



ANCHOR WATCH

MAY
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JULY
AUGUST
2011

The Journal of the Historic Naval Ships Association

To Support the Preservation of Historic Naval Vessels
To Honor Those Who Serve at Sea

CENTENNIAL OF NAVAL AVIATION



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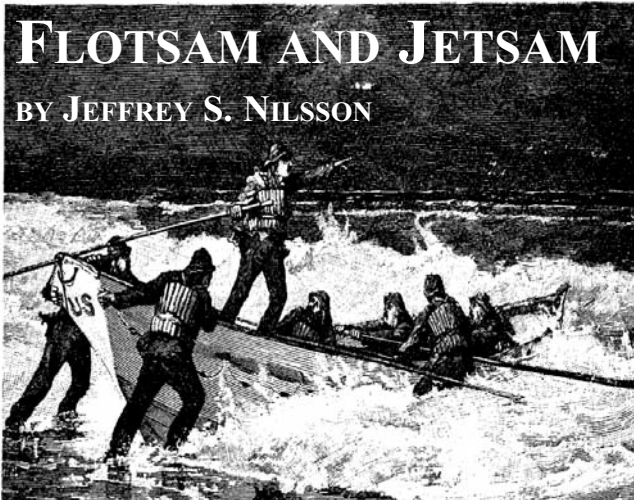
The Anchor Watch in COLOR!

The *Anchor Watch* is now available in color on the HNSA website. To see this issue, and past issues, in full color, visit:
www.hnsa.org/anchorwatch/index.htm

THE COVER

Right: Reproduction of the original Triad "hydroaeroplane" that proved the validity of naval aviation in San Diego Bay in 1911. USN photo by Scott Janes.





FLOTSAM AND JETSAM

BY JEFFREY S. NILSSON

It is with a heavy heart that I inform you all of the passing of David Kidd, 86, former President of the Historic Naval Ships Association from 1977-79. Dave was one of the five people who were instrumental in saving HMCS *Haida* from the ship breakers in 1964, a story recorded by History Professor Barry Gough in his 2001 book *HMCS Haida, Battle Ensign Flying*. We will miss David, and wish him fair winds and following seas.

We are going to try something a little different in this issue, and would really like to hear or read your comments. Knowing that the Anchor Watch is read by our individual members and ship managers around the world who want to bring themselves up to date on happenings around the “fleet”, we thought we would include an article or two that dealt directly with the care and maintenance of the ships. Our thanks goes out to Bill Galvani, who is the Director of the Naval Undersea Museum in Keyport, WA for bringing the idea to Jason Hall and myself to do something like this. In this issue there are three submissions that are technical in nature. One is written by Lorraine Scott, Collections Manager of the Naval Undersea Museum, that deals with environmental control of artifact storage areas. Charles Deroko has submitted another that focuses on the importance of good ventilation, and there is also one by one of our newest Associate members, Phoenix International, Inc., that briefly describes their company. We hope that you enjoy these, and future technical articles.

“THE CRUISER *OLYMPIA* SUMMIT MEETING”

A Cruiser *Olympia* Summit meeting was held at the Independence Seaport Museum (ISM) in Philadelphia, PA March 30 – April 1, 2011. This meeting drew historic ship and preservation experts from around the country as well as the five groups of transfer candidates. Attendees were able to tour the ship while they were there. Participants heard case studies and brainstormed possible outcomes for the iconic National Historic Landmark. The presentations that were made during the three day summit will be available

for your viewing. You can receive updates on this effort and the ship by going to the HNSA website (www.hnsa.org) and scrolling to the *Olympia* site and then clicking on the highlighted *Olympia* updates. You can also receive information from the ISM by e-mailing seaport@phillyseaport.org and ask to be placed on the distribution list for their electronic newsletter *The Masthead*, which is published on a periodic basis.

“HNSA MID-WINTER BOARD MEETING”

On the 14th of March, we held our mid-winter board meeting in Annapolis. Our Chairs for Marketing and Communications made the announcement that the Historic Naval Ships Association is now on Facebook and Twitter. NavSea informed us that Navy dive teams will be making greater use of the HNSA ships for getting much needed training.

We were advised by our Chair for Curatorial Affairs that a number of the papers delivered at the conference in Baltimore in September 2010 are now posted in the Operations Handbook on the HNSA website. Mr. Glen Clark of the Naval Sea Systems Command brought the Board up to date on what is currently happening at PMS 333 which is the Inactive Ships Program Office. The Board was given a current status report on all ships currently on Donation Hold, and of those ships it appears that *ex-Edson* (DD-946) should soon be released to The Saginaw Valley Naval Ship Museum.

Captain Jerry Hofwalt made a presentation for the HNSA 2011 Conference which will be held in Honolulu, HI September 14-17. The headquarters for the conference will be the Pacific Beach Hotel where all conference sessions will be held. Captain Hofwalt has provided more information on the conference in his article on page 19 of this issue of the *Anchor Watch*.

The last order of business of the board meeting was the presentation of awards. Spirit of '45 awards were presented to Maury Drummond, Mac McLaughlin, John Fakan, Paul Farace and Toby Oothoudt for their participation in Spirit of '45 events held on the USS *Kidd*, USS *Midway* and USS *Cod* respectively. Mr. Warren Hegg and Commander Charles Hopkins, representing the Keep the Spirit of '45 Alive presented an eagle award for actor Ernest Borgnine which Mac McLaughlin will make arrangements to have delivered at an appropriate time and place. Mac McLaughlin read a citation and presented the Diffley Award to James B. Sergeant who has retired as Executive Director of *Albacore* Park, Portsmouth, NH. Jim is also a Past President of the Historic Naval Ships Association. We thank Jim for his years of service to the *Albacore*, and to HNSA.

Jeffrey S. Nilsson

NEWS FROM THE FLEET

USS *MIDWAY* (CV-41)

San Diego, California, U.S.A.

CENTENNIAL OF NAVAL AVIATION CELEBRATION

by *Scott McGaugh*
Marketing Director

The U.S. Navy's Centennial of Naval Aviation celebration took to the air in San Diego on February 12, kicking off a year-long national campaign. The launch logically took place in San Diego, the Congressionally designated birthplace of naval aviation.

The largest fly-over since the end of World War II brought more than 100,000 spectators to the San Diego Bay waterfront, and nearly 5,000 to the flight deck of the USS *Midway* Museum for entertainment and a live, "play by play" narrative of the historic event.

More than 150 aircraft participated, ranging from 1930s-vintage props to the entire air wing of the USS *Carl Vinson*, flying in formation over the bay and across downtown San Diego. Helicopter rescue demonstrations in the bay also were a highlight, as were the Blue Angels.

The Navy also held an open house on Naval Air Station North Island, and a centennial gala aboard the USS *Midway* Museum, featuring the Secretary of the Navy, Ray Mabus, Chief of Naval Operations, ADM

Below: Part of the massive crowd that filled Midway's flight deck for the flyover. Photo by Jerry Gibbs.



