



From the Wheelhouse

The feature article in this Quarterdeck is about the Maritime Archaeological Society, a new organization whose mission is to study shipwreck and other submerged archeological sites in the region. Their work is important. For example, in 1895 the Federal Fish Commission counted more than 2,600 double-ended sailing gillnet boats on the Columbia River between Ilwaco and Puget Island. But not one unmodified example of these culturally important boats has yet to be found. The best bet is that this group will discover the remains of one buried deep in the mud of a tidal slough along the river. I wish them good hunting.

The Restoration of the Anna, A Replica of the HMS Chatham's Launch.

In October 1792, Lieutenant William Broughton, commander of the armed tender HMS Chatham that was also part of Vancouver's expedition, crossed the bar and entered the Columbia River. This was just six months after Captain George Vancouver learned of Captain Robert Gray's entry into the Columbia River.

In two boats, Broughton and a small crew rowed up the Columbia River for an estimated 100 miles to what he called "Point Vancouver" but what is now believed to be Cottonwood Point, a bit upstream from Washougal, WA. Broughton took careful soundings and his field chart was engraved and published by London mapmaker Aaron Arrowsmith in 1798. A first edition of this map is on display in the Museum.

To celebrate the bicentennial of the Euro American discovery of the Columbia River, in 1992 the Oregon Historical Society sponsored the building of a replica of one of the small boats -- the launch used by Broughton to survey the Columbia River two hundred years before. This boat, now owned by the Columbia River Maritime Museum, will be restored in the Barbey Maritme Center



over the next year by a crew of volunteer boatwrights. The Chatham's launch is typical of the boats carried aboard both merchant and exploring vessels of the 18th century: these were heavy, well-built work boats capable of withstanding rough use near shore and at sea. The replica of Chatham's launch is based on plans of the HMS Bounty's launch used by Captain Bligh in his epic 4,000 mile small boat voyage across the South Pacific.

The lines and construction details for this boat, which is slightly smaller than the Bounty's launch, were drawn up by maritime historian and master boat builder Greg Foster of Galiano Island, British Columbia. The construction of the Chatham's launch is essentially that of a scaled down version of the larger sailing vessels of the time, with frames sawn from oak, planks butted against each other, edge to edge. The restoration work will use the same tools used by shipwrights in the 18th century. This project is being funded by Cornie and Bill Stevens, longtime members and supporters of the Museum.

The restoration of the Anna will provide the opportunity to teach and interpret traditional boat building as well as the exploration of the Columbia River.

Lam Johnson

Executive Director

Executive Committee

Helena B. Lankton, Chair Michael Haglund, Vice Chair Don Vollum, Secretary Gary D. Kobes, Treasurer H. Roger Qualman, Immediate Past Chair Ward V. Cook, Advisor Thomas V. Dulcich, Advisor Capt. Bruce C. Jones, Advisor John R. "Jack" Loacker, Advisor Kurt Redd, Advisor Dr. Sam E. Johnson, **Executive Director**

Board of Trustees

Steven M. Andersen George F. Beall John Braestrup Dale A. Farr Steve Fick Terry D. Graff Jerry F. Gustafson Ted H. Halton, Jr. Donald M. Haskell Carol Ihlenburg Senator Betsy Johnson Capt. Dan Jordan Dr. Russell Keizer S. Kenneth Kirn Irene E. Martin Capt. Anne Mcintyre David M. Myers David Nygaard Capt. James E. Richards Jeanyse R. Snow William T. C. Stevens Shawn M. Teevin John Tennant

