

Anchor News

WISCONSIN MARITIME MUSEUM

FALL 2003



Museum Hosts Memorial and Opens Fitzgerald Exhibit

On Saturday, Nov. 8, 2003, the Wisconsin Maritime Museum held its first annual Great Lakes Mariners Memorial ceremony to remember all those who have lost their lives while serving on the Lakes.

Following the ceremony, the Museum opened a new exhibit entitled "Of Ships and Men - The *Edmund Fitzgerald*." The exhibit features a diorama and twelve original works of art of the wreck site by Richard Sullivan, the official artist for the U.S. Coast Guard wreck investigation.

The Museum invited all current and former crew members of Great Lakes commercial vessels to attend the ceremony. Crew members and their families were admitted free to the Museum for the event.

Named for the president of Milwaukee-based Northwestern Mutual Insurance, the *Edmund Fitzgerald* was the largest freighter on the Great Lakes when it was launched in 1958 and remained so until 1971. Members of the

Fitzgerald family were to be on hand for the exhibit opening, and families of the lost crew members were also invited.

THE GALES OF NOVEMBER

At 13,632 tons and 729 feet in length, the *Edmund Fitzgerald* was referred to as the "The Pride of the American Flag." With a load of approximately 26,000 tons of iron ore bound for Detroit, the ill-fated ship departed Superior, Wis. on the morning of Nov. 9, 1975.

The *Fitzgerald* was under the command of Capt. Ernest McSorely, a seasoned sailor of the Great Lakes with 44 years of experience. The ship was followed out of Superior later that day by the freighter *Arthur M. Anderson*, which was bound for Gary, Ind.

At 7 p.m. that night, the National Weather Service issued a gale warning for Lake Superior, with wind speeds expected to range from 34 to 40 knots. Around 2 a.m. on the morning of November 10, the captains of the *Anderson* and



The loss of the crew of the *Edmund Fitzgerald* on Nov. 10, 1975 was remembered in a memorial service and new exhibit opening in the Riverside Gallery.

Fitzgerald discussed the threatening weather by radio and decided to change their course. They chose a "safer route" that would take them along the northern edge of Lake Superior.

At 3 a.m. that night, winds on the lake were reported as coming from the northeast at 42 knots. The *Fitzgerald* and *Anderson* proceeded on an easterly course along the Canadian coast towards Sault Ste.

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Exhibit of Historic Lighthouse Lenses Displayed in Riverside Gallery

In October, in conjunction with the Wisconsin Maritime Museum's first annual Lakeshore Maritime Heritage Festival & Lighthouse Walk, the Museum opened to the public a new exhibit featuring its collection of rare Fresnel lighthouse lenses.

All three lenses have recently been cleaned and mounted in a special exhibit area adjoining the Riverside Gallery. Composed of leaded glass prisms, they are beautiful examples of highly-skilled glasswork produced by trained craftsmen in France during the 19th and early 20th centuries.

HISTORY OF FRESNEL LENSES

Fresnel lenses were invented in 1822 by a French physicist, Augustin Fresnel. Prior to their invention, lighthouses were often lit with simple lamps or torches, sometimes with reflectors to enhance the light's brightness.

The lights in these early lighthouses, however, could only be seen for a few miles. Tests by Fresnel showed that an open flame lost nearly 97% of its light, and a flame with reflectors behind it still lost 83% of its light. To capture more of the light, he invented a lens consisting of concentric rings of glass prisms held in place by a brass frame that bent the light

coming from a lamp inside the lens into a narrow beam.

Using this approach, the Fresnel lens was able to capture all but 17% of a lamp's light. The first Fresnel



lens was installed in the Cardovan Tower lighthouse on France's Gironde River in 1822 and was visible from more than 20 miles away. By the mid-1800s, Fresnel lenses were commonplace along the seacoasts of Europe and North America.

Over time, Fresnel lenses were built in different "orders" or sizes, depending on how far a light-

house's light needed to be seen. The largest lenses were "first order" lenses that contained over a thousand glass prisms and weighed several tons. They were used primarily along the Atlantic and

Manistique, Mich. was a bustling port for shipments of lumber and iron ore.

To provide safer harbor for the increasing number of ships using this Lake Michigan port, the U.S. Army Corps of Engineers began construction of a pair of concrete breakwater piers on each side of the mouth of the Manistique River in 1913. Following the piers construction, the U.S. Lighthouse Board constructed a pierhead lighthouse at the end of the east breakwater in 1915.

The Manistique Lighthouse was constructed of steel plate, and its light and Fresnel lens were placed 35 feet above Lake Michigan in a cast iron lantern room which rested on a steel tower. In 1969, the U. S. Coast Guard automated the lighthouse and the Fresnel lens was replaced with a plastic lens.

MILWAUKEE LIGHTHOUSE

A second lens in the Museum's collection is from the Milwaukee Breakwater Lighthouse, which was built in 1926. Located in the center of a four mile long breakwater, the light stands 53 feet above the water.

The Milwaukee Lighthouse was one of the last lighthouses built on the Great Lakes and was maintained by

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Pacific coasts. Most of the lenses in the Great Lakes region were smaller, fourth or fifth order lenses.

MANISTIQUE LIGHTHOUSE

The Wisconsin Maritime Museum's lens collection includes a fourth order Fresnel lens from the Manistique East Breakwater Lighthouse in Michigan's Upper Peninsula. By the early 1900s,

From the Director's Desk

Well, the busy summer season is behind us and this would normally be the beginning of the "slow" season here at the Wisconsin Maritime Museum.

But we're moving in a new direction this fall as we work to become a year-round museum dedicated to telling the stories of hard work, courage and sacrifice that are the maritime history of Wisconsin. Museum members have probably already noticed the difference with the now-weekly arrival of postcards announcing upcoming programs and activities.

MORE PROGRAMS, ACTIVITIES AND EVENTS

Whether your interest is captivating speakers or exciting performances, our goal is to insure that there is always something "going on" at the Wisconsin Maritime Museum for you.

Our expanded schedule of programs and events, which will grow to include both Saturday and Sundays in the coming months (see this issue's Calendar for details), is part of a concerted effort to offer activities at the Wisconsin Maritime Museum every weekend between Labor Day and Memorial Day.

We're also scheduling activities during daytime hours so that they are more convenient for members and visitors who live within a 90-minute drive of the Museum. Although we've historically done a good job of attracting visitors from the Milwaukee and Chicago areas, we've often missed "day trippers" from areas like Green Bay, the Fox Cities, Oshkosh, Fond du Lac, and Sheboygan.



In addition to making our programs and events more convenient for visitors and members, we've also embarked on a promotional campaign using weekly advertising and publicity to increase Northeastern Wisconsin's awareness of a unique treasure in their own backyard – the Wisconsin Maritime Museum.

MORE NEW EXHIBITS

To compliment our expanded schedule of activities, we're making a renewed effort to insure that the Wisconsin Maritime Museum is a "fresh" experience for both first- and long-time visitors.

We're now committed to offering several new and exciting temporary exhibits each year, such as "Of Ships and Men – The *Edmund Fitzgerald*" which opened on November 8, and "Nautical Dreams under the Christmas Tree" which opens on November 29. With our recent acquisition of a large collection of vintage maritime toys, we hope that a new version each year of "Nautical Dreams" becomes a new Lakeshore holiday tradition.

And come January, work begins in earnest on "Hot Boats on Cold Water – Racing to Win on Wisconsin's Inland Waters and Great Lakes" which will be our first major temporary exhibit in almost four years.

In addition to 2,500 square feet of new displays at the Museum, there will also be a traveling exhibit, featuring displays and a 42-foot off-shore powerboat racer, which will be displayed at sites throughout Wisconsin during 2004. It will be at the Edgelake Plaza in Manitowoc beginning in January.

Help Us with the Voyage Home



One of the reasons Great Lakes mariners risked the "Gales of November" was the fact that those last couple of cargos before the final voyage home often made the difference between a financially profitable or unprofitable year.

So it is with the Wisconsin Maritime Museum as we near the end of our first year in our newly-expanded facility. With our new exhibits and attractions, we were able to achieve an increase in admission revenues in 2004, while most other museums in the country experienced a decline due to the struggling economy.

However, with a new facility came increased operating costs and our annual expenses are now at just over \$1 million per year. Although admissions and museum store sales cover a major portion of those expenses, we still needed to raise \$250,000 in grants and donations in 2003 to financially breakeven.

