

## \$2.4 Billion Tanker Market Predicted

According to Dr. James C. Cross, Sun Oil Company economist, the next twelve years will be a tremendous challenge for American tanker operators. To meet the predicted increasing demand for oil tankers before the U.S. operators will have to build adequate tonnage to meet its needs in any medium draught tonnage. A task of this magnitude has not been accomplished since World War II.

Speaking on May 15th at the Annual Tanker Conference of the American Petroleum Institute's Transportation Division, Dr. Cross said that by 1968, 58 percent of the current U.S. fleet must be replaced and an additional eight million tons of new ships added to meet growing demand, including the movement of oil from the North Atlantic to Europe.

Although the total magnitude of potential increases in Alaska has not yet been identified and the transportation modes not yet selected, Dr. Cross discussed two of the possibilities.

In his current estimate, the Sun Oil economist predicts that the West Coast Market probably should be covered first and the oil moved to the north coast of Alaska by pipeline. From there, it would move further south by tanker to the major West Coast ports. To handle the estimated movement of 1.2 million barrels of crude oil daily a fleet of over 250,000 dwt tankers would be required.



J. C. Williams

If Alaska exports prove to exceed 10 million barrels, Dr. Cross feels the next most logical market is the East Coast. Here the entire oil will reach East Coast ports in not yet certain. The MAHARAT, now being converted here at Sun Ship, may provide the answer to this question this summer when it crosses the Northeast Passage to the North Slope of Alaska. If successful, and the passage can be made year round, it's expected one million barrels a day may move over this route.

To transport this volume, as many as 25 tankers of the 250,000 dwt size may be required. Of course, the actual number of tankers used on this route would depend on the estimated speed possible through the ice and other conditions.

Thus, taking a figure of two million dwt for West Coast shipments and adding an average of six million dwt tonnage for the East Coast, plus four million dwt tonnage for the overall U.S. tanker fleet replacement—Dr. Cross arrives at a figure of 12 million dwt of tonnage.



Shown above is the 1958 ANNUAL TANKER CONFERENCE which took place in the Banquet Room of the Century Hotel on May 15, about 75 sessions were featured at both-day and attendance numbered approximately 70.

Tanker fleet composition only the next twelve years. At today's prices this could involve an investment of \$1.4 billion between now and 1968.

But what do these figures mean in terms of new ship construction and Sun Ship's share in it? For some answers to these questions, SUN LOG speaks to William Mating, Manager of Sun Ship Sales.

In the last issue of the SUN LOG, Mr. Williams pointed out the opportunities for Sun Ship and the potential of the Alaskan oil market for creating a steady and long term production program.

## Groundbreaking Ceremonies



The June 5 groundbreaking took place at the shipyard's 4th Street and Edgewater Avenue site for the new Engineering Management building.

Sun Ship Vice President of Engineering, Charles Allen, tossed the first traditional shovelful of dirt at the ceremony in order of precedence from left to right R. W. Allen, C. Linowson, F. Hendricks, E. Scheraga, E. Halshaw and W. Watson looked on.



Allen, Mr. Linowson (left) and Mr. Allen (center) showed on which the profile of the new building appears.

To be completed in early 1959, the building will house the Company's executive offices, engineering division offices, sales and administration offices and associated clerical personnel.

MAILING LABEL

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## Corliss Engine Preserved For Posterity



Being on a building during construction operations is a view of the Watertown Corliss Engine. From left to right: William Smith, right, on behalf of Sun Ship, holds the Corliss Engine of the American Institute one of the original three engines of the engine in the power Watertown engine; James McInerney, center left, holds on

A part of Corliss' industrial past located in a part of industrial heritage recently when Sun Ship donated approximately 10,000 line-drawings of the Corliss engine system to the U.S. National Museum of the Smithsonian Institution in Washington, D.C. Sun Ship officials presented the drawings recently in a brief ceremony at the shipyard's Watertown plant to the Robert M. Taylor, Director of the Marine Technology and Civil Engineering Division of the Smithsonian Institution.

The collection of drawings donated by Sun Ship represents all of the Watertown firm's work from its start up to the turn of the century, and the collection contains drawings of complete engines, parts and assemblies.

The significance of the donation is such that the U.S. Dept. of the Smithsonian Institution commented, "Collection of mechanical drawings from such an early period have rarely occurred in so complete a form. Most of the remaining firms that once built steam engines destroyed their drawing files years ago because the engines were becoming obsolete after the 1930's."

It is of real significance that the last Watertown Corliss

steam engine was in service in a Delaware steel mill and that there are no more.

The Corliss steam engine was the single most widely produced type of steam engine in the U.S. during the latter half of the 19th century. The Watertown Corliss, which was one of the most economical and successful versions of this engine, was produced at the Watertown plant from 1871 to 1917.

The industrial popularity of the Watertown Corliss was due to a large degree to the engine's reliability and versatility. In the early days before public utilities became the main source of commercial power supply within the community, many power plants operated with their own power plants. For these firms the Watertown Corliss had a special attraction because it furnished a reliable power source whose reliability was a major concern at mills, rolling mills, pumping engines and in compressors. Additionally, the robust design from the engine was often used to build the plant or for generating electricity in paper and textile mills. It was also popular in public buildings where its beauty and modern operation was a major consideration.

## Accident Reduction

The sixth shipped engine to become a member of the Sun Ship chapter of the "Win Our Own" was formally unveiled in ceremonies on May 20. David Rogers, a Robert student with less than six months of shipyard experience, was presented with the "Win Our Own" engine, named by Labor Department representative "Norman Wright." Wright is the area supervisor for the Office of Occupational Safety of the U.S. Department of Labor, and he made the presentation on behalf of the Sun Ship chapter of the National Society for the Prevention of Blindness.