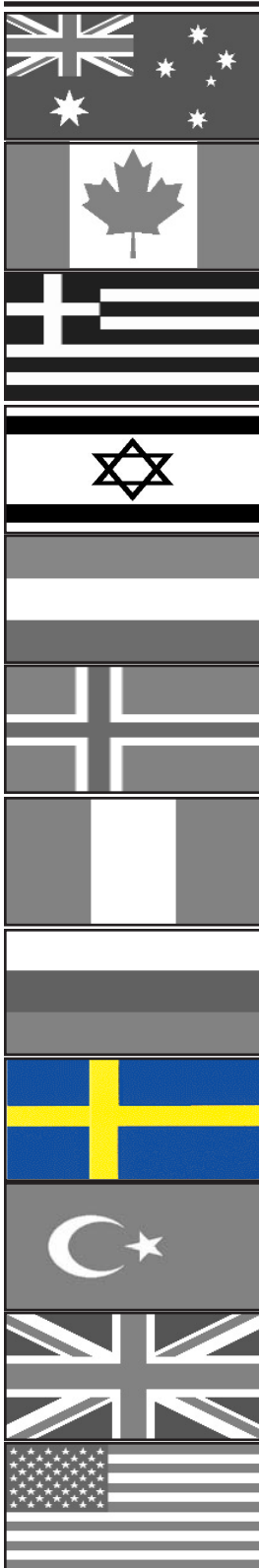
Above: Navy SEALs demonstration as part of fly-over. Photo by Nathan Rupert.

Gary Roughead, and entertainer Kenny Loggins.

"It was a perfect day, launching America's Centennial of Naval Aviation in San Diego and aboard the USS *Midway*, the longest-serving carrier of the twentieth century," said *Midway* President & CEO Mac McLaughlin. "San Diego's heritage as the birthplace of naval aviation stood at the forefront of a national campaign that is sure to elevate the awareness and appreciation for naval aviation across the country throughout 2011."

The Navy's first flight school, first naval aviator, and first four aircraft carriers were all located in San Diego. Today it remains the worldwide command for all naval air forces.

A series of Centennial of Naval Aviation events has been scheduled throughout the year, most at air shows across the country. The celebration will culminate with the closing gala in Washington, D.C., on December 3, 2011. For more information, visit the website at www.navalaviation100.org.



FLAGS OF THE HNSA FLEET

*(Top to bottom,
in alphabetical order)*

Australia, Canada, Greece,
Israel, the Netherlands, Norway,
Peru, Russia, Sweden, Turkey,
the United Kingdom, and
the United States of America.

**USS *OLYMPIA* (C-6)
INDEPENDENCE SEAPORT MUSEUM**

Philadelphia, Pennsylvania, U.S.A.

*by Hope Koseff Corse
Director of Marketing & Communications*

**“NOTICE OF AVAILABILITY OF TRANSFER
APPLICATION PROCESS”**

Independence Seaport Museum (ISM) is seeking qualified transfer candidates to assume ownership of the ex-USS *Olympia* (launched 1892) and related archival materials. Transfer Application (TAPP) information became available on March 7, 2011 on the Museum’s website, www.phillyseaport.org.

The *Olympia*, Admiral Dewey’s flagship and once the most celebrated, state-of-the art naval vessel afloat, will be scrapped or scuttled unless a new owner can be found. In terms of historic value, the National Historic Landmark *Olympia* has been equated to the USS *Constitution* and the USS *Constellation* as one of the most important vessels in U.S. Naval history. The ship straddles the shift between the age of sail and the age of steel, and marks the launch of the modern steel Navy. Deferred maintenance has reached a critical stage and the ship requires \$2-5 million of immediate stabilization. A further estimated \$10-20 million will be required for dry-dock and restoration.

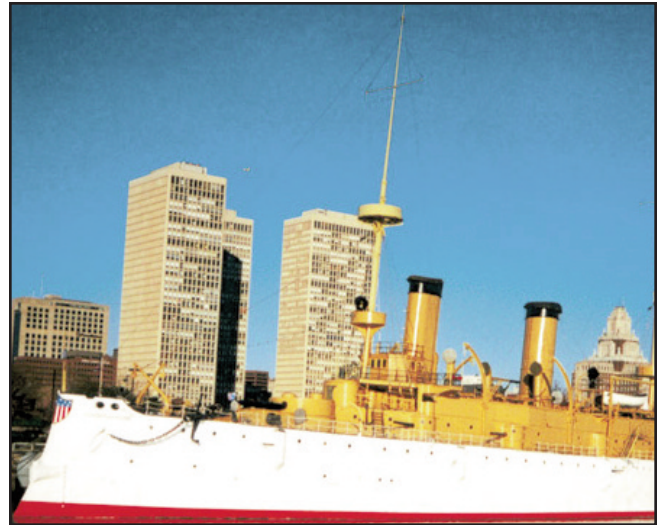
“WHO MAY APPLY”

The following are examples of the types of organizations that are eligible to apply:

- State
- Commonwealth
- Possession of the United States
- Political subdivision or municipal corporation thereof
- The District of Columbia
- A charitable organization tax-exempt under section 501(c) (3) of the Internal Revenue Code. An organization must provide a copy of a determination letter by the Internal Revenue Service that the applicant is exempt from tax under the Internal Revenue Code, Section 501(c) (3) or submit evidence that the applicant has filed the appropriate documentation in order to obtain tax-exempt status.
- Or any other 501 (c) organizations as approved by the Review Panel

“WHO MAY NOT APPLY”

Organizations and others that are not eligible to apply include:



Above: The cruiser Olympia.

- For-profit organizations or corporations
- Individuals

“ACCESS TO ONLINE TAPP”

TAPP information can be found at www.phillyseaport.org. Anyone with internet connection can access the TAPP. There are numerous documents regarding the *Olympia* that are available to potential transfer candidates; however to access these you must have a user account. Account set-up information will be provided following receipt of a request (e-mail link on the website) and proof of qualification of above guidelines. The *Olympia* Collection of artifacts will be available for transfer under a separate process and agreement. For those without online access, please contact Hope Corse using the contact information above.

“KEY TAPP DATES”

March 30-April 1: *Olympia* Summit at Independence Seaport Museum

September 1, 2011: Phase One - Letter of Intent and Executive Summary Application due

April 1, 2012: Phase Two - Business/Financial and Environmental Plans Application due

November 1, 2012: Phase Three - Mooring, Tow, Maintenance and Curatorial/Museum Plan Application due

“OLYMPIA SUMMIT”

The Independence Seaport Museum and partners including the National Park Service, Pennsylvania Historical and Museum Commission and NAVSEA held a summit at the museum March 30-April 1. The mission of the summit was to evaluate preservation alternatives for the *Olympia* and

facilitate development of fundraising, business and educational plans for those parties interested in completing the TAPP. The summit was very productive, and the results of the meeting will be forthcoming. For more information on the *Olympia*, visit www.phillyseaport.org.

USS EDSON (DD-946)

Bay City, Michigan, U.S.A.

by Andrew Dodson
The Bay City Times
Published March 18, 2011

“EPA APPROVES AGREEMENT TO BRING USS EDSON DESTROYER TO BAY CITY”

Saginaw Valley Naval Ship Museum officials are one signature away from securing the destroyer USS *Edson* for Bay City. This week, the U.S. Environmental Protection Agency signed off on an agreement to approve the ship on rules about PCBs, or polychlorinated biphenyls, according to Julie Morris, team leader of the pesticides and toxins compliance section of EPA Region 5 in Chicago.

