



OREGON
MARITIME
MUSEUM

THE PORT QUARTER

Oregon Maritime Newsletter

Spring 2018



Bundles & Boom Sticks: the Lost Art of Log Towing



The tug BETSY L gets her tow underway “header first” from one of Crown Zellerbach’s log dumps on Deep River. Once downriver, she’ll swap ends and continue towing to either Cathlamet for re-sorting or on to Astoria for export.

LOG RAFTS were once as common a sight on the river as a fisherman’s hogline. But the glory days of log towing on the Columbia and its tributaries are no more. In fact, this entire segment of the local maritime industry has faded into oblivion within the last few decades to become another page of riverfront history.

For well over 140 years, harvested timber was carried by wagon, rail, and truck to hundreds of log dumps along various waterways and sloughs across the Northwest. From there logs were sorted by size and specie, assembled into rafts, and then towed by tugboats to meet the insatiable demand of all the lumber and paper mills from the Gorge to Astoria. By the early 20th Century whole logs were also being towed to the ports and loaded onto ships for export.

This mundane, yet vital activity appeared to ooze along at such a leisurely pace that it belied the amazing level of talent and river knowledge necessary to get from point A to B with the tow intact. The seemingly simple task required a skill set that is best described as an art. The difficult nature of the job was primarily because it was done on waters ruled by tide and current – and reportedly one of the few places where logs were sometimes towed upriver!

Traditionally, tows were a flat raft, or a group of unbundled logs. By the early 1950’s, bundle rafts became common where logs were bound together into bundles, usually a 100 per raft. Boom sticks, 64-foot logs with holes and chains in each end, encased the raft. Peaked at one end to assist in towing against the current, a header stick was placed across the tail end. Rafts were about 765 feet in length and often towed in pairs. When combined with 1000 feet of towline, a log tow could be a half-mile long!

While big boats like the Steamer JEAN and her 14-man crew could manage a four-raft tow, most tandem tows in the 1950’s were handled by smaller tugs powered by a 200 HP Atlas diesel and a two-man crew. Things became a little easier in the 1980’s when 1500 HP boats arrived. Tail boats were used behind tows moving downriver to help keep the unwieldily rafts in line.

Boat crews usually stayed aboard for a week at a time, working around the clock as required. Once the rafts were rigged and the tow underway, the captain and deckhand would take turns running the boat to allow the other to rest. Deckhands with good steering skills were a welcome asset and much sought after by captains. Sometimes, when the river was high, a tow could grind along for hours without making any progress upriver.

Timing was the most important component of the job. Knowing when – and where – the tide would be ebbing or flooding was crucial. Some places were extremely difficult to land a raft if the current was flowing the wrong way or if there wasn’t sufficient water available at low tide. Intimate river knowledge was essential. Captains had to know where to take advantage of eddies, where to wait out a tide change, or where it was deep enough water to cut a corner and shave off precious time.

Equally important was knowing when to have more tow wire out or to shorten it up; where to pull hard or slack off; turn easy or turn hard to keep the tow from going wild. It was also imperative to know of any approaching river traffic before attempting to cut across the ship channel. *(continued on page 3)*



In this scene, taken from the seawall where the Steamer is now moored, Knappton’s COWLITZ and NOYDENA race to fix a broken joint. The trick was to get the logs back together before the raft drifted down onto the Burnside Bridge or some other obstacle. Losing logs or a raft was not fun.

All photos in this article courtesy of Captain Chuck Patching’s personal collection

At the Helm



Change is Coming!

The men who started the Oregon Maritime Museum are much like the men who restored the Portland Steamer. They were determined to make a dream come true and build a legacy that would last another 200 years. This preservation of OMM continues to be accomplished through the loyalty of our membership and not with any one person, including myself.

Although we had a rocky transition getting our new officers up to speed, Susan Spitzer made herself available to help and I thank her for that. I am so proud of the docents who are working hard to keep the tours on time and proud of the volunteers that work in the Steamer's engine room, often using their own money to buy parts to get us ready to cruise. 2nd Vice President Mike Stevens was instrumental in getting some of the inspections by outside sources for little or nothing and I have to thank him. George Hall, the greatest Chief Engineer on the planet as far as I am concerned, runs a tight ship in the engine room.

That being said, there are some changes I would like to make. Our website needs to be updated or rebuilt so that it is easier to maintain and more user friendly. It boasts of a research library that doesn't exist, a digital library with books for sale that we may not have and forms that cannot be completed on-line. The site is the first thing people see online – the first impression is a lasting impression.

Our new office is a very small space, cluttered with books and papers – hardly an atmosphere for getting anything done. Our goal is to remove all items that do not pertain to Oregon maritime history. We also plan to sell irrelevant books on eBay. Materials that relate to local maritime history will be organized by subject and inventoried. Once space is available, a small part of the office can be used as a limited research library for public use.

Our intern, Morgan Greer, has put together a collection policy and a mission statement. Once approved by the Board, this document will help us determine what donated items will be accepted in the future and how extraneous material will be removed.

Many of our artifacts, books, magazines, ship models, and stuff are stored in a three-room bank vault, which have not been properly inventoried. We hope to collaborate with PSU archive students to inventory these items under the PSU archivist and then get them moved to a proper, environmentally-controlled space.

Even though the public walks by the Steamer every day, many have no idea who we are or that the boat is open for tours. Some think we are affiliated with the Columbia River Maritime Museum in Astoria. Obviously we have a branding problem. Since the City of Portland will not allow signs on the seawall, we cannot advertise outside the gate. To remedy this problem we have decided to hang a banner on the boat's rail facing the seawall stating that we are open for tours. The banner will also show the appropriate website to book cruises. I also plan to promote the ship tours to the local hotels in the area with brochures and information to their concierge or front desk employees.

We obviously need more docents and we are going to try to double the number by next year. If we get more docents, another goal is to open on Thursdays.

I would like to do six cruises next year. One of the two extra cruises would be a VIP cruise with a maritime corporation sponsoring it. In return they will be able to pitch ideas to the City of Portland or state officials to bring maritime employment, education, etc., to Portland or into Oregon in general. The other cruise would be a corporate sponsored cruise for their employees.

I am drafting a letter to local schools in the area offering our assistance to their Science Technology Engineering and Mechanical programs for the 2019 calendar year. Another draft will go to the History Departments of the same schools asking for volunteer docents in the summer of this year.

We are working with Rose Festival Officials to be open with no admission charge during ship week of the Rose Festival. Instead the focus will be on the gift shop sales. I am hoping to get some word of mouth advertising from this.

I have spoken to quite a few of you and ask that you keep your ideas coming. Most importantly, I will communicate to you the reason we may or may not use your idea. I will give you a progress report in the next Port Quarter!

Museum Hours and Location:

Open Wednesday, Friday & Saturday,
11:00am to 4:00pm

Aboard the Steamer PORTLAND

At the foot of SW Pine St. at the Seawall
near the Battleship Oregon mast.

Contact Us:

503-224-7724

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webpage:

www.oregonmaritimemuseum.org

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The Port Quarter

Dan Butler, Editor
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The Port Quarter is published quarterly and is distributed by standard mail and email. Please let us know which option you prefer. Also, we encourage you to submit interesting maritime stories, photos or ideas for future issues.

All articles and photos provided by
Dan Butler unless otherwise noted.

Log Towing



Some sections of the river were notoriously difficult to tow through. Chapman's Bend on Multnomah Channel was one such place where tows had to snake through an 'S' curve so tight that one couldn't see the tail raft. Retired river pilot, the late **Capt. C.J. Galloway**, was a master at log towing and supposedly the only towboat who consistently took rafts through there – *without* any tail boat! He knew exactly what tree or fence post to look for before pulling one way or the other and for how long.

By the late 1980's, log towing was winding down. Environmentalists frowned on the practice of dumping logs in the water and timber sales were becoming smaller in size, negating the economic advantages of assembling large rafts at key points. The cost of maintaining tugboats and crews, along with the log dumps, rigging, boom sticks, and storage facilities was becoming increasingly expensive. It had become quicker and less costly to just truck the logs directly to mills or sorting yards for export.

Before its demise, dozens of companies in the area involved with log towing, such as; Arrow Tug & Barge, Deep River Towing, Smith Tug & Barge, and Caffall Brothers Forest Products (*Steamer Captain Clark Caffall's family business*). Some mills operated their own towing divisions, like Crown Z's Western Transportation; others worked on contract. Some, like Shaver Transportation and Brusco Towboat still exist but many of the smaller firms moved on to other tasks or disappeared entirely.

The iconic images of rafts on the river, and the crews who worked them, are now memories of a storied yet fairly recent past.



Steamer NO WONDER in Beaver Slough with bowload of cordwood fuel.

(above) Log rafting was a common sight from the earliest days of cordwood-powered steam boats until the late 1980's.

(below) Knappton tug LOUIE III has delivered a raft to the Astoria Port Docks for loading onto a ship and export to Japan.

(below, left) Shaver tug LINCOLN works a raft below Oregon City.



Log Towing Terminology

Boom Stick: a 64' log with holes for chains in each end

Dog: a spike-like spear attached to a cable and driven into a log

Dog Line: 60' cable with 22 dogs and a dog on each end; used to rig a raft

Swifter: a 75', 1/2-inch cable with 8 dogs and 3' of chain on each end

Swifter Wire: a small wire put across the raft as it was being built

Pike Pole: a 25' pole used to dip Swifters under the bundles when rigging a log raft

Peavy: a tool used for prying apart and clearing joints

Header Stick: a 50' log placed across the tail end of a raft

Joint: the connection between two boom sticks

Hungry Joint: one that stuck out that could snag another stick; not a good thing

Broken Joint: when a chain breaks or end of the stick breaks off; also not a good thing

Buckskin: old growth fir log with no bark

Peeler Raft: big, old growth logs usually destined for a plywood mill

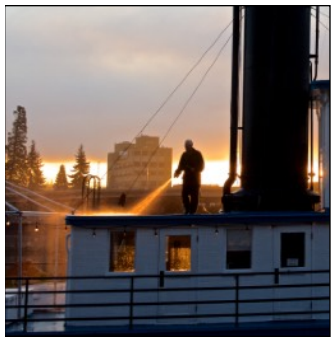
Pulp Hemlock Raft: the heaviest, most difficult raft to rig and tow; destined for a pulp mill

Like most industries, log towing had its own unique language and terms. A special thanks goes to **Capt. Chuck Patching** for his assistance in providing these terms, stories, and history of this fascinating business. Although Chuck worked during the waning days of log towing, he learned from the best and mastered the trade. He continues to use the knowledge and experience gained from his days on the rafts as a Columbia River Pilot.





Ron Youngman Steps Down



After decades of serving on the OMM Board in various positions and for years as head of Vessel Operations and Maintenance, Ron Youngman has retired. A Charter Member of the museum, Ron has been an active volunteer since 1991. With his 24 years in U.S. Coast Guard, Ron's background in vessel inspections has been invaluable in helping the Steamer move toward obtaining her USCG Certificate of Inspection. His seemingly boundless energy usually found him aboard before sunrise and long before anyone else showed up. We'll still have the good fortune and pleasure of having

Ron around but he'll be thinking about vacations with his wife Jan first and the boat second — something he hasn't done for a very long time!

Thank you, Commander Youngman, for all your years of hard work, inspiration, leadership, and dedication to OMM!



Annual Membership Meeting

The 2018 Annual Membership Meeting was held on February 24, onboard the Steamer PORTLAND. Attendees were given updates on the current state of the museum and the Steamer as well as OMM's plans for the upcoming year.

Elections of Officers and Trustees was held and, for the first time in many years, ALL Officer positions were filled! Thanks to everyone who willingly stepped up to help keep OMM afloat and moving forward!

The President's baton was also passed from **Susan Spitzer**, who has ably guided OMM for the past two years, to museum docent and Steamer deckhand, **Brad Duval**. A big "Thank You" to both Susan for your tireless involvement as the face of OMM, and Brad for taking on this crucial and demanding position! Well done!



Meet Our Newest Trustees

Annual Meeting Election Results

The following individuals were either newly elected to positions or re-upped for another term:

New Officers

President: **Brad Duval**
 1st Vice President: **John Dehaas**
 2nd Vice President: **Mike Stevens**
 Secretary: **Mimi Redfield**
 Treasurer: **Bob Waldron** (re-elected)

New Trustees

Russ Albertson, Kenny Jones

Re-elected Trustees

Derek Aldrich, Dan Butler, Capt. Fred Myer, Claire Roche

Russ Albertson's connection to the Steamer predates most of us: his dad was Eddie Albertson, the PORTLAND's longest serving Chief Engineer! Russ has had a career in fine paper sales and financial services as well as past President of Oregon PTA.

Kenny Jones is a Portland Streetcar Operator. His careers include decking on a salmon trawler, house painter, Portland Archives record clerk, stage/TV/film actor, special education teacher, medical copy editor, a civic activist.

Thanks to both of these talented gentlemen for offering their services as OMM Board members!



(photo by Mimi Redfield)



Mast(er) Craftsman

by Jim Spitzer

As reported in the winter issue, the top portion of the Steamer's 32-foot main mast had fallen off and crashed to the Texas deck last spring. The repair project had commenced as shown in a photograph of four 20-foot boards of very fine, costly Douglas fir boards the team that just glued and clamped them together in Steamer PORTLAND's main cabin. Work to rebuild the mast now continues in the engine room.

But first, why does the Steamer even *have* a fore, main, and mizzen (after) mast? After all, it never carried sail, sent a lookout aloft into a Crows Nest, or needed to string antennae between masts for the wireless radio. The simple answer is communications, tradition, and aesthetics. Masts carried the vessel's flag, identifying home country, and also the operating company's flag – such as, Shaver Transportation or Willamette Tug and Barge. At night the configuration of navigational lights communicates the approximate size, direction of heading, and activity (towing or light boat) to other vessels. Some towing arrangements called for displaying two or three lights in a vertical configuration.

With respect to tradition and aesthetics, compare the recent 200 years of steam and motor propulsion to over 7000 years of sail. Ships with masts just look right. The Steamer's main mast provides balance to the height of the stack. The eye rises from the mass of the hull and house to the lightness of the masts carrying flags playing in the wind, and finally to the sky.

But back to the project... Port Angeles boatwright **Michael Neubauer** was on one of our 2017 cruises. While onboard, he sketched an approach to building a new mast. When discussing details months later, he noted our method to making a wooden mast would be similar to that used by shipwrights hundreds of years ago when a storm broke a spar while in far reaches of the world. Like a Captain Cook shipwright, the approach was to harvest the best tree available, shape it using a variety of tools, and cutting various joints to join pieces of wood. Conversations with Michael, along with inspiration from Rivers West wooden boat builders, the book '*How to Build a Wooded Boat*' by **Bud Macintosh**, plus the advice of System Three chemist **Nina Kim**, and my decades of fine woodworking experience gave me the confidence to proceed. Epoxy adhesives are the major advantage that I have over Captain Cook's shipwrights.

I made various jigs to determine the taper, measure the shape/diameter at every foot of height, and guide the cutting of a three-foot long swallowtail scarf joint that will eventually connect the segment being fabricated to the existing lower mast segment. The moisture content of the two segments had to be similar before they can be joined together with epoxy.

The joined boards of the upper segment are initially cut into a square that tapers from about 5 inches to less than 3 inches in a 17-foot length. Guided by precise pencil lines and frequent measurements, the tapered square is cut into 8, 16, and finally 32 sides that can then be rounded by an interesting sanding machine that I also fabricated with a key part made by wood turner **Roger Crooks**. The piles of shavings are mostly the result of my 40-year old wooden hand jointer plane.

After the mast segments are joined, sanded parts will be soaked with a penetrating epoxy, the pulley assembly will be repaired and reinstalled, and the mast coated with epoxy paint.

My one morning per week volunteer schedule and other duties means this is a slow project. I've just started on the 16-sided shape. My goal is that the mast is completed and installed before our June cruise.

Finally, a big Thank You to Woodcrafters and System Three for material donations; to Disdero Lumber for selling us very expensive wood at wholesale cost; and to the volunteers who have been – and will be – assisting me!

*Editor's note: **Jim Spitzer**, Captain USCG (retired), Steamer PORTLAND ship's carpenter, deckhand, etc., single-handedly took on this daunting project to avoid having a new mast built — saving OMM an estimated \$8000! Hats off to Jim for his determination, meticulous planning, and woodworking skills!*



After laminating the 2x6's together in the Main Cabin, the piece was carried below to the Main Deck for the initial rough shaping. A jig was made to determine exact dimensions at specific points along the length of the tapering mast. The laborious hand planing then began as Jim continues to generate copious amounts of shavings.



(above photos by Jim Spitzer)



A Special Thanks...



OMM extends a hearty *Thank You* for your continued support of our museum through your membership and generous donations! The following members joined, renewed or made donations between **January 1** and **March 31, 2018**.

Renewals

Chuck & Ann Adams
 Eric Adams
 Capt. Clifford M. Austin
 Ken Austin
 Rick Burkard
 Mary Anne Coyle
 Dana Davis
 Capt. Brett & Sharon Deaton
 David Engen
 John & Elizabeth Farwell
 Katherine Ford
 Frank Gruber
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 Darlene McLoud
 David Marinos
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 Phil Nock
 Robert Olds
 Sam Patching
 David Peterson,
Nautical Society of Oregon Model Shipwrights
 Michael Powell
 Brian Ray
 Kent Roberts
 Robin Rowland
 Dean Runyan
 Jack Russell
 Rosalie Schmitz
 Ed Steve
 Eric Swedberg
 Keith & Julie Thomson
 David Vik
 Capt. Jack & Beverly Vonfeld
 Arlan Walker
 Elizabeth Welton
 John Wnorowski
 Robert Woolsey
 Don Youngman
 Ron Youngman, Jr.
 John Zimmerman

New Members

Welcome Aboard!

Robert & Susan Billstein
Jeffrey Chartier
Judy Hall
Downer Johnson
Nick Otting
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Memorial Donations

In Memory of...

Harold Englet
 Jan Kessler
Dick Montgomery
 DeDe Montgomery

Donations to General Fund

Robert Bauer – *Peterson Industrial Products*
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 Model Shipwrights
 Arlan Walker
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 Disdero Lumber Company
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 Steve Penberthy —
Woodcrafters
 Fully Company
 Al Landau
 Rick Rother

**And a big THANK YOU to our Corporate sponsors
 for your continued support and participation!**



OMM Mission Statement


"To provide, operate and maintain facilities dedicated to the collection, preservation and public display of marine objects; to collect and preserve maritime records for scholarly public use; to provide public meeting opportunities for maritime interpretation and education; to serve as a memorial to merchant mariners; and to encourage interest in the past, present and future maritime heritage of Oregon and the Columbia River Basin."



Bitts & Pieces




Steamer's 10 year Boiler Inspection




If you've been aboard the PORTLAND recently, you probably noticed the chaos and clutter around the ship's partially disassembled boiler. The work being done is part of a U.S. Coast Guard requirement that all boiler mounts (any valve or pipe that directly connects with the steam drum) be removed and inspected every 10 years. This work is in addition to other required inspections of the water tubes, steam drum, and fire box.


So far, USCG inspectors have been pleased with the boiler's condition with only a few mandated minor repairs. After all items have been reinstalled, a hydrostatic test of the boiler will be done to ensure that components can hold under working pressure.

- 
- (upper left) With boiler doors off, selected hand hole covers are removed to visually inspect the water tubes.
 - (left) Chief Engineer **George Hall** notes the progress as **David Vik** removes a feed water check valve.
 - (right) **John Wnorowski** assists **Bob Slover** as he prepares to hoist the heavy, cumbersome main steam stop valve body back into place atop the steam drum.

It's dirty, often difficult work but all necessary to keep the boat steaming safely for years to come.




OMM Trustees Honored with Industry Awards



In February, two of our Trustees were recognized for their outstanding work in the local maritime industry.

Shaver Transportation V.P. **Rob Rich** received the 'Merchants Exchange Excellence Award' for his years of involvement and service. Presented by MEX Executive Director **Liz Wainwright**, (left) OMM members **Mike Stevens**, **Dan Butler**, **Mimi Redfield**, and **John DeHaas** also attended. Our own **Susan Spitzer** had nominated Rob for this award. Good job, Rob!

And speaking of **Liz Wainwright**... the Maritime Commerce Club presented **Liz** (right) with the 2018 'Old Salt Award' for her many years of contributions to the Women's Shipping Club, as a steamship agent and as MEX Director. She joins a long list of previous Old Salts dating back 60 years! Congratulations, Liz!



2018 Steamer Cruise Schedule

GET YOUR TICKETS !!

The July Cruise is already SOLD OUT !!

Please make plans to join us as we embark on our summer cruise season aboard the Steamer PORTLAND. The roughly four-hour trip begins at the seawall on the **third Saturday of June through September**. Boarding starts at 7:45am for a 10am sailing. After passing through the Burnside, Steel, Broadway, and Fremont bridges, we proceed downriver past Swan Island, through the BNSF Railroad bridge and under the graceful St. Johns Bridge. Passing by various port terminals, we'll enter the mighty Columbia River as the Willamette ends its journey at Kelley Point. A catered lunch will be served as we turn, reenter the Willamette, and steam back to the seawall about 2pm.

Tickets available at brownpapertickets.com. Price is \$88 for adults, \$38 for youth, age 10-17. Discounts for parties of 10 or more.

Sailing Dates: JUNE 16, JULY 21 (sold out), AUGUST 18, SEPTEMBER 15





Special Email Bonus Section: the Photo Gallery

It has been suggested that we expand our digital version of the *Port Quarter* for our email subscribers. By adding a page or two, it will allow us to submit longer articles and provide more space for photos that might not otherwise fit within our eight page limit for the printed version. We hope you will enjoy having a little extra material to peruse at the same low, low price! It's just one of the benefits of receiving your OMM Newsletter on line!

More Bundles & Boom Sticks...

As a passionate archivist of local marine history, **Captain Chuck Patching** has acquired a substantial collection of photographs that depict some amazing scenes of the past river commerce. While some of the log towing shots were fairly recent, most this activity has vanished into the backwater mists of maritime memories.



Heading downriver on the Willamette, the tug CRUISER is assisted by Shaver tugs OLIN W and the ECHO. This photo appeared in Pacific Motor Boat Magazine, May 1945



Chuck's dad, **Captain Sam Patching**, on the tug TONQUIN in Astoria.
photo by Paul Vik



These massive old growth peeler logs at St. Johns boom were likely destined for a nearby veneer or plywood mill.



Churning by the mouth of the Clackamas River, the Knappton tug MARY ROSE BRUSCO struggles to get a raft over the fast water at Meldrum Bar. The tow is headed for the West Linn paper mill.



The MAMMOTH PINE probably won't be loading any pine logs but the tug has brought a sizable raft of fir alongside for export overseas.



There is lots of activity in this classic scene at Longview, WA as Smith Tug and Barge boats work the Weyerhaeuser boom amidst ships at anchor, circa 1960's. Longview was, and continues to be, a major shipping point for Northwest timber products.

Looking Back... June 1990



(above) **June 13, 1990:** The USS NEW JERSEY, departs Longview for her return trip to San Diego and final decommissioning.

(right) **June 6, 1990:** Former OMM member, retired Navy Captain and Columbia River Pilot, the late **Capt. Don Hughes** pilots 'The Battleship' inbound to Portland.

The upcoming commissioning of the USS PORTLAND, reminds us of another significant navy ship that visited Portland 28 years ago. The 887-foot USS NEW JERSEY was the largest naval vessel to ever call here. After an overnight stop in Longview to embark passengers, the Iowa class battleship proceeded to the Port of Portland's Terminal 2 as part of the Rose Festival fleet where she was greeted by thousands of visitors.



The PORT QUARTER, Spring 2018