Trustee Emeritus

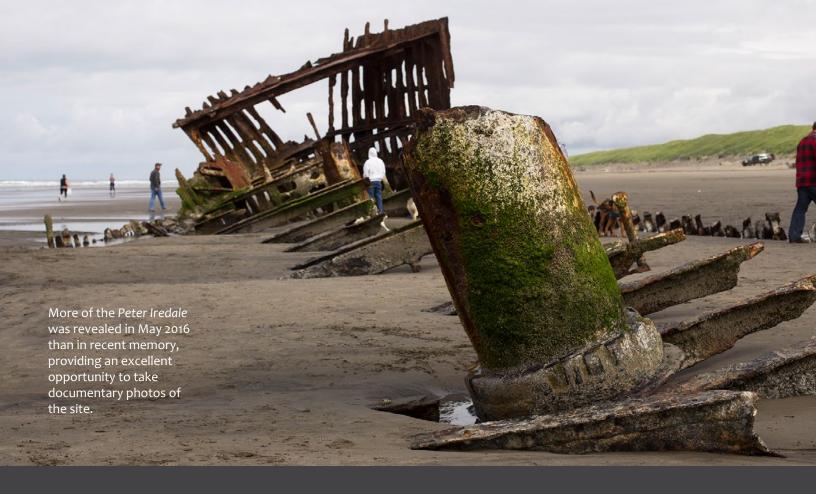
Peter J. Brix Cheri J. Folk Walter Gadsby, Jr. Alan C. Goudy W. Louis Larson Donald W. Magnusen

Advisory Trustees

David S. Hill Guy C. Stephenson Ambassador Charles J. Swindells Willis Van Dusen Bill W. Wyatt

On the Cover:

Professional photographer Monique Rodriguez captured this view of the Peter Iredale wrecked at what is today Fort Stevens State Park. Monique visits Astoria and the park every summer with her family from Colorado.



Maritime Archaeological Society

The Maritime Archaeological Society, MAS, is a non-profit organization formed in 2015 after seeing a need for a coordinated group of professional archaeologists and volunteers to document shipwrecks and other submerged archaeological sites in the region. According to Oregon State Historic Preservation Office (SHPO) Archaeologist Dr. Dennis Griffin, recorded shipwrecks within the state database number just over 300 while the number of reported shipwrecks off the Oregon Coast alone include over 3,000. The mission of MAS is to seek out, investigate, and document shipwrecks and other maritime archaeological sites; conserve artifacts from those sites, when appropriate; and educate the public in areas of maritime cultural heritage, historic shipwreck preservation, and the science of maritime archaeology. Headquartered in Astoria Oregon, MAS serves the Pacific Northwest and beyond, with a

contingent based in Hawaii. MAS is still small, but continues to grow in size and expertise.

The idea for a new organization was started in 2014 by several leaders of a shipwreck project on the North Oregon Coast known as the Beeswax Wreck Project. Recognizing the need to record local maritime archaeology, it was decided that a non-profit 501(c)(3) could be formalized using a model relying on trained archaeology volunteers. Similar organizations around the country and across the globe were looked to for examples of comparable programs and the Columbia River Maritime Museum was consulted. The Nautical Archaeology Society (NAS) in England is the granddaddy of most volunteer underwater archaeology societies. NAS grew out of the excavation and recovery of the Mary Rose in the 1970s and 1980s. The Lighthouse Archaeological Maritime Program (LAMP) in Florida is a good example of



a volunteer program that works hand in hand with a museum. Another inspiration came from a successful volunteer archaeology program closer to home, the Oregon Archaeological Society (OAS). OAS is an all-volunteer organization with significant participation and mentorship by professional archaeologists. Since forming, MAS has worked to build relationships with all of these organizations.

One MAS directive is to educate the public about our shared maritime cultural heritage with a goal of building pride of ownership and a sense of stewardship for shared public resources. One big target audience is the diving community. Divers, by the very nature of their sport, frequently come in contact with maritime cultural resources in the form of shipwrecks. MAS wants to offer a positive, productive, and fulfilling way for divers to interact with these resources. Each MAS project has a professional archaeologist volunteering as the principle investigator. Volunteers are overseen and mentored by a professional archaeologist. Having the professionals involved helps insure well-meaning volunteers do not inadvertently violate a cultural resource law or professional archaeology ethical standards.

An all-volunteer organization, MAS members go through an internal training program before assisting with surveys and research opportunities. Training includes basic maritime archaeology techniques including archaeological ethics and regulations, courses on field methods, historical research methods, artifact conservation, and remote sensing. A typical survey project includes both high tech and traditional methods from measurements and drawings to detailed photo and video capture. Photographs can be used with photogrammetry tools to create 3D models of shipwrecks. For offshore surveys, MAS utilizes a small remote operated underwater vehicle (ROV), GoPro camera, side scan sonar, and other equipment when available. Specially trained volunteer divers are also available for underwater surveys.







