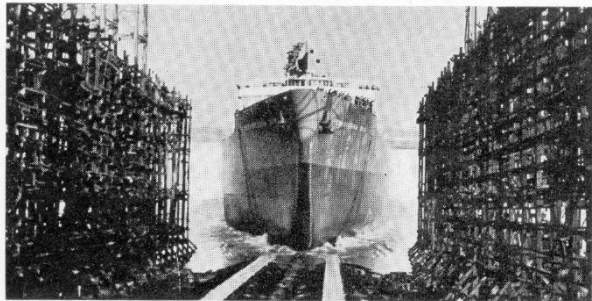
SSHS: 104_05_3806_02_2r^[5]



4.4: Ship sliding down No. 1 Shipway into the Delaware River.

Date: 1938.05.20

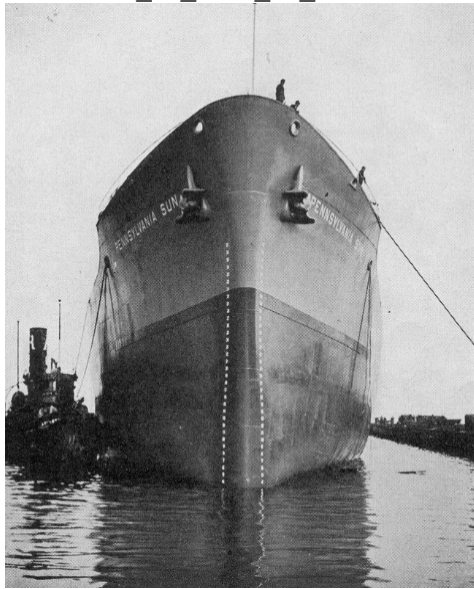
SSHS: 104_05_3806_02_5r^[5]



4.4: Tugs moving ship into wet basin after launching.

Date: 1938.05.20

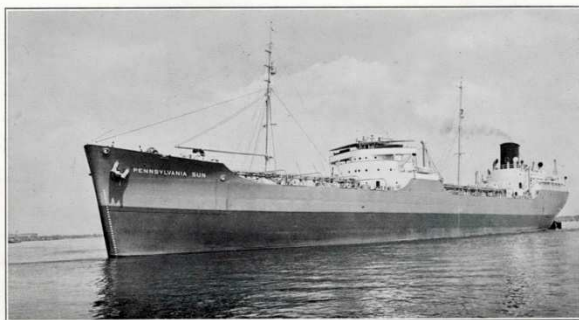
SSHS: 104_05_3806_02_4r^[5]



4.5: Ship heading down the Delaware River on trial trip.

Date: 1938.MM.DD

SSHS: 162_03_09_1r^[1]



M. S. PENNSYLVANIA SUN

D.W.T. 17,870

1942:^[3]

U-boat, Merchant Marine, Battle of the Atlantic, World War II (WWII)

Attack on American tanker, SS Pennsylvania Sun
On July 15, 1942, German (Type VIIC) U-boat, U-571, attacked American motor tanker SS Pennsylvania Sun off Key West, Florida. The survivors were picked-up by USS Dahlgren (DD-187). Repairs were completed to Pennsylvania Sun in 1943, and she served for the next 20 years. Australian Sunderland aircraft sank the German submarine on January 28, 1944, in the North Atlantic, west of Ireland.

Image: 80-G-61597: SS Pennsylvania Sun burning after torpedoing by U-571 on July 15, 1942. Official U.S. Navy Photograph, now in the collections of the National Archives.

1945:^[1]

Our Yard's Oct, 1945 edition

SSHS: 705_4510_15_2r^[1]

"The trials of wars have tested every atom of the M.S. **Pennsylvania Sun** and found her staunch-hearted and true. She has become the symbol for the stamina of the all-welded tanker.

Since her launching on May 20, 1938, at the Sun Shipbuilding & Dry Dock Co., the M.S.

Pennsylvania Sun has sailed more than 550,000 miles with essential cargoes of crude and navy fuel oil. The power she delivered to our Allies under lend-lease-to our Armed Forces since Pearl Harbor-is staggering-especially to our enemies! Torpedoed in the Caribbean Sea in July, 1942-while on her third mission for the War Shipping Administration-her entire superstructure was gutted by fire. Abandoned by her crew, she would not die Her indomitable spirit would not go under. Her crew reboarded her, fought the fire, repaired the damage sufficiently to get to land. There, temporary repairs were made and, then completely controlled from the after-end, she made an ocean trip of hundreds of miles under her own power to the Sun Shipbuilding yard at Chester. The M.S. **Pennsylvania Sun** then was repaired and continued in her vital war work"

SSHS: 705_4510_15_2r^[1]



View of 'Pennsylvania Sun' pierside at Sun Ship for permanent repairs. Note temporary repairs made to keep the ship from breaking in half on her return voyage to Sun Ship.
168_74319_022r^[7]



1948:^[6]

Chester Times

1948.08.27

"River Collision"-Locked together in the middle of the Delaware off Marcus Hook Thursday morning were the freighter '**K. I. Luckenbach**' and the Sun Oil Company tanker '**Pennsylvania Sun**'. It took four tugs almost three hours to separate the vessels. One of the tugs, the **Triton**, from Philadelphia is shown in the photograph's foreground."
(Our thanks to Dave Boone for sending the original newspaper clipping)

Chester Times Newspaper

SSHS: 329_19480827_021^[1]



1955:^[8]

Marine Reporter

Nov. 1955

SSHS: 454_161_5511^[8]

"In line with its tanker fleet modernization plans, Sun Oil Company has sold the 17-year-old M.S. **Pennsylvania Sun**. The 132,000-barrel motorship, survivor of World War II, was bought by the Bremen, Germany partnership of Schluskel Reederei-D. Oltmann & Company.

5. Sources:

- 1: SSHS Archives
- 2: Miramarshipindex
- 3: www.history.navy.mil
- 4: VP Robert Haig Collection
- 5: Charles Morris Collection
- 6: Dave Boone Collection
- 7: Hagley Museum and Library
- 8: Independence Seaport Museum

Note: Sun Ship's Shipway Designations:

- | | |
|------------|-----------------------|
| SY: | South Yard 9 thru 12 |
| CY: | Central Yard 1 thru 8 |
| NY: | North Yard 13 thru 20 |
| 4Y: | No.4 Yard 21 thru 28 |