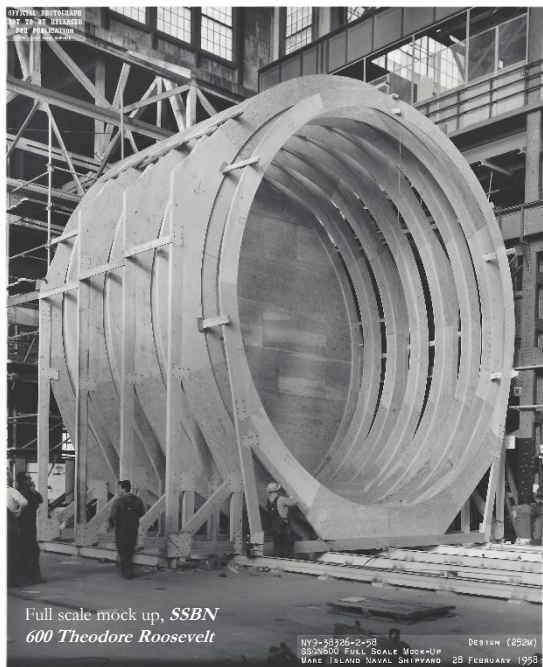


# Farragut's Press

NEWSLETTER OF THE MARE ISLAND MUSEUM, 1100 Railroad Ave, Vallejo CA 94592

Mare Island Historic Park, a 501(c) (3) Charitable Organization

September 2015



## Wooden Submarines?

In the library storeroom were two boxes, not yet cataloged, which when opened contained hundreds, literally, of pictures of “wooden submarines,” sometimes outfitted with “machinery and rope piping,” at other times wood or cardboard was used to simulate the machinery and pipes. What were these strange looking photos?

Upon closer examination it was discovered these were mock-ups and models of the submarines, **Barbel**, **Swordfish**, **Scamp**, **Halibut**, **Grayback**, **Permit (Thresher)** and **Theodore Roosevelt** which were built to exact specifications of each of the submarines seemingly to make sure that all the parts fit before they actually constructed the submarine. In fact on the back of some of the pictures were notes – one indicated they had made an adjustment to accommodate a water tank.

Some of the mock-ups were ¼ size and these were frequently “peopled” with wooden figurines which were jointed and could be bent in the same manner as a human body could move. On the **Grayback** mock-up they even dressed the figurines in uniforms to denote sailors, chiefs and officers and some even had rank insignia on their sleeves. Amusingly the chief has

a rather large pot belly – too much of that good ice cream submarines were noted for supplying to the men aboard! ¼ mock-ups were made for the **Halibut**, **Barbel**, **Swordfish**.

And while the ¼ mock-ups are amazing, the mock-up of the **SSBN 600 Theodore Roosevelt** is even more astounding. It is a full size mock-up and both the mock-up and the sub were built at Mare Island. The picture of the beginnings of the mockup shows the frames (“ribs”) of the submarine and the mock-up dwarfs the men working on it. **Roosevelt** was the first of her class to be built at MINSY.

After speaking to Dan Danielson who actually worked in Building 271 where the full size mock-ups were built, we were able to ascertain the following - the original plans for the submarines probably came from Electric Boat in Groton, CT or Portsmouth Naval Shipyard in New Hampshire or Maine, depending on which side of the river you are standing. In fact some of the photos are labeled Electric Boat.

Once the plans arrived here Shop 64, Woodshop, would begin to build the frame of the mock-up. The plywood was laminated, if necessary, so that it would be the exact dimensions and thickness of the frames when they were fabricated out of steel. Shop 38, Outside Machine Shop, would do the setting of the machinery which was usually built with steel frames covered with cardboard or plywood and painted, or in some cases made of plastic. All the piping would be constructed by Shop 56, the Pipe Shop. In the case of a pump, the flanges for inlet and outlet were made of steel, the exact dimensions and thickness of the metal which would be used on the flanges. They were then welded to the frames of a steel skeleton and the wood/cardboard shape of the pump fabricated around it. The skin of the submarine was usually made of sheets of metal only thick enough so that a workman could walk on it and only placed on the bottom or underside of the submarine. The thickness of the skin was not critical at this point.