Posoarch

Research is a big component to each project. The Columbia River Maritime Museum and other coastal maritime and history museums have been generous with offering meeting space and research assistance. MAS is proud of its growing relationship with CRMM and a network of local museums and historical societies. CRMM has made a space available in their research library for a collection of books and papers on maritime archaeology contributed by MAS. Before MAS heads to a maritime site, research is conducted.

Every project needs to have a research design as well as research questions to be answered. Sometimes the questions can be simple, such as finding out how much is left of a site. It is more complex to answer how a site was used. One of the most difficult questions can be figuring out the name of a vessel. For example, MAS was called

on by the Westport Historical Society to help record a wreck that had washed out of a hillside in Willapa Bay, WA in late 2016. Research had shown the wreckage washing out of the beach could belong to a number of shipwrecks.

After recording as much information as possible about the wreckage: dimensions, fasteners, materials, construction methods, signs of fire, possible tool marks— the team always then heads back to the research library. Researchers look at the vessels known to be lost in the area for the best fit to the evidence collected in the field. Fasteners, construction materials, and sometimes construction methods can all be used as rough time markers. Fasteners and particularly construction materials can inform the researchers of the vessel's region of origin. With the observations from the wreckage, they begin the process of narrowing the list of known wrecks, looking for the definitive diagnostic artifact or group of artifacts that



answer the project research questions. Identification of the Willapa Bay wreck is still under investigation.

Sometimes the findings can completely change the theory on a site or the identity of a shipwreck. For example, at the beginning of the Beeswax Wreck project, the team thought the shipwreck was the Spanish galleon San Francisco Xavier, lost in 1705. With the accumulation of evidence from the field and archives, the most likely candidate changed to the Santo Cristo de Burgos lost in 1693.

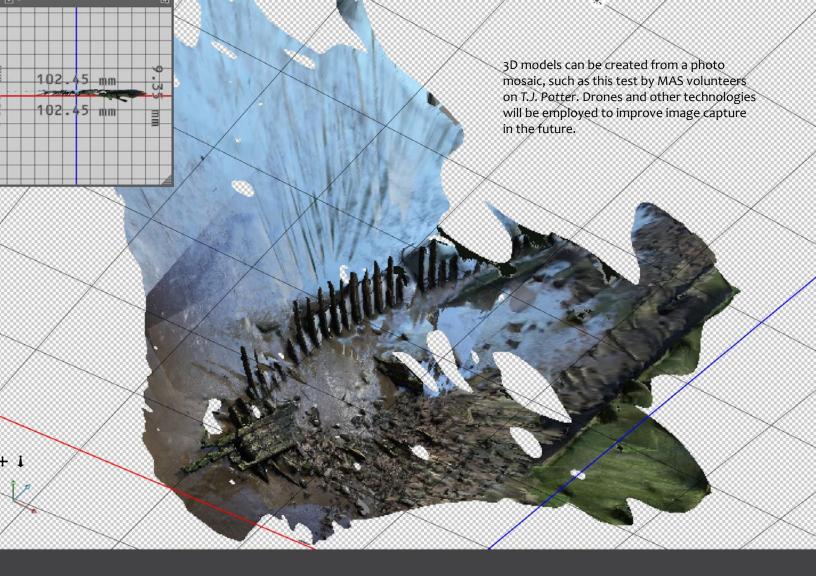
Projects and Activities

MAS projects are much more than diving on shipwrecks. Maritime archaeology encompasses all human activity along the transition area, or ecotone, between water and land. Maritime archaeology studies the remains left by human activity to understand the relationship and interaction with the marine environment and how it has changed

over time. These activities include water access like docks, piers, and bridges. It can also include resource extraction such as fishing, clamming, processing, and shipping activities as well as water transportation.