We've raised over \$170,000 in the first part of the year. If our year-end appeal can raise an additional \$80,000 for our "final voyage of the season" we will have completed one of the most successful years in the history of the Wisconsin Maritime Museum. Therefore, we ask you to please be generous.

YOUR SUPPORT IS THE KEY

As a supporter of the Wisconsin Maritime Museum, you are the key to the success of our efforts to become a truly, year-round museum.

Although we have a dedicated staff, many more hands will be needed to successfully offer the programs, events and exhibits planned for the coming year. Whether you can spare a few hours per month or a few hours per day, please consider becoming a Museum volunteer. We have many wonderful and interesting opportunities described in this issue of *Anchor News*.

In addition, please be as generous as possible in your response to our

recently-mailed, year-end appeal. Although an increasing number of visitors will pay for part of the cost of offering new programs, events and exhibits, donations will still be needed to fund 25% or more of our annual operating costs for the foreseeable future.

And, as an independent museum, we rely on your generosity for that funding and we thank you for your continued support.

Bob O'Donnell
Executive Director
rodonnell@wisconsinmaritime.org

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The Wisconsin Maritime Museum is a private non-profit organization located in Manitowoc, Wis. Founded in 1968 as the Manitowoc Submarine Memorial Association, Inc., the Museum is dedicated to the preservation and interpretation of local, state and regional maritime history.

The Museum has a membership program and distributes the *Anchor News* quarterly to the membership. Other membership benefits include: unlimited free admission to the Museum and U.S.S. Cobia, and discounts for purchases in the Museum Store, research services, and special events.

Membership Categories include: Senior/Student (\$25), Senior Couple (\$35), Individual (\$40), Family (\$60), Sustaining (\$100), Sponsor (\$250) and Benefactor (\$500). The Museum also has four levels of patron society membership available.

Accredited by the American Association of Museums, the Wisconsin Maritime Museum is also a member of the Association of Midwest Museums, Wisconsin Federation of Museums, Association for Great Lakes Maritime History, Council of American Maritime Museums, International Congress of Maritime Museums, Historic Naval Ships Associations, and the American Association for State and Local History.



Looking for more information on upcoming events?
Looking to volunteer? You can now call us toll free at
1-866-724-2356

Upcoming Programs, Activities and Events

Note: Programs are subject to change. To confirm dates and times, please call the Wisconsin Maritime Museum toll free at 1-866-724-2356; or 684-0218.



November 22 -

Holiday Cooking at the Lighthouse

Come sample traditional holiday foods from the lighthouses and life saving stations of the Great Lakes, and learn how to prepare old holiday favorites in new and healthy ways. Make sure to bring along your favorite recipe for inclusion in the upcoming Wisconsin Maritime Museum Cookbook.

Time and Location: 2-4 p.m. in the Riverview Room.

November 29 - Exhibit Opening: "Nautical Dreams Under the Christmas Tree"

Remember the special holiday window displays of area department stores when you were a kid? We're bringing back that tradition with a special display of vintage nautical toys set under period Christmas trees. Exhibit runs thru January 4. Come remember a bit of the spirit of Christmas past! Time and Location: 1 p.m. in the Temporary Gallery.



December 6 -

First Annual Maritime Christmas Market

Looking for a unique holiday gift for that person with an interest in all things nautical? We've arranged for a special group of dealers in maritime collectibles, artwork and antiques to sell their wares at the Wisconsin Maritime Museum, just in time for Christmas. Time and Location: 9 a.m. to 4 p.m. in the Riverview Room.

December 13 - Reed Marionette's Production of "Treasures of the Great Lakes"

If you enjoy the Muppets of Sesame Street fame, you and your children or grandchildren will love an afternoon with the famous Reed Marionettes as they perform a special program about the history of the Great Lakes and those who sailed on them.

Time and Location: 1 p.m. in the Adventure Center.

December 20 - 1st Annual Manitowoc-Two Rivers Christmas Tree Ship Celebration

Until the mid-1900s, many people along the Great Lakes bought their Christmas trees from the deck of a ship rather than a parking lot. Come celebrate that tradition when a "Christmas Tree Ship" with a deckload of trees for a special group of area families arrives at the Wisconsin Maritime Museum from the Rogers Street Fishing Village in Two Rivers. Holiday refreshments and activities will follow inside the Museum.

Time and Location: 1 p.m. in Shipbuilder's Park just west of the Museum.



January 3 - Nautical Relief Carving Workshop (Part I)

Beat the winter blues by learning the techniques of nautical relief carving from master craftsman Richard Young. There will be a charge of \$5 to cover the cost of materials (note: the second part of this workshop will be held on January 17). Time and Location: 11 a.m. in the Adventure Center.

January 3 - "A Brief History of the U.S. Navy on the Great Lakes"

From the construction of the U.S. Navy's first iron ship, the *U.S.S. Michigan*, on the shores of Lake Erie in the 1840s to the role of the Great Lakes state Naval Militias in the Spanish-American War, Executive Director Bob O'Donnell will talk about the Navy's impact on Great Lakes maritime history. Time and Location: 1 p.m. in the U.S.S. Cobia Interpretive Centers' Theater



January 10 - Boatbuilding for Kids - Build a Great Lakes Freighter!

We'll provide the materials and the tools. You and your children or grandchildren will have all the fun! Project takes about 30 minutes to complete. There will be a charge of \$10 to cover the cost of materials. Time and Location: 11 a.m. in the Adventure Center

January 10 - "Timber Rafting - From the Pineries to the Markets"

Each spring, hundreds of hardy lumberjacks braved the raging rivers of northern Wisconsin to deliver that winter's harvest of logs to market. Once they reached the waters of the Great Lakes, the adventure continued for some as huge "rafts" of logs were assembled for delivery to saw mills further south. Author and researcher Hank Whipple will look at the men and ships that accomplished this feat of transportation. Time and Location: 1 p.m. in the Riverview Room.

January 17 - Nautical Relief Carving Workshop (Part II)

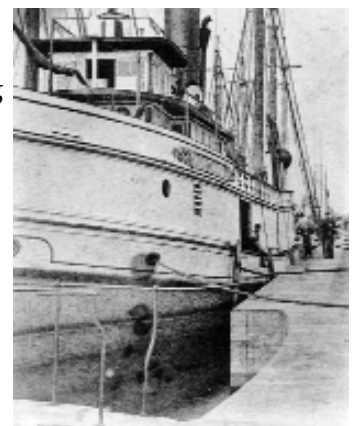
Beat the winter blues by learning the techniques of nautical relief carving from master craftsman Richard Young. There will be a charge of \$5 to cover the cost of materials (note: the first part of this workshop will be held on January 3). Time and Location: 11 a.m. in the Adventure Center.

January 17 - "Remembering the Recovery of the Schooner Alvin C. Clark"

In the 1960s, a band of determined sport divers with a little bit of luck and a lot of daring located and raised an intact sailing schooner from the waters of Green Bay. And she floated when she reached the surface! Dr. Dick Boyd, a member of the expedition that raised the schooner *Alvin C. Clark*, recounts the expedition and schooner's later demise. Time and Location: 1 p.m. in the Riverview Room.

January 24 - "Immigration & Tragedy: The Steamer Phoenix"

They had survived the long sea voyage from their homelands in Europe, and been traveling for days west on the Great Lakes from Buffalo. But for many of the more than 200 immigrants on the passenger steamer *Phoenix*, the promised land was just a few short hours away. Historian Bill Wangemann will tell how quickly most of their lives changed in one night when the steamer caught fire and burned within sight of Sheboygan Wis. Time and Location: 1:30 p.m. in the Riverview Room.



January 31 - Maritime Antique Road Show

Bring those maritime treasures out of the attic and find out what are they really worth in terms of both dollars and history at this nautical take-off of the popular Public Television series. Local appraisers and the Museum's curatorial staff will be on-hand to help identify and determine an approximate value for your family's maritime "treasures." Time and Location: 9 a.m. to 4 p.m. in the Riverview Room.

February 1 - Swashbuckling Sundays at the Movies

Join us for an old fashion afternoon at the movies featuring one of Hollywood's best tales of excitement and romance on the high seas shown on a wide screen with stereo surround sound. And the popcorn is free! Time and Location: 1 p.m. in the U.S.S. Cobia Interpretive Center's Theater.

