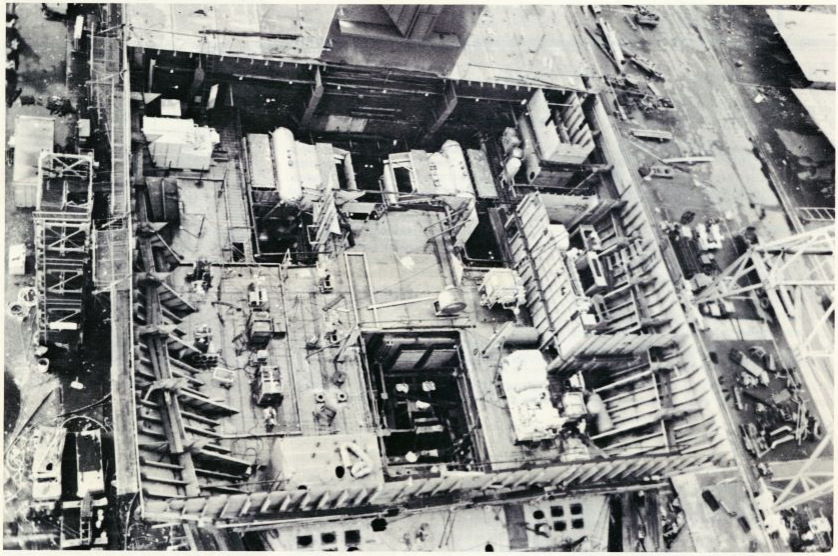
SunShipLog

Volume 14, Number 6 / July, 1980

Over And Above



This aerial view of the engine room on the JOHN B. WATERMAN shows how the ship differs in construction from the traditional shipbuilding method. At this stage of hull construction, the third deck engine room shown here is 80% preoutfitted. Under the traditional method of construction, there would be little installed at this point. Under the new method, as the units are constructed, various fitting and machinery components are attached to each unit. By bringing preoutfitted units to the erection site, the ship is built in a more efficient, faster and cheaper manner.

"New" Construction Method — A Distinct Advantage

If you're building a house, you don't usually make the foundation, build the stories, and then when the structure is completed, put in the heating and water systems. Likewise, in shipbuilding, it's not the most efficient way to build the structure and then put in the internal workings. In the past, however, ships have been, to a degree, built that way. Hull 679, the first of the three Waterman ships, is being constructed in a different way from the traditional method. Structural units are being preoutfitted as the unit construction process moves forward. What this means is that as the units are constructed, various fittings/machinery components, etc, are attached to each unit. Fittings would include foundations, piping, electrical fixtures, shelving and the like. The goal is to bring a completed unit to the erection site.

Why is this method better? There are two basic reasons (1) The majority of the work will be done in a more favorable environment to accomplish production work - better access, better position, less climbing, easier lifts, better weather conditions, etc., (2) By creating a better work place, efficiency, and productivity will improve making the company more competitive in the market place; thereby making its future more secure.

The result of the new method is a faster, more efficient construction process. "It saves time, complications in making lifts and manhours;" says Bob Hartman, Chief Ship Superintendent for all construction. "To illustrate, say the main boiler wasn't available until the ship was nearly complete. We would have to cut open the ship, put in down in place, and then seal it up again. It's a time consuming, tedious process. To do it once, at the proper time, is far more efficient and saves time and money."

To get this high degree of completion requires a team effort. It requires the coordination of Engineering, Materials Management, Operations, and all other divisions of the Company. Engineering must develop complete working drawings early in the program so that the Materials Management Division can order all the material on time and have it ready when needed. "The effort requires coordination and planning to get the job done," notes Red Owen, General Manager - Production. "It also requires self-discipline to meet the schedule," he adds.

Red Owen sees the progress in the yard as good and a heck of an improvement over the past year. "We're proud of what we're doing out here," he said.

The newest facility that gives a tremendous boost towards meeting schedules is the new blast and coating facility. In the new facility, outfitted units are coated prior to placement on the ship. This means savings in the time because the units don't have to be redone because of inclement weather. Also, units can meet the schedule because they can work around the clock, regardless of the weather.