Projects range from historical research investigations to complex underwater surveys. Investigations often begin in response to requests for expertise and assistance from individuals, local historical societies, and government organizations. Volunteers recorded the remains of a boat in Lewis and Clark National Historical Park at the request of the National Park Service. Another ongoing MAS activity is adding records to the Big Anchor Project, which is an international effort coordinated by the Nautical Archaeology Society in the UK to create a database of heritage anchors. MAS began participating in the project after being asked to record an admiralty anchor recovered from Baker's Bay, WA by the Coast Guard.

Museum Staff:
Blue Anderson
Elaine Bauer
Celerino Bebeloni
Chuck Bollong
Stacy Bradley
Ann Bronson
Paula Bue
Kate Casler
Marcy Dunning
Gary Friedman
Julie Flues
Elizabeth Hayes
Helen Honl
Jordan Horn
Kathy Johnson
Sam Johnson
Kelly McKenzie
Karen Sexton-Josephs
Matthew Palmgren
David Pearson
Blaine Phelps
Nate Sandel
Jeff Smith
Aaron Stinnett
Patric Valade
Brooke Willoughby



Several anchors have been recorded already, with a growing list of anchors to record. Many of these projects can also be used as a way to test methodology and new equipment.

Oregon Coastal Survey Project

A large ongoing MAS project, the Oregon Coastal Survey Project, seeks to provide increased knowledge of shipwrecked and abandoned vessels along the Oregon coast that previously had little or no documentation. This project was created to address concerns and gaps in the Oregon State Historic Preservation Office records. Limited existing records might have a position, vessel name (if known), and estimated year the ship was sunk (if known). Adding details to the site record means a great deal more information is known about the site including measurements,

history, and site formation processes which are the events that created the archaeological site. Reports for each site get filed with the SHPO site database. As MAS collects more site data in each coastal community and estuary, a larger picture and narrative of maritime activity can be built up over time.

So far, MAS has five sites under the Coastal Survey Project umbrella and the list keeps growing. Research and site work are in various stages of completion for T.J. Potter, Emily Reed, Silvia De Grasse, Blanco, and Peter Iredale. These projects can be slow to complete because of the environment, research, and volunteer availability. Many field projects are also dependent on nature's winds, tides, currents and the movement of sand. One portion of Emily Reed on Rockaway beach is only visible once every few years. The wreckage of



T.J. Potter has been surveyed and the report written and submitted to the Oregon SHPO. With Emily Reed, MAS is still looking for all of the parts. MAS has found what they believe are two parts of the ship that is said to have broken up into five parts. Silvia de Grasse is in the remote sensing phase. Wreckage has been located on sonar. The next step is to document the wreckage with ROVs. The ROVs will take both video and still photos. The photos will be used to build 3D a model of the wreckage. 3D modeling has been practiced on land with T.J. Potter and Peter Iredale.

Peter Iredale is one of the most iconic and publicly accessible shipwrecks on the Pacific Northwest Coast. In August 2016, more of Peter Iredale emerged out of the sand than had been seen in the last 30 years. Peter Iredale is on state park lands, so to do research would re-

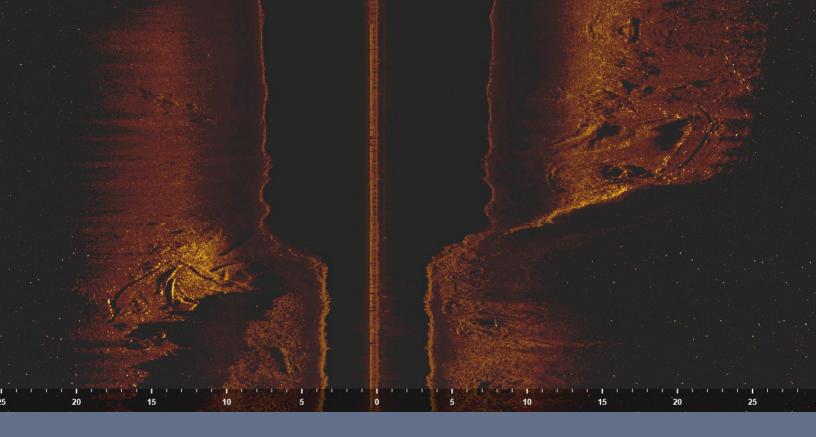
quire a permit. MAS needed to act fast before the wreck was reburied by sand so the time was used as an opportunity to go take over a thousand photos of the shipwreck, knowing the site would eventually be part of the Coastal Survey Project. It was also an opportunity to practice building a 3D photo mosaic. MAS plans to create 3D models of wrecks both onshore and underwater. In the future with a permit, MAS plans to take detailed measurements of *Peter Iredale*, and will use a 3D scanning laser to augment the 3D photogrammetry already completed.

