

Moments in Time

SAUSALITO HISTORICAL NEWSLETTER WINTER 2007

Marinship During World War II

This issue features a photographic essay about major Marinship buildings as they were during World War II and as they are today. This is made possible by the donation last year of original photographs of the Marinship by

Janice and Henry Holman and by the recent photographic work of Jim Davenport. In April, SHS will feature an exhibit of the Holman photographs.

In addition, the feature article below looks at the importance of railroad and

other transportation in the operation of Marinship.

Readers who are not familiar with the overall history of Marinship are encouraged to visit the Sausalito Historical Society exhibit at the Bay Model.

MARINSHIP SUPPLIED by LOCAL RAILS

It is a fact that without the existence of the Northwestern Pacific Railroad (NWP) in Marin County in the early 1940s, Marinship would not have been built on our shores. In 1942, representatives of the W.A. Bechtel Co., contracted by the U.S. Maritime Commission, said this about choosing a site for the shipyard: "It was obvious that the best site available was the old Northwestern Pacific Railroad terminal site near Sausalito on the shores of Richardson's Bay," wrote K.K. Bechtel in *Marinship: the History of a Wartime Shipyard*. The NWP promptly sold the site of Marinship to the U.S. Government, which then contracted Bechtel to build the yard. After dismantling "a large steel turntable, 15,000 barrel oil tank and 65,000 gallon water tank on the shipyard site," the NWP began immediately "to bring in thousands of tons of building material."

The NWP had consolidated its 300 miles of track over many years and by 1942 had a branch line connecting it to the Southern Pacific Railroad, and thereby to practically every rail line in the country. This local link to the national railroad system, at Schellville, California near Sonoma, became the lifeline of Marinship. "With almost negligible exceptions, every single item that goes to the building of our ships is brought to us over NWP rails," according to the August 7, 1943, issue of *The Marin-er*, Bechtel Co.'s in-house publication. The major lines—including the New York Central, the Santa Fe, the Union Pacific, The Western Pacific and the Southern Pacific—moved their supplies to the NWP from as near as Portland, Oregon, and from as far away as Schenectady, New York. To supply crucial war industry sites such as Marinship, special trains took priority over normal freight service in order to meet strict construction schedules. These trains would "highball" an order across country in less than a week. The quickest on record was from Schenectady to Chicago to Sausalito in



PHOTO: HOLMAN COLLECTION

Plate steel being unloaded at Marinship.

132 hours, or five and a half days. The Office of Defense Transportation and the U.S. Maritime Commission issued MTX (Military Trail Special) permits to expedite such rapid transport.

The logistics of ordering raw steel and parts and transporting them to Marinship were daunting. In three years the yard built three different types of ships all with different specifications. Steel expediter C.E. O'Connor said they had to receive the steel sixty days before it was needed, and his office sometimes handled as many as forty orders at a time. Freight trains

(Continued on Page 2)

deposited the steel at the north end of the yard (about where Mollie Stone's is today) and other supplies to the Warehouse (now the Bay Model). There were occasional glitches, of course, but thanks to creative problem solving not one order fell out of the production loop. For example, the Liberty ship engine beds were just slightly too wide to pass through the Chapman/Alto tunnel (between Mill Valley and Corte Madera). Using simple logic and finesse, a crew of men with axes stood on an empty flatcar in front of the one carrying the engine bed. Wherever it looked like the edges of the beds were going to hit the sixty-year-old tunnel support timbers, the men carefully cut notches in the wood, allowing the beds to squeeze through. According to Marinship Traffic Division Manager Paul Grant, fifteen engine beds were cleared through the tunnel this way, without so much as scuffing the paint! Bechtel had to widen two of the other tunnels, the Cerro (in San Rafael) and Greenbrae, to allow for clearance of the heavier, bulkier freight.

But some parts, like the condensers for the T2 tankers, were simply too big to bring in by train through any of the tunnels, so these awkward shipments were brought in by boat or truck; the Sausalito ferry-train slip was modified to accept oversize cargo, and local vendors provided delivery trucks. Trucks coming from the south with wide-load boilers had special permission to drive down the center of the road, on both the newly built Golden Gate Bridge and through the Waldo tunnel.

Another order of transport business was getting Marinship workers to the job site. While many were recruited from around the country, setting up residence in bachelor dormitories at the yard or in family-oriented apartments in Marin City, many were already here, and they commuted by ferry, bus or auto. When convenient means were not available the



Workers unloading from busses from San Francisco and Marin Counties

PHOTO: HOLMAN COLLECTION

government stepped in to insure there were. Although the ferry ride from San Francisco was routinely uneventful, one boat, lost in heavy fog, got caught in the submarine net at the Bay entrance. Yard employees commuting by bus traveled north from San Francisco, east from Stinson Beach, west from Tiburon, and south from as far as Santa Rosa. They rode Marinship Express until Greyhound took over, when that carrier saw the need to add the shipyard to its North Bay service. But overall, workers got to their jobs by car, enduring the minor inconvenience of lengthy walks to the shipyard.