February 7 - "The World of Wooden Kayaks"

Boat builders Mark and Celeste Rogers of Superior Kayaks of Wisconsin will present a program on the craftsmanship involved in creating wooden kayaks and the different types of kayaks found around the world. Time and Location: 1 p.m. in the Riverview Room.



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Upcoming Programs, Activities and Events

February 8 - Art Sundays at the Maritime Museum: Making a Sailor's Box

Just in time for Valentine Days learn how to make a piece of maritime history - "Sailor Boxes" which were given by sailors to their wives and sweethearts after a long sailing voyage or season away from home.
Time and Location: 1 p.m. in the Adventure Center

February 8 - Swashbuckling Sundays at the Movies

Join us for an old fashion afternoon at the movies featuring one of Hollywood's best tales of excitement and romance on the high seas shown on a wide screen with stereo surround sound. And the popcorn is free!
Time and Location: 1 p.m. in the U.S.S. Cobia Interpretive Center's Theater.

February 14 - Boatbuilding for Kids - Build a Great Lakes Tug Boat!

We'll provide the materials and the tools. You and your children or grandchildren will have all the fun! Project takes about 30 minutes to complete. There will be a charge of \$10 to cover the cost of materials.
Time and Location: 11 a.m. in the Adventure Center.

February 14 - Lakeshore Maritime Music Series: David H.B. Drake

This Saturday's concert will feature a performance of traditional maritime music entitled "Shorelines" by singer and songwriter David H.B. Drake of Milwaukee.
Time and Location: 1 p.m. in the Riverview Room.



February 15 - Swashbuckling Sundays at the Movies

Just in time for Valentine's Day is the classic "The Ghost and Mrs. Muir" - a comical and sometimes touching story about a young widow and the salty sea captain who "haunts" her seaside cottage. Shown on a wide screen with stereo surround sound. Come join us and the popcorn is free!
Time and Location: 1 p.m. in the U.S.S. Cobia Interpretive Center's Theater.

February 21 - "Mystery Schooner at 40 Fathoms"

More than a hundred feet down on the bottom of Lake Michigan southwest of Manitowoc lies a mystery - a small sailing schooner with no name. Researcher and shipwreck diver Brendon Baillod will discuss the discovery of the schooner and the ongoing search to determine the ship's identity and how it was lost some time in the 19th century.
Time and Location: 1 p.m. in the Riverview Room.



February 22 - Swashbuckling Sundays at the Movies

Join us for an old fashion afternoon at the movies featuring one of Hollywood's best tales of excitement and romance on the high seas shown on a wide screen with stereo surround sound. And the popcorn is free!
Time and Location: 1 p.m. in the U.S.S. Cobia Interpretive Center's Theater.

February 28 - Boatbuilding for Kids Special - Let's Build A Lighthouse!

We'll provide the materials and the tools. You and your children or grandchildren will have all the fun! Project takes about 30 minutes to complete. There will be a charge of \$10 to cover the cost of materials.
Time and Location: 11 a.m. in the Adventure Center.

February 28 - "Wreck Ashore: Stories of Storm Heroes Saving Lives on the Great Lakes"

Renowned author and historian Fred Stonehouse will explore the exploits of those who served in the U.S. Life-Saving Service on the Great Lakes, and how their courage literally meant life and death for countless shipwreck survivors. There will also be a book signing for Stonehouse following the presentation.
Time and Location: 1 p.m. in the Riverview Room.

February 29 - Swashbuckling Sundays at the Movies

Join us for an old fashion afternoon at the movies featuring one of Hollywood's best tales of excitement and romance on the high seas shown on a wide screen with stereo surround sound. And the popcorn is free!
Time and Location: 1 p.m. in the U.S.S. Cobia Interpretive Center's Theater.

March 6 - Exhibit Opening: "Sleeping Giant - the Edward L. Ryerson"



Come view this special exhibit of dramatic photographs by Chris Winters and commentary on what many believe is the most architecturally beautiful freighter on the Great Lakes and the last such freighter ever built in Manitowoc, Wis.
Time and Location: 11 a.m. in the Riverside Gallery.

March 6 - "Schooner Passage: Sailing Ships and the Lake Michigan Frontier"

Although they lacked the beauty and majesty, the Great Lakes scow schooners played a pivotal role in the opening of the American West to trade and settlement. Author and historian Ted Karamanski will talk about the schooner's role in our nation's early history. There will also be a book signing his book by the same title following the presentation.
Time and Location: 1 p.m. in the Riverview Room.

March 6 - Wisconsin Maritime Hall of Fame Weekend

Come celebrate the people and businesses of Wisconsin's maritime industries, past and present, with a day of programs and events. Following the induction of this year's Maritime Hall of Fame honorees there will be dinner and special speaker in the Riverview Room. More information in the Winter 2004 issue of *Anchor News*.

March 7 - Art Sundays at the Maritime Museum: Nautical Stamping

Bring out the artist that you know is within you, and come discover the fun and artistry of stamping with a nautical twist. There will be a charge of \$10 to cover the cost of materials.
Time and Location: 1 p.m. in the Adventure Center.

March 7 - Boatbuilding for Kids - Build a Powerboat Racer!

We'll provide the materials and the tools. You and your children or grandchildren will have all the fun! Project takes about 30 minutes to complete. There will be a charge of \$10 to cover the cost of materials
Time and Location: 11 a.m. in the Adventure Center.

March 13 - Exhibit Opening: "Hot Boats on Cold Water - Racing to Win on Wisconsin's Inland Waters and Great Lakes"



Prior to the opening, Mark Nemschoff of Sheboygan will discuss his successful attempt to break the Chicago to Milwaukee water speed record in a 42-foot offshore powerboat racer, which is featured in a new traveling exhibit.
Time and Location: 11 a.m. in the U.S.S. Cobia Interpretive Center.

Burger Boat Company's Roots in Wisconsin date back to 1857

To tell the history of the Burger Boat Company and give it proper justice we must go back to 1846 when Simon and Margareta Brauburger left their home in Bad-Homburg-Ober-Erlinbach, Deutschland, and immigrated to the United States with their five children.

Upon arriving, the family shortened their name to Burger and established their home in Jeffersonville, Sullivan County, New York. In 1856, the Burger family relocated to Milwaukee, Wisconsin. In 1857, at the age of 18, young Henry began honing his skills by apprenticing as a shipbuilder at Milwaukee's Wolf & Davidson Shipyard.

In 1863, at the age of 24, he married Mary Esslinger, the daughter of a prominent German businessman from Manitowoc, Wis., a small community on the shores of Lake Michigan some 80 miles north of Milwaukee. It was there, during the midst of the Civil War, that Henry Burger began producing small, 20' -30' Mackinaw fishing boats for local commercial fishermen. His expertise and penchant for building extremely high quality vessels quickly became known on the Great Lakes.

FROM HENRY SR. TO HENRY JR.

In 1870, during the heyday of wooden sailing ships, Burger and Greene Rand consolidated their shipyards to form the Greene Rand, Burger Shipyard. This partnership continued until Rand's death in 1885. In 1886, Henry took his nephew, George B. Burger into partnership forming the Burger & Burger Shipyard. In 1887, envisioning the decline of new wooden sailing ships, they purchased the only dry dock in Manitowoc to begin a ship repair business.

Between 1870 and the turn of the century, the Burger brand name appeared on almost 100 vessels, including steamers, tugs, scows, schooners and barges. Without question, the name was synonymous with quality and craftsmanship. In 1902, Henry B. and George B. Burger, after almost 40 years in business, sold their shipyard to the Manitowoc Dry Dock Company, newly formed by John West, Elias Gunnell I and William Geer. This company evolved into The Manitowoc Company of today.

Henry B., then known as Henry, Sr., retired but the Burger name continued in shipbuilding. Ten years earlier, in 1892, his nephew Henry B. Burger, Jr. formed his own company, the Henry B. Burger Shipyard, just across the river from his uncle. This is the current site of the Burger Boat Company.

Henry Jr. was very innovative and a true visionary. While he also began



Managers and employees of the Burger Boat Company gather for a photo in 1918 (from the collection of the Wisconsin Maritime Museum)

by building small sailing and fishing vessels, Burger quickly recognized the potential of the newly developed gasoline engine. With engines being locally produced by Kahlenberg Brothers of Two Rivers, Henry Jr. began installing them in his launches.

BURGER BOAT COMPANY

When Henry died in 1914, his wife and four children, Henry C., George M., Walter and Caroline assumed ownership and management of the yards. In 1915, they incorporated as Burger Boat Company.