Reeswax Wreck Project

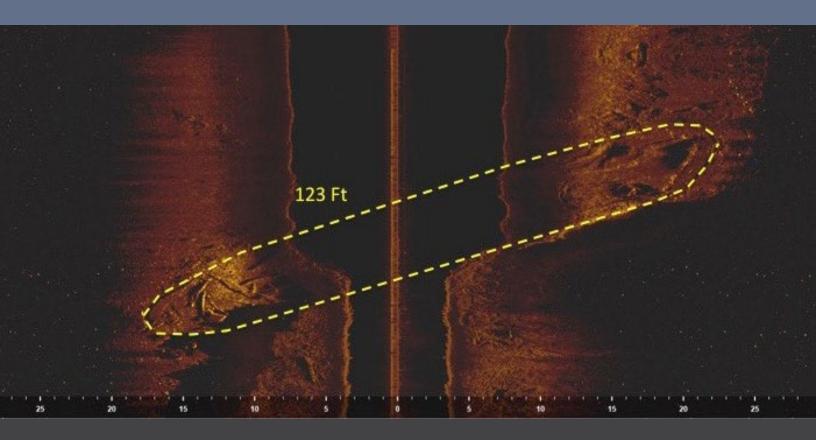
One of the most well-known archaeological mysteries on the Oregon Coast is the identification of the Beeswax Wreck at Nehalem Beach. The QuarterDeck
Fall 2017
The QuarterDeck is published by the Columbia River
Maritime Museum,
1792 Marine Drive,
Astoria, Oregon 97103.
Tel: (502)235-2222

Editor: David Pearson Editorial Staff: Blue Anderson Julie Flues, Jeff Smith

Printed by Lithtex, Hillsboro, Oregon



Side-scan sonar images captured of the *Sylvia de Grasse* shipwreck in the Columbia River. MAS will study the wreck and submit a detailed report to the State Archaeologist. Loaded with lumber headed for San Francisco in 1849, the *Sylvia de Grasse* drifted onto a ridge of rock in the river near Upper Astoria and was unable to get free.





Nehalem Indian oral histories as well as the journals of the earliest traders in the area indicate a Spanish galleon wrecked there prior to European settlement. Archaeologist and MAS Board member Scott Williams has been the principal investigator of the Beeswax Wreck Project for 10 years. The Beeswax Wreck Project is now a MAS field project, which has opened up new opportunities to fundraise and seek out grants to support the investigation.

This year MAS was awarded a *Preserving Oregon* matching grant to fund offshore remote sensing research. The plan was to collect both side-scan sonar and magnetometer data in a regular grid pattern across six pre-determined sectors. Each sector could be covered in a tide cycle and the boat would be able cross the Tillamook bar on the flood tide. The team ran into equipment problems early on with both the