When it was discovered that a part or pipe did not fit or line up properly, the workman would report the discrepancy to the design division who would issue an LAR (Liaison Action Request) to the yard which had originally designed the boat advising them of the

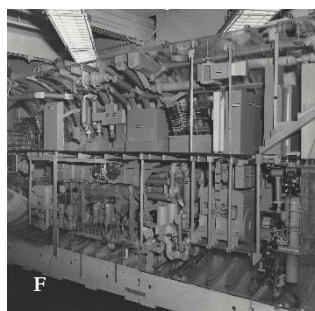
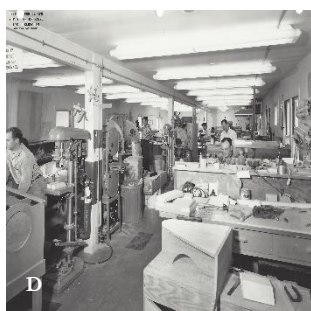
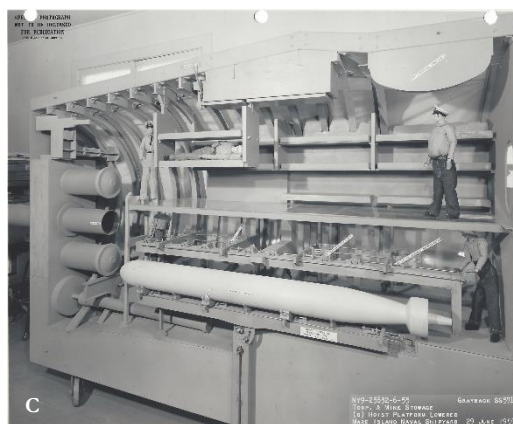
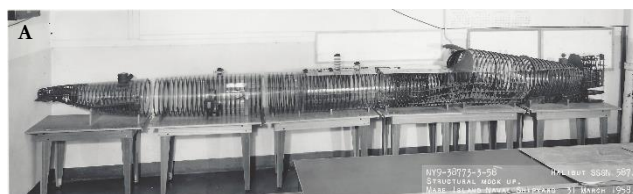
problem and either asking for a fix or indicating the adjustment made here. It was much cheaper to make an error and/or manufacture a fix on a wooden submarine than on an actual submarine in the process of being built.

The **SSN 594 Class (Permit)** was renamed from the **SSN 593 Thresher** Class. This, of course, should have been the **SSN 593 Thresher** class because it was the first boat built in that class, but after a vessel is lost and stricken from the naval registry, the class is then named after the next boat in the class, and in this case it was **Permit SSN 594** which was built at Mare Island. However there are photos in this folder actually labeled **Thresher**. This mock-up was also a full size mock-up and the **Roosevelt** and the **Permit** mock-ups were both in 271 at the same time. Code 240, Design, was in charge of the building of the mock-ups and Bill Bertino headed the Mock-up Group. Interestingly enough, Building 271 had 12 foot wide mezzanines which went up five stories on the north side of the building. When they were finished using one of the 1/4 mock-ups, Danielson thought it was the **Grayback**, it was simply stored on the third floor mezzanine. Danielson wanted to go into the building years later to see if it was still there, but he was told the

building was empty.

Most of the 1/4 mock-ups and the 1/12 scale models were built on the third floor in Building 521 just behind the headquarters building. The Navy actually cut a hole into the north side of the building to install an industrial sized door which would allow them to bring in material and equipment. This area included a large open area and a woodworking shop with a table saw and drill press.

In addition to the mock-ups they also built models, in absolute scale to the part of the submarine being built. For the ribs and framing of the **Grayback** there are at least ten different models of sections of the framing and then a model of the entire framing. They also tested the bunks by loading bags filled with sand (??) to a weight of 500 and 1000 pounds to see if the shell of the bunk would break. The exact number of men who would be working in an area would be duplicated by the wooden figurines to see if there was ample room to complete the necessary tasks. There are models of **Regulus I** and **II** missiles being loaded and in flight after being fired from the sub. Nothing was left to chance. The result - the best submarines in the world in use at that time!