Mr. Rogers' use of his safety glasses prevented him from being injured while in an unapprovedly repaired engine from a disintegrated 18-inch steel wedge that disintegrated off his hand but not his eyes.

This record is only one part of Sun Ship's full range safety program that has helped to lower the shipyard's lost time due to injuries by 44 percent during the first four months of this year from the figure recorded during a similar period last year.

In another phase of Sun Ship's safety program, shipyard management, supervisors and union officials provided lectures on industrial safety and accident prevention during training sessions given by Dr.



Showing the mounted board on safety glasses to a new employee, adding to the Sun Ship chapter of the National Society for the Prevention of Blindness, a shipyard worker David Rogers, center. Sun Ship Vice President, Robert Rogers, Department of Labor representative "Norman Wright" is on the right.

Joseph Rabinoff, a Professor from Baltimore Medical College and an acknowledged expert on the field of industrial safety.

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Arnold For large tankers. He also indicated there were obstacles and unknowns to be considered in this potential market for Sun Ship.

Two questions are pertinent and include the quantity of oil reserves, the rate and timing of production, the markets where the crude will be used and the costs involved to get the oil to market.

To get a handle on the magnitude of potential tanker demand, we can refer to Dr. Cowi's 11 million tons in a ship we're now building, the BRITISH OILER. If it would take 150,000 BBL of oil, produced at a rate of 35 a year starting in 1975 and ending in 1980 to supply the need for the production of oil.

Dr. Cowi indicates, however, the large volume of oil movements indicates the need for the large tanker to deliver the best quality transportation economic production in the 20,000 tons per year. Based on Dr. Cowi's estimate of one million tons of new tankers required each year, there might be less of these ships produced annually in the United States.

If Sun Ship is able to obtain contracts for one-third of this potential annual market, it would mean 33 percent of new oil tankers in the next 10 years.

Of course, the actual extent of tanker oil demands has yet to be determined and current thinking and planning must be based on "33" conditions. To enable Sun Ship to get a substantial share of this market, we will have to make a number of internal decisions involving ship type, size and location as well as construction techniques and displacing facilities requirements.

With over 10,000 ton tankers are now being under contract, Sun has a head start with the largest U.S. flag tankers since the 1969 TITAN was built, and I feel confident that this lead can be extended to the market opportunity for the United States.

## Youth Corps



Headed by the Neighborhood Youth Corps workers, Roger Anderson, center, Philip Thomas, right, and a Youth Corps program. The Youth Corps are helping to build the shipyard's commitment to training of young people and providing an opportunity. The Youth Corps have been training, mentoring, and building young men and women into the workforce. Youth Corps participants are also the Grand Jury in the Sun Ship.

## Sun Oil Evening School

Your chance is here to enroll in a very modern first in the Sun Oil Evening School. Check the list below.

Course	Enroll	No. of Weeks	Location
Project Planning by Network Analysis (P/NTS) .....	3-1	4	Sun Valley High School
Introduction to Computer Programming .....	3-1	11	Sun Valley High School
Intermediate Mathematics .....	3-1	13	Sun Valley High School
Basic Business Statistics .....	3-1	11	Phila. Offices
Understanding Computers .....	3-1	8	Sun Valley High School
Understanding Economics .....	3-1	13	Sun Valley High School
Elementary English .....	11-1	12	Sun Valley High School
Basic Mathematics .....	3-1	13	Sun Valley High School
Physical Mathematics .....	3-1	13	Sun Valley High School
Reading Improvement .....	3-1	10	Phila. Offices

Time for enrollment is critical. The Industrial Relations Department has full course details and registration forms. Forms must be back to school immediately. Enrollment will take place the first evening of scheduled classes.

# Highlights Of A Memorable Family Day

## Our Honored Guests



## And Those Who Welcomed Them



## Special Honors

Denoting special recognition are those employees who were also carefully considered with the family for the title of Mr. September. This list represents the nominees who were presented to the final selection committee.

Age/No.	Name	Years Since
14-04	Thomas Nowak	41 yrs. 11 mos.
20-02	Thomas Porey	26 yrs. 4 mos.
18-54	Henry Bryant, Jr.	18 yrs. 7 mos.
24-00	John Sachs	22 yrs.
34-00	Edward L. Sargent	30 yrs. 1 mos.
36-04	John Slavich	8 yrs. 4 mos.
42-21	James Long	27 yrs.
44-00	Lucas Parke	22 yrs. 7 mos.
45-03	William Jones	46 yrs.
46-11	Joseph O'Neil	18 yrs. 1 mo.
47-00	Henry Wynn	17 yrs. 10 mos.
48-01	James Porey	26 yrs. 11 mos.
54-12	Peter Schneider	14 yrs.
55-20	Raymond Porey	43 yrs. 3 mos.
56-6	Henry Goodell	39 yrs. 3 mos.
60-04	James Swales	16 yrs. 10 mos.
65-04	James Lakin	9 yrs.
67-00	Conrad Miller	30 yrs.
68-00	William Brown	22 yrs. 7 mos.
68-08	Thomas Jones	22 yrs. 6 mos.
74-36	Newark Rogers	32 yrs. 8 mos.
76-01	Henry Ridgill	32 yrs. 11 mos.
88-09	James Gallagher	47 yrs. 3 mos.