The funny part of this new method of doing things is it's not really new — it's a rebirth of what was originally developed by American shipbuilders and there is nothing mysterious about it! "It's not difficult to do," noted Jim Blenkhorn, Vice President - Operations. "We're doing the same things but in a different fashion. We're building the same product as before with the same skills and knowledge, but applying them in a different manner in a different environment."

Productive shipbuilding means getting the correct information and material to the production people at the proper time. It can be done if all employees understand the process, accept responsibilities, and support one another on a day to day basis!!!

Sun Ship and the U.S. Navy

As the completion date for the U.S.S. PORTLAND arrives with no identified follow-on Navy Ship currently under contract, the question has been raised regarding Sun Ship's commitment to continue in the Navy repair business. Let me state clearly that we are ***totally committed to remaining in the Navy major overhaul business,*** *and it is our desire to have a Navy ship in here at all times. To achieve this we must bid competitively in the marketplace against both large and small repair yards. I am convinced that we are bidding for this work in the correct manner, and although we need the Navy overhaul business we cannot as prudent businessmen go after it "at any cost." Our bids to date have been correctly derived and correct in relation to the rest of the marketplace; however, if a competing yard wants to bid the job at an unrealistically low price in relation to other yards just to get the work, they will "win" the contract. We will not bring work into the yard at a guaranteed and irreversible loss.*

We recently bid and lost on the U.S.S. MILWAUKEE and the U.S.S. SHREVEPORT. This week we will bid on the overhaul of the APL-45, and we are proposing to bid on the U.S.S. PENSACOLA. In addition, we are expanding our list of "acceptable ships" to include bidding on destroyers. This willingness to venture into the combatant ship business is a new step for Sun Ship. In addition, we are continuing to do everything we can to attempt to win a part of the Navy new construction business associated with the proposed RDF (Rapid Deployment Force). The formation our Washington, D.C. office with a full-time Director is one step in many that we are taking to make Sun Ship an integral part of the Navy picture.

Robert H. Campbell

SunShipLog
Volume 14, Number 6

Editor
Carol Luttrell

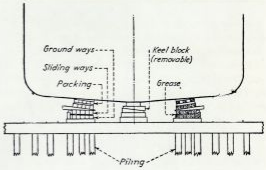
Launching!

A look at what goes on behind the scenes!

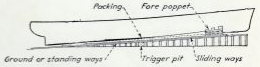
Flags whip in the breeze, a band sends music out over the water, the champagne is ready. Casting its giant shadow over the proceedings, looking strangely out of place on the land is the new ship, waiting impatiently to be launched. Finally the sponsor cracks the champagne bottle against the hull. All holds are released and the ship glides gracefully down the ways into the water. It's home!

A ship launching is an exciting and spine tingling sight. And it all happens so quickly, in only about 45 seconds. Yet the transfer of the weight from land to sea is a complicated, highly technical operation. Most of the spectators have no idea of what happens "behind the scenes" and what the yard crafts do on the day of the spectacle.

To begin, one must go back to the day the construction on the ship is begun, the day the keel was laid. The keel, or spine of the ship, was placed on keel blocks located in the dead center of the ship. The blocks are just what their name implies, a stacked group of wooden blocks, placed at 5 foot intervals, supporting the keel. Parallel to the keel blocks are the "ground" ways. These ways, built on top of pilings, exist soley to take the weight of the ship and let it slide into the water when it is launched. Consequently, the ground ways are perfectly smooth. (To get a clear picture of the structure, look at the illustrations.)



"View of structure beneath a vessel"



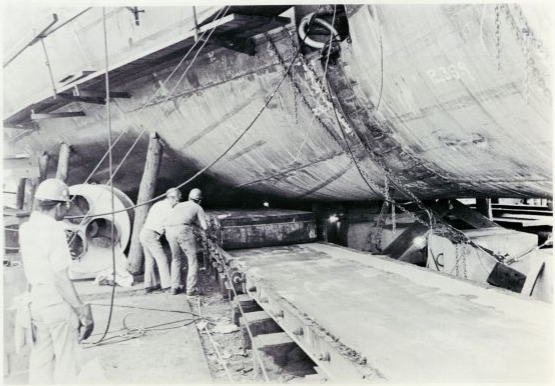
"A Ship in Position for Launching"

Prior to launching, the ground ways are coated with grease. Like much other work in shipbuilding, this is done by manual labor. Carpenters climb up, under the ship and apply the grease. Launching grease is put on in layers, the total thickness being about ½ inch. About 45 barrels of grease are used to launch a ship the size of the PHILADELPHIA SUN. While some men are greasing the ways, others in the department are sliding skids into place on top of the greased ground ways. (See photos.)