As we look back at the transportation effort to supply Marinship, we can see the footprint on the landscape left by the railroad—the route of the Northwestern Pacific into Marinship is today almost exactly the same path of southern Marin's multi-use trails. Where we now walk, jog and bike, trains heavy with steel and huge prefabricated parts

met urgent daily delivery schedules during World War II. Right under our feet runs the history that connects us to the past.

— Jim Davenport

MISSION STATEMENT

The Sausalito Historical Society collects and preserves art, artifacts, photographs and printed materials that document Sausalito's history; provides access to the collection for public and academic research; and develops publications and outreach programs to inspire local interest in Sausalito's history and to educate the visiting public.

MOLD LOFT and YARD OFFICE INDUSTRIAL CENTER BUILDING: 295 HARBOR DRIVE AT GATE 5 ROAD



PHOTO: HOLMAN COLLECTION

◀ The **Mold Loft and Yard Office** (107,640 square feet) was one of the largest buildings built at Marinship. The switchboard, mailroom and photo labs along with other essential yard services were located on the lower floors.

▶ On the top level was a giant loft for laying out templates on plywood for the ship hulls. When it was built in 1942, it was the biggest loft of its kind in the country.

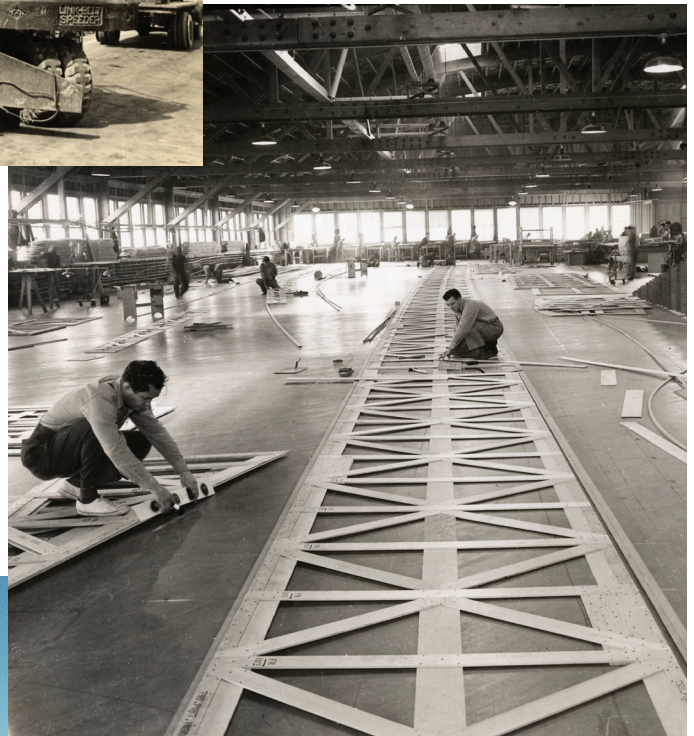


PHOTO: HOLMAN COLLECTION



PHOTO: JIM DAVENPORT

◀ Today the Mold Loft is known as the **Industrial Center Building (ICB)**. The top loft is ideal for sail making and the lower offices provide studios for many of Sausalito's artists as well as large retail spaces.

MACHINE SHOP

PACIFIC LAB BUILDING: LIBERTY SHIP WAY



PHOTO: HOLMAN COLLECTION

▲ The **Machine Shop** (27,400 square feet) was located just south of the Warehouse and was built when the yard shifted from making Liberty ships to making tankers. It was used for storage and machining. Three shifts of machinists worked in the building around the clock. They were responsible for all the sensitive machine work on engines and generators as well as repairing broken yard equipment.



PHOTO: TONY BADGER

▲ This contemporary shot shows a 3-ton overhead crane inside the former **Machine Shop**. During the war it had one 40-ton overhead crane and a 10-ton to handle heavy deliveries such as 18-ton propellers and main turbo generators.

▼ Today the old Machine shop is known as the **Pacific Lab Building**. It was acquired by the Army Corps of Engineers soon after the war and functioned as a regional center for the Corps for the analysis of soil and cement products for the making of roads and dams. Recently the building was acquired by the Veterans Administration and will function as a research laboratory after extensive remodel.



PHOTO: MARGARET BADGER

The HIRING HALL

REAL FOODS MARKET: CORNER OF CALEDONIA AND TURNEY STREETS

► The **Hiring Hall** was located outside the shipyard boundaries. For security reasons, only employees were allowed within the yard. The building had been around at least since 1925 when it was listed in a directory as Rosa's Auto Repair Shop. After the war, it morphed back into a British Sports and Racing Car Garage before becoming a market in the 1970s.