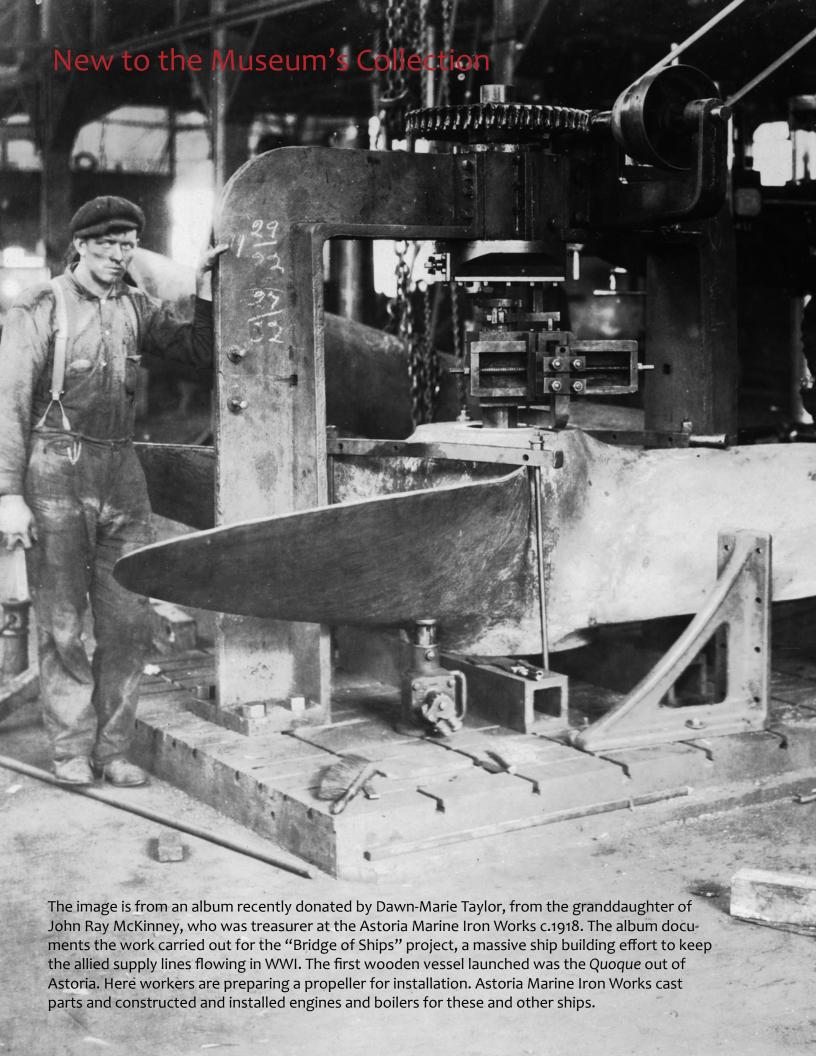
original planned magnetometer and a second borrowed magnetometer. As good weather windows started passing, MAS initiated its backup plan to proceed with side-scan sonar and return later to check identified targets with ROVs. The magnetometer search is currently on hold until more reliable equipment can be obtained. The side-scan sonar grids were completed in early September. Even without the magnetometer, volunteers were able to collect great side-scan data covering shallow areas not reached in previous side-scan and multi-beam sonar sweeps. The search for the resting place of the Beeswax Wreck continues.



Get Involved

The Maritime Archaeological Society is always looking to expand its base of trained volunteers as well as its partnerships in the community and with museums and historical societies along the Coast. The group looks forward to further developing its relationship with CRMM activities and outreach. If you are interested in getting involved, MAS has opportunities onshore, offshore, and in research archives. Anyone can participate once the basic training program is completed. Learn more about MAS on the web http://maritimearchaeological.org, on Facebook @MaritimeArchaeologicalSociety, and on Instagram @mas maritime or email info@maritimearchaeological.org.







Museum Store Sunday

Sunday, November 26, 2017 from 11:00-3:00 PM

Museum Store Sunday is a global celebration that puts the spotlight on the mission-related products found at museum stores worldwide. In partnership with the United Kingdom's Association for Cultural Enterprises and the Museum Shops Association of Australia and New Zealand, the Museum Store Association is launching Museum Store Sunday as the annual day to shop conscientiously and support museum stores and their missions worldwide. Holiday shoppers will not only be able to find quality gifts filled with inspiration and educational value but, through their purchases, will support museums and cultural institutions, enabling ongoing and future cultural appreciation and knowledge.

The Columbia River Maritime Museum will be celebrating with food demonstrations, music, and special offers for members and visitors during the busy holiday season, and Museum Store Sunday will encourage the public—and especially culturally minded shoppers—to make thoughtful purchases and to rely on museum stores as retail destinations. The Museum Store will offer a relaxing and informative environment from which visitors can reflect and learn. In addition, shopping and purchases at your museum store will support CRMM educational programs, as well as designers and vendors on a local, national, and international level.