The toxic chemical is found in the ship’s paint, insulation, caulking, rubber and gaskets, said Morris. “Our headquarters in Washington, D.C., signed off and the agreement is on its way to the Navy,” said Morris.

Morris said all liquid PCBs were removed from the ship, but some solid ones remain in paint and insulation. Dick Janke, vice president of the museum, said once the Navy signs off, the ship can be moved to Bay City. “It’s been a long time coming,” said Janke. “About 13 years. You never know what to expect.”

Edson supporters have jumped through many hoops trying

Below: The USS Edson underway when she was in service. Photo by Capt. Scott Noble, USN (Ret.).




to bring a ship to town. An earlier effort to bring the guided missile destroyer USS *Charles F. Adams* (DDG-2) to Bay City was tabled in favor of the *Edson* in 2004. According to the EPA agreement, when the ship arrives in Bay City, museum officials will be responsible for submitting annual samples to monitor the PCBs onboard. “If there are any issues with sampling that we need to address, we’ll go back and talk to the museum about that,” said Morris.

When agreements went out to all three parties in December, museum officials were optimistic the ship could arrive in the spring. Now, museum officials are hoping to have the ship in port by summer. “That’s what we’re hoping for,” Janke said.


The USS *Edson* was commissioned in 1958 and decommissioned in 1988. The ship is named after Merritt Austin Edson, who received the Medal of Honor near the end of his 30-year military career for his heroism in WWII. He orchestrated a successful withdrawal of units to a reserve line with minimal casualties during a heavy attack in the Solomon Islands by the Japanese in September 1942.

The *Edson* currently rests in the Philadelphia Naval Business Center. Once the ship comes to Bay City, it will dock at the Independence Park Boat Launch in Bangor Township, near the Independence Bridge, where it will become a floating museum and tourist attraction, said Janke. A \$216,000 grant from the Michigan Economic Development Corp. helped install infrastructure for the dock.

To date, the museum group has raised about \$1.3 million in cash, grants and pledges, and continues to raise funds. It will take four tug boats to tow the ship from Philadelphia to Bay City, a distance of about 2,650 miles requiring about 93,000 gallons of diesel fuel, according to Janke.



Tin Can Sailors, Inc. is the National Association of Destroyer Veterans. To search for information on individual ships, destroyer museums, and how to become a member, contact them at:
www.destroyers.org
(800) 223-5535 M-F
1000-1600 EST.



THE HISTORIC NAVAL SHIPS ASSOCIATION

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SUMMER 2011

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JOIN US!

46th HNSA ANNUAL CONFERENCE
SEPTEMBER 14-17, 2011
To Be Held In
Honolulu, Hawaii



This year's annual HNSA conference will be hosted by the USS *Bowfin* Submarine Museum and Park, the USS *Missouri* Memorial Association, and the World War II Valor in the Pacific National Monument (USS *Arizona* and USS *Utah*). More information on the conference is located on page 19 of this issue of the *Anchor Watch*.



Questions About Your Membership?

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PHOENIX INTERNATIONAL*By Eric Lindberg***“UNDERWATER ENGINEERING EXPERTS”**

Phoenix International Holdings, Inc. (Phoenix) is an employee owned marine services company that performs complex manned and unmanned underwater operations worldwide. Phoenix started in 1996 with 9 employees, and now has a staff exceeding 200 personnel. Our core business segments include waterborne ship maintenance and repair (M&R), underwater inspection and survey, deep ocean search and recovery missions, oil and gas support, submarine rescue, marine construction, engineering, and specialized equipment manufacturing.

We are currently in the second year of a three year effort to install blank patches on all underwater hull openings on the USS *Midway* Museum. Additionally, Phoenix holds three multi-year U.S. Navy contracts that require us to conduct comprehensive worldwide underwater operations and associated engineering services on a stand-by, 24-hours-a-day basis. The NAVSEA Diving and Diving Related Services contract requires us to perform diving and engineering services for emergent and scheduled M&R on Navy ships and submarines. We have held this contract since 1997 and performed over 250 M&R operations worldwide. The Undersea Operations contract requires us to operate, maintain, and upgrade Navy underwater equipment used to conduct worldwide search, recovery, and inspection projects in water depths up to 6,000 meters of seawater. The Submarine Rescue contract requires Phoenix to maintain and operate the U.S. Navy’s Submarine Rescue Diving and Recompression System (SRDRS), the next generation fly-away submarine rescue capability.

Of particular relevance to HNSA is our expertise in underwater welding (wet and dry chamber) and non-destructive testing. Phoenix maintains over 26 weld procedures and qualified personnel with capabilities for steels ranging from mild steel to HY-80, as well as aluminum and copper-nickel alloys. Qualifications include NAVSEA, American Bureau of Shipping, and American Welding Society. American Society for Non-Destructive Testing (NDT) approved services include magnetic particle, dye penetrant, and ultrasonic (thickness and flaw detection) testing. Past Navy and commercial experience includes a wide range of M&R tasks including: installation of hull and rudder shell plate and sea chests, anode and impressed current cathodic protection (ICCP) installation, and propeller removal and replacement. We have an NDT Level III on staff as well as a highly qualified (over 35 years experience) welding engineer.

Engineering services include concept development, design, analysis, testing, and rapid prototyping of underwater tools and work systems. Our capabilities include the design of underwater tools and fixtures, and underwater welding habitats and cofferdams. We also develop rigging concepts as well as work procedures for ship repairs, waterborne installation / removal of ship and submarine equipment and sensors, and the recovery of items from the ocean floor. Phoenix has manufactured/delivered complex equipment such as the Saturation Fly-away Diving System (SATFADS) and several underwater vehicle types and smaller innovative devices such as advanced LED diver’s lights.

For more information on Phoenix, please contact Eric Lindberg at (703) 625-8934 or e-mail him at elindberg@phnx-international.com or visit us at: www.phnx-international.com.

**USS *INTREPID* (CV-11)
INTREPID SEA, AIR & SPACE MUSEUM**

New York, New York, U.S.A.

*by Susan Marenoff
President*

“AIRCRAFT CARRIER LANDS SPACE SHUTTLE”

It has been announced that NASA has selected New York City and the Intrepid Sea, Air & Space Museum as one of only four sites nationwide to display a space shuttle orbiter. We are thrilled to receive this wonderful news, not just for *Intrepid*, but for all of New York.

The first space shuttle orbiter *Enterprise*, which was the prototype and test for the Space Shuttle program, will come to NYC and become a central attraction at the *Intrepid* Museum. It will bring substantial economic benefit for all of New York through increased tourism and associated activity. Because the public and media response to the campaign to bring a shuttle to NYC was so overwhelmingly positive, we are confident that this will be a huge economic, cultural, and educational success as the city’s economic impact statement illustrated. We are very proud that NASA viewed our application favorably.

We will work with NASA to develop a timeline for the shuttle’s arrival in NYC. We therefore now have a substantial challenge before us: to raise the needed funds to move the shuttle and prepare it for display. We plan to build a green and energy-efficient structure to both protect and properly showcase this technological icon. As we move forward, we will develop an educational and interpretive program to tell the exciting story of this pioneering space marvel to the millions of visitors who will come to New York to see it.

NAVAL UNDERSEA MUSEUM

Keyport, Washington, U.S.A.