Between 1914 and 1920, the company's reputation for wooden shipbuilding was such that the U.S. Navy ordered nine vessels - wooden minesweepers, subchasers, tugs and rescue craft. Burger also built thirteen 90' wooden tugs for the U.S. Army. The years following World War I saw the company build many large luxurious wooden cruisers and some sailboats for the civilian pleasure market.

With the advent of electric arc welding, Burger developed techniques for the construction of an all welded steel hull for pleasure craft. In 1938, Burger built the first all-welded steel auxiliary ketch in the U.S., the 81' *Tamaris*. This new technology helped the company survive the depression years of the thirties by building steel fishing vessels. It proved to be a far more practical item than luxury yachts.

World War II began, and the U.S. Army and Navy ordered 55 vessels over a five-year period from Burger. Utility craft, steel tugs, crash boats, rescue boats, minesweepers and sub-chasers slid down the ways in rapid succession.

POST-WORLD WAR II YEARS

After the war, Burger devoted his efforts to producing pleasure boats. Luxury cruisers and auxiliaries were built and a line of custom and semi-custom yachts were introduced in 1949

In 1951, the Navy once again ordered seven craft -- two 138' wooden minesweepers and five 170'

wooden minesweepers. That brought the total number of military vessels produced by Burger Boat Company to 84.

The year 1952 brought another major innovation. Because of Burger's long reputation for building America's finest yachts, the company was approached by the Reynolds family of Reynolds Metals Company to work on an experimental hull utilizing a new alloy - aluminum.

With the development of MIG & TIG welding, the collaboration produced America's first all welded aluminum vessel, the 36' cruiser *Virginia*, in 1955. Steel yacht construction at Burger ended in the early 1960's and the company focused on the design and construction of luxury aluminum motor yachts. The heyday of flush decks, cruisers, houseboats, raised and semi-raised pilothouse motor yachts continued through the sixties, seventies and into the eighties. The company worked with such notable naval architects as Sparkman & Stephens, J.B. Hargrave, C. Raymond Hunt, and Don O'Keefe.

The year 1977 saw the launching of the largest fully-found aluminum yacht ever built in the U.S., the 125' *Arara*. She was built as a corporate yacht for Illinois Tool Works and has since been extended to 130'. Burger's prosperity continued. However, a black cloud was looming over the company, as there was much strife behind the scenes.

THE TURBULENT 1970'S AND 80'S

Union and labor problems ensued in the late 1970's and reoccurred in the early 80's. Finally, in October 1986, due to declining health, continuing union problems, a horrible lawsuit, a sullen and beaten down Henry E. Burger sold the company to John McMillian, a customer for whom the company was building an 86' yacht.

Burger continued to prosper and for the period between 1985 and 1990, almost half of all the registered motor yachts over 80 feet produced in the U.S. were built by Burger

Boat Company. McMillian sold Burger in April 1989, to United Shipbuilders of America, a newly-created subsidiary of Tacoma Boatbuilding Company.

Fresh out of Chapter 11 reorganization, Tacoma's strategy was to expand operations beyond its diminishing military shipbuilding by acquiring Burger and Striker sportfishing yachts and entering the pleasure boating market. Unfortunately, the unexpected loss of several large naval contracts, newly instituted luxury tax and some questionable management decisions caused a struggling Tacoma to abruptly suspend operations.

On Friday, Nov. 30, 1990, the closing of the Burger yard was ordered by a faxed message from Tacoma just 20 minutes before the end of the shift. As they were waiting to collect their non-existent weekly wages, 167 employees were told to take their toolboxes and not report to work until further notice.

REBIRTH IN THE 1990'S

In response to the abrupt closure, the skilled craftspeople and employees formed the group "FBW" which stood for Former Burger Workers to stay in communication with each other in hopes their company, their pride and their boatbuilding heritage would someday continue.

Hearing of Burger's plight about a year after the closure, businessman David Ross along with friend and business associate, Jim Ruffolo traveled to Manitowoc. Ross and Ruffolo met with a FBW representative and city officials. They learned that the company had been abandoned by Tacoma with a quagmire of debt, liens and encumbrances totaling more than \$13 million.

The two men also discovered, however, an incredible spirit and enthusiasm in the FBW's and a remarkably strong, community-wide commitment to regain their once proud shipbuilding heritage. After many meetings, Ross and Ruffolo decided to make an equal commitment to relocate to Manitowoc and lead the effort to coordinate, finance and facilitate Burger Boat Company's return to the industry.

The "new" Burger Boat Company had an emotional chain cutting ceremony proclaiming its grand reopening on Friday, Feb. 5, 1993, just 26 months after the Tacoma closure. As of the end of 2002, the company had built and launched 21 vessels and had another five under construction, with two vessels under commitment waiting to start.

This story was written by Fred Pospeschil with additional information from the Burger Boat Company web site at burgerboat.com

Planned Giving Could be Your Opportunity to "Leave a Legacy"

The idea of "leaving a legacy" has a variety of meanings to people. In Wisconsin, the word "legacy" has often been associated with the values of tradition, quality, and integrity.

Creating your own legacy is something anyone can do through a planned gift to a non-profit, charitable organization, such as the Wisconsin Maritime Museum.

By naming the Museum as a beneficiary in your will, trust, life insurance policy, or individual retirement account, you have an opportunity to create a meaningful, long-lasting gift.

"Planned giving strategies make absolute sense from a personal financial management perspective, especially when gifts are made with alternative assets or when the gift occurs over an extended period of time," notes John Cress, donor, Wisconsin Maritime Museum Treasurer and president of Access Investment Advisors.

"It is also very important to document and communicate your intentions," John adds. "This enables the Museum to make sound financial decisions today so your gift will have a positive effect on the lives of those who visit or utilize its services for many generations to come."

For example, Wisconsin Maritime Museum supporters Edward and Mary Fordney recently chose a Charitable Remainder Trust to secure their legacy to the Museum and other non-profit organizations.

Using a lump sum amount to create the trust, the Fordney's structured the trust with a maturity date. Interest is accrued in the trust until its maturity date at which time the non-profit beneficiaries will each receive an equal share of the original investment.

Life insurance policies are another very popular form of planned giving. Your favorite organization can be named as the beneficiary



and receive the benefits when the policy comes to term.

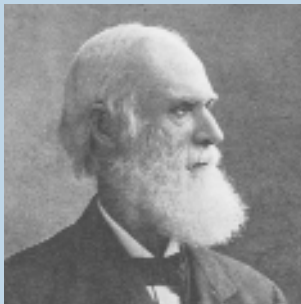
If you would like additional information on planned giving opportunities, please contact Patty Ressler, the Wisconsin Maritime Museum's Development Manager toll free 1-866-724-2356, or in Manitowoc area, call 684-0218, ext.105.

And after you have created your legacy with a planned gift to the Museum, please let us know. Remember, a legacy is a gift that will last a lifetime.

This story was written by Patty Ressler, Development Manager for the Wisconsin Maritime Museum. Her e-mail address is pressler@wisconsinmaritime.org

New Wisconsin Maritime Museum Patron Societies

Museum membership is a way for individuals, families, and businesses to provide annual financial support for the historic preservation and educational missions of the Wisconsin Maritime Museum. As an independent, non-profit organization, this support is critical to the financial success of the Museum.



The William W. Bates Society

In 1854, William W. Bates designed and built the *Clipper City*, one of the most innovative sailing schooners on the Great Lakes. The new schooner's design heralded major improvements in both speed and cargo-carrying capacity. Its success led to Manitowoc, Wis. becoming a major center for shipbuilding on the Great Lakes during the second half of the 19th century, and a reproduction of a cross section of the *Clipper City* is now one of the centerpiece exhibits of the Wisconsin Maritime Museum's Permanent Gallery.

William W. Bates Society Members annually contribute \$10,000 or more.



The Albert E. Goodrich Society

Born in 1826, Albert E. Goodrich went on to become both a ship's captain and founder of one of the most famous shipping companies on the Great Lakes, the Goodrich Transportation Co. Established in 1856, the company grew quickly providing cargo and passenger service to the rapidly growing state of Wisconsin. Known for its innovative and well-maintained steamers, the Goodrich Line was one of the oldest shipping companies on the Great Lakes when it ceased operations in 1933. Artifacts from its unique whaleback passenger steamer *Christopher Columbus* are now on display in the Wisconsin Maritime Museum.