A) Hull framing structural mockup of **SSGN 587 Halibut** (1958), B) **SSGN 587 Halibut** in the wild, C) quarter scale mockup of **SSG574 Grayback** torpedo and mine stowage, hoist platform lowered, "dressed" (1955); The Chief enjoys ice cream, lots of ice cream, D) model makers shop area for mockups, E) Quarter scale mockup of **SSG 574 Grayback** attack center, undressed (1954), F) quarter scale mockup of **SSGN Halibut** engine room, ladder to tunnels, G) quarter scale mockup **SSGN 587 Halibut** steam room (1957)



SS-168 Nautilus, 1942, off Mare Island Navy Yard

## Mare Island and WWII Submarines

Mare Island launched its first submarine, *Nautilus* SS-168, 15 March 1930 and the next, *Pompano*, was not launched until 11 March 1937. *Pompano* eventually sank five ships (21,493 tons) though after the war it was only credited with 2 sunk (8,500 tons.) From that date until the end of WWII in 1945 MINSY built another 21 submarines which fought in WWII. Many other WWII subs were overhauled or converted at Mare Island. Seven of the MINSY subs were lost and are now on “eternal patrol.” Many of the other subs built or worked on here had outstanding records during the war.

In 1941 Mare Island built and overhauled in 1944, *Trigger*, which on 12 patrols sank 18 ships (86, 551 tons). *Trigger* was caught on the surface by a Japanese aircraft which bombed her and then called in other ships to depth-charge her. Also in 1941 *Silversides* was commissioned at MINSY. *Silversides* participated in 14 patrols and sank 23 ships (90,080 tons) third most of all submarines. She is now a museum in Muskegon, MI and was judged by a Navy review board to have had the most productive combat record of any still surviving American submarine.

In 1942 the shipyard launched one of most successful

submarines of WWII, *Gudgeon*, which was the first submarine to sink an enemy warship and earned the motto, “Find ‘em, Chase ‘em, Sink ‘em” which eventually became the motto for all submarines.

Before she was lost on her 12<sup>th</sup> patrol, location and cause unknown, she managed to sink 14 vessels (71,372 tons)

In mid-1942 MINSY converted the *USS Argonaut* to a troop carrier which often carried soldiers or Marines on clandestine missions.

1942 also saw MINSY building the famed *Wahoo* and overhauled her in 1943. Commanded by Dudley “Mush” Morton, she was one of the first submarines which initiated the strategy of seeking out and attacking enemy subs. Prior to WWII and the advent of new, younger skippers the strategy was strictly defensive. The *Wahoo* was lost on her seventh patrol in 1944 and her location was not known until she was found in 2006 in LaPerouse Strait north of Japan. She sank 20 ships (60,031 tons).

1943 saw the commissioning of *Tinosa*, *Tullibee* and *Tang* at the shipyard.

*Tinosa* had 12 war patrols and sank 16 ships (64,655 tons). But it was on her second patrol that she made history. She had the biggest tanker in the world in firing range and two early torpedoes hit the tanker making it dead in the water. *Tinosa* continued firing until a total of nine torpedoes had been fired at the “sitting duck” and none of the other seven exploded.

*Tinosa* took one torpedo back to Pearl Harbor and CMDR Daspit blew into RADM “Uncle Charlie” Lockwood’s office Hawaii in a fury. That torpedo started the actual testing of the torpedoes which determined their faulty design and the result was a new design which made submarines a lethal weapon in the Pacific theater.

*Tullibee* had a less illustrious career. She went on four war patrols, the second in a wolf pack with two other submarines. On her fourth patrol she was off the Palau Islands and spotted a Japanese ship and chased her through rain squalls. On 26 March 1944 she finally had a decent firing position and she sent two



Preserving the history of Mare Island

### Mare Island Museum Hours

10:00 A.M. to 2:00 P.M. Weekdays

10:00 A.M. to 4:00 P.M. First and Third Weekends

Tel: (707) 557-4646

Shipyard tours by appointment, please call:

(707) 664-4746 or (707) 280-5742

torpedoes towards the ship. Two minutes later the *Tullibee* exploded. Several men were blown into the water, but only Gunner's Mate C.W. Kuykendall who was on the bridge as a lookout, survived. He was captured and imprisoned for the duration by the Japanese. It was Kuykendall who told authorities after the war that a torpedo had made a circular run and destroyed *Tullibee*, the first submarine to be destroyed by her own torpedo.