The ship must be launched on high tide that is slack. The ship is launched with the maximum amount of water under it and with a current neither going in or out. Having a lot of water is important because once the ship leaves the ways, it must have lots of support. The ship could become grounded with insufficient water. Further, if, when the ship is launched, there wasn't water, at the point when the ship is half in and half out of the water, the bow could rise, thus putting severe pressure on the end and bottom of the vessel and the way. The bouyancy of the stern of the vessel in the water counteracts this tipping tendency.

The tide must be slack, because there must be no forces to push the ship around. Getting the ship under control immediately after the launching is important. To insure this, a wire rope is attached to the stern of the ship which forces it to turn up stream.

Although the PHILADELPHIA SUN is scheduled to be launched at 1:30 P.M., it may go a bit earlier or later depending on the tide and current. Determining when the correct conditions are present is done by taking tide elevation readings and throwing wooden chips into the Delaware. When the tide is at its height, and the current is still, it's time to launch.



Carpenters roll the sliding ways (or skids) into place underneath the ship as the ground ways are greased.

The sliding ways ride with the ship during the launch.

Come One, Come All, To Family Day

Family Day, the Sun Ship open house for shipyard employees, retirees and their families, will be held on Saturday, July 26, 1980 from 11:00 A.M. until 2:00 P.M. The highlight of the day will be the christening and launching of the 30,000 DWT product carrier, "M.V. PHILADELPHIA SUN" from number 6 way in the central yard. The sponsor will be Mrs. William Green, wife of Philadelphia Mayor Green. The "PHILADELPHIA SUN" is the second product carrier currently being constructed for Sun Transport, a sister subsidiary of the Sun Company. The first carrier, "NEW YORK SUN," was christened last September.

A schedule of events is planned for this year's Family Day and includes:

. . . open house in selected shops,

. . . musical entertainment by the South Philadelphia String Band,

. . . hospitality suite for retirees,

. . . soft drinks and pretzels.

Additional information is available in the Human Resources Division.

A key element in the launching is the "trigger" mechanism. Located at the center of the ship, this mechanical unit holds the ship in place until it is to be launched. The trigger mechanism is basically a latch holding the sliding ways in place until the keel blocks are removed. The trigger is located in the center of the ship to insure that the weight of the after half provides friction between the groundways and the shipway to hold the trigger in place. The weight of the forward half provides friction between the sliding ways and the ship.

As the tide comes up on the day of the launch, things are happening under the ship. Carpenters are under the vessel driving up wedges between the sliding ways and the ship, and removing the keel and other blocks. The blocks are made so that they can be demounted with pneumatic wrenches and sledge hammers. The weight is thus being transferred to the ground ways. Topside, riggers get on board preparing to ride the ship during the launch. It is their job to heave the lines to the waiting tug boats and get the ship under control immediately after it is launched.

When the launching moment approaches, a five minute whistle is given. The operations division notifies the sponsor's platform that the ship is ready to go. The sponsor christens the ship, operations is notified and the trigger mechanism is released. And down she goes!

As the ship enters the water, she is, at one point, half in and half out of the water. The stern is lifted by the water. The portion of the ship that is still on the ways is thrown forward by the lifting of the stern. The weight of the ship is thrown on to the poppets, wooden structures on the bow of the ship built specifically to support the weight during a launching. The pressure of the ship on the poppets is known as "pivoting." As she pivots, the ship continues to enter the water supported by the bouyancy of the water and by the forepoppets. Once the ship clears the ways and turns up stream, the riggers release the wire rope. At this time also, tugs meet the ship, recieve the lines from the riggers. When the ship is in check, she is moved to an outfitting pier where she will be finished.

Launching is part of the mystique of the sea. It's the high point in ship construction testing the ability of the architect, skill and care of the yard engineer and the quality of the craftsmanship that went into the construction. It's the moment when the ship finally escapes the confines of the land. And it's been romantic since the days when human sacrified marked a ship launching. It's the stuff of poets. And Longfellow described it like this:

"She starts, she moves — she seems to feel
The thrill of life along her keel,
And, spurning with her foot the ground
With one exalting, joyous bound
She leaps into the ocean's arms."