Build a Stand Up Paddle Board

Based on classic long board designs "All-Round" SUPs combine ease of paddling with stability and maneuverability. They are the "multitaskers" of the SUP world. Our new 11' SUP with its classically beautiful lines fits the bill. Its length provides good glide and its rockered bottom and narrow tail give it good maneuverability. The shape, width and volume give it the stability needed to hold large paddlers steady and makes it great for beginners. While designed primarily as a flatwater board, its rockered bottom helps the board handle choppy afternoons and smaller playful waves.

Stability and versatility make this board the perfect one-board choice for the whole family. With its flat deck, this user-friendly board provides a wide platform for a comfortable stance. We've taken it crabbing, on board a sailboat for some side adventures, paddled it on glassy days, in choppy swell and had a local yogini contort on deck. At its debut at the Port Townsend Woodenboat Festival the Pygmy 11' SUP was the most stable kit board. It's an ideal family board for beginner paddlers up to 250 lb. and advanced paddlers up to 300 lb.

Using stitch-and-glue construction with 3mm plywood and 4 ounce fiber-glass cloth, this paddleboard comes together easily with no prior woodworking experience.

Pygmy Stand Up Paddle Board Class Instructor: Chuck Bollong December 4-10, 2017 8:30 AM - 5:00 PM

Cost: \$1,849.00 (\$800 Tuition plus \$1049 kit price from Pygmy Boats)

These are seven-day classes offered in conjunction with Pygmy Boats. Please call the Museum for more information.

No previous building experience necessary.

Minimum of 3, maximum of 4

New Members

5/3/2017 thru 9/6/2017

ENSIGN

Steve Bennett Darci Linkey Bodin Thomas Briggs Mary Hardy

CREW

John and Jan Acker Vance and Lisa Anderson Tom and Patti Appleby Chuck Archer and Donna Fuller-Archer Alain and Anne-Marie Balmaceda Michele and Allison Bassich Ashley Black and Kathleen McHugh Justin and Delane Blackstock Jacob Bushnell and Jessica Hoffman Bill and Jenn Capodagli Nicholas Clark and Frances Turner Don and Val Conrov Ellen and Sara Crow Greg and Robyn Doré Pamela Dyer and Najela Scott Jack and Rebecca Eichhorn Jeff Elder and Molly Hope Elder James and Alice Emmett

Han Fradenburg Samantha Golden Meir Hammer and Lauren Roon Jerry Hansen and Donna Case Karl and Katie Hellberg Richard and Khrystal Hinkel Jay and Sandi Hofer Linda Johnson and Jennifer Kelly Jon Jones Micah and Esme Jordan Allen Kinast and Wendy Ditzler Matt and Kelsi Klovdahl Bryan and Debra Kumm Leiken and Olivia Jacobus Jason and Larabeth Lobo Jared and Denise Logan Paofue and Mia Lor Ryan and Shoshana Lund David Machado and Lorraine Wormald Mark McNeal and Elizabeth Dwan Jim Meyer Mark Mueller and Sara Loveless-Mueller Peter Newland and Robyn Johnson Sam and Genice Normand Jim and Alyson O'Connor Jud and Diana Parsons Rafael and Kristina Perez

Ben and Danielle Quarmby
Joe and Katie Sanderson
Jack and Jane Scharbach
David and RaeLa Seekins
Gail Sunderland and
Susan Rhodes
David and Cindy Thomas
Gina Thompson
Todd and Tina Towers
Darlene Waldmann
John Wetherill
Justin and Kalani Whitney
John M. and Kathleen Wright
Mitchell and Tiffany Wright
Tom Zinser, DMD