*by Lorraine Scott
Collections Manager*

**“IS IT HOT IN HERE?
IMPROVING ARTIFACT PRESERVATION
THROUGH ENVIRONMENTAL MONITORING”**

The most significant artifact in the collection of a typical HNSA member is the ship itself. Most HNSA members have artifact collections that they store on the ship, which presents a variety of environmental challenges, or in a building ashore. In either situation, responsible management of our collections places two requirements on us:

1. To know what environmental conditions exist in our exhibition and collections storage spaces.
2. To understand what’s happening to our artifacts as a result of these conditions.

As collections managers, one of our goals is to optimize our storage environments, and to slow, to the greatest degree possible, material deterioration. To do this, we must actively monitor the environment in which we exhibit and store our artifacts.

The environment of a ship or museum encompasses a wide range of factors including air pollution, dust, vibration, pests, natural disasters, mishandling, and basic wear and tear by visitors. This article focuses on temperature, light, and relative humidity (RH) as they affect historic materials.

Why should we worry about monitoring our storage environments? Because higher temperatures, light levels, and fluctuating RH levels all speed up the deterioration process. For example, a torpedo stored for an extended period of time in a room with high humidity levels can experience metal corrosion. A photograph exhibited under bright lights will fade irreversibly. When relative humidity levels are too low, materials such as paper can become brittle. Large fluctuations between high and low temperature and relative humidity will lead to degradation by causing certain materials to contract and expand, all while they are sitting in place on exhibit or in storage.

Compounding our challenge is the fact that different materials in one artifact can degrade at different rates. Often a variety of materials such as paper, photographs, metal, plastics, rubber, and/or fabrics are stored or exhibited in the same location. HNSA members need good

current and on-going information to find the most effective combination of temperature, light, and RH levels to preserve our valuable collections. The good news is that collections managers have a variety of analog and digital tools available to help us understand how environmental factors are helping or hurting our artifacts.

Analog devices such as thermometers and hygrometers provide spot readings indicating how warm and humid (or cold and dry) a given space is at any time. Psychrometers also provide spot readings of current humidity levels. While useful to a point, these instruments lack the ability to record information and are therefore limited in providing an understanding of conditions over time.

Other analog tools record environmental conditions over a specified time period. These include recording hygrothermographs which measure temperature and RH onto graphs attached to a rotating drum.

Digital tools such as electronic data loggers also record environmental data and give us more flexibility. These battery-powered units have sensors, a microprocessor, and data storage abilities. The recorded data is downloaded onto a computer via USB cable or portable flash drive. Associated specialized software provides in-depth data interpretation and the ability to easily create graphs and reports.

The Naval Undersea Museum currently utilizes PEM2 electronic data loggers for main storage spaces. They feature a viewable screen that lets a person in the space know what the temperature and RH is right there.

We use HOBO U-12 units for exhibition halls and HOBO

Below: PEM2 data logger showing readable screen for spot checking current temperature/RH readings in the Naval Undersea Museum archives. Inserting a flash drive downloads recorded environmental data.





Above: Ms. Lorraine Scott places a HOBO data logger in a map drawer to determine temperature/RH differences within enclosed storage cabinetry.

U-10 units for spot locations needing evaluation such as smaller storage enclosures, cabinets, and exhibit cases. Additionally, HOBO U-12 units measure lux or foot-candle units; this is critical information needed to prevent irreversible fading damage. Does the heat put out by new exhibit lighting affect the temperature inside an exhibit case? Inserting a HOBO U-12 data logger can provide this important information.

On a monthly schedule we download our PEM2 data loggers, obtaining the RH and temperature readings within a given space for the past 30 days. We upload this same data into a software program called Climate Notebook, created by the Image Permanence Institute (IPI). Climate Notebook features a set of preservation metrics that when applied to a given data set, provide us with a snapshot of how current environmental conditions are affecting the materials in that space. Climate Notebook analysis includes rates of degradation given in years, the ability to study and compare different areas within one facility, clear warning markers (including the risk of mold growth), and recommended courses of action to slow artifact degradation.

We evaluate these monthly reports, note trends, and flag situations needing further review. Areas of concern might include too many RH spikes in a 24-hour period, or temperatures that are consistently too high or too low for the preservation needs of materials in a given space.


Climate Notebook reports provide in-depth analysis of climate conditions, and can easily be shared with other staff or site personnel. We recently began using the web-

based tool PEMdata (www.pemdata.com), also provided through IPI. It provides the same features as Climate Notebook software. Because you store your data in a secure online PEMdata account, your information is accessible through any computer with internet capabilities.

The following resources provide a good starting point for those wanting more information about environmental monitoring. The Image Permanence Institute (IPI) is a research institution whose labs concentrate on preservation research (www.imagepermanenceinstitute.org). It provides PEM2 data loggers, Climate Notebook software, and PEMdata online accounts. The makers of HOBO data loggers (www.onsetcomp.com) focus on environmental monitoring for both indoor and outdoor settings. The Northern States Conservation Center provides comprehensive information about environmental monitoring as it fits into the entire realm of collection care (www.collectioncare.org).

Gaining optimal environmental conditions will go a long way in preserving our treasured and significant historical resources. We cannot take needed steps without a thorough knowledge of current conditions, achieved through an ongoing environmental monitoring system. Data collected throughout the year(s) will arm you with the knowledge needed to make appropriate decisions on what temperature, RH, and lighting levels are best for your collection and your visitors.


Interested In Ship History?



JOIN The Steamship Historical Society of America

Member Benefits Include

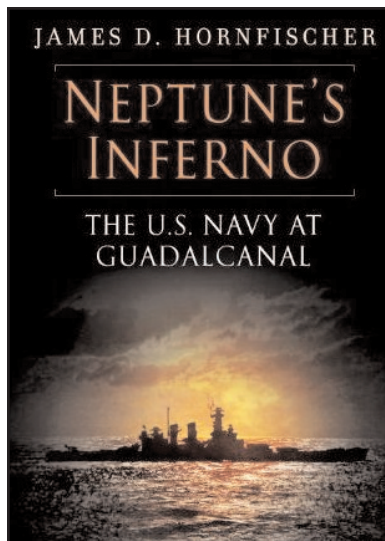
- MEMBERS RECEIVE the official SSHSA newsletters and the quarterly magazine—*PowerShips*. This prestigious, full color publication isn't just another maritime history magazine ...it is the ship history magazine.
- ACCESS to more than 60,000 historic digitized maritime photographs.
- DISCOUNTS on special cruises, conferences, research, photos, museum visits and memberships to affiliated organizations.
- MEMBERS ENJOY special nautical events and programs at the SSHSA conferences and meetings throughout the year.
- OPPORTUNITY to network with peers at local and regional chapter events.



Celebrating 75 Years in 2010

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BOOK REVIEWS



Neptune's Inferno: The U.S. Navy at Guadalcanal, by James Hornfischer

Review by Terry Miller

There are two things that I may say of a James Hornfischer book since he burst onto the naval literature scene in 2004 with *The Last Stand of the Tin Can Sailors*. First, the book will be as well researched and documented as any I've seen. And second, it will contain historical data that has been rigorously examined, augmented by many first person accounts and newly obtained material, and crafted into an imminently readable volume that reads like a thriller. Such a book was his first. His second, *Ship of Ghosts*, has even made Hornfischer a member of the USS *Houston* (CA-30) Association's extended family.