In October 1943 *Tang* was commissioned at Mare Island with Richard O'Kane as her commander. O'Kane had served as executive officer with Morton on the *Wahoo*, but had transferred before the submarine was lost. *Tang* became a legend in the submarine service under O'Kane's leadership. On her third patrol she sank 10 enemy ships (39,100) the most ship sunk on any patrol by a U.S. submarine. On her fifth patrol she was in the Formosa Strait and had already sunk six ships by 24 October 1944 when she spotted four more large enemy ships. In the attack on this convoy one of the torpedoes made a circular run and destroyed *Tang*. The second ship to be destroyed

in that manner and both built by Mare Island, though we did NOT build the torpedoes.

There were nine survivors including O'Kane who were picked up by the Japanese, imprisoned and harshly treated. In her five patrols, *Tang* was credited with 24 ships sunk for a total of 93,824 tons. She was number one in the sub service. *Tang* received two Presidential Unit Citations for Patrols 1, 2 & 3. O'Kane was awarded the Medal of Honor after his return from imprisonment.

In addition to *Tang*, these boats were also awarded a Presidential Unit Citation: *Nautilus* (patrols 1,2 & 3); *Gudgeon* (patrols 1-7); *Silversides* (patrols 4,5,7, & 10); *Trigger* (patrols 5-7); *Wahoo* (patrol 3) and *Tinosa* (patrols 4-6). In addition to the PUCs, Mare Island boats were also awarded 55 Navy Crosses; 164 Silver Stars; 143 Bronze Stars; 26 Navy and Marine Corps Medals; and 5 Legions of Merit according to a letter from ComSubsLant dated 30 July 1945. The seven subs built by MINSY and on "eternal patrol" are *Pompano*, *Swordfish*, *Gudgeon*, *Trigger*, *Wahoo*, *Tullibee*, and *Tang*.



Pictured challenge coins available at: <http://www.subvest.com/challenge-coins/>



## Life on a Submarine

Only the best and the brightest serve on submarines? After reading this description of life on a submarine prepared for the United States Navy Submarine Centennial, you might want to question that assumption!

1. Spend as much time indoors as possible, out of direct sunlight. Go to work only before sunrise and come home after sunset.
2. Paint everything sea foam green or off-white. Every Friday, set an alarm on loud and get up, manned only with a bucket, sponge and “greeny”, clean one area over and over, even if it is already spotless.
3. Eat food you can get only out of a can and requires water to eat. Empty out your refrigerator and turn the temperature control down, turning the refrigerator into a freezer. Get rid of all fresh fruits and vegetables.
4. Repeat back everything spoken to you. Repeat back everything spoken to you.
5. Sit in your car for six hours at a time with the motor running. Keep hands on the wheel. But don't leave your driveway. Log readings of your oil pressure, water temperature, speedometer and odometer every 15 minutes.
6. Put lube oil in your humidifier instead of water. Set it on high.
7. Buy a trash compactor, use it only once a week. Store the rest of your garbage in your bathroom.
8. Watch movies only in the middle of the night. Have your family vote on which one to watch and then show a different one.
9. Have a paperboy give you a Navy haircut.
10. Take hourly readings on your electric and water meters. But only for a six hour period.
11. Sleep with your dirty laundry.
12. For old mechanics, set your lawn mower in the middle of your living room while it is running.
13. Invite guests but don't prepare enough food for everyone. Serve food cold. Limit the time at the table to 10 minutes.
14. Wake up at midnight and make a peanut butter sandwich, use stale bread. Better yet, make your own bread and slice it three inches thick and use that. Or as an option, you can warm up some canned soup or ravioli.
15. Make your family menu for a week without knowing what food is in the cabinets.
16. Set your alarm clock for various times at night, adjust the volume to maximum. When it goes off, jump out of bed, get your clothes on as fast as you can, run outside and grab the garden hose. Then go back to bed and do it all again when the alarm again goes off.
17. Once a month take every appliance apart and put it back together.
18. Use 18 scoops of coffee per pot and allow it to sit for five or six hours before drinking it.
19. Invite 85 people you really don't like and have them stay for a couple of months.
20. Store you're your eggs in the garbage for two months and then cook a dozen each morning.
21. Have a fluorescent light installed under your coffee table and lie underneath it to read your books.
22. Put a complicated lock on your basement door and wear the key around your neck on a special chain.
23. When making a cake, prop up one side of the pan when cooking. Use extra icing to level it off.
24. Every so often, yell “EMERGENCY DEEP!” run into the kitchen and sweep all the pots and pans and dishes off the counters onto the floor, and then yell at your spouse for not having the kitchen area “Stowed for Sea!”
25. Put on your stereo headphones (don't plug them in) go to the stove and stand in front of it. Say (to no one in particular) “Stove manned and ready!” Stay there for three or four hours. Say (once again to no one in particular) “Stove secured!”, then roll up the cord of your headphones and put them away.