George Keeney, Employment Manager for Marinship, wrote proudly of how he designed the interior of the site to work efficiently to process the extremely varied job applicants. "Fourteen deaf mute chippers for the Plate shop, ex-convicts, attorneys, actors, pro-athletes, European refugees and 'at one time we had about 60% of the San Francisco Symphony



PHOTO: HOLMAN COLLECTION

working at Marinship in various capacities." Also in this building the Identification Bureau finger-printed

all workers and coordinated with the Federal Government in criminal investigations.



PHOTO: JIM DAVENPORT

◄ Next time you enter **Real Foods Market** be aware that the Hiring Hall entrance was on Turney St. where the freight entrance is now. In the inset the Victorian house looks today much as it did in the 1940s. If you listen carefully you will hear the voices of men and women inquiring about jobs at Marinship.

WAREHOUSE

BAY MODEL: 2100 BRIDGEWAY



PHOTO: HOLMAN COLLECTION

◀ The curved Quonset type roofs were commonly used during the war to meet the urgency of construction demands.

▲ When the **Warehouse** (122,500 square feet) was finished on July 4, 1942, it was the largest building ever built in Marin County. The railroad track ran parallel to the building for maximum efficiency in loading and unloading. When the yard switched from building Liberty ships to tankers, the warehouse became overwhelmed and had to send surplus to the Machine Shop and other locations around Marin County and San Francisco.



PHOTO: JIM DAVENPORT

▲ Today the **Bay Model** inhabits the large space that originally was the shipyard's warehouse. The Army Corps of Engineers took over the building on May 16, 1946 and constructed the San Francisco Bay-Delta Hydraulic Model for the development of technical data and for public education.

The Visitors' Center was added on the bay side of the building in the 1980s. The railroad tracks were removed from the west side of the building about fifteen years ago. Only a few of the original warehouse doors remain.

ADMINISTRATION BUILDING

3030 BRIDGEWAY BUILDING: 3030 BRIDGEWAY



◀ The first foundation piles for the **Administration Building** (26,483 square feet) were driven into the bay fill on April 25, 1942 and personnel moved into their offices just a few months later on June 16.

PHOTO: HOLMAN COLLECTION

▲ The **Administration Building** was located at the very north end of the Marinship yard and housed essential services such as purchasing, auditing, accounting, stenographic services and the offices of the W.A. Bechtel Co, which had been chosen by the Maritime Commission to build the shipyard.



PHOTO: JIM DAVENPORT

◀ Today the Administration building is called the **3030 Bridgeway Building** and retains many of the features of the original structure. One change made in the last ten years was the conversion of two bombproof vaults, one on each floor, into offices. Although the all-redwood exterior is now painted over, redwood doors and wainscoting (probably not original) adorn the inside. Near the entrance are the original mailboxes and switchboard.

Joseph Brucia, the present owner, has placed a plaque at the entrance to the building honoring the U.S. flag that flies on top of the building, Marinship achievements, and, the World War II veterans who went to sea on the ships.

SAUSALITO VOICES

The *MARIN-ER* 1943



PHOTO: JIM DAVENPORT

JOHN PULLIN – MARINSHIP CARPENTER 1943-44, MARINSHIP DOCENT 1999 TO THE PRESENT.

About 15 years ago John's interest in the history of Marinship started to grow. He found a book on Marinship at an antique shop in Benicia and noticed that a friend of his had written a chapter. At present John runs a bi-weekly tour of the Marinship at noon every other Saturday and "continues to learn" details of the history.

Betsy Stroman conducted an oral interview with John Pullin on February 2, 2006.

Almost everyone working at Marinship was an amateur at their job. Suddenly they had to make big steel ships. They were trained on and off the grounds of the yard. But some types of jobs were filled by retired professionals: train engineers ran the yard trains, truck drivers and crane op-

erators, welders, burners—they didn't need much training. I was 18 years old and signed up with the Carpenters Union two days after graduating from high school. I did basic carpentry, inside staging that nobody saw. The old carpenters knew their stuff and showed me things like how to pull out nails. My first job was to pull nails out of old 2 X 1 2 boards, 8 hours a day for two weeks.

Most of the people working were from the South or Midwest because in the North they already had jobs. People were being paid \$.35 an hour in the South so when they saw they could make \$1.20 in the shipyards, they came. Some jobs were paid a little less, others more—swing and night shift made more.

A friend of mine was a welder. He said no Marinship vessel ever cracked, but that wasn't so. There were cracks, but it wasn't faulty welding it was because the government supplied the yards with two different grades of steel and it wasn't marked properly. Cracks went right across the welds as if they weren't there. Overall though, the welding at Marinship was considered premier.