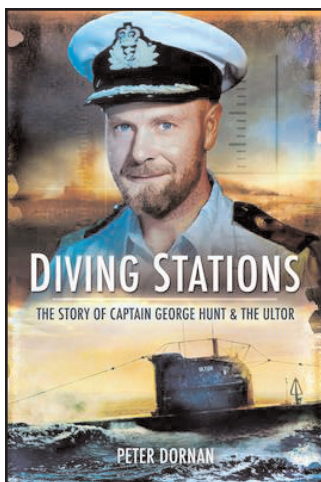
Now comes his third naval history book, *Neptune's Inferno: The U.S. Navy at Guadalcanal*. There have been several books, many of them very good, on the half-year-long battle in 1942 for that island but they focus on the Marines and their engagements ashore. For the first time there is a book that examines the entire campaign from the perspective of the navy. There were several engagements during the period, some decided losses for the Americans and Hornfischer describes not only the events but the underlying reasons. He takes us through lessons learned as the American Navy, still moribund from the inactivity of the interwar years and the Depression, comes to life in the heat of battle.

Taking each battle in turn, Hornfischer educates the reader without seeming to do so. We are being entertained by history; more than that we are enthralled with the stories he so deftly weaves as history becomes alive and real to the extent that I almost expected to feel salt spray on my face.

From the understanding of the need to stop the Japanese advance at a point where Allied forces would have a real

place to start the war, to the departure of the last Japanese evacuees when Guadalcanal was safely in American hands, every aspect of the campaign is presented in a fresh and compelling way: a history that is a page-turner.

James Hornfischer fans will not be disappointed. If anything, the bar he set so high with *The Last Stand* has been raised and all future naval historical literature will be improved as a result.



Diving Stations, by Peter Dornan

Review by Peter Nunan

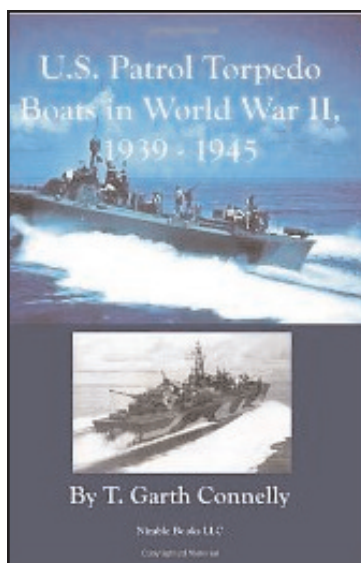
The Germans in the Atlantic and the Americans in the Pacific dominate the writing about submarine warfare in World War II. This book is different—the story of a Scotsman's exploits in the Mediterranean.

And the differences don't stop there. Ninety-five year-old Captain George Hunt, Distinguished Service Order and Bar, Distinguished Service Cross and Bar, not only attended the Brisbane launch of his story but spoke forcefully of his debt to the crew of HMS *Ulltor* and the need to remember the lessons of their experiences.

George had plenty of experience. In six years of war he made thirty-two patrols, seventeen of them in command of his U-class *Ulltor*. The U-class were small with only four bow tubes and four reloads. Their displacement was only one third a *Gato*'s, and they were significantly smaller than the German Type VII. Yet when Hunt left the Mediterranean in August 1944, *Ulltor*'s torpedoes had sunk twenty vessels and damaged two others. As well, the boat's gun had dispatched ten other ships.

The book concentrates on Hunt's time in *Ulltor* with most of the rest on his service in other boats which included two collisions and surviving one sinking. It's a pity his life before and after the war is covered in two brief chapters. I would have appreciated more on his boyhood training at the merchant navy training ship, HMS *Conway*, and his time after the war as Commodore in the West Indies. It's a pity, too, there is no index. Four maps and sixteen pages of

photos supplement the text. It's an engrossing story told in an unadorned style that lets it speak for itself. *Diving Stations* may open your eyes on a little known part of the submarine war.



U.S. Patrol Torpedo Boats in World War II, 1939-1945,
by T. Garth Connelly

Review by Terry Miller

This paperback book is a good handy reference for American Patrol Torpedo (PT) boats with attention to the details of how the boats were adapted to the demands of changing tactics as the war progressed. PT boats are too often overlooked, but they functioned as an integral part of Allied operations both in the Atlantic and the Pacific.

Connelly brings us up-to-date immediately with a description of the adoption of a basic British Navy design coupled with American manufacturing capability and American design changes. The result was the creation of a class of vessel that surpassed its British origins and built by three companies: Higgins, Elco, and Huckins. Connelly includes discussion of the Canadian Powerboat Company's boats. He leaves little out of this compact volume and includes such things as camouflage and added weaponry.

While this is a welcome addition to any naval history library there are a couple of minor disappointments that I need to point out. The first, and more serious drawback, is that although there are many photographs, sometimes the photos are not large enough to see the described details. Fortunately this is not a common flaw in the book. The other is a minor editing issue in the camouflage section where two paragraphs are inexplicably repeated with slightly differing text.

These flaws are not a reason to avoid the book which does stand on its own merits and anyone with an interest in America's Patrol Torpedo Boats, or in WWII naval history, will want to read and probably own *U.S. Patrol Torpedo Boats in World War II, 1939-1945*.

SS LANE VICTORY

San Pedro, California, U.S.A.

by Jan Michaelis
Volunteer

“WWII STEAMING MUSEUM GOES TO SEA!”

In San Pedro, at Berth 94, sits a museum ship, painted wartime gray, with guns that bristle on bow and stern; she's ready to go to sea. Nope, she's not a navy ship, rather a 455' *Victory*-class cargo ship. Thanks to years of restoration, beginning back in 1989, the *SS Lane Victory* is still STEAMING!

The 'Lane' is steeped in history. From her participation in WWII where she delivered munitions in the Pacific, to joining in a heroic effort with many of her sister *Victory* ships to evacuate civilians to the safety of South Korea during the Korean War. And then she was called back one more time to haul munitions to support our troops in Vietnam.

There are two fine museums on board. The first is in #4 cargo hold and is filled with more than 30 large models of the cargo ships and tankers of the WWII era, plus a vast amount of nautical memorabilia. The second museum is in #2 hold, that includes the large triple expansion engine that was featured in the movie 'The Sand Pebbles'. Now powered electrically this same engine is operated on our WWII cruises each summer. Also on display are WWII and Korean War jeeps, plus another jeep for kids to enjoy.

Today the S.S. *Lane Victory* is supported by WWII "Victory at Sea" cruises each summer, featuring a continental breakfast, hearty catered buffet lunch, live music, and an exciting mock aerial attack. 2011 cruise dates are July 23, August 27 & September 24. For more information visit our website www.lanevictory.org.

Below: An enemy aircraft swoops down to attack the Lane Victory during one of the ship's WWII "Victory at Sea" cruises.