The launching of the PHILADELPHIA SUN from the inclined ways is of special significance for shipyard employees. The production schedule calls for all new construction to be built on the flat slab in the North Yard instead of the "traditional" inclined ways. As a result the inclined way will not be used for some time.

Shipyard employees are encouraged to bring this copy of the *SUN LOG* with them to Family Day to watch the launching.

SPLASH PARTY!

Ship launchings have always been attended by ceremonies in varying degrees as far back as recorded history. Human sacrifice marked the first launchings. Red wine was long identified with launchings but now champagne is generally used because its effervescence gives a spectacular splash. The bottle is broken on the ship's prow as it is named and begins to slide down the ways.

Sponsors were originally men. In the 19th century the custom was changed so that today sponsors are generally women. Today's launching ceremonies are not as long and elaborate as those of the past, but a ship launching always remains a thrilling and inspiring sight.

Carpenter Barry Haines greases the ground or standing ways for a launching. Seen at the left of the photo is one of the keel blocks holding the weight of the ship during its construction.

Retirees Honored at Dinner

Eighty-four retirees were honored at the Annual retirement dinner held June 17, 1980 at the Brandywine Hilton. These men retired during the past year from June 1979 through May 1980. They include:

William Hellard
John Knowlton
Edward Lacrosse
George Buchan
Blair Gibbs
Emil Traum
Alfred Russel
Donald Weidner
Albert Robinson
Edward Bland
William Chatten
Charles Kase
Dominic DiGiacomo
Thomas Powers
Joseph Cape
Clarence Carter
James Goodyear
Simon Liss
James McCarroll
Clinton Turner
Andy Cassidy
William Worrell
Paul Miniszak
Alexander Ruggieri
Joseph Kulp
George Mumford
Gabriel Novak
Edward Niedziejko
Thomas Aucott
Norman Fisher
John Mrsic
William Schatz
Thomas Toohey
Harry Smith, Sr.
John Boyd
John Sample
Alexander Kovaleski
Joseph Cooke
James Funk
Walter Kelly
Harry Lewis
Charles Ruchis
Marion Davis
William Haigh
Robert Watts
Edward Strzala
Herman Meekins
Ernest Tolliver
John Boyd
George Prokapas
John Jaworski
Walter Kowalchuk
Ludwig Krasowski
Frank Szalkowski
Bennie Anderson
Nathaniel Edwards
Daniel Virgili
Francis Ringler
William Graham
Ervin Filbert
Charles Brown
Arthur DeLaCour
James Sanders
Robert Hull
Horace Broughton
William Redd
Paul Ingram
Benjamin Morris
Ellis Gregg
William Murtaugh
Norman Hibbert
Albert Bevilaqua
Evins Carmichael
Charles Jones
Stanley Dychala
Michael Yacabucci
Leanard Cole
Roy Keller
Nelson Ashley
Richard Stebner
Leonard Buscaglia
George Kelly
Carl Christiansen
Frank Gyles

Meet You At the Mall

Retiree George Howarth from 59 Department felt it would be a good idea to have all the retirees keep in touch with each other. He offers the following suggestion.

"If you're a retired worker and would like to see and talk to your old work buddies, you'll find them at the Granite Run Mall Pavillion every Thursday at 12:00 Noon."

If you're interested, stop by and say hello!

PIT STOP

They were in the pits on Saturday morning going to the driver's meeting, seeing the likes of Mario Andretti and Bobby Unser planning their strategies and checking their cars. They were talking with Roger Penske, and met the champion driver, Rick Mears the night before the race. They had reserved seats to watch the Festival Parade in downtown Indianapolis, and when the big Memorial Day weekend came they heard "Ladies and Gentlemen, start your engines" from special seats on the track's second turn. Some big honchos in auto racing, right? NO! They were Sun Ship's John Shedletsky and his wife Madeleine.

The second shift shipfitter and his wife were at the track because he won the trip. John was the shipyard employee who came closest to guessing the qualifying speed of racer Rick Mears in this year's Indy 500 time trials. The contest was held for shipyard employees and was run through "Sun Spots," the yard's weekly newsletter.