I never had a problem with any of the people I worked with regardless of race or nationality. They were a real cross section of humanity. One guy named La Scala, an Italian, was a beautiful singer with a wonderful personality, but was a complete failure as a worker. He just couldn't coordinate his hands. But he was such a nice guy, nobody cared.



The *Marin-er* was a biweekly publication put out by Bechtel Corp for the workers at Marinship from July 1942–December 1945. Following are two excerpts.

JANUARY 1, 1943

Marinship was tasked to build 22 tankers in 1943. "Our 22 tankers are enough to turn the tide of battle on any one of several critical battlefronts—If our tankers are built on time, and sent into the war service on a critical front, they can swing the tide of battle in favor of the United Nations. If our tankers fail to show up . . . if they are late . . . our gallant troops are helpless without fuel.

We know how highly the ENEMY values TANKERS. When Hitler unloosed his unrestricted submarine campaign along our eastern shores a year ago he told his U-boat captains, 'Track down the tankers. Sink them. We must eliminate them, wherever the cost.'"

MAY 29, 1943

A contest was run for workers to describe "the toughest job at Marinship." One worker said the first few days on any job is the hardest job . . . "in a world of so much noise, apparent confusion and turmoil . . . you wonder if you will survive."

The winning description of the toughest job was that of the " . . . hydro-test men. We chip, cork, and bob all those impossible leaks down behind pipes in double bottoms, drain wells, cofferdams and down escape hatches—everywhere that only an inspector with his flashlight can find. We get all the departments mistakes and make them 100% OK . . . We eat smoke from welders, dust from sweepers, and wrath from all departments. We are in every hold and every tank in every part of the ship making sure that she has no leak in her as she slides down the ways to a United Nations victory."

SAUSALITO HISTORICAL SOCIETY NEWS

Two Long-Time Sausalito Historical Society Supporters Deceased

L.W. THOMAS MAY

Tom May, a member of the Sausalito Historical Society Board from 1995-1997 and in charge of Special Collections died in November 2006 at the Redwoods Health Care Center. He is survived by his wife of 36 years, Alice Turnley May who lives in the family home on Platt Avenue.

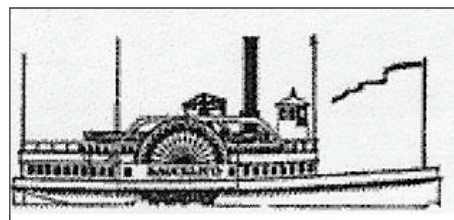
Tom had been a resident of Sausalito since 1954. His life was linked to the city in unique ways. He was born in Sausalito's sister city, Valparaiso, Chile. He served on Sausalito-built Liberty ships in the Pacific during World War II. In addition to being active in the Friends of the Library and the Sausalito Historical Society, he was an enthusiastic participant of the Golden Gate Raptor Observatory (GGRO). On December 5, 2006 Mayor Mike Kelly adjourned the Sausalito City Council meeting in Tom May's memory.

RUTH ALEXANDER STEWART

On November 2, 2006 Ruth Alexander Stewart, a well-known Marin watercolorist and friend of the Sausalito Historical Society died at age 89 in Phoenix, Arizona. Ruth's note cards of familiar local scenes have been sold at the Ice House Gift Shop for the benefit of SHS for many years.

She began studying oil painting at a class taught by Edie Trusdell at the Woman's Club in the 1950s. She continued her study at College of Marin in watercolor and eventually founded in 1970 the Marin County Watercolor Society. Her early career paralleled Sausalito's golden age as an art colony.

The SHS was proud to host an exhibition and sale of her works in 2000 and in our next *Newsletter* will feature more on Ruth's contributions and those of the waterfront art community following World War II.



Donations

Thank you to our members who responded to the November 2006 fund raising request. We wish to acknowledge the following contributors:

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We also wish to thank all those who participated in the successful Alta Mira Fund Raising Event. Altogether our Fall fund raising efforts netted \$5869.21.

Contributions

Thank you to **Shira Barnett** and **Norman Scheiner** for their contribution of a video/TV for the viewing of historic videos in the history room.



WATERCOLOR: RUTH ALEXANDER STEWART

The Holman Collection

*World War II
Marine Ship Photographs*

EXHIBIT OPENING
Sausalito Historical Society Rooms
at the Civic Center



Thursday, April 12, 6-8
Refreshments
Save the Date!!

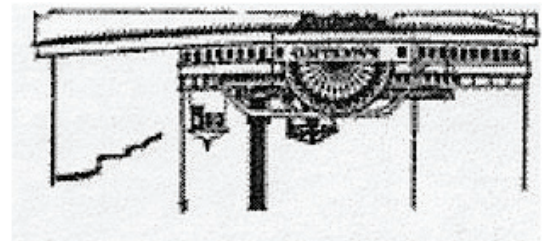
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