HNSA NEWS & VIEWS

Compiled by Jeffrey S. Nilsson, Anchor Watch Executive Editor

On November 17th, 2010, HMS *Belfast*, in London, England, unveiled a major restoration project which took over three years to complete and was designed to restore the ship's Bofors Gun Unit to its former glory. During the ship's last major refit, between 1956 and 1959, she was fitted with six twin 40mm Bofors anti-aircraft guns in Mk V mountings. They were state of the art at the time, radar controlled, capable of training at an astonishing speed and able to fire up to 140 rounds per minute from each barrel. Now, 50 years later, one of the Bofors Gun mountings, P3, has been fully restored by a team of volunteers who, for more than three years, braved the highs and lows of London's weather to return the gun to its original condition. The team of volunteers, made up of men and women, are all united in the enjoyment of the company of like-minded people jointly engaged in the preservation of *Belfast* for the generations of visitors to come.

Also from England we hear from Portsmouth that thirty years to the day after the wreck of the *Mary Rose*, which sank on the 19th of July 1545, broke the surface of the Solent River, the *Mary Rose* Trust will open a new museum, bringing the hull of the ship and most of the 19,000 artifacts that were raised with her together again. The architectural firm of Wilkenson Eyre has designed an elliptical 'jewel box', placing the hull at the center with galleries running the length of the ship, each at a level corresponding to deck levels on the ship. Artifacts will be set out in these galleries so that the visitor can see what the decks looked like moments before the ship sank. The 17 years of treatment to conserve the ship's timbers by spraying polyethylene glycol comes to an end shortly, but will take another five years for the ship to dry out. The Head of Conservation at the Trust said 'Our visitors in 2012 will be able to see this final phase of conservation by looking into a hotbox and seeing both the ship and the process for removing the 100 tons of water she now holds'. When this is done in 2016, they will remove the hotbox and reveal the ship completely. This is being done for a ship known around the world. "There is nothing like it. This is Britain's Pompeii."

Onboard the USS *Massachusetts*, at Battleship Cove in Fall River, MA, overnight guests are now invited to step into the past as they witness the battleship's history come alive. A group of ambitious middle school students will take on the roles of battleship crew, their loved ones, and female service personnel from the WWII-era. These costumed students will occupy various spaces throughout the ship to help give life to the stories of the battleship's crew. Led by the battleship's education director and their teachers from The Montessori School in Westport, MA, this group of

youth historians has banded together to form the Montessori School of the Angels and USS *Massachusetts* Living History Society, with the mission of bringing the public face-to-face with the heroes who bravely served our country on board the ship, and with those who supported and loved them. The program will run the length of the school year, with the first half serving as a time of preparation, and the second half as a time to perform once per month during Nautical Nights encampments.

Ms. Susan Marenoff has been appointed to fill the vacant position of President of the Intrepid Sea-Air-Space Museum in New York City, NY. This promotion makes Ms. Marenoff the first woman in the 29-year history of the institution to hold this position. Please join me in offering Susan our Congratulations and wish her every success.

For perhaps the first time in history, a warship from the Civil War and World War II were in the same dry dock. The submarine *Torsk* from WWII and the sloop of war *Constellation* were on blocks being worked upon in the Sparrows Point Shipyard, Sparrows Point, MD which is quite close to Baltimore. The two ships have since returned to the water and their berths in Baltimore's Inner Harbor.

The *Laffey* is still not back at her dock at Patriot's Point, Mount Pleasant, SC. Their Board of Directors is looking at two options as to what to do with her. One is to eventually

Below: An extremely rare sight! The Civil War era sloop of war Constellation and the WWII-era submarine Torsk in dry-dock together.



HNSA NEWS & VIEWS

Continued

bring her back to Patriot's Point, and the other is to offer her to another museum. Ideally, what will happen is that *Laffey* will be moved back and occupy the dock space that *Clamagore* now occupies when *Clamagore* goes into dry-dock. It may be as much as a year before anything happens to either ship.

Even though Albany, NY went through a very deep winter, volunteer work on the *Slater* continued. Tim Rizzuto somehow manages to get his folks out in any kind of weather, and snow is no deterrent. Work continues in several main areas. In the Radio Room, volunteers are wrestling with the installation of the TBL transmitter and its associated motor generator and controls. The main deckhouse, on the main deck port side, along the tour route is rotting just aft of the galley and in need of repair. A plywood "man-cave" was constructed giving them some protection from the weather, however, it proved to be a handicap as there was more snow drifted up inside the lean-to than there was outside. Work will continue once they find the steel that is buried under a foot of snow on the pier. On the reefer deck, both restored compressors have been installed, as well as the electric motors.

On April 9, 2011, the USS *Orleck* Naval Museum, Inc. held the Grand Opening of its museum in Lake Charles, LA. The ship has been in Lake Charles since May 2010. The Gray Ghost of the Vietnam Coast will once again welcome visitors and former crew members to its decks. The Historic Naval Ships Association congratulates the staff and volunteers of the *Orleck*, and is proud to count the museum as one of the newest HNSA Fleet Members.

In Wilmington, NC the battleship *North Carolina* recently announced that repairs to the starboard bow of the ship are scheduled to begin this spring. LS3P Associates provided bid documents for the hull repairs and coordinated the work of Ocean Technical Services (Joe Lombardi) through the NC Department of Cultural Resources. Joe Lombardi is a leading expert in the restoration and preservation of World War II naval vessels. Taylor Brothers Marine Construction will perform the hull repairs from their Wilmington office. The father and son team of Julius Taylor Jr. and Julius Taylor III will bring over forty years of experience in marine construction to bear on the hull. Their work for the battleship will include a custom-made steel cofferdam, which will be inserted against the hull to displace water and mud. The cofferdam will provide a dry work area against the hull. Working from barges floated over the mud that now surrounds the ship, Taylor will replace steel at the battleship's "wind-water" line where the water meets the hull.

USS *NORTH CAROLINA* (BB-56)

Wilmington, North Carolina, U.S.A.

by Heather Loftin
Promotions Director

"WWII MAP RETURNS TO BATTLESHIP"

A rare World War II rubber intelligence map of Iwo Jima returned to the battleship *North Carolina* on Wednesday, March 2, 2011. Over the past six months, conservators at East Carolina University have preserved the rubber relief map by removing previous restorations that caused deterioration. The map is now stored in an oxygen free environment to ensure the rubber does not deteriorate further and will be returned to the battleship's collections.

The Iwo Jima map was originally constructed by the Naval Photographic Interpretation Center for preparation of invasion of the island. Made of cardboard, plaster and foam rubber, at an approximate scale of 1:12,500, this terrain model served to train military personnel and depict the island with air strips and topographic features. During the conservation process, stenciling on the reverse side of the map was revealed, as well as unique construction details.

"Of all the campaigns in the Pacific during WWII, the battle for Iwo Jima is the most iconic. The battleship *North Carolina* earned 15 battle stars as she fought across the Pacific but it is Iwo Jima that may be most recognized in the public's mind. It is a privilege and honor to have on loan in our collections an artifact that was used in that historic event and we are grateful to the Friends of the Battleship for providing the funding to conserve it," said Mary Ames Booker, Curator of Collections. "We are excited to show the results of our work on such a unique historical object with the public," said Susanne Grieve, Director of Conservation at ECU.

Below: The preserved rubber intelligence map of Iwo Jima.