26. Pull out the refrigerator and clean behind it for four hours and then put it back when you are done. Have your spouse come and check every ten minutes with a flashlight to see how you are doing.
27. When doing your laundry, fill it only 1/3 full, sit in front of your washing machine in your underwear and read a book or magazine you've read at least five times before. When the wash is done, only run the dryer for half the normal time.
28. Fix up a shelf in your closet that will serve as a bunk for the next six months. Take the door off the hinges and replace them with curtains. While asleep, have family members shine a flashlight in your eyes at random intervals and say either "Sign this!" or "Sorry, wrong rack!"

If you can do these, you MIGHT consider a career on a submarine!

## Mare Island Visitors

This quarter Mare Island Museum had visitors from Arizona, Arkansas, California, Colorado, Delaware, Florida; Georgia, Hawaii, Idaho, Illinois, Indiana, Kansas, Maryland, Massachusetts, Minnesota, Mississippi, Montana, Nevada, New Hampshire, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, Texas, Virginia, Washington, West Virginia and Wisconsin; a total of 29. We had foreign visitors from Belgium, British Columbia, India, Ireland, Mexico, the Netherlands, New Zealand and Slovakia. We also had visitors from the *Polar Star*, a Coast Guard ice cutter, presently in dry dock at Mare Island.

## MINSY Logo on Causeway

If you are one of many who donated to the restoration of the Mare Island logo on the causeway you should be aware that the City of Vallejo has approved the project, but it will not happen until the bridge is repainted. According to one engineer the proposed date for that repainting is now scheduled for the summer of 2017. Things do take time when you are dealing with a governmental agency as many of you would know who worked here at Mare Island.

## Eight Gold Stars

In March of 1944 Mare Island Shipyard's Honor Flag had eight gold stars for MINSY built ships lost in combat. They included USS Chicago, USS Wasmuth, USS Preston, USS Henley, USS Pompano, USS Wahoo, USS Kanawha and USS Langley.

## Coming Events

### **Shop 31 Reunion**

**September 26<sup>th</sup>, 2015**

**12:00 P.M.**

**Mare Island Museum**

**POC: John Chamberlin, (707) 226-3654**

### **NYA Yearly Meeting/Reunion**

**October 10<sup>th</sup>, 2015**

**10:00 A.M.**

**Mare Island Museum**

**POC: Ralph McComb, (707) 987-3850**

### **Design Code Reunion**

**November 3<sup>rd</sup>, 2015**

**10:00 A.M.**

**Mare Island Museum**

**POC: Jim Holland, (707) 224-8593**

### **Christmas Concert**

**December 13<sup>th</sup>, 2015**

**2:00 P.M.**

**St. Peter's Chapel**

**POC: Mare Island Museum, (707) 557-4646**

For further information on any of these events contact the museum at [mihp46@att.net](mailto:mihp46@att.net) or call (707) 557-4646

## Did You Know?

- Henry Ferrero began work at MINSY in 1916 when he was 16 and had only an elementary school education. By the time Ferrero left Mare Island he had three engineering degrees and was instrumental in sending MINSY built ships to sea.
- Jim Davis was an apprentice at Mare Island and had this to say about his time in the classroom, "It was way tougher than high school, probably more than 10 times more homework than I was used to. If you flunked, you were fired!"
- The *USS Ward* was built at Mare Island during WWI and launched in 17 ½ days, still a record. On 7 December 1941 she fired the **first** shot of WWII in the Pacific by sinking a Japanese midget sub just off Pearl Harbor's entrance **prior to** the attack by Japanese planes.