Albert E. Goodrich Society Members annually contribute \$5,000 or more.



The Edward Carus Society

Edward Carus was both a Great Lakes ship's captain and a prolific writer on the region's maritime history. Born in Manitowoc in 1860, Carus first shipped out at the age of 14 aboard the schooner *Loona* and achieved the rank of captain at the age of 23. After he retired from sailing in 1917, he went on to a second career with the Manitowoc Shipbuilding Co. Over the years, he amassed a considerable collection of photographs, records and clippings which became the foundation of the Wisconsin Maritime Museum's Carus Collection in 1981.

Edward Carus Society Members annually contribute \$2,500 or more.



The Timothy J. Kelly Society

Timothy J. Kelly was given command of his first ship in 1872 at the age of 22 making him one of the youngest captains on the Great Lakes. His 61-year career included service aboard both sailing ships and steamers, and his log has been described as "the history of some of the best known ships that ever sailed the Great Lakes."

Portions of that log are now in the collection of the Wisconsin Maritime Museum.

Timothy J. Kelly Society Members annually contribute \$1,000 or more.

Memorial to Manitowoc-built Submarines Dedicated in Peoria



On Oct. 11, 2003, the twenty-eight U.S. Navy submarines built in Manitowoc, Wis. during World War II were remembered along the banks of the Illinois River at the dedication of an historical marker in Peoria, Ill.

Following their construction in Manitowoc, the submarines sailed under their own power to Chicago and were then transported by floating dry dock down the Illinois and Mississippi Rivers to New

Orleans. One of the communities along that journey was Peoria, and those who made the voyage remember how the town turned out to welcome each of the subs as they passed.

The new historical marker is a one-ton granite memorial dedicated to the twenty-eight submarines built in Manitowoc. It took over two years for members of the Peoria Base of the United States Submarine Veterans, Inc., to generate the funds

and community support needed to install the memorial at Liberty Park on Peoria's riverfront.

Curator Bill Thiesen represented the Wisconsin Maritime Museum at the dedication and was its keynote speaker. In his speech, Thiesen discussed the Manitowoc-built boats and how they represented "the ingenuity, craftsmanship and hard work of all Midwesterners."

Thiesen noted that the founders of Manitowoc Shipbuilding Co., Charles West and Elias Gunnell, moved to Manitowoc from Chicago; and the workers who built the submarines during the war years came from all over Wisconsin. In addition, many of those who served aboard the submarines had Midwest roots and others returned to Manitowoc after the war to work and raise families.

"Building the Manitowoc boats was an engineering feat," Thiesen noted, "not only because the submarines were built in Wisconsin's cold climate and the need to slide launch

vessels into the Manitowoc River, but also because obstacles to transporting the submarines to sea had to be overcome."

The Saint Lawrence Seaway was built after World War II, so Manitowoc Shipbuilding designed and built a special floating dry dock that could lessen the 15-foot draught of the submarines to eight feet. This allowed them to be shipped down the Illinois River past Peoria and then down the Mississippi to New Orleans.

Upon arriving in New Orleans, the submarines took on torpedoes and stores, and sailed for Panama and the Pacific theater of operations. The Peoria memorial dedication was followed by a reception and dinner at the historic Hotel Pere Marquette, where Thiesen invited all of the attending submarine veterans to join the Wisconsin Maritime Museum during the upcoming Manitowoc 28-Boat Submarine & Shipyard Workers Reunion to be held October 5-10, 2004.

Volunteers Help Survey the Wreck of Bulk Freighter Continental

On Tuesday, October 9th, the Wisconsin Maritime Museum's Curator Bill Thiesen and a team of Museum volunteers set out on a small voyage of discovery along the western shore of Lake Michigan.

Their quest was to locate and identify the wreck of a ship that sank almost one hundred years ago in the waters north of Two Rivers, Wis. The team included Museum volunteers Fred Pospeschil, Don DuBois, Larry Bohn, and Mary Thiesen.

On Dec. 13, 1904, the bulk freighter *Continental* was steaming south along western Lake Michigan to receive an overhaul at the Manitowoc Shipbuilding Company. The ship nearly reached its destination before a severe blizzard produced white-out conditions on the lake and the vessel lost its bearings.

The *Continental* subsequently ran aground just north of Two Rivers in less than ten feet of water. Fortunately that close to shore, the entire crew was rescued. Several attempts were later made to refloat the vessel, but none succeeded.

The George Presley Shipyard of Cleveland, Ohio, built the *Continental* in 1882 for the Republic Iron Co., of Marquette, Mich. One of two vessels of its class, the ship was designed to transport bulk cargoes, such as iron ore and coal. Its hull was built of wood and had a length of 245 feet and a capacity of 2,200 tons.

The *Continental* boasted a compound steam engine equipped with two cylinders -- a high-pressure cylinder and a low-pressure one. The earliest forms of marine steam engines, which first appeared in the early nineteenth

century, had only one cylinder. By the mid-to-late 1800s, the compound engine became commonplace.

By the late-nineteenth century, however, compound engines, such as the one aboard the *Continental*, were being outmoded by more efficient and powerful triple-expansion steam engines. A triple expansion engine is now on exhibit in the Wisconsin Maritime Museum.

The team from the Museum reached the wreck of the *Continental* about half-an-hour out of Two Rivers by boat. It was easy to spot the ship's wreck site because Lake Michigan's unusually low water levels have allowed the wreck's engine cylinder heads to protrude above the water's surface. The reason for the recent expedition was to ascertain the condition of

the wreck and the underwater environment surrounding it, as a possible research site for the Wisconsin Historical Society or as part of a field school sponsored by the Historical Society for graduate students studying marine archeology. The Wisconsin Maritime Museum periodically cooperates with Historical Society's Office of Underwater Archaeology to support shipwreck research.

Maritime Museum officials hope that the wreck site of the *Continental* is sufficiently rich in history and archaeological remains to provide the setting for future research work by the Historical Society.

This story was written by Bill Thiesen, Curator of the Wisconsin Maritime Museum. His e-mail address is bthiesen@wisconsinmaritime.org

Group Tours and Overnights Remain Busy in Fall and Winter

Although the busy summer season is behind us, the fall and winter seasons see an increase in the number of group visitors to the Wisconsin Maritime Museum.

GROUP TOURS

During September and October, the Wisconsin Maritime Museum hosted over 850 visitors who were part of group tours. Most of these visitors were seniors from Wisconsin, Illinois, Minnesota and North Dakota taking in bus trips.

Although most of our school field trips are in the spring of the year, we did have approximately 350 school children come to the

Museum this fall. The children's favorite parts of the Museum experience continue to be tours of the U.S.S. Cobia, activities in the new Children's Waterways Room and programs by our Museum Educator, Wendy Lutzke.

OVERNIGHT PROGRAM

Overnight programs aboard the Cobia are still the most popular group experience at the Wisconsin Maritime Museum. In addition to a night in the crew's quarters, participants learn about life aboard a World War II submarine by taking part in a variety of onboard activities, such as standing watch and writing Victory Mail or V-Mail

messages that must pass the muster of wartime "censors."

Although Fridays and Saturdays are already booked through May of 2004, Submarine Overnights Programs can be booked any night of the week, year-round. For example, some groups take advantage of school in-services and teacher conventions to book overnights on Thursdays.

FAMILY OVERNIGHTS

During 2004, the Wisconsin Maritime Museum will again be hosting several family overnight programs. The current dates are July 23, July 24, August 13, and

August 14. The cost is \$30 person, and what a great Christmas gift for the person that has everything!

One of the special features of the Family Overnight program is the participation of World War II submarine veterans who talk about their experiences onboard the submarine. What a priceless opportunity to hear first hand the stories of courage and sacrifice of what many refer to as the "greatest generation!"

This story was written by Marlys Schwantz, the Wisconsin Maritime Museum's Group Services coordinator. Her e-mail address is mschwant@wisconsinmaritime.org

Former Passenger Steamers Played Unique Role in World War II History

Note: This a continuation of a story that appeared in the Summer 2003 issue of *Anchor News*.

The *U.S.S. Wolverine* and *U.S.S. Sable*, both former Great Lakes passenger steamers, were a unique part of World II history in many ways.

The ships were powered by two side paddlewheels which turn in the same direction. The U.S. Navy had not used paddlewheel vessels in the active fleet for many years. In addition, the steamers used special brand of coal called "Pocahontas coal" in their boilers.