John and his wife aren't particularly interested in auto racing, but were glad for the trip because it gave them an opportunity to see the famous annual event. "It was good but kind of long," said John as he reflected on the race. "My wife got upset when they had the first accident. It was big with lots of smoke, but fortunately the driver wasn't hurt seriously."

John and Madeleine toured the Speedway Museum and saw the presentation of the Sunoco Special automobile given to the museum by Sun Company. While at the track, John got some racers' autographs for his co-workers in 47 shop. He also got T-shirts and other souvenirs for some of his relatives.

John was one of 10 employees representing the different Sun subsidiaries on the trip. He chose the winning number "187.528" almost at random. "The '87 was an address. I put a '1' in front of it," he said. "The '528' was the number of a house boat belonging to a neighbor." John's guess was the closest of all the Sun family subsidiaries, incidentally. He was off by only .038 seconds as the official racing timing was 187.490. Runners up in the contest were Andy Adams from the Boiler Shop and Paula McCullough from the Marketing Division.

John and Madeleine Shedletsky are pictured at the Speedway Museum in Indianapolis. The shipyard employee and his wife saw the sights and attended the 1980 Indianapolis 500 race as a result of winning the "Indy 500" contest run through each of the Sun Company subsidiaries.

The trip was of special significance for the couple because it was the first time they had ever flown on a plane together. Madeleine had always been afraid of airplanes. "She got through it O.K." said John. "When the trip was finished and we were back in Philadelphia, I suggested that she and I stay on board until all the passengers were out. She said 'No way, I'm not staying here any longer than I have to.' " John was comfortable about the plane ride because he had flown before. However, he noted, "The planes have changed a lot since the last time I flew. That was when I was returning home from the Second World War!"

Scholarship Winners Announced

Since 1974, Sun Ship has funded two scholarships annually to children of employees entering an accredited 4-year college. The National Merit Scholarship Foundation in Chicago, Illinois, selects the winners on the basis of academic ability and determines the amount of the award which runs up to $1500 per year depending on financial need. The scholarships are open to children of all shipyard employees.

The 1980 winners are Nyssa Yankopolous, daughter of Dot Yankopolous of Engineering and "C.R." Orth, son of Dick Orth of Sales.

Nyssa, whose name is pronounced like Lisa but with an "N", is planning to major in special education at Penn State University this fall. She got interested in special education through a neighbor who had a niece in the field.

"What she was doing sounded like something I would be interested in," Nyssa said.

In order to get a feel for the work, she looked into Elwyn Institute and volunteered to work there for several hours after school each day. She has been doing this for over 6 months. Nyssa works in the therapeutic recreation area.

"I enjoy the people and like working with them," she said. "The children are good for me and if one of them tries to give me trouble, the others are on my side."

Nyssa is so interested in the work that she goes to Elwyn on Sunday and Monday afternoons. Nyssa was "hoping to win the scholarship" because it helps her financially.

"C.R." Orth is usually all wet — from swimming that is. The West Chester (East) High School graduate is a champion swimmer. He has participated in meets all over the country and has trophies to prove it. In fact, he has a case full of them. Most recently he swam in the National Junior Olympic Championship in Lincoln, Nebraska.

Interestingly enough, "C.R." got started swimming because of a medical problem. "I have asthma and my doctor recommended swimming to strengthen my lungs," he said. "That was when I was 6 years old."

At this point, "C.R." swims 5 hours a day every day of the week. He gets up at 5 A.M. to go to the pool and do his morning laps and is in the water again in the afternoon.

Like Nyssa, he appreciates the scholarship program. "I'm happy that I won because it's quite an honor to be selected," he said.

"C.R." will be going to Princeton University this fall and hopes eventually to study medicine.

Previous scholarship recipients still keep in touch. Steven Iezzi, son of Louis Iezzi of 61 Department, was the 1977 scholarship winner. Steve, who will be graduated from Drexel University's School of Engineering next year recently wrote to the shipyard saying, "I thank you again for your support and will continue to do my best."

CHESTER PA.

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 20

M LUBRAGGE 70-0014
530 GRAND AVE
HAVERTOWN PA 19083

The *Sun Ship Log* is published each month for shipyard employees such as Florence Pastick.

Florence is a secretary in Corporate Systems and Computers and has 39 years of service.