HELMSMAN

David and Elaine Arthur Mark and Patricia Christensen Christopher and Lora Clements Dennis and Alice Gutknecht Jim and Jessica Haxton William and Lillian Holland Vincent and Bereniece Jones-Centeno Tom Kantz and Kathy Taylor Kathy Kuehn Peter LaBelle and Julia L. Read-LaBelle Casey Law Tod Lundy and Carole Elder Kevin Mundy and Jennifer Adams Mundy Greg Qualey and Jessica Amo

Jeremy and Anisa Richardson Charles Rogers and Pat Krumm Paul Stinnett and Nicole Wager Kevin and Barrie Tawes Wallace and Patricia Badger Scott and Carolan Wolterman Stuart and Melody Woolley

BOATSWAIN

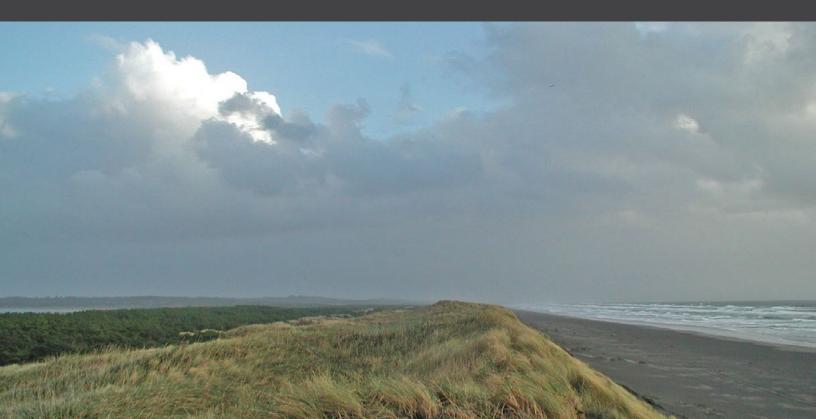
Tom and Siv Barnum
Tim Brown
Gary and Melodie Chenevert
Jeffrey and Debra Hall
Ed Moticka and Jane Adrian
Owen and Susie Phillips
George Roth and Jason Mack

PILOT

Noah Jarrett

BUSINESS MEMBER

PacifiCorp / Pacific Power



Memorials

5/3/2017 thru 9/6/2017

Diane Beeston

Jerry Ostermiller and Lynne Johnson

Dave Bennett

Kathy and Steve Johnson
Jerry Ostermiller and
Lynne Johnson
Jerry and Marlene Vanderpool
Jack and Shelley Wendt

Janet Gadsby

Phil Nock Jerry Ostermiller and Lynne Johnson

Helen Horvath

The Lower Columbia Danish Society

Julius Horvath

The Lower Columbia Danish Society

Esther K. Jerrell

Captain Fred B. Jerrell Estelle W. Duggan

Kevin Kolb

Edward F. Hargreaves Tilzer W. Hargreaves, Jr., and Martha J. Hargreaves

Evelyn M. Leqve-Smith Pam and Mike Randell

Prudence M. Miller

Richard T. Charlton and Joan M. Charlton

Eva Moore Ellen Fuller

Donald T. Nelson

Captain Fred B. Jerrell Anne McAlpine Jerry Ostermiller and Lynne Johnson Gordon and Carol Wolfgram

Byron Pinkney

Andrea Proett

Shirley Parker Randles

Judy Howard Fran Lavery Susan Marietta

lames Schmitt

Horace Harrison, Jr.

Harry Sutton

Horace and Kalliopi Harrison

Charlotte Vlastelicia

Dave and Sue Corkill

USS Knapp DD-653

John E. Forrester EM2c

Planned Giving

At sea, an anchor to windward provides stability in a storm, and secures a vessel and its crew in difficult weather. Much like an anchor to windward, planned gifts such as bequests, gifts of real estate, and charitable trusts, provide security and benefits to donors and the Maritime Museum. Please consider a planned gift to the Museum.

For further information on how you can provide a lasting legacy to the Museum please contact Sam Johnson, Executive Director at 503-325-2323.

COLUMBIA RIVER MARITIME MUSEUM 1792 MARINE DRIVE ASTORIA, OREGON 97103

ADDRESS SERVICE REQUESTED

Non-profit Organization U.S. POSTAGE PAID Astoria, Oregon Permit No. 340