VENTILATION AND GOOD HOUSEKEEPING

*By Charles C. Deroko
Marine Surveyor*

“BACK TO BASICS”

Historic vessels are acquired in a variety of conditions: some are nearly intact while others need extensive rebuilding. Each vessel has her own maintenance history and a successful restoration program may be her last chance for survival. Regardless of the amount of restoration required - or if ship is built from wood, iron or steel - all vessels need the same basic care throughout their lives. Ample ventilation and good housekeeping are paramount, but these basic procedures are frequently put on the back burner in favor of more ambitious and admittedly interesting restoration work. Neglecting the basics at the start of a project ensures costly and complex repairs in the future that can divert funds, impede progress and lead to general frustration. Restricted funds usually cannot be used for such fundamental repairs, further delaying the corrective work and aggravating the vessel's condition.

A clear restoration plan and adequate funding should be in place before acquiring a ship. Making the vessel safe for entry, removing debris, and performing a comprehensive cleaning are necessary first steps. A thorough inspection of the vessel's structure should follow, and any calls for a “paint brush overhaul,” however tempting, must be ignored. When well executed, these efforts establish a firm reference point for carrying out future restoration.

“VENTILATION”

A vessel in service enjoys consistent care from a crew kept busy soogeeing paintwork, scrubbing decks, airing the quarters and performing other daily rituals. This is often not the case with a vessel owned by a museum or other non-profit. Staffs are small and much dependence is placed on establishing a well-organized effort undertaken by dedicated volunteers.

Corrosion activity in a steel or iron ship requires oxygen and metal combined with an electrolyte (in this case, moisture). Clean dry air, replenished on a regular cycle, is vital in keeping the interior of a vessel fresh. Temperature differences between the interior and exterior of the hull, and stagnant air in enclosed areas, combine to create condensation. Condensation, deck leaks and leaks from failed internal deck drain pipes collect in the bosoms of built-up side stringers, behind riveted angle clips and in other tight structural corners. Eventually, the coating system breaks down and corrosion gains a foothold in the underlying structure.



Above: An example of extensive corrosion damage due to prolonged damp conditions.

Ventilation opportunities vary by ship type. Iron or steel windjammers can make good use of traditional wind sails to funnel fresh air into the holds. (Wind sails were also used ashore in the 1800s to provide fresh air in hospitals and dwellings.) The open holds also lend themselves well to the installation of simple mechanical ventilation systems. A relatively inexpensive installation would consist of two exhaust fans, one at each end of the vessel, electrical wiring and a system of vertical ducts leading from the lower hold to the weather deck. The fans should be sized to change the volume of air in the vessel's hull once every twenty to thirty minutes. The exhaust fans, mounted on top of the vertical ducts, create an induced draft that draws outside air down through hatches, cowl ventilators and other openings. The circulating air removes moisture and reduces the effects of corrosion within the hull.

Large, medium speed fans operating within well-stiffened vertical ducts can be insulated from the surrounding structure to keep noise levels down. The ducts can be designed for easy removal so as not to permanently mar the original structure. Fitting neoprene pads between the duct and the structure discourages vibration and decreases noise levels. Installing ventilation ducts may present some esthetic complications, but the long term benefits of good ventilation can be described to visitors as vital in helping preserve the ship.

In ships originally fitted with mechanical ventilation systems, existing ducting may be re-used to ventilate a museum vessel. Prior to re-activating an existing system, hazmat inspections are needed to ensure that no PCBs are present in the ducting gaskets.

Ventilation is extremely important in wooden vessels, where numerous confined areas exist behind ceilings and framing systems. Centrally located ventilation systems as previously described can work well in wooden vessels. In

hard to reach closed areas such as forepeaks & lazarets, locally fitted squirrel-cage blowers are efficient in exchanging air. Small, strategically placed blowers can ventilate the spaces behind ceilings by drawing air through sheer clamp air courses. Even a limited change of air provided by a modest system is worthwhile.

Some vessels are too large and complex for the mechanical ventilation system previously described to be feasible. However, a well thought-out passive humidity control system can also be effective in reducing corrosion. After determining the ambient humidity and the extent of corrosion activity, a comprehensive passive humidity control system was recently installed aboard USS *Missouri*. The control system included sophisticated monitoring equipment coupled with passive desiccant canisters in 500 tanks and spaces. Nearly 6,000 lbs. of desiccant material was installed to maintain low humidity levels in USS *Missouri*.

“HOUSEKEEPING”

The ally of good ventilation is good housekeeping. Supplies, equipment and materials should be stowed off the ship to keep internal areas clear, making routine inspection and cleaning a much easier task. Accumulated dirt holds moisture that eventually breaks down the coating system, leading to corrosion activity. A soogee solution of mild soap and clean water, along with portable and hand-held vacuums, are usually all that's needed to keep the vessel's structure clean.

Vessel trim also contributes to corrosion patterns. A vessel constantly down by the stern, for example, will collect dirt and moisture in the after end of compartments and structural members. Areas susceptible to corrosion activity would be on the fore side bulkheads, at the aft end of side stringers, on tripping brackets and along the webs of

Below: Example on how a well ventilated space can keep structures in excellent condition.



horizontal bulkhead stiffeners, to name a few. Areas of bottom plating and framing under leaking deck scuttles also collect debris and are susceptible to leaks and corrosion damage. Members having corrosion damage eventually suffer loss of section and acquire a “necked down” appearance.

Needless to say, a well-designed ventilation system and conscientious housekeeping are important for the well-being of the ship, staff and visitors. The historic ship that presents herself well is more likely to secure private and public funding and attract talented individuals. Such resources are critical to the success of any historic ship.

USS AUSTIN (LPD-4) BROOKLYN NAVY YARD CENTER AT BLDG 92

Brooklyn, New York, U.S.A.

by Daniella Romano

Project Director

“BROOKLYN NAVY YARD MUSEUM UPDATE”

In December 2010, one of the two bow anchors of the ex-USS *Austin* (LPD-4) was installed in the lobby of the Brooklyn Navy Yard Center at Building 92 (BNYC92), the exhibition and visitor center scheduled to open around Veterans Day 2011. This anchor, donated by the U.S. Navy, is a symbol of the scale of manufacturing that occurred at the Yard. It represents the immense productivity and output of the military installation for 165 years of service to the nation, as well as a symbol of the Yard and its role in the community.

The *Austin* was commissioned into the Navy on February 6, 1965. The ship's sponsor was Lynda Bird Johnson, daughter of President Lyndon Baines Johnson and a native Texan. *Austin* was a marvel of new technologies that represented many of the hard lessons learned during both World War II and the Korean War and better understanding of the needs for amphibious warfare and doctrine. The tasked mission for *Austin* and her sisters was to transport Marines with their essential equipment and supplies by embarked landing craft or amphibious vehicles and helicopter lift. *Austin* served the Navy and the nation in her role for forty-one years, a milestone claimed by few ships in U.S. Naval history.

Brooklyn Navy Yard Development Corporation thanks the shipbuilders and former crews of the ex-USS *Austin* for her many years of service, as well as the friends and supporters who made possible the anchor delivery and installation. Please visit www.bnyc92.org to learn about the Brooklyn Navy Yard Center at Building 92, and look for information on opening events in the next issue of the *Anchor Watch*. Hope to see you there!

**SRV *VITYAZ*
MUSEUM OF THE WORLD OCEAN**

Kaliningrad, Russia

by Dr. Viktor L. Strjuk

“MONUMENT OF SCIENCE AND TECHNOLOGY”

The Scientific Research Vessel (SRV) *Vityaz* was built in 1939 in Bremerhaven (Germany) as a dry-cargo ship and was originally called *Mars*. During WWII she served as a naval hospital and transport. In January-April 1945 she participated in a humanitarian mission, carrying more than 20,000 refugees from East Prussia.