Pocahontas coal was supposedly used to produce less exhaust smoke, which would hamper flight operations. However, both ships continued to trail heavy dark plumes off Chicago during training exercises.

The *Wolverine* and *Sable* also had a much lower "freeboard" than their ocean going counterparts. The freeboard, or distance between the top of the water and the top of the flight deck, on most World War II carriers was between 60 and 70 feet. The *Sable* and *Wolverine* had only 28 feet of freeboard.

A lower freeboard could make takeoffs difficult from the vessels since aircraft tend to drop several feet when they leave a carrier's deck. However, no such takeoff accidents relating to freeboard were recorded on either ship during the war.

When the *Sable* and *Wolverine* sailed out onto Lake Michigan they were joined by a small "task force" of support vessels. The freighter *Commerce* served as a ferry for personnel, carried supplies, and was equipped with a crane, which was used to take some crippled planes to shore and to try and salvage ones that ended up in the water.

The small cabin cruisers *Lark* and *Peregrine*, along with U.S. Coast Guard cutters, were stationed around the ships to recover pilots from downed planes. These were referred to as the "crash boats."

During their training, pilots needed to become familiar with the variety of planes that were used by the Navy in carrier operations. As a

result, a wide variety of aircraft were used to train pilots on the Great Lakes, many aircraft that had seen combat action.

Among the aircraft used aboard the *Wolverine* and *Sable* were the Grumman F4F Wildcat and F6F Hellcat fighters, the SBD Dauntless dive bomber, the TBF Avenger torpedo bomber, and the trainer AT6 North American Texan. One of the pilots who trained aboard the *Wolverine*, Leonard Watson, later recalled:

"My experience was limited to qualifying in an SBD-4 #10442 on October, 1943 - a stripped down (all guns and armor plate removed) plane that was a joy to fly and because of its light weight could have made a great fighter plane. We all had a ball wringing it out after qualifying on the flight back to Glenview."

The *Wolverine* and *Sable* both operated from dawn to dusk usually anchoring in Chicago Harbor at night. Each day, the ships would pickup their hooks around 3 am and proceed north out into the lake. They would sail up and down the lake sometimes sailing all night if they ventured too far north.

HAZARDS OF FLIGHT OPERATIONS

Flight operations, however, went on year round so the crew and pilots had to endure both the intense one hundred degree heat of summer as well as the below zero temperatures of a Chicago winter.

During the winter, Coast Guard ice breakers keep the lower lakes clear for both the carriers and freighters. But sometimes, bad weather, high winds and pounding waves would cancel flight operations.

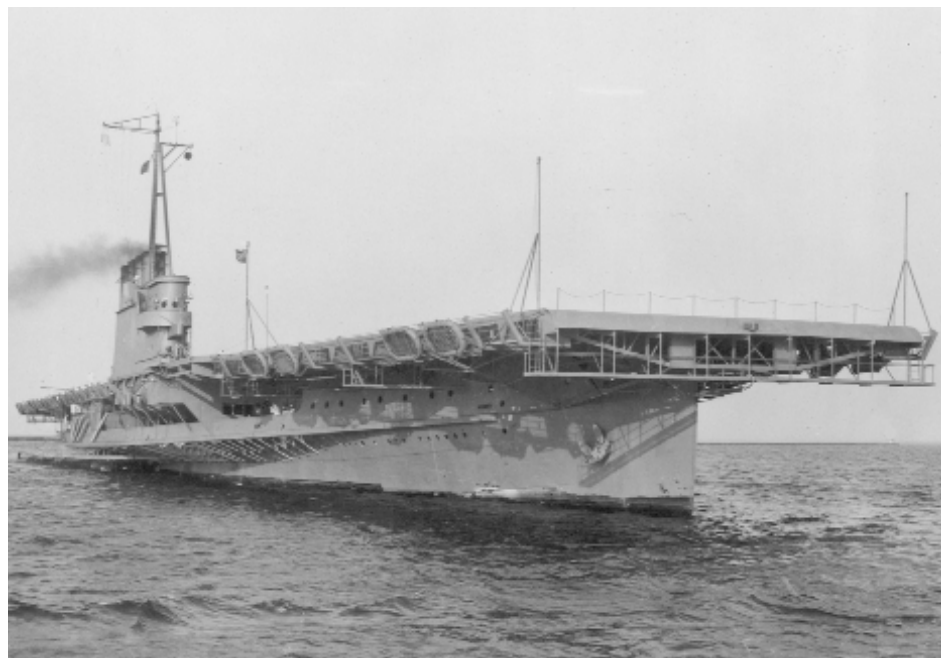
On April 13, 1943, a sudden snow squall enveloped the two carriers as a flight of SBD's was inbound from shore. The captain radioed the aircraft to land immediately with the first two landing safely.

Then trouble developed when the third plane crashed upon landing forcing the crew to clear the deck for the other three aircraft. As this happened, Ensign Arthur Phillips raced for shore crashing his plane 200 yards off Sherwin Avenue beach.

Phillips was fortunate to be rescued by two men in a row boat. The remaining two pilots were not as lucky having to crash their planes in the lake, both were killed and one man's body was never found.

Ulyss Buffington, a photographer's mate aboard *Wolverine* recalled:

"On one occasion a TBF (torpedo bomber), the largest plane we could accommodate, missed his landing and peeled off to the wrong side of the deck heading directly toward



The *U.S.S. Wolverine* conducted training for World War II Navy pilots within site of downtown Chicago (Wisconsin Maritime Museum collection).

my position aft of the island. At the time I was using a movie camera and simply went on filming."

"At the last possible moment the hook caught and the plane came to a stop in the catwalk on its side with the prop whirling within feet of me. It happened so fast there wasn't time to be scared. Later I found myself trembling when I realized how near I had come to reaching my end of World War II."

TRAINING FOR PILOTS AND CREWS

On average, both the *Wolverine* and *Sable* each handled about 300 landings and takeoffs per day. However, it was not uncommon to see them complete as many as 600 per day.

And there was a great deal of competition between the crews of the two ships, to see who could launch and recover the most aircraft in one day. The *Sable* set a record on May 28, 1944 when 498 landings occurred in 531 minutes, which qualified 59 pilots. Not to be outdone, the *Wolverine* recorded 633 landings on June 4, 1944.

American pilots were not the only ones to get their carrier training on the decks of the *Wolverine* and *Sable* during World War II. In 1942, eleven British Royal Navy pilots also trained on the Great Lakes. The carriers also provided a practice area for landing signal officers (LSO's) who controlled flight deck operations on the newer carriers.

In addition to pilot and LSO training, the two ships also provided training for carrier deck crew members. Every two to four weeks, a new class of 15 enlisted men was trained onboard in flight deck procedure and arresting gear operation.

The *Wolverine* and *Sable* were also equipped with radar for both navigation and for use by men at the radar school located at Navy Pier. The two ships were so successful in their training roles

that there had even been talk of converting from the *Sable*'s former sister ship, the *Greater Detroit*, into a third carrier.

A SAILOR'S LIFE IN CHICAGO

In spite of the hazards of carrier training, service aboard the two ships wasn't particularly hard duty. A Navy radioman who served aboard the *Wolverine* in 1944-1945 recalls:

"Liberty in Chicago was terrific, especially for an 18-year-old. Girls were plentiful. We'd meet them in Grant Park at Buckingham Fountain, at roller skating rinks, at movie theaters, at the USO, and every other place imaginable. And many taverns did not check ID cards too carefully, so we could get beer and booze without too much trouble."

William E. Barrett, another *Wolverine* crewman recalls:

"There was a place in North Chicago that was Polish. You could go there and dance with the Polish girls, and try to do the Polish hop. These people treated us great. They wouldn't let us pay for anything, drinks or food."

The *Wolverine*'s crew also published a semi-monthly newsletter called the "Wave Off", and was provided with good meals. For example, the menu from the *Wolverine*'s First Anniversary Commissioning Dinner on Aug. 12, 1943 shows fresh Maine lobster cocktail, Southern fried chicken, potatoes, vegetables, and apple pie-a-la-mode.

WAR-TIME STORIES

There are many stories of high seas "hi jinks" involving the Great Lakes carrier fleet.