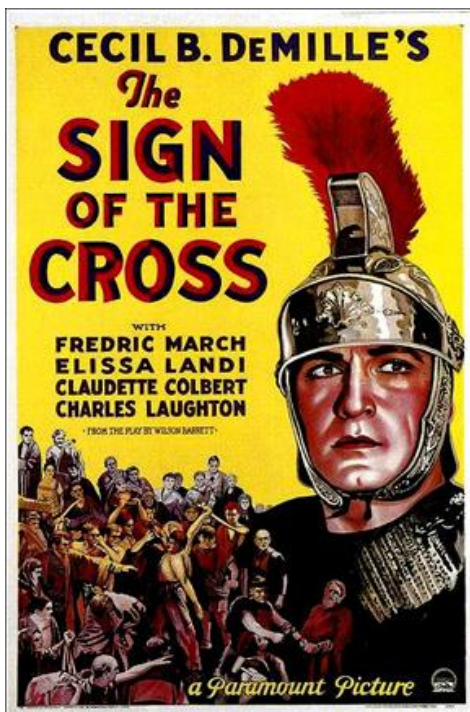
## Navy Relief Society Carnivals

In the early days of the American military there were no retirement benefits, health benefits or survivors' benefits and so Naval personnel would often "pass the hat" to help out the families of their colleagues. In 1904 a group of naval officers and their wives formed an official organization called the Navy – Marine Corps Relief Society. The first proceeds to fund the society were from an Army-Navy football game in Philadelphia in January 1904 and during the first year the society distributed about \$9,500. During WWI paydays were often delayed and interest free loans were given to families "to tide them over" and eventually this also included loans for medical care. But "passing the hat" was a firmly rooted tradition and Navy Relief Society "events" became a major part of raising funds for providing assistance to Navy & Marine families in need. At Mare Island for many years these events were either shows or carnivals. We have photos from the 1920s which indicate the shows at that time were primarily the typical variety show or revue. They included men in "blackface," ventriloquists, skits with performers in all kinds of foreign costumes from Chinese to American Indian to Spanish and Mexican. And there were lots and lots of pretty young girls who were most likely dancers. Many of the performers appear to be members of the local

military community.

Perhaps one of the most extravagant of the Navy Relief Society events was the Navy Relief Society Carnival of 1934 which was chaired by the base commandant, Admiral William Yancey, and one of the primary movers behind the carnival was a master showman himself, Chaplain Maurice Witherspoon, who was quite famed. If you have ever been to St. Peter's Chapel and looked closely at the roof you will see a rather strange metal contraption in the middle which looks like it might be a bell shaped siren. In fact, it is a loudspeaker system that was installed during Chaplain Witherspoon's tour of duty at Mare Island. His services were so popular that there were too many people to fit into the chapel and seats were placed outside the chapel and the speaker system installed so all could hear his sermons. It might also be noted that he was not above dressing like a circus ringmaster during special events.

But the Navy Relief Carnival of 1934, held October 4-6, was an extravaganza to outdo all others. There were three major guests during the carnival, one featured each day of the event. Least known was Joyzelle Joyner, an "exotic film danseuse" as she was billed, who had starred in "*The Sign of the Cross*" and was featured on the first night.



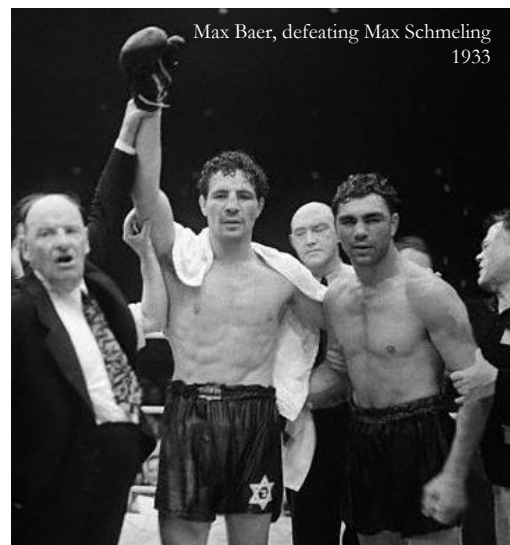
The second night the guest of honor was Max Baer, a boxer and a resident of Livermore, CA, who in June 1933 had beaten Max Schmeling, a German fighter, who was Hitler's favorite and who had helped to perpetuate in America, at Hitler's direction, that there was no persecution of the Jews in Nazi Germany. Baer, who was half-Jewish, wore boxing trunks which had the Star of David on them and defeated Schmeling with little effort. That same year he starred in a film *"The Lady and the Prizefighter"* with Myrna Loy, a major star of the time. In June 1934 Baer fought the World Champion Primo Carnero and knocked him down 11 times during the match. Baer then became the newly crowned World Heavyweight Champion. While at the carnival Baer had dinner at the "government cafeteria" where he attracted thousands of people, many of them friends who lived in Vallejo. It was said that he primarily spoke of his brother, Buddy, who was also an aspiring boxer and who later, according to John Osborn, a former Yardbird, sold cars at the Lincoln dealership in Vallejo in the early 1950s. (For those not old enough to remember those times, Baer's son, Max Baer, Jr. starred as Jethro in the hit TV program, *The Beverly Hillbillies*.)

But the greatest attraction at the carnival was the famous film star and the Navy's "Little Sister" as she had been christened by Secretary of the Navy, Josephus Daniels, on the **USS Texas** in San Diego in 1918, when she first became involved with Navy Relief. Also known as "America's Sweetheart," the star was Mary Pickford. The original invitation to Miss Pickford, according to the local papers, was delivered by a "handsome young naval officer." However, there is no doubt that the arrangements which included Miss Pickford being met at the train when she arrived by 20 Naval officers were arranged by Chaplain Witherspoon, who accompanied her throughout her visit to Mare Island.

By the time of the carnival Pickford was past the peak of her film career which started to decline with the advent of "talking pictures." However she had made 51 films in 1909, worked for the famed director D.W. Griffiths and was hired by the new studio called Paramount Pictures. Her first starring role was in 1914, *Tess of Storm Country*, which sent her career "into orbit." She starred in 52 films, but more importantly she was an astute businesswoman who with D.W. Griffiths, Charlie Chaplin and Douglas Fairbanks, who later became her husband, formed United Artists as a

film studio which still exists today, though not strictly as a film studio. Probably due to her work with Navy Relief, after WWI Pickford started the Motion Picture Relief Fund, and it, too, still exists today, though the name has changed.

This carnival was such a success that when the officer in charge of finances for the carnival made his final report, the three day carnival had raised \$12,450.74, an amazing amount during the years of the Depression. Based on today's dollar the final take would have been over \$220,000. Probably no event at Mare Island has ever raised more funds in such a short time.



Max Baer, defeating Max Schmeling  
1933



Mary Pickford, with cat



## Mare Island Museum Membership

1100 Railroad Avenue, Vallejo, CA 94592

(707) 557 4646 [mihp46@att.net](mailto:mihp46@att.net) [www.mareislandmuseum.org](http://www.mareislandmuseum.org)

The Mare Island Historic Park Foundation keeps alive the history of Mare Island Naval Shipyard and chronicles its shipbuilding activities in the museum, as well as preserving the most historic buildings – St. Peter’s Chapel, the Shipyard Commander’s Mansion and Building 46, the oldest building on the island dating from 1855. The shipyard founded in 1854 by Commander David G. Farragut, first admiral in the USN, was the first naval installation on the West Coast and was an important contributor to success in World War II in the Pacific. It also played a prominent role in the Cold War by building 17 nuclear submarines. We invite **YOU** to become a part of this endeavor by partnering with the Mare Island Historic Park Foundation and supporting its work.

### Benefits of Membership:

- Free Admission to the Mare Island Museum (Bldg 46) for the year of partnership
- 10% discount on purchases in gift shop
- Advance notice via email of new exhibits or events sponsored by the foundation
- Access to Mare Island Museum Library
- Free newsletter via email
- Helping to preserve the history of Mare Island Naval Shipyard

### Partnership Levels: (All partnerships are for one (1) year and are fully tax deductible)

- Individual \$25.00 – Admits partner named on card
- Out of State \$20.00 – Admits partner named on card
- Family \$40.00 – Admits two household members and their children or grandchildren 12-18 (under 12 are free)
- Student \$15.00 – Admits student named on card with a student ID card

---

### Mare Island Museum Membership Application

Name \_\_\_\_\_ Date \_\_\_\_\_

Street Address \_\_\_\_\_

City, State, Zip Code \_\_\_\_\_

Phone \_\_\_\_\_ Email Address \_\_\_\_\_

Partnership Level:

Individual \$25  Out of State \$20  Family \$40  Student (with ID) \$15

Visa  MasterCard  American Express

Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_

Please Make checks payable to **MIHPF**

Remit to: ATTN; Membership

Mare Island Museum

1100 Railroad Ave, Vallejo, CA 94592

(For Office Use Only) \_\_\_L \_\_\_D \_\_\_E

Received by: \_\_\_\_\_

Date \_\_\_\_\_