After the end of the war the *Mars* was passed to Great Britain and got a new name –*Empire Forth!* In 1946, in accordance with the reparation accords, the ship was passed to the USSR. It became part of a Baltic steamship line, under the name *Equator*.

On January 31, 1946, the Institute of Oceanology of the USSR was founded. The *Equator* was chosen to become an oceanographic expedition vessel. In 1947 she was renamed *Vityaz* in honor of Russian corvettes of the XIX century.

“BASIC CHARACTERISTICS”

Displacement: 5,710 tons
 Maximum length: 109.44 m.
 Width of load waterline: 14.56 m.
 Midship section height to upper deck: 8.75 m.
 Draft, fully loaded: 5.86 m.
 Main engine power: 3,000 hp
 Speed: 14 knots.
 Number of research laboratories: 14
 Operating depths for anchoring: 11,000 m.

“A NEW LIFE”

The vessel was refurbished between 1947-1948 in Wismar, East Germany, by the Ministry of Navy. During her refurbishment, the middle superstructure was lengthened where laboratories, offices, and dwelling cabins were located. Former cargo holds were rebuilt into cabins, common hall, sanitary and service cabins. Diesel generators were installed, and additional fuel and water containers were added. As a result, the vessel could stay at sea for up to 120 days with a crew of 66 and an additional 70 scientific workers onboard.

The Krupp engine, built in the 1930s, remains today. When the ship's fortune was hanging by a thread, the German Museum of Science and Technology in Munich wanted to



Above: The SRV Vityaz at her berth as part of the Museum of the World Ocean's Historical Fleet Embankment.

buy the engine and remove it from the ship. Thankfully this was prevented and the engine is now on exhibit to visitors to the ship.

The *Mars's* elegance and richness of her interiors were not only saved during the refurbishment process but reproduced while equipping different rooms, living cabins and even research laboratories. Despite further difficult fortune of the ship, the interiors (chief-mess, crew-mess, ladders, library, crew mess, and other rooms) of the 1940s were restored and are part of the museum exposition.

Research equipment was installed during the refurbishment, mainly a deep-sea anchor winch; it enabled anchoring at extreme depths. The deep-sea trawling winch was as unique as the above mentioned anchor winch; it enabled trawling at the same depths. There have never been, before or after *Vityaz*, such winches aboard a research vessel. The world record of deep anchoring, held by the *Vityaz*, is 9,600 m, it has not been broken yet. Both of the deep-sea winches remain today and are available for viewing by visitors.

There were 65 voyages made from 1949 to 1979; the *Vityaz* sailed in the Pacific, Indian and Atlantic Oceans, and covered approximately 770,000 nautical miles. The ship completed 7,943 scientific missions and made many discoveries that brought her a reputation as a leader in oceanic research. One of the most famous achievements of the *Vityaz* is connected with explorations of deep trenches. In 1957, during her 25th voyage, the ship's echo depth-sounder fixed a record-breaking depth of the world's oceans in the Marianas Trench; 11,022 m.

The SRV *Vityaz* is moored as a floating museum in the city of Kaliningrad as part of a unique group of ships – the

Historical Fleet Embankment. Included in this collection is the diesel-electric submarine *B-413*, the space communication ship *Kosmonav T Viktor Patsaev*, the medium fishing trawler *SRT-129*, and the icebreaker *Krasin* which is located in St. Petersburg.

Today the *Vityaz* is the largest scientific-research museum vessel in the world. Onboard the ship, visitors explore the unique exposition "History of the World Ocean Exploration by Russian Navigators" which is located in restored cabins, holds, laboratories and 43 rooms. For more information on the *Vityaz*, and the other ships of the Museum of the World Ocean, visit the website <http://world-ocean.ru/en>.

2011 HNSA ANNUAL CONFERENCE

Honolulu, Hawaii, U.S.A.

by Jerry Hofwolt
Executive Director
USS *Bowfin* Submarine Museum

"EHELE MAI KAKOU" - WE COME TOGETHER

The Conference hotel is the Pacific Beach Hotel. It is located across from the Kuhio Beach Park (Duke Kahanamoku statue) and has a unique feature: an aquarium as the centerpiece of the hotel's Oceanarium Restaurant. For more information, please visit their website: www.pacificbeachhotel.com.

"HOTEL ACCOMODATIONS & RATES"

The hotel is offering significantly reduced prices on all room view choices. You can receive the special room rate during the conference and three (3) days prior and three (3) days after. Conference Prices for the hotel are \$129.00 for a Standard Room, \$169 for an Ocean View Room, and \$229 for an Ocean Front Room, plus taxes (4.71% general excise plus a hotel room tax of 9.25%).

Attendees are responsible for confirming their own reservations by calling the hotel at (800) 367-6060 or locally at (808) 923-4511. Attendees can also fax a reservation request to (808) 922-8061 or email the hotel directly at reservation@pacificbeachhotel.com. You must confirm your room with a one-night room and tax deposit by August 1, 2011 and be sure to mention HISTORIC NAVAL SHIPS ASSOCIATION to receive the discounted rate.

"CONFERENCE PACKAGE"

In addition to all of the great presentations and workshops the conference provides, as well as breakfast each morning, the following is included in the registration fee:

Wednesday: Aloha Reception at Pacific Beach Hotel.

Thursday: Dinner onboard the battleship *Missouri*. (Please wear comfortable shoes and clothing for climbing and exploring. Transportation is provided.)

Friday: Tour of Pearl Harbor (Friday will be a full day at Pearl Harbor so wear comfortable shoes and slacks for climbing and boarding boats and ships and bring sunscreen, sunglasses and a hat! Transportation is provided.)

Friday night is *Bowfin's* cocktail reception at Jimmy Buffett's at the Beachcomber Surf Museum. 1st hour of wine / beer / soft drinks & pupus are complements of *Bowfin* Park. Special exotic drinks are on your own and you are encouraged to follow up and dine at JB's. It is only an 8 minute stroll back to the hotel. Note: We'll stop at Jimmy Buffett's direct from our tour of Pearl Harbor.

Saturday: "Pau Hana" Award Banquet Dinner at the Pacific Beach Hotel.

"CONFERENCE REGISTRATION FEES"

Directors Fee (You have some extras - sorry)

\$275.00 Before July 16

\$295.00 After July 16

Regular Conference Fee

\$230.00 Before July 16

\$250.00 After July 16

Guests Fee

\$120.00 Before July 16

\$140.00 After July 16

"AIRPORT TRANSPORTATION INFORMATION"

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"CALL FOR PAPERS"

The conference chair(s) invites proposals for papers and sessions. Proposals should include a brief abstract for each paper or panel, plus a brief biography of the author and of each panel participant. Submissions should be mailed to Captain Jerry Hofwolt, Executive Director, USS *Bowfin* Submarine Museum and Park, 11 Arizona Memorial Dr., Honolulu, HI 96818-3145 or e-mailed to him at jerryhofwolt@hawaii.rr.com. All submissions must be received no later than July 1, 2011.

ANCHOR WATCH



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