Female tech

Expanding the ranks offers a rich opportunity



Recruiting, mentoring and promoting women as marine electronics technicians means doubling the talent pool.

on't turn the page. This can make you money. Sure, the article covers women marine technicians and their experiences, challenges and outlook, but this isn't an article about a "women's issue." It's an issue for the entire industry and mostly it's about how some talented but slightly "different" techs can make you a bundle.

The report below isn't about how hard it is to be a woman in the marine field. That would be one long and boring piece full of cliches that you wouldn't want to read. This is about gaining insight into the female experience because there's value in a different perspective and it could grow your business.

I interviewed numerous women in the marine technology field. They were younger, older, experienced, newbies, college-trained electrical engineers, high school grads, and those who stumbled into the dream job that they never knew existed. They were all over the field and yet their stories sounded similar and they resonated with my own experience. However, since this isn't a women's issue, I also talked to a few men including business owners looking for that elusive pool of tech talent and customers who've had women work on their vessels.

Let's look at the landscape, the issues, and some thoughts on how men and women can join forces and work better together in this (sometimes less than enlightened) corner of the world.

The current landscape

The marine industry, and specifically the tech segment, continues to experience talent shortages. Finding interested and motivated young people is tough, which may be why marine technicians are growing increasingly middle-aged. Fewer techs translate to underserved markets with pent-up demand. Employers are hungry for people with specialized skills who are willing to work in tough environments

Electrical engineer Julia Carleton specializes in the design of power generation and energy storage systems aboard distantwater cruising vessels. About the challenge of blending in with the rest of the crew she works with, Carleton says, "I need to not be one of the guys, but on the other hand I feel I can't stand out. It's a razor's edge."

and potentially for lower wages than they could make in other technical and/or computer-related fields.

Attracting and cultivating women in the tech field may be the answer. They're half the population, and some stumble into the field by accident rather than by being actively recruited and mentored. For men the point is to not overlook enthusiastic women seeking a career out of the ordinary. For women the key is understanding that these jobs are plentiful, don't necessitate being at sea for weeks or months, may offer a career path, and promise longevity as well as higher wages than traditional female occupations.

The challenge is getting men and women to work together because mixed gender environments make better workplaces. Working with all women or all men can create difficulty if not downright weirdness. Both genders just seem to behave better in a balanced or at least a less lopsided mix. But getting some to see the light isn't easy. A few I spoke with pointed out that not all women want to do this work so why focus on them. Well, not all men want to do this work either. But until you do outreach, you won't know where your next great hire is coming from.

'Hardest and best job'

The women I spoke with love the marine industry. "I hurt every day and I come home dirty and bruised, but I like the satisfaction of making things work, especially those things that people really need or want," says Tiffany Garrison who works at Casey Marine Electrical in North Carolina. "It's the hardest job I've ever done and the best job I've ever had."

Jen Haaland is an ABYC Master Technician who works for NW Explorations in Bellingham, WA. Today, she's a senior tech for the company, but just eight years ago she trained at the Skagit Valley College Marine Maintenance Program. That was after she had already received a B.A. in Fine Arts from Seattle University. "I love my job," she says. "I like teaching too—like the women's electrical and diesel primers at Cruisers College. Women ask more questions, which is good whether you're a boater or a tech."

Recently, Haaland was awarded the Bolling Fortson Douglass Memorial Award by ABYC. Her advice for women coming into the field? "Cultivate confidence," she says. "Fake it until you make it and lean on your special edge, which is being good at detail."

Jen King and Monica Reiss co-teach electrical and electronics coursework at the Skagit Valley College Marine Maintenance Program, which enjoys an excellent reputation for real world preparation by experts in the field. King and Reiss are also co-owners of K&R Marine and RV Services near Anacortes, WA, and their enthusiasm for their work and business is contagious.

King is a lifelong boater and drove boats for the National Oceanic and Atmospheric Administration—NOAA—while Reiss has a master's degree in oceanography. "Men and women work differently," says King. "Women tend to read instructions, get the scope of the situation and form a plan while men grab a wrench and jump in. Neither is wrong and in fact, taken together, they may be the best solution."

Reiss's advice to women is twofold: Don't be afraid to ask for help because it's not worth hurting yourself, and always remain professional because it's disarming in any situation.

Captain Karen Prioleau is faculty at the Orange Coast College (OCC) Professional Mariner Program in southern California. Students can earn a certificate in one year or an A.S. in two. She wrestles every day with finding companies to provide internships for her students but is excited that this year, approximately 40% of her students are women. (Only a few are pursuing technician positions while others take different jobs in the industry.)

One of her students I spoke with was a great example of an enthusiastic woman who landed her dream job with a marine electronics company. Lisa Lewis came from TV production and couldn't be more excited about her new direction. Although she's just pulling wire for MFDs at the moment, she has her eye on working with artificial intelligence projects in the future or for the Port of Los Angeles. "It's early days, but I love it," she says.







Jen King (left) and Monica Reiss (far right) are co-owners of K&R Marine and RV Services near Anacortes, WA, and instructors at Skagit Valley College, where they teach electronics and electrical courses for the Marine Maintenance Program. King says, "Men and women work differently. Women tend to read instructions, get the scope of the situation and form a plan while men grab a wrench and jump in. Neither is wrong and in fact, taken together, they may be the best solution."

Reiss advises women techs not to be afraid to ask for help and that remaining professional can disarm any situation.

Tiffany Garrison (center) is a technician at Casey Marine Electrical in North Carolina. "I hurt every day and I come home dirty and bruised, but I like the satisfaction of making things work, especially those things that people really need or want," she says. "It's the hardest job I've ever done and the best job I've ever had."

Quick tips for men

- There's no simple roadmap of how to manage this complex issue but here are a few thoughts from the field, offered by the women who live this experience every day.
 - Build up your colleagues (both male and female) to create a safe zone where success can grow.
 - Don't make women outliers—welcome them into the fold and mentor them. They offer complimentary skills and perspectives the results of which may be both surprising and lucrative. Leverage their uniqueness for better overall results.
 - Offer assistance genuinely. If not needed, step back and let it go.
 - Don't overcompensate—it can backfire. If you suspect a comment may be demeaning
 or condescending, it probably is. Just be genuinely and succinctly complimentary or
 don't say anything. (I once had a guy gush over my ability to tie a cleat hitch. He would
 never have done that with a man.)
 - Don't get defensive. If you feel you misunderstood something, ask before the situation blows up.
 - Always act from a position of respect. You can't go wrong with anyone, regardless of gender.
 - Learn to trust someone's abilities and then let go so they can do their job.
 - And for God's sake, don't mansplain.

Quick tips for women

- Traditional male-oriented industries can be problematic for women seeking to get a foot in the door. Marine technicians aren't the only challenging bunch, so the points below, made by the women in the industry, can come in handy anywhere and at any time.
- Actively seek out both men and other women to mentor you. You can't force anyone's help but don't assume it's not available.
 - Take extra time to show interest and prove yourself. Pay attention, accept responsibility and don't cost anyone time on the job. Know your business like your life depends on it—because your career does.
 - Learn to communicate in a non-accusatory manner because nothing shuts someone down faster than getting on the defensive.
 - Some of the worst behavior stems from insecurity. Note it, figure out what role you want to play in it, and then act accordingly.
 - Sometimes, you may have to push hard for good ideas or unusual solutions but that
 comes with the risk of being called bossy. In the same situation, men may be "leaders"
 while women are "pushy." Recognize it, acknowledge it, and persevere—or just move
 on.
 - Don't take things personally and don't get bummed out by hiccups—each day is a fresh start.
 - Speak up—you don't have to take harassment of any kind.
 - · And scope out the restroom situation early.

Communication is key

As in most things in life, communication is the crux of the problem when women work in the marine industry. The truth is that we're all just trying to navigate situations that have few rules. Clear and transparent communication is hard as Garrison notes, "Sometimes I have to figure out how to talk to guys when they won't even talk to each other."

It's not always clear what will be helpful or condescending—on either side. If in doubt about how to communicate effectively, try putting on your human hat versus your guy or gