

WORKING

AT E R F R O N T



2019

Supplement to the
Wednesday, January 30, 2019 edition of the
Port Townsend & Jefferson County Leader

Index to advertisers

Admiral Ship Supply.....	5	Port of Port Townsend.....	20
All Points Northwest Marine.....	17	Port Townsend Boat Company.....	17
Anderson Machine Shop.....	11	Port Townsend Brewing Company.....	15
Best Coast Canvas.....	9	Port Townsend Foundry.....	2
Admiral Ship Supply.....	5	Port Townsend sails.....	17
Bottoms Up Marine Services.....	17	Port Shipwrights Co-Op.....	5
Central Welding Supply.....	19	Port Townsend Watercraft.....	13
Craftsman United.....	19	Rubicon Yachts.....	15
Edensaw Woods.....	7	SEA Marine.....	9
Emerald Marine.....	11	Sunrise Coffee.....	19
Fisheries Supply.....	9	The Artful Sailor.....	5
Goldstar Marine.....	13	The Business Guides.....	15
Haven Boatworks.....	11	Thompson Boat.....	19
Henery Hardware.....	13	Velocity Coffee.....	17
Holm's Heritage Painting.....	13		
Marina Cafe.....	13		
Marine Surveys and Assessments.....	19		
Northwest Maritime Center.....	15		
Northwest Sails & Canvas.....	13		
Northwest School of Wooden Boatbuilding.....	19		
Octopus Gardens Diving.....	19		
Olympic Game Farm.....	15		
Peter's Marine.....	19		

Stay in touch.

\$48 for a six-month out-of-county subscription.
Call 360.385.2900

The Leader



IN DEPTH • IN TOUCH • INDEPENDENT • SINCE 1889



Publisher: Lloyd Mullen
General Manager: Kelli Ameling
Editor: Brian McLean
Writers: Kirk Boxleitner, Chris McDaniel and Lily Haight
Production: Linda Hanlon, Rainier Powers
© 2019 Port Townsend and Jefferson County Leader

Advertising: Kachele Yelaca,
Margo Schafer, Andi Pistay and
Jessica Hackett
360-385-2900 • ptleader.com
226 Adams Street
Port Townsend, WA 98368

On the cover: Peter's Marine Service and Fabrication owner Peter Chaffee, located in Port Townsend, is in the process of creating a draw bridge for a customer in Oregon. *Leader photo by Chris McDaniel*



PORT TOWNSEND
— MADE IN  THE USA —
FOUNDRY LLC
1883 **ESTABLISHED** 1983

**A Leading American Manufacturer
of Marine, Industrial, & Architectural Hardware**

When you buy from us you support
our crew, our families, and our
community. We are proud to use the
words "made in the USA."



251 OTTO STREET
PORT TOWNSEND, WA

LEARN MORE AT OUR NEW WEBSITE
WWW.PORTTOWNSENDFOUNDRY.COM

(360)385-6425
PTF@OLYPEN.COM

Local boat school building zero-emission pump-out boat

Kirk Boxleitner

kboxleitner@ptleader.com

Students at the Northwest School of Wooden Boat Building are designing an environmentally friendly boat that will be locally engineered and built.

Betsy Davis, executive director of the school, said the planned 25-foot zero-emission boat will run on electric and solar technology and include a corrosion-prevention system to ensure it doesn't release metals into the water.

Davis said the boat's key feature will be a free pump-out service for other boats to use in Port Ludlow Bay. She cited research by the Washington Sea Grant showing boat owners are more likely to use portable pump-out boats than stationary facilities.

"This will serve as an in-

novative proof-of-concept workboat designed with environmental stewardship in mind," Davis said. "And it will be a great teaching and learning project for our students, from the hull construction in the contemporary boatbuilding program, to the systems installation in our marine systems program."

Davis outlined the boat's goals of reducing the carbon footprint, vessel noises that impact orcas, the potential for small oil spills and the release of cadmium and other metals associated with corrosion-protection systems.

Students designed the boat in November and December so the building of its hull, deck and house could begin this month, in time to be completed by September. Its systems are scheduled to be installed between October 2019 and June 2020.

Davis credited Port Townsend-based naval architect Tim Nolan with developing the design, and Turnpoint Design, also based in Port Townsend, with using computer numerical control technology to cut the boat's forms. Edensaw Woods, another local partner, is providing materials.

"Tim listened to our goals and our donors' ideas about the aesthetics of the boat," Davis said. "Bruce Blatchley, who teaches our contemporary boatbuilding course, offered input on the various construction methods that should be incorporated based on what he wanted to be able to teach his students."

Of the project's total \$200,000 cost, half has been covered by a leadership grant from the Institute for Law and Systems Research, which wrote a letter



Bruce Blatchley, an instructor at the Northwest School of Wooden Boat Building, takes stock of the frame of the zero-emission pump-out boat that his students, including Elliott Avery of Port Hadlock, are helping to construct. *Leader photo by Kirk Boxleitner*

in support of the project, along with the Washington Sea Grant and the Board of County Commissioners for Jefferson County.

"Even though this is a single project, we're deliber-

ately employing a variety of building methods," Blatchley said. "I wanted to mix it up so it wouldn't all be the same style that my students would be learning."

See ZERO-EMISSION, page 19 ▼

MAKE A LIVING CRAFT A LIFE

**12-month AOS Degree in
Wooden Boatbuilding**

**6-month Diploma in
Marine Systems**

**Week-long intensive classes in
Marine Systems**

**NORTHWEST
SCHOOL of WOODEN
BOATBUILDING**

Now enrolling at www.nswsb.edu

42 N. Water Street Port Hadlock, WA (360) 385-4948

Our school is accredited by the Accrediting Commission of Career Schools and Colleges (ACCSC). Financial Aid and Veterans Benefits available for those who qualify.



THANK YOU

These maritime leaders advise the Boat School on its programs to ensure our students receive an education relevant to today's workplace.

Ann Avary, Northwest Center of Marine Manufacturing & Excellence
Steve Bamsberger, Jack Park Company

John Mark Barrett, Imtra Corporation

Ethan Cook, Boatbuilder
Sam Devlin, Devlin Designing Boat Builders

Sarah Fiske, Washington Sea Grant

Jim Franken, James J. Franken Inc.

Stephen Gale, Haven Boatworks
David King, Retired CFO Townsend Bay Marine, Past Mayor of Port Townsend

Jim Lyons, Port Townsend Shipwrights Co-op Member

Scott McEniry, Power Products LLC

Dan Newland, Pegasus Aeromarine Inc.

Jim Pivarnik, Port of Port Townsend

Peter Proctor, Jensen Motor Boat
Gordon Sanstad, Boatbuilder and Former Boatbuilding Instructor, Seattle Central Community College

Study shows impact of maritime trades

Lily Haight

lhaight@ptleader.com

Fine leather, linens and cloth hang from shelves on the walls of Gwendolyn Tracy's workshop, Fine Yacht Interiors, situated above the Blue Moose Cafe at the Port Townsend boatyard.

Pillows sit in stacks, large rolls of batting lean against walls, and wheels of ribbon in different colors hang from a rack. In the center is a large white work table, where Tracy cuts and measures cloth for the interior upholstery of yachts.

For months, that table was covered in papers, laptops and the occasional mason jar filled with herbal tea — the signature drink of Pam Petranek, Tracy's fellow Port Townsend Marine Trades Association member.

From November 2017 to July 2018, Tracy and Petranek worked at that table, collected data, made calls and searched databases to compile a list of every marine trade business in Jefferson County.

"Gwendolyn had a stool set up right here where the dirty work boots stayed," Petranek said. "People sat right there and got their lists out, and we just started writing it all down."

All of that work was for one goal: to release an economic impact study of the maritime industry in Jefferson County, to show the port administration and county citizens that marine trades play a vital role in the local economy.

"In the spring of 2017, the writing started coming on the wall that the way the port was viewing how to manage the infrastructure crisis wasn't allowing for the existing businesses or incoming business to really thrive and grow," Tracy said. "Over time, trust of the port to take care of what needed to be taken care of wasn't high."

Leases weren't getting renewed; Boat Haven marina's stormwater wasn't meeting the state Department of Ecology's benchmarks; the Point Hudson jetty was still in need of repair; and the marine trade workers weren't feeling their concerns were heard, Tracy said.

"The port collects property



Pam Petranek and Gwendolyn Tracy spent many hours around the work table at Tracy's shop, Fine Yacht Interiors, compiling data for an economic impact study of the maritime industry in Jefferson County. *Leader photo by Lily Haight*

tax money, and that leads to this perception that businesses here are subsidized by the taxpayers," said Chris Sanok, chair of the Port Townsend Marine Trades Association board. "There was a lot of discussion about whether we could continue to afford being a port. It was these two (Tracy and Petranek) who came up with the idea that we fix this by showing the value of the marine trades to the community in a strict dollars-and-cents kind of way."

The state Department of Commerce completed a similar economic impact study in 2017 that showed the maritime sector contributes more than \$21.4 billion in gross business income and directly employs nearly 69,500 people in Washington. Not only that, Gov. Jay Inslee's Maritime Blue program is working to make Washington the home of the nation's most sustainable maritime industry by 2050, the study showed.

"The numbers statewide were astounding," Sanok said. "They showed that the industry is a major part of Washington's economy, but it wasn't broken down by county. Gwendolyn and Pam said, 'Let's get our own numbers!'"

An economic impact study done by a respected company can cost up to \$70,000, Sanok said. The PTMTA, an association of marine trade workers in Jefferson County, only charges \$50 for membership dues.

"We talked to Martin & Associates, which also does a lot of port economic research and really liked the approach of Dr. John Martin," Sanok said. "He's very invested in portraying the economic value of the marine trades."

Martin & Associates, an internationally known economic and transportation consulting firm, cut the PTMTA a deal.

"If Pam and Gwendolyn did all the work, he would give us a giant discount," Sanok said.

So Tracy and Petranek got to work. In between their normal jobs upholstering boats and delivering Cape Cleare salmon by bicycle, they first catalogued all of the maritime businesses in the county, and then got economic data from each business, assuring business owners along the way their data would be protected.

"We had people show up with lists on the backs of things, with phone numbers and names," Tracy said. "We went online to the Washington shellfish wholesale list, the Alaska fish permit holders list."

They called people to make sure they were still in business, or to find out if they had moved. They had visits from business owners who would sit on a stool in Tracy's workshop to give them information.

"What we realized through calling people was that everybody was very much concerned and valued our working waterfront here," Pe-

trane said. "So many people had big stories to tell. ... And there were a lot of people who were really upset, ready to move, and they were so thankful we were doing this study because it might turn the direction of the ship around."

Meanwhile, the PTMTA had to raise money to pay for the study, even though it was discounted.

"We just work on boats," Sanok joked. "We've never done that kind of fundraising. I haven't ever asked anyone for that kind of money."

But the maritime community showed its support. At a one-night party hosted at the Port Townsend Brewery, \$8,725 was raised, PTMTA treasurer Bob Frank said.

With that fundraiser, plus individual donations, the PTMTA was ready for the study to be completed.

The study, released in July 2018, concluded that the mari-

See STUDY, page 19▼

PORT TOWNSEND SHIPWRIGHTS

A FULL SERVICE BOAT YARD



From Classics to New Construction

INSIDE REPAIR FACILITY UP TO 140 FEET

360.385.6138

contact@ptshipwrights.com

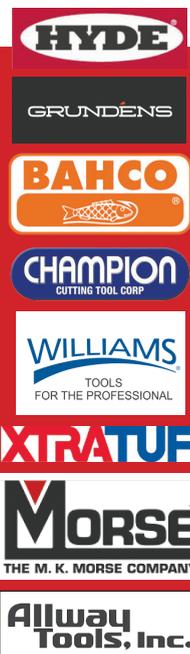
www.ptshipwrights.com

[f/PortTownsendShipwrightsCoop](https://www.facebook.com/PortTownsendShipwrightsCoop)

NOW STOCKING GRUNDENS HIGH VISIBILITY CLOTHING & STEEL TOE BOOTS



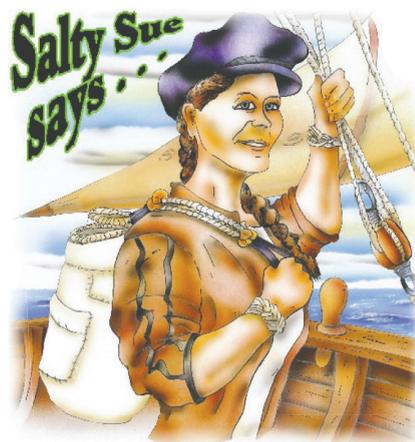
**Tools and Clothing
to get the job done!**



Admiral Ship Supply
Hours: Monday-Friday: 8-5:30, Saturdays: 9-5

305 10th Street, Port Townsend WA 98368

360-379-9921 www.admiralshipsupply.com
email@admiralshipsupply.com



ARTFUL SAILOR



Whole Earth Nautical Supply
★ Port Townsend, WA ★

Guidance

Goods

Tools

Repairs

Workshops

Sail

Exchange

(By the Skate Park)

360-344-8120

www.theartfulsailor.com



The Sunnyvale and McClure Bay are both 76-foot-long working boats owned by Whale Pen Island LLC. They are harbored in Port Townsend for the winter, being repaired and renovated for the upcoming summer fishing season in Alaska. *Leader photo by Chris McDaniel*

Life on the waterfront:

Commercial fishing vessels wintering in Port Townsend

Chris McDaniel
 cmcdaniel@ptleader.com

After a busy summer season in the ocean off of Alaska, Ozzie Anderson and Rebecca Argo are eager to return to Port Townsend for some much-needed downtime.

“Coming back to Port Townsend, it is nice to be home and bring our boats here and do the maintenance,” Argo said. “I really don’t want to work the entire year-round on a boat. It is nice to come on land and be a part of the community and insert myself into Port Townsend. And, it is a full-time job maintaining these boats.”

Anderson and Argo co-own Whale Pen Island LLC, which operates two workboats that pick up fresh caught salmon from fisherman and transport it to a cannery so the fishers can continue fishing uninterrupted. The company also provides provisions and fuel to its clients so they can stay at sea.

The two boats generally leave port in May and return in August.

“It is nice to be away from society for a while, to take a pause from life,” Anderson said.

The time away leads Anderson to appreciate the conveniences of being on land when when he returns.

“I get excited and rejuvenated,” he said.

If you build it, they will come

Similar to many other young adults who work along the waterfront these days, Anderson and Argo were attracted to Port Townsend by the flourishing marine trades.

“I have been in the industry for about 10 years or so,” Anderson said. “I was working as a shipwright for a while before that, and that is how I got into it.”

Anderson said he has been attracted to boats and traveling on water from a young age, and that the transition from shipwright to fishing was a natural extension of his yearning to get out on the water.

“What drew me into the fishing industry was that making money with a boat makes it more affordable for me to be able to use boats. It is a fun adventurous lifestyle.”

Anderson said he has noticed many new faces working down on the waterfront.

“We are seeing more and more young people coming in and finding good work in the port,” he said. “I have definitely seen the transition of that happening in the last five or 10 years.”

Anderson expects the marine trades will continue to thrive in Port Townsend well into the future.

“I would say as long as we can keep this port open, it will continue growing,” he said. “There are a lot of people still here in town. It definitely brings in a different group of people and keeps

them around, a younger generation for sure, rather than the retired.”

Argo said many folks start off, as Anderson did, in the boatyard.

“It is just a really good spot for young people to come and learn skills, become more competent and either continue doing that or not,” she said.

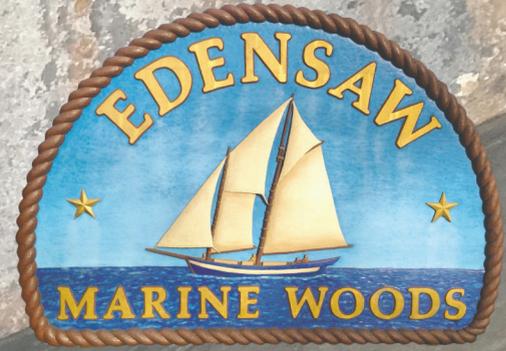
And the marine trades will help rejuvenate the city as the older generation continues to age, Argo said.

“The boat world is where you see the most young people and new young people coming in,” she said. “I have seen a whole new wave of young shipwright faces coming in and out, which is very exciting to me. I am not the youngest generation anymore. There is a new batch. It is really great. I am hopeful for that.”

The new influx of residents does not put old traditions at risk, Argo said, but rather reinforces them.

“This is a part of our identity,” she said. “I feel like embracing the tourism is very cool, but why do people even want to come here in the first place? It is because we have this real vibrant boat world that started because the yard is here. I think that is pretty important. Not losing sight of who we are and our roots.”

See WINTERING, page 18 ▼



Partnering with
those working on the
waterfront since 1984.

We support the
Maritime Trades
in Jefferson County
and beyond.



marine hard & soft woods | marine plywoods | hand & shop tools
teak | bending oak | sapele | khaya | purpleheart | douglas fir | alaskan yellow cedar

211 SETON ROAD, PORT TOWNSEND, WA 98368 | edensaw.com | 360.385.7878

EDENSAW
WOODS Ltd.

Follow us on Instagram & Facebook

Maritime program aims to open satellite skills center

Kirk Boxleitner

kboxleitner@ptleader.com

Port Townsend High School's Maritime Career and Technical Education program continues to expand, prompting the Port Townsend School District and the West Sound Technical Skills Center to propose a satellite skills center to house a Maritime Academy half-day program for the 2019-20 school year.

PTHS Maritime CTE instructor Kelley Watson believes a Port Townsend Maritime Academy satellite would increase students' access to "high-wage, high-demand" jobs in the sector through rigorous, hands-on, cross-credited education that would partner with local nonprofit organizations to create "a model program" for public school maritime training in Washington state.

The proposed model would devote 2 1/2 hours of daily instruction, for a total of 540 hours of annual instruction, to increase students' skills, knowledge and safety certifications, either to enter the "underway" maritime workforce, or to be strong maritime academy candidates.

Watson said the West Sound Technical Skills Center, located in Bremerton, moved to approve the satellite skills center this month after the Port Townsend School Board did so last November. That leaves the state Office of Superintendent of Public Instruction to conduct a feasibility study.

"These would be dual-credit earning courses, between CTE and academic," Watson said. "It would be open to students from Port Townsend, Chimacum and Quilcene, getting them onto the water as often as possible, in addition to subjecting them to safety training simulations."

Besides affording students sea time on board a variety of vessels, the satellite skills center is intended to earn those students entry-level U.S. Coast Guard certifications and to increase their opportunities for internships through local maritime industries and educational nonprofits.

Watson is part of an advisory committee that also includes Jake Beattie, executive director of the Northwest Maritime Center of Port Townsend, whom Watson credited as a valued partner of the PTHS Maritime CTE program along with the Northwest School of Wooden Boat Building.

"A curriculum has been developed and submitted to Olympia, so we should know by this spring," Watson said.

Watson added maritime jobs account for 11 percent of direct jobs in Jefferson County, with 19 percent of the



Kelley Watson, instructor of Port Townsend High School's Maritime Career and Technical Education program, leads her students in a hands-on lesson in marine trades and boatbuilding. *Leader photo by Kirk Boxleitner*

jobs in the county generated as a result of the region's maritime cluster.

Although the state currently does not offer a single year-long underway maritime sector-focused skills center program at any school campus, the Port Townsend School District is in its fifth year of offering vessel operations classes through the PTHS CTE department.

This program has since expanded to include summer Adventures at Sea programs, a Workforce Development Grant-funded Schooner School program, and summer internships on board the schooners Martha and Adventuress.

"Our Maritime CTE program only began in 2014, but a number of its graduates have already entered additional maritime training and the maritime industry," Watson said.

Watson said a \$36,000 Carl Perkins Reserve Grant recently made it possible for the PTHS Maritime CTE program to acquire a fleet of six 10-foot inflatable vessels complete with outboard motors, which they plan to use for lessons this spring.

Watson said she felt galvanized to attend the Washington Maritime Blue rollout event with two of her students in Seattle on Jan. 8. That's where they

met Gov. Jay Inslee as he and the state's maritime advisory committee addressed the state's course toward a "blue economy" by 2050.

This winter and coming spring will be busy for Watson's students, who will start winter maintenance with the Northwest Maritime Center and Schooner Adventuress before the end of January.

"We're making stand-up paddleboards in marine trades and boatbuilding and doing first aid in vessel operations after we did vessel safety this fall," Watson said. "We'll be running an Alaska Marine Safety Education Association vessel safety training course for youth at the Northwest Maritime Center this spring."

Jenna Hiegel, a PTHS sophomore, is in her second year of Maritime CTE, currently studying vessel operations after interning on board the Martha.

Hiegel is considering enrolling in the California State University Maritime Academy, with a possible focus on oceanography or maritime transportation. She wants to stay sailing rather than go to the industrial side of the maritime sector.

"I'm just not a homebody," Hiegel said. "A desk job doesn't suit me at all."

Even though Hiegel had been on the water before, she had no idea of the breadth of the maritime industry, or its employment opportunities, prior to taking Watson's classes.

"My parents are kayakers, and I grew up around the water, so I had a bit of a head start," Hiegel said. "But Kelley prepares us for real jobs in the field. I've gained resources, people to talk to, and hands-on experience through this course."

Hiegel was one of two students to accompany Watson to the Washington Maritime Blue event, and she hopes to see more sponsorship and internship opportunities emerge through local industry as a result.

Fellow PTHS sophomore Odin Smith also interned on board Martha and is enrolled in the Maritime CTE marine trades and boatbuilding course after completing vessel operations last year.

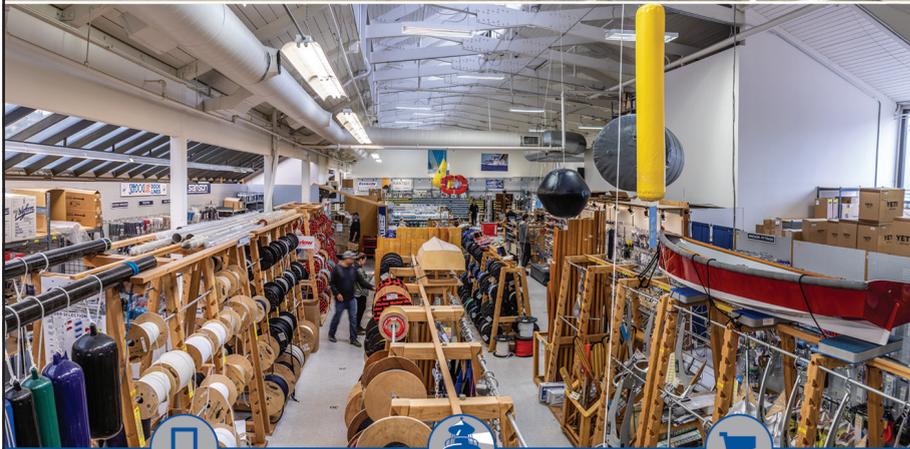
"Between the curriculum and the nice, expensive tools we have access to here, we're getting an education that would cost thousands of dollars on our own," Smith said.

See CENTER, page 18 ▼



Fisheries Supply
Marine Supplies Since 1928

Everything for the Boat Owner



Call us 800.426.6930

FisheriesSupply.com

1900 N. Northlake Way



360.774.6515

www.bestcoastcanvas.com

In the Port Townsend Boat Haven
290 10th St. Port Townsend, WA

Dodgers · Biminis · Sail Covers · Full Boat Covers
Awnings · Windlass and Winch Covers ·
Binnicle Covers · Hatch Covers · Cushions ·

PACIFIC NORSE VEST®

OUTDOOR WEAR
HANDCRAFTED IN PORT TOWNSEND, WA

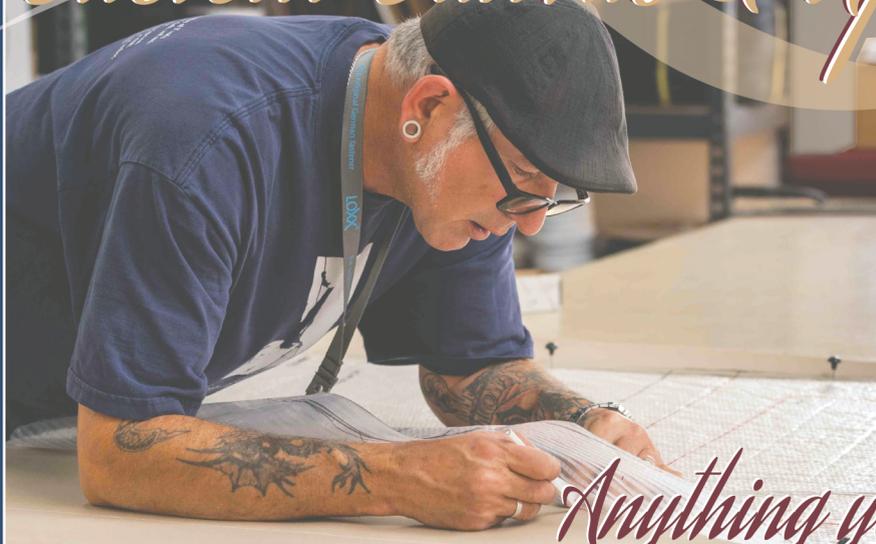
360-774-6515

PACIFICNORSEVEST.COM . PACIFICNORSEVEST@GMAIL.COM



ABYC Master Technicians
Custom Canvas & Upholstery
Bottom & Topside Paint
Electrical & Mechanical
Welding & Fabrication
Yacht Brokerage
Engine Repower
30-Ton Lift
Dry Storage

Custom Canvas & Upholstery



- **Dodgers**
- **Frames**
- **Biminis**
- **Full Enclosures**
- **Boat Covers**
- **Sail Covers**
- **Cushions**

Anything you dream of...

we have the
creativity and
skill to make it
beautiful and
functional.



Point Hudson, Port Townsend, WA • (360)385-4000 • seamarineco.com

Float adds safety measures for 'Kariel'

Shipwright's Co-op adds bulb to fishing boat

Lily Haight

lhaight@ptleader.com

Outside of the water, the bulbous bow of the boat Kariel looks odd. But when fishing in the Gulf of Alaska in mid-February, the bulb that extends off the bow can help keep the crew safe and sound.

At the Port Townsend Shipwrights Co-op, shipwright Arren Day and his team of fabricators and welders are adding the bulb just below the waterline. They're also extending the stern to add stability and fuel efficiency to the commercial fishing boat.

"They used to pack fish in ice," Day said. "Now the industry's going towards

refrigerated sea water, and keeping the fish in an ultra-cold brine. Water's a lot heavier than ice, so the boats are getting heavier."

The extended stern and the added bulb add more flotation to the boat, which loses stability when it's too heavy.

"You get more fuel economy, but the main benefit is safety," Day said. "They fish in February in the Gulf of Alaska; that's pretty gnarly weather. We're adding buoyancy to both ends of the boat."

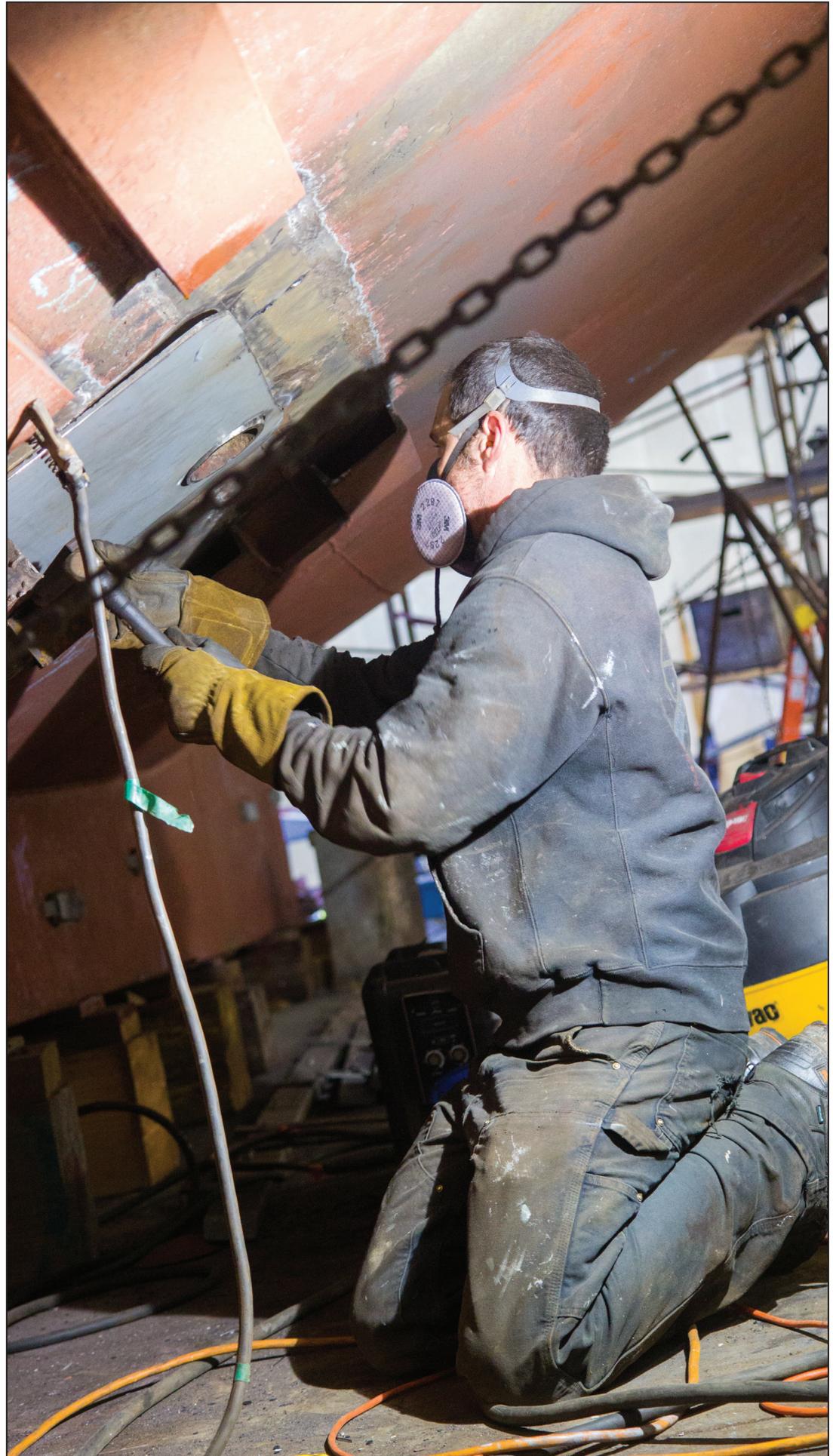
With the adjustments, the Kariel, which came into the Shipwright's Co-op at 66 feet, will leave at 71 feet, and be more stable for owner Steve Fish and his crew.



The Kariel, a commercial fishing boat owned by Steve Fish, is getting an extended stern and a bulbous bow, constructed by the Shipwright's Co-op, including shipwrights Brad Lato, left, and Tim Hoffman. *Leader photos by Lily Haight*



Leigh O'Conner works on the extension of the Kariel's stern, which will help to increase flotation to improve the boat's safety and efficiency.



Dean Brittain works on the bow of the Kariel, which has a newly added bulb to improve buoyancy.



Shipwrights Brad Lato and Tim Hoffman work with steel parts cut by a computer to construct an extension to the stern of the commercial fishing boat Kariel.

HAVEN
BOATWORKS, LLC

PORT TOWNSEND

A Full Service Boatyard
Specializing in Wooden Boat
Repair and Restoration
Engine Sales & Service

P.O.Box 1430, Port Townsend, WA 98368 USA
(360) 385-5727 www.havenboatworks.com

**Home of the
Waving Bears!**

**Olympic
Game Farm**

Open Daily: 9 a.m.
1423 Ward Rd, Sequim, WA
1-800-778-4295
www.olygamefarm.com

Subscribe in print today
and get free online access.

360 385 2900  ptleader.com

 **Andersen**
MACHINE SHOP, INC.

WOULD LIKE TO OFFER YOU OUR SERVICES...

- Newest Technology in CNC Turning/Milling
- Fast & Friendly Service
- Competitive Pricing
- Quality Work

30+ YEARS EXPERIENCE

Toll Free 1-877-379-1030
Local 360-379-1031
2702 Washington St.
Port Townsend, WA 98368

andersenmachineshop.com

Battery-powered boats are wave of the future

Lily Haight
lhaight@ptleader.com

Sailboats always have been green. Powered by wind alone, it wasn't until the 20th century that diesel engines were added to help propel sailboats out of marinas and move in still winds. Now with new technology, sailors are going green again. The M/V Robert Lewis, a 10-year project by Cape George Marine Works, is an example of an environmentally friendly sailboat. Powered by four lithium battery banks, the sailboat can propel silently with no diesel emissions.

"On a normal sailing day, the owner can start an electric motor, and it purrs silently as he leaves the dock," said shipwright Chris Sanok, who worked on the electrical engineering of the boat. "It's a beautiful boat, but if you fill a beautiful boat like this with the noise of the diesel engine, the experience is much less. So he can go out and sail all day; there's no exhaust, and there's really very little fuel consumption."

The 45-foot custom Cape George cutter was the handiwork of Todd Uecker and Tim Uecker, co-owners of Cape George Marine Works, naval architect Carl Chamberlin and the help of Port Townsend marine trade workers. It includes Hasse & Co. sails, interior woodwork by Tom Gillespie, varnishing by Joni Blanchard, rigging by Port Townsend Rigging and wiring by the PT Shipwrights Co-op.

The custom design, smooth wood interiors and fiberglass mast made to look like wood all make the Robert Lewis a boat unlike any other.

But tucked away in storage spaces under the floorboards in the hull is another world of high-tech engineering.

Geoffrey Custer and Sanok organized the jigsaw puzzle that consists of four lithium batteries, a backup generator and computer systems.

"The project was challenging all the way through," Custer said. "I've done much larger boats that were no more complicated, but physically putting that all in this amount of space was extremely challenging."

The battery-powered boat can monitor all of its power usage, controls, lights and vents from a single source, whether that's the computer in the pilothouse or a Wi-Fi enabled device, such as a phone.

"From the computer, we can go and check all the states of the batteries, we can see percentage charge, we can see instantaneous currents and voltage," Sanok said. "Lithium batteries are very sensitive to voltage differences between the cells, so we actually look at the minimum cell voltage and the maximum cell voltage. He can control the starting of the generator (on the computer). And this can be done from any Wi-Fi enabled device. He can even go in and control the throttles of the propulsion motor."

The batteries can be recharged with the backup diesel generator, but they can also be recharged via shore power.

"Efficiency goes way up if you're just using power from the power company compared to the generator," Todd Uecker said.

On top of that, since the computer system can be reached by Wi-Fi, Sanok can check the systems from his office computer at the Shipwright's Co-op if the boat's owner has any electrical problems while out to sea.

"We're doing more and more lithium batteries, more and more electric propulsion," Sanok said. "But this boat is the culmination of that. This kind of monitoring and control, and this kind of integration, is something that we've never done before."

Sanok said the Robert Lewis was the third electric-propulsion boat he had worked on this past year, and the Shipwright's Co-op had installed six to eight lithium battery systems in the past year.

"It will become more common, more popular, more affordable," Sanok said. "The technology will become more reliable as we put more of these in. The appeal of having quiet time on the boat and not burning diesel fuel is going to become more attractive to people."

For Custer, who began working on the Robert Lewis in 2010, when lithium batteries in boats were relatively new, the project was an example of how quickly technology can advance.

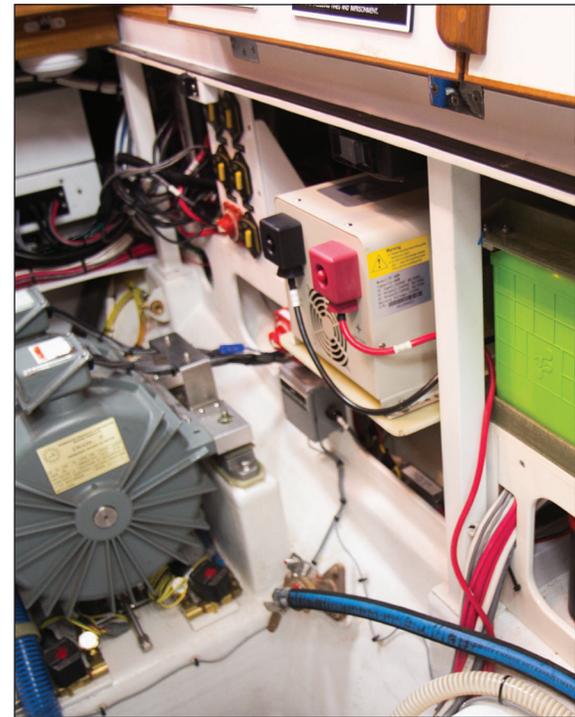
"Technology marches on," Custer said. "I worked on a lot of projects in my career, but this is the pinnacle for sure."



Geoffrey Custer started working on the electrical engineering of the Robert Lewis in 2010. He said the most challenging part was figuring out how to fit all of the modern technology into the boat. *Leader photos by Lily Haight*

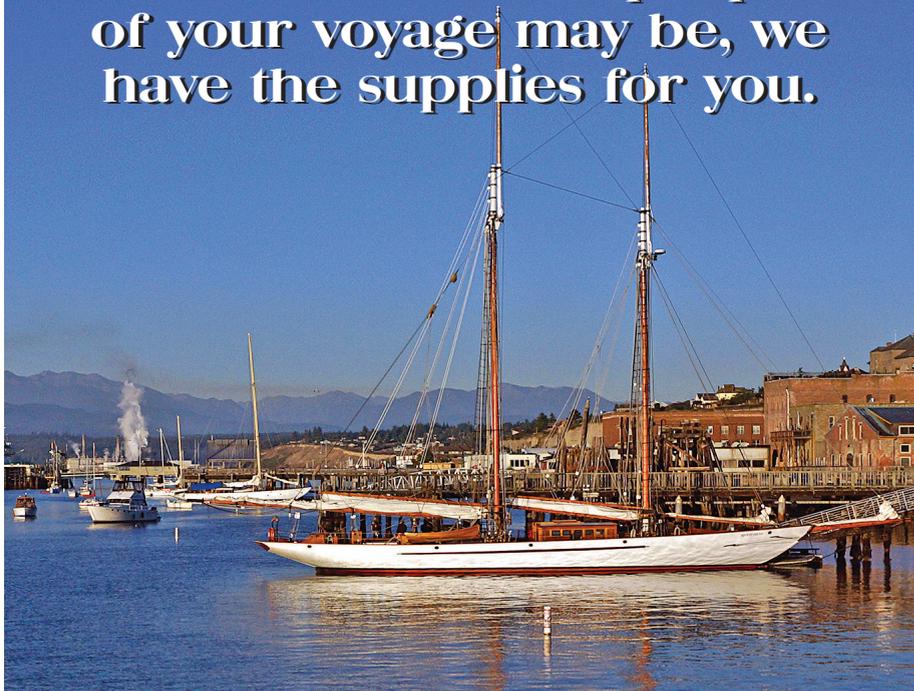


Chris Sanok demonstrates how the boat's batteries and systems are monitored by a computer, which can also be transmitted via Wi-Fi onto the boat owner's phone.



Powered by four lithium battery banks, the sailboat can propel silently with no diesel emissions.

No matter what the purpose of your voyage may be, we have the supplies for you.



Henery **Do it Best** Hardware

Bremerton Henery Hardware 3449 Wheaton Way Bremerton WA 98310 360-824-5047	Kingston Henery Hardware 10978 Hwy 104, Suite 107 Kingston WA 98346 360-297-3366	Port Townsend Henery Hardware 218 Sims Way Port Townsend WA 98368 360-385-5900	Quilcene Henery Hardware 294382 Hwy 101 Quilcene WA 98376 360-765-3113	Sebo's Henery Hardware 1102 Commercial Ave. Anacortes WA 98221 360-293-4575
--	--	--	--	---



**GOLD STAR
MARINE**

Full Service Hydraulic Shop
Topside & Bottom Painting
Mechanical/Electrical Systems
Gas & Diesel Engine Service
Vinyl Wrapping Installation
Major Repair and Refit

2900 Washington St. Port Townsend, WA 98368
360-385-3054 • goldstarmarine.com • Mon. thru Fri. 8 - 4:30

*More than 25 Years of
Marine Repair and Service*



Northwest Sails & Canvas, Inc.

- ✓ Sailmaking Instruction
- ✓ Rig & Sail Design
- ✓ New Sails
- ✓ Repairs



- Canvas Covers ✓
- Boat Tops ✓
- Cushions ✓
- Repairs ✓

Sailloft:

42 N. Water St.
Port Hadlock, WA 98339
mobile: 360-301-3204
nwsails@olympus.net

Canvas Shop:

1238 Blaine St.
Port Townsend, WA 98368
360-385-5416
nwcanvas@olympus.net

www.nwsailsandcanvas.com

**Holm's Heritage
PAINTING & BOATWORKS**

holmsheritagepainting.com

360.774.2040



**COMPLETE
MARINE SERVICES**

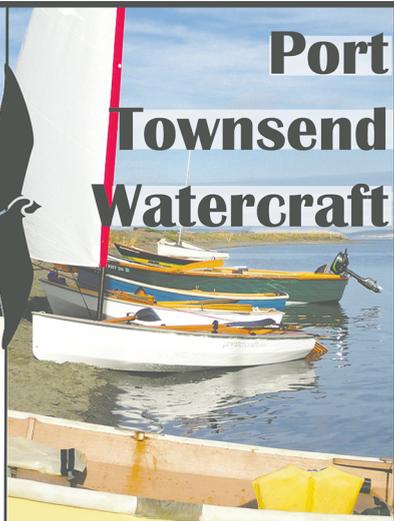
Topside & Bottom Painting • Osmotic Blister
Fiber-Glass Repair • Detailing
Restorations & Repowers

Innovative Boat Kits since 2009,
thanks to a unique mix of local
marine trades talent, skill, &
collaboration.

ptwatercraft.com

It takes a community

Turn Point Design - Edensaw Woods - Jim Franken Inc. -
Antalya Holdings - Bueno Systems - NW Sails & Canvas -
Admiral Ship Supply - NW School of Wooden Boat Building -
NW Maritime Center - Innovative Composites - Fisheries
Supply - Fiberglass Supply - Electric Paddle - PT Marine
Trades Association - PT Sails - PT Rigging - Small Craft
Advisor - Bieker Boats - Henerys Hardware - Many Friends!



WE ARE ♥ THE 20%

**Voted:
BEST MUFFINS
in
Puget Sound!**
by Pacific NW Boater



**Breakfast
Lunch
Muffins/Scones
Fresh Coffee
Great Attitude!**

a.k.a. "The Boatyard Kitchen"

2800 Washington St, Port Townsend
Next to Gold Star Marine ~ w/Marina View Outdoor Seating!

Father and son team attracted to waterfront

Chris McDaniel
cmcdaniel@ptleader.com

The Port Townsend waterfront offers something that may be uncommon in other parts — old-school tradition and newfound opportunities.

“In the marine trades, there are opportunities for jobs and therefore a draw for young people to work,” said Ryan Charrier, who co-owns Western Workboats with his father, Randy. “I want to see real activities still happening here, not be a fake tourist attraction. I want to see actual boat repair continuing and thus a way for younger people to have employment, and I think it is important to also maintain the sort of unique flavor of the maritime heritage we have.”

Along with salvage operations, Charrier and his father provide independent contracting for commercial boats and pleasure craft.

“It is definitely a mixture,” Charrier said. “In general, we like to work on workboats a little more. Both my dad and I really enjoy working with an owner in the sense the owner knows what they want, and that is often fishermen or commercial people more where they are making the decisions. There are a lot of calls that have to be made, and it can be tricky working with somebody who doesn’t know anything about the boat.”

The father-son duo specializes in engines and various other tasks needed to keep a boat running efficiently.

“We do engine installations or repowers where you are swapping a worn-out engine for a new one,” Charrier said. “That goes along with aligning the engine to the propeller shaft. We also do fuel systems, hydraulic systems and electrical work. Wiring, especially, is just really tedious at times. You will be standing at a panel for a long time to get your wire runs just right. It can take forever.”

A destination

For young adults seeking adventure while learn-



We are a home-grown family business that specializes in being a bit of a jack-of-all-trades.”

Ryan Charrier

ing a skill or trade, the Port Townsend waterfront is becoming the place to be, Charrier said.

“It has, I think, especially in the wooden boat world because of the Northwest School of Wooden Boat Building down in (Port) Hadlock,” he said. “They have always drawn younger people to go to the school, and we have done a number of jobs with them because, until recently, they have not done any of their own systems work. In there, boats my dad and I have come in and done engine installations, mechanical systems and now they are just starting to offer some of their own systems courses, which is really exciting.”

“It has been a big gap,” Charrier added. “They do beautiful work, but it will be neat for them to be able to do the whole thing now, even though it means I will have less work.”

Most recently, the Charriers did the engine installation and mechanical systems in the Wooden Boat School’s last completed large craft “Sea Beast,” a 36-foot motorsailer launched in 2017. Ryan also did the systems and electrical installation in the boat school’s latest completed runabout, “Top Hat,” which launched in October 2018.

Coming home

Charrier, who was born and raised in Port Townsend, went to the University of Washington to earn a me-

chanical engineering degree before he moved back home in 2013 to go into business with his father.

“I didn’t really have a plan,” he said. “I went to engineering school and got through that and decided I didn’t want to work in a cubicle. I wanted to come back and do something hands-on, and this is a good opportunity for that.”

Six years later, Charrier said he made the right choice.

“I am really happy to be here,” he said. “It is a good community.”

After he completed his degree, Charrier obtained his captain’s license.

“At that time, my parents Randy and Quenn Charrier and I started a new company together called Western Workboats LLC. We do a large variety of work both on and off the water but in a sporadic, specific job-based sort of way, partially made possible because we have no employees.”

Locally grown

“We are a home-grown family business that specializes in being a bit of a jack-of-all-trades,” Charrier said. “My dad has been living in the Port Townsend area and working on boats for well over 40 years and is well-known in the marine community here. His original business was Eagle-mount Marine and Salvage Company.”

Randy said he’s proud his son came home to follow in his footsteps.

“With Ryan, I only wanted him to do what he wanted to do, to follow his own interests,” Randy said. “It was just a matter of good luck his interests aligned with mine. I can’t think of anything better.”

The business model is possible thanks to the unique nature of the Port Townsend waterfront, Charrier said.

“As far as actual work on boats here, I think the way we are competitive is by offering really good service that is maybe not done anywhere else,” he said.



In the late 1990s and early 2000s, Randy Charrier built from scratch the Ed Nelson, a boat about 42 feet long and 12 feet wide named after Ryan’s great-grandfather. Ryan is fond of its old Kobelt hydraulic diesel engine, installed by his father.
Leader photo by Chris McDaniel

Another factor is that boat owners are allowed to work on their own boats ashore.

“That is something that is not real common at yards anymore,” Charrier said. “Someone can come in here, haul their boat out, do what they want on it, and also hire an independent contractor. That is where a business of our size comes in. We are there to do one specific

job while the boat owner is there painting or something. And it is a lot cheaper for them to go with an independent contractor. That is that sort of harmony that I hope can come to flourish here between the port and the marine trades. We do have something special here that is not offered anywhere else, but we have to keep our prices and quality at a competitive level.”

CPAs & Advisors for Small Businesses

We guide business owners to financial freedom

- Tax planning, preparation & compliance
- Retirement & social security planning
- Buying & selling businesses

Since 1991, we've guided businesses of all sorts, but **we know boats and we know boat businesses!**

Between the 8 members of The Business Guides' team, we own way too many boats, ranging from dinghies, rowing shells, kayaks and sloops to a 42' steel cutter.

Our clients include boatbuilders, the fisheries, marine surveyors and suppliers. We support the marine trades personally and professionally -- in our home port of Port Townsend, and throughout Washington State.

What support does your business need?



Contact us to see if we're a good fit to guide your business. We offer a complimentary 1-hour consultation.

360-385-6961 • www.thebusinessguides.com

RUBICON YACHTS



Ready to sell?
We're here to help.



QUALITY YACHTS • BROKERS YOU CAN TRUST!

YACHT SALES & ACQUISITION SPECIALISTS

CALL US FOR A FREE MARKET ANALYSIS

2601 WASHINGTON ST • PORT TOWNSEND (206) 602-2702

WWW.RUBICONYACHTS.COM

NORTHWEST MARITIME CENTER



Mark your calendars!



MARINE THRIFT SWAP MEET April 20, 2019
Used boat goods for sale! Located in Boat Haven, PT



CLASSIC MARINERS' REGATTA May 31-June 2, 2019
High-caliber racing and a friendly atmosphere on PT Bay



SEVENTY48 May 31, 2019
Human-powered race from Tacoma to Port Townsend



R2AK PRE-RACE RUCKUS June 2, 2019
Meet the racers, see the boats, dance! Pope Marine Park



RACE TO ALASKA RACE START June 3, 2019
Watch the racers head out to AK from the NWMC beach

43rd WOODEN BOAT FESTIVAL September 6-8, 2019
Boats, music, and food for days! Point Hudson Marina

431 Water Street • Port Townsend • nwmaritime.org

ARE YOU LOYAL TO THE PINT?
GET \$100 OF BEER FOR \$85!

*RESTRICTIONS APPLY

Port Townsend
Brewing Co.
CUSTOMER LOYALTY CARD



LIVE MUSIC SATURDAYS FROM 5-8 pm

330 10th Street ~ Port Townsend (Across from Safeway)
Open Sunday-Thursday 12-7 • Fridays-Saturdays 12-9 pm

www.porttownsendbrewing.com

Reuse, recycle, resail

Artful Sailor starts local sail exchange



Emiliano Marino uses all natural materials, such as beeswax, twine and canvas, to make a sailor's apron, demonstrating stitches that can be used for sailmaking. *Leader photos by Lily Haight*



Emiliano Marino, left, and Pami-Sue Alvarado demonstrate sail sewing skills at one of their workshops.

Lily Haight

lhaight@ptleader.com

Emiliano Marino, author of "The Sailmaker's Apprentice," knows the key to being a good sailor is self-sufficiency.

But sailors also need creativity and frugality. And since not every sailor has the cash to buy a brand new sail, Marino and his business partner, Pami-Sue Alvarado, aka Salty Sue, are starting a Port Townsend sail exchange, where people can donate old sails or find "new-to-them" sails for their boats or projects.

The exchange will be available at their shop, The Artful Sailor.

And this month, they started a sail exchange at their shop.

"It's by donation," Alvarado said. "The money will cover us taking the sails in, surveying them, categorizing them and labeling them so that we know what we've got. Our goal is to take a part of whatever the donation is and give that to the Northwest Maritime Center for their marine

education."

Marino and Alvarado also sell whole-earth sailing goods and host sail-sewing classes at their shop.

They hope the exchange will encourage people to reuse sails instead of throwing them away.

"It fulfills two aspects of our mission," Marino said. "One is, as a whole-earth enterprise, to try to encourage salvage and reuse. The other thing is supporting the maritime education with it, which is a big part of what we do."

Marino and Alvarado make sails with natural materials, such as canvas, twine, beeswax and pine tar, but many are made with synthetic materials that don't easily decompose.

"If we can keep them out of the landfill, that'd be a great thing," Alvarado said.

Alvarado clarified they are hoping the sails that come into the shop will be in relatively good condition.

"We don't want to get into a big huge sail repair job, but if it's something minor,"

she said.

Marino added the sail exchange is an opportunity for sailors to improve their self-sufficiency skills while being environmental stewards.

"We're trying to encourage people to reuse, but we're also trying to encourage people to do their own work," Marino said. "We can help provide the tools and materials and know-how for them to do it themselves. If there's a sail here that doesn't fit your boat, you can re-cut it. Or if it just needs a few minor repairs, you can do the repairs."

If there isn't a sail that fits your boat, the sail material can be used for other projects like a tarp or bag, Marino said.

And if somebody has donated a sail that fits your boat, then "you have a sail at the fraction of the cost of a new one," Alvarado said.

Visit The Artful Sailor at 410 Washington St. for more information on the sail exchange.

**WE SPECIALIZE IN MARINE REPAIR
& MAINTENANCE**

— SERVING BOATERS SINCE 2008 —



BOTTOMS UP MARINE SERVICES

BUMS LLC

360-301-5921

Under New Ownership

www.bottomsupmarineservicesinc.com

Located in the Port Townsend Boat Haven

OUR WORKING WATERFRONT

“IF YOU NEED IT DONE, WE CAN DO IT!”



PHOTO © BILL CURTSINGER

“For decades the Boat Haven & Point Hudson have been the economic and cultural hubs of our working waterfront. Our dynamic marine trades industry have the talent and skills to tackle any project, from historic restorations like the Western Flyer, Adventuress, and Schooner Martha to projects employing cutting edge, innovative technologies fueling the 21st century maritime world. Our goal is to keep our working waterfront vibrant and growing for generations to come.”

“WE ARE THE 20%”

Maritime Trades = 20% of Jeff. Co. Jobs, 5:1 Return On Your Tax Dollars. See the Maritime Economic Impact Study at ptmta.org

**Voted ‘Outstanding New Yacht Brokerage’
in Northwest Yachting Magazine for 2018!**



Rob Sanderson
Broker. Instructor. Captain.

**WANT TO BUY OR SELL A BOAT?
WE’RE HERE TO HELP!**



**(360)316-9370 or ptboatco@gmail.com
★ PORTTOWNSENDBOATCO.COM ★**



315 Jackson St. Port Townsend, WA 98368
360-385-1640 porttownsendsails.com



GREAT COFFEE KEEPS GREAT PEOPLE AFLOAT.

LOCATED AT THE NORTHWEST MARITIME CENTER
OPEN DAILY 6:30 AM

JODY COMAN, AMS[®], SAMS[®]

MEMBER OF SOCIETY OF
ACCREDITED MARINE SURVEYORS[®]

All pleasure and commercial fishing vessels.
20 plus years of experience.
No travel charges anywhere in the NW.

JodyComan@gmail.com

360-457-5092





The sun begins to set at Point Hudson.
Leader photo by Lily Haight

Wintering: Port Townsend offers opportunities

▼Continued from page 6

On the job

Anderson and Argo have been in business for the past six years.

“2018 was our first year working on our boat, the Sunnyvale, as a salmon seine tender in Kodiak, Alaska, and owning the McClure Bay, which worked as a gut boat in Prince William Sound, Alaska,” Argo said. “The McClure Bay was run by Capt. Justin Smith, a Port Townsend local.”

Transitioning from fishing to working as a tender has given the pair more resources to invest and grow their business. It also reduces stress.

“The stress came from not having a set income, because it just depends on the fishing year,” Argo said. “You can do really well some years, and some years are not good fishing years. Or the price changes every year, too, due to global markets. Tendering was a nice move because we have a set contract with a set amount of pay, a day rate.”

And they don’t need to purchase a fishing permit.

“When you’re a fisherman, a permit ties up a lot of liquidity that isn’t able to be used as collateral for a loan,” Argo said. “It is like owning a commodity.”

In 2017, a fishing permit cost the company about \$100,000, Argo said. Now that money is available for other purposes, such as installing a new engine and refrigeration system on the McClure Bay, which is being done currently.

“It is nice to keep our boats here,” Argo said. “We have property here. I can ride my bike to come check on the boats. These are huge liabilities. So it is nice to check on lines when the weather is crappy. And we can work on our own boats here. Ozzie is a talented shipwright.”

Being in Port Townsend in the off-season offers other opportunities.

“I lived in Chile for two years prior to moving to Port Townsend,” Argo said. “There I wrote for a newspaper

and was an English teacher. I teach Spanish in Port Townsend, hoping to share the joy of meeting Spanish speakers and learning about Latino culture.”

Lending a helping hand

Although Whale Pen Island offers convenience for its customers, every now and then it becomes an actual lifeline.

“There was one boat — these are all seine fishing boats — one of them had an electrical fire” during the 2018 season, Argo said. “We were their support boat. We ended up towing them in, and their crew came on board, and I cooked them food and let them take a shower. That is part of our services. It is nice.”

Because Anderson and Argo began as fishers, they are better able to meet the needs of those they serve, she said.

“There was a couple of times where we were broke down and it was nice to have a tender be there

to take care of us,” she said. “I know that feeling. I think we do a better job because we know what it is like to be fishermen out there.”

On more routine runs, the working boat pulls alongside a customer and deploys vacuum hoses to transfer the fresh-caught fish into onboard refrigerators for transport.

Despite common belief, fish don’t smell bad, Argo said.

“The fish are kept between 33 and 34 degrees, so there is not a real big margin, and when they are kept at that temperature, they smell fresh,” she said. “That is actually part of the quality control I do. I have a temperature gun that I shoot fish with when they come on board, and I also smell the fish. I look at their scales, their pupils, their gums. They were caught that day, and we keep them cold.”

Center: Programs expanding at school

▼Continued from page 8

Watson thanked Arrow Lumber and Edensaw Woods for donations of tools and materials to help her students build four new work benches.

Smith sees the maritime sector as a haven for relatively high-paying jobs, with connections readily available right in

his hometown. After crewing the Martha and taking part in sailing races on board other vessels, he’s drawn to the lifestyle as much as anything else.

“Sailing is so relaxing, and yet it’s the most extreme thing I’ve ever done in my life,” Smith said. “I want to make a life out of this and travel the world.”

CRAFTSMEN UNITED INC.

360-379-2500
3109 JEFFERSON ST.
PORT TOWNSEND,
WA 98368
office@craftsmenunitedinc.com

Study: Shows local impact

▼Continued from page 4

time sector accounts for 20 percent of all employment in Jefferson County.

As the PTMTA had hoped, the published study “turned the ship around.” The port’s leadership changed, and the marine trade workers felt as though their voices were more heard, Sanok said.

The experience also bonded the members of the PTMTA. Its membership has almost doubled in the past year, Tracy said.

Now the county maritime workers have concrete evidence of the importance of the industry to the local economy.

“I was surprised how people cared so deeply and so strongly about our working waterfront,” Petranek said. “They had invested their lives, they had invested their homes, the future of their children here. People were genuinely concerned and passionate about this community and how hard they had worked, and how much they wanted it to remain a part of our culture here. It is a part of our culture here.”

Zero-emission: Boat building

▼Continued from page 3

During construction, students will learn laminating, strip-planking, cold-molded construction, vacuum infusion, foam core construction, millwork, traditional joinery, and custom systems design and installation.

“I just want to thank Tim for being amenable to my choices,” Blatchley said. “I always think boats look so cool like this, with their frames exposed before the planks are put in. They look like giant sea beasts. It’s amazingly beautiful.”

EMERALD MARINE



ANACORTES WASHINGTON

Specializing in wooden boat repair and restoration of classic yachts and workboats from Olympia to Vancouver, B.C.

703 30th St. Anacortes, WA

360-293-4161 • www.emeraldmarine.com

Dealers for Beta Marine • Proud distributor of Edensaw Woods since 2004



Full Service Dive Center

360-385-DIVE (3483)

2410 Washington St.
Port Townsend, WA 98368



Environmental consulting firm based in Port Townsend specializing in marine and wetland ecosystems throughout western Washington.

Habitat Management Plans, Mitigation and Monitoring Plans, Habitat Survey Reports and Biological Evaluation documents.

360.385.4073

PETER'S MARINE

Custom Metal Fabrication

360-379-1291

PETER CHAFFEE
Cell: 360-301-2708

Port Townsend, WA

THOMPSON BOAT

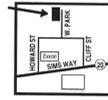
OVER 40 YEARS OF WOODEN BOAT REPAIR

360-643-2050

2700 JEFFERSON ST.
PORT TOWNSEND



Gases, Safety and Welding Supplies for Industry and Life



Visit us in Port Townsend!

847-B W. Park Avenue
(360) 385-9533



Our friendly staff can insure you have the right tools for the job!

Welding Equipment, Safety & Industrial Supplies,
Equipment Rental & Repair, Gas Delivery & Cylinder Exchange

WWW.CENTRALWELDING.COM

PHOTO © BILL CURTSINGER



Emil Africa working on “W. N. Ragland” @ Haven Boatworks, 2018.

SUNRISE COFFEE

SUPPORTING OUR
WORKING WATERFRONT
SINCE 1985

6 REASONS TO BRING YOUR BOAT TO THE PORT OF PORT TOWNSEND

1. OVER 400 MARINE TRADES CRAFTSPEOPLE

The best in the Northwest!
Parts & boating stores.

2. WE DO IT ALL

Wood. Metal. Fiberglass. Sails.
Upholstery. Varnish. Engines.
Plumbing. Electrical. Electronics.
All here.

3. HAULOUT SPECIAL RATE

Until March 31, 2019.

4. THREE HAULOUT LIFTS

Roll in and out with a 70-ton,
75-ton and 330-ton lift.

5. PROFESSIONAL & FRIENDLY STAFF

The Port staff will help with moorage,
fuel, links to the trades.

6. HAPPY CUSTOMERS

... like these folks!



www.portofpt.com

360-385-6211