According to Ensign Sam Sturgis, who qualified on the *Sable* during World War II, an Army Air Corps pilot assigned to Chanute Field near Chicago was giving his new co-

Continued on Page 9

Correction

On pages 5 and 10 of the Summer 2003 issue of *Anchor News*, the captions for the passenger steamers *Seeandbee* and *Greater Buffalo*, both of which were converted into training aircraft during World War II, were inadvertently transposed. In addition, the *Greater Buffalo* was mistakenly referred to as the "City of Greater Buffalo" in caption.

Steam Engine Exhibit Would Not Have Been Possible without Volunteers

In this issue of *Anchor News*, we would like to make a special effort to thank the volunteers who contribute in a major way to the success of the Wisconsin Maritime Museum and encourage all members to consider becoming volunteers.

With our limited professional staff, volunteers are an important part of the Museum's day-to-day operations. Without their assistance, we could not provide the type of quality experience that visitors have now come to expect from the Wisconsin Maritime Museum.

To show how rewarding it can be to be a volunteer at the Wisconsin Maritime Museum, the following is a profile of three volunteers who were the mainstay of the workforce supporting one of our newest exhibits, the historic *Chief Wawatam* triple expansion steam engine.

Larry Bohn is a life member of the Wisconsin Maritime Museum and has helped it in many ways since the Museum's founding 35 years ago.

Over those years, Larry has invested a considerable amount of time and effort working on the *U.S.S. Cobia*. In the summer of 2001, Larry also became the first volunteer to begin work on the restoration of the *Chief Wawatam* steam engine.

Since then, he has invested several hundred hours working on the engine and continues to work on it on a regular basis as it completes its first "shakedown" year.

Chuck Peppard is also a long-time supporter of the Wisconsin Maritime Museum whose volunteer work also dates back 35 years. Chuck began working on the *Chief Wawatam* engine in 2002, and continues to help the Museum work

out the challenges associated with one of the few marine steam engines being displayed in operation anywhere in the United States. Until his recent surgery, Chuck could be found working as a team with Larry most Monday and Wednesday afternoons. Get well soon Chuck!

Wally Randolph has played a unique role in the restoration of the *Chief's* engine and its interpretation for visitors.

Not long after restoration began, Wally saw the potential for bringing the engine "alive" for visitors using computer automation and controls. Combining his professional background in automated paper machinery and an avid interest in steam engines, Wally brought many skills and experiences to bear on the project.

Due to his work, visitors can now "operate" the steam engine using a

touch screen that simulates an engine telegraph. Equally important, though, was Wally's work in the development of an automatic lubrication system for the engine, and safety devices to protect the visitor.

And Many Others -- This article merely touches the outstanding job that these three volunteers and many others have done for the Wisconsin Maritime Museum.

They have literally saved us tens of thousands of dollars through their donated labor and expertise. We thank them and all of our volunteers for the invaluable service they provide the Museum.

This story was written by Bob O'Donnell, Executive Director, and Bill Thiesen, Curator, of the Wisconsin Maritime Museum. If you would like to learn more about Museum volunteer opportunities e-mail: museum@wisconsinmaritime.org

Questions Remain about Fitzgerald



Continued from page 1
Marie, Mich. With the *Fitzgerald* ahead of the *Anderson*, the two ships kept in contact by both radio and radar.

By the afternoon of November 10, a wind shift was evident. At 2:45 p.m. the winds had backed to the north-west and increased to 42 knots. The two ships were no longer protected by the Canadian coast and were exposed to the full fury of the storm.

At around this time the *Fitzgerald* reported "a fence rail down, two vents lost or damaged and a list." A list is when a ship leans to one side, due to taking on water or a shift in its cargo.

At this same time, the storm's fury closed the Sault Ste. Marie locks. Late on the afternoon of the 10th, Captain McSorely of the *Fitzgerald* made radio contact with another ship, the *Avafor*, and reported that he "had a bad list, had lost both radars, and was taking heavy seas over the deck in one of the worst seas he had ever been in."

At 7 p.m. the *Anderson* made radio contact with the *Fitzgerald* and had her on their radar. When asked how his ship was making out Capt. McSorely replied "We are holding our own". This was broadcast around 7:10 p.m. Shortly afterwards

the *Fitzgerald* disappeared from the *Anderson's* radar screen. No distress signals were ever issued.

HOW COULD IT HAPPEN?

What caused the *Fitzgerald* to sink? There are a couple of theories cited in the marine casualty report of the U.S. Coast Guard Marine Board of Investigation. Since there were no survivors or witnesses, the Board's report is based on the testimony of experts and ship captains, and an underwater survey of the wreck.

This report suggests that the *Fitzgerald* was taking on water due to earlier damage from the storm and that around 7:15 p.m. it plunged headfirst into a large wave and sank abruptly.

The results of the Coast Guard's underwater survey are the subject of Richard Sullivan's original artwork and detailed diorama which will be on display at the Wisconsin Maritime Museum through March 1, 2004.

This story was written by Sarah Spude-Olson, Bill Thiesen and Bob O'Donnell of the Wisconsin Maritime Museum. For more information on the exhibit, call toll free 1-866-724-2356 or see the Museum's web site at www.wisconsinmaritime.org

Chicago's Coal-fired Flattops

Continued from page 8

pilot an airborne tour of Chicago one day aboard a Douglas C-47 transport plane.

The pilot spotted the *Wolverine* and decided to have some fun. He maneuvered the C-47 out into the landing pattern, lowered his wheels and flaps, and headed down toward the Navy flattop. Being a large transport, the C-47 was much too big to land on the *Wolverine's* deck.

As he approached, the pilot never saw so many signal flares and lights come on at one time. At the last moment, the pilot hauled up his plane's landing gear, pulled back on the throttles, and headed back to Chanute. Aside from the C-47 visit, the *Wolverine* also had the privilege of temporarily being the flagship of the U.S. Navy.

On Oct. 27, 1942, the ship flew the four-star flag of the Commander-in-Chief of the United States Fleet and Chief of Naval Operations, Admiral Ernest J. King. If for only a few hours, the *Wolverine* became the only Great Lakes naval vessel to be flagship of the United States Navy.

The *Sable*, however, won the fame competition in the end. A young 20-year old lieutenant from Texas made his carrier qualifications aboard the ship on Aug. 24, 1943. That pilot, now former President George Bush recalled his training experience: "I remember those Great Lakes flights very well in the open cockpit that winter. Coldest I ever was in my life."

WAR-TIME ACCOMPLISHMENTS

As the war came to a close in 1945, the *Wolverine* and *Sable* had provided the United States and her allies with 17,820 carrier qualified

pilots. Those pilots had completed 65,000 landings aboard *Wolverine* and 51,000 aboard *Sable*.

During flight operations, only 21 pilots had been killed and none due to shipboard related activity. The two "freak" ships, as Manley called them, had faithfully served their country and helped bring on the final victory in the Atlantic and Pacific Theaters.

The last log entry was for Tuesday Sept. 18, 1945, and simply states "Flight operations completed." The Navy decommissioned both ships on November 7, 1945. The ships remained tied up in Chicago for several years, and several ideas put forth to convert them to restaurants, casinos, hotels, and museum ships.

In the end, these two great ladies, who shared a great deal of the same water together, met a similar demise. The *U.S.S. Wolverine* was sold in 1947 for \$46,789. She was bought by the A. F. Wagner Iron Works and towed by the tug *John Roen III* to Milwaukee. Shortly after arrival, she was scrapped.

The *U.S.S. Sable* lingered awhile longer until she was sold in 1948. She was bought by the Steel Company of Canada and left Chicago on August 8, 1948 in tow of the tugs *Guardian* and *Lachine*.

When the *Sable* arrived at Port Colborne, Ont., she had to have 28 feet of her sides dismantled in order to fit through the Welland Canal. With this done, she was taken in tow by the tugs *Helena* and *J. C. Stewart* to Hamilton, Ont. where she was scrapped.

Brian Jaeschke was the summer collections intern at the Wisconsin Maritime Museum, and holds a masters degree in maritime studies.

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Museum Store News

The Wisconsin Maritime Museum's Museum Store is bustling with excitement as new items arrive everyday for fall visitors and the Christmas holiday season.

Some of the new items include boxed compasses, sundials, telescopes and sextants. These unique items will dress up the desk of any of the sailing or maritime history buffs in your family, and are very reasonably priced.

We also have crystal lighthouse and dolphin business card holders, along with brass nautical letter openers that will look great in any office area. Also new this fall is a large assortment of charms that can be paired with a bracelet that comes in four styles. Stretch crystal

bracelets with matching rings are also available and are a big hit with children and grandchildren.

Books are always popular gift items, and the Museum Store has a number of hard-to-find titles like **The Legend of Mercury** by Jeffrey L. Rodengen. This coffee table book tells the exciting story of Mercury Marine outboard motors, and is extensively illustrated. The book sells for \$34.95 and can be purchased at the store or from anywhere in the United States using the Museum's new toll free number, 1-866-724-2356.

Following the busy holiday season, the staff will start getting ready for the start of the 2004 season. New clothing will be ordered for spring,

and we'll be looking for new items that will compliment the Museum's permanent collection and new exhibits, including "Hot Boats on Cold Water - Racing to Win on Wisconsin's Inland Waters and Great Lakes" which opens in March.

Remember your 10% Museum Member discount when Christmas shopping this season, and bring a friend along. There's never an admission charge to shop the Wisconsin Maritime Museum's Museum Store, and you're sure to find gift items for everyone on your list.

This story was written by Veronica "Chico" Franz, Museum Store Manager. Her e-mail address is vfranz@wisconsinmaritime.org

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2004 Upcoming Events

Note: All events are subject to change, please call the Museum toll free at 1-866-724-2356 or (920) 684-0218 for details.

March 6



New Exhibit: "Edward L. Ryerson-Sleeping Giant" featuring photography of Chris Winters through May

March 6

Wisconsin Maritime Hall of Fame Induction Ceremony and Dinner

March 13

New Exhibit: "Hot Boats on Cold Water-Racing to Win on Wisconsin's Inland Waters and Great Lakes" through October

May 29-30

First Annual Lakeshore Antique & Classic Boat and Outboard Motor Show sponsored by the Wisconsin Maritime Museum

June 5

U.S.S. *Lagarto* Remembrance and U.S.S. *Cobia* Commissioning Anniversary Celebration (Public Welcome)

June 19-20

Wisconsin Maritime Museum's Tall Ship Weekend

August 7-8

29th Annual Model Ships and Boats Contest hosted by the Wisconsin Maritime Museum

August 20-22

U.S.S. *Cobia* Crew Annual Reunion (Public Welcome)

September 11-12



2nd Annual Lakeshore Maritime Heritage Festival & Lighthouse Walk sponsored by the Wisconsin Maritime Museum

October 5-10

The 28-Boat Manitowoc Submarine & Shipyard Workers Reunion (Public Welcome)

October 23

Fifth Annual Wisconsin Maritime Museum Halloween Party

November 6

Annual Great Lakes Mariners Memorial and *Edmund Fitzgerald* Commemoration (Public Welcome)

November 27

Exhibit Opening "Nautical Dreams Under the Christmas Tree - 2004" thru December

December 4

Wisconsin Maritime Museum's Maritime Christmas Market

December 11

2nd Annual Manitowoc-Two Rivers Christmas Tree Ship Celebration sponsored by the Wisconsin Maritime Museum

Lighthouse Lens Exhibit

Continued from page 1

a four-person crew until the 1960's. As with the other lenses in the Museum's collection, this one is a fourth order Fresnel lens made in France. It was placed in a lantern room on top of a steel tower and illuminated by an acetylene lamp.

The lighthouse was manned by U.S. Coast Guard personnel until the 1960s when it was automated. The Fresnel lens was replaced with a plastic lens in 1991, and later transported to the Museum.

MANITOWOC LIGHTHOUSE

The third lens in the Wisconsin Maritime Museum's collection was recently retired from the Manitowoc Breakwater Lighthouse. There has been a lighthouse at Manitowoc, Wis., since 1839, making it one of Lake Michigan's oldest light stations.

Between 1850 and 1880 there were as many as ten major shipbuilders operating in Manitowoc and its harbor became a regional center for ship building and repair on the Great Lakes. By 1900, more than 200 schooners, tugs and steamers had been built in the local shipyards.

A lighthouse was essential for new ships departing the port and vessels entering the port for repair and refit. The present Manitowoc Breakwater Lighthouse was built in 1918 complete with a fourth order Fresnel lens.

With this order lens, the Manitowoc light could be seen some ten miles offshore. In 2002, the Fresnel lens was replaced with a plastic lens and then transferred to the Wisconsin Maritime Museum by the U. S. Coast Guard.

Volunteer Opportunities

Volunteering to work at the Wisconsin Maritime Museum is a fun and exciting way to learn more about the Museum and meet some new friends at the same time.

Currently, both community and museum members are assisting the staff in the areas of exhibit construction and maintenance, submarine tours, special events, fundraising, membership, and office support.

Volunteers are also working alongside paid staff in the Museum's store, library & archives, collections storage and workshops, helping us to stretch our limited budget dollars. To learn more about volunteering at the Wisconsin Maritime Museum, contact the staff person named below by e-mail or call toll free 1-866-724-2356 or local: (920) 684-0218.

DEVELOPMENT

Volunteers in the development area help with fundraising events and appeals, exhibit preview events for donors and sponsors, and general office activities. There are also opportunities to serve on planning committees for fundraising events, and do computer data entry and proofreading. To volunteer, please contact Patty Ressler at pressler@wisconsinmaritime.org

EDUCATIONAL PROGRAMS

Several thousand school-aged children take part in a wide variety of educational programs at the Wisconsin Maritime Museum each year. They learn while handling artifacts from the "hands-on use" portion of our collection, visiting the Children's Waterways Room and taking part in the "Education Afloat" program aboard the former Coast Guard utility boat *Icelander*. To volunteer to assist with those programs, contact Wendy Lutzke at wlutzke@wisconsinmaritime.org

EXHIBITS & SPECIAL EVENTS

Do you have an interest in a particular aspect of maritime history, such as antique & classic boats, sailing, powerboat racing, outboard motors, Great Lakes freighters, lighthouses, tall ships or World War II submarines? We need people to work with professional staff members to help plan and construct new exhibits, or plan and coordinate special events. To volunteer to help with exhibits, contact Bill Thiesen at bthiesen@wisconsinmaritime.org or for

special events, contact Bob O'Donnell at rodonnell@wisconsinmaritime.org

LIBRARY & ARCHIVES

The Wisconsin Maritime Museum regularly receives requests for information from our collection of several thousand historic images, publications and periodicals. We are also in the process of digitizing our photographic collection, and repairing many of the rare and historic volumes in our library. If you would enjoy working "hands-on" with history, contact Bill Thiesen at bthiesen@wisconsinmaritime.org

MARKETING & PUBLIC RELATIONS

Do you enjoy writing, but don't have the time to write that novel that will let you retire on the beach in the Bahamas? We have an opportunity for you! Many travel publications are looking for articles on the Wisconsin Maritime Museum, and the Manitowoc-Two Rivers area. You could help us out by writing one or two of these articles, and have a chance to see your name in print! To volunteer, contact Sarah Spude-Olson at sspude@wisconsinmaritime.org

MEMBERSHIP RECRUITMENT

Membership volunteers help prepare mailings and enter information on potential members into our computer databases. Mailings are done primarily in the morning hours, working with a group of four-to-six people.

Data entry can be done at any time of day and involves typing in information from our visitor logs, checking addresses on the Internet and proofreading the information. To volunteer, contact Patty Ressler at pressler@wisconsinmaritime.org

TOUR AND OVERNIGHT PROGRAMS

Are you a veteran of the Armed Services or have an interest in World War II history, then the Wisconsin Maritime Museum's Submarine Program is looking for you! We have volunteer and paid opportunities available in both the tour and over night programs aboard the U.S.S. *Cobia*. If you or someone you know would like to have an exciting, fun-filled experience at the Museum, contact Marlys Schwantz at mschwant@wisconsinmaritime.org



A Wisconsin Maritime Museum Membership makes a great Christmas gift, and we'll send the gift card!



Call toll free 1-866-724-2356 or local 684-0218.



75 Maritime Drive
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Toll Free: 1-866-724-2356
or Local: (920) 684-0218
E-mail: museum@wisconsinmaritime.org
Web Site: www.wisconsinmaritime.org

Upcoming Events

November 22
Holiday Cooking
at the Lighthouse

November 29
"Nautical Dreams
Under the Christmas
Tree" Exhibit Opening

December 6
First Annual Maritime
Christmas Mart



Happy Holidays

From the staff of the Wisconsin Maritime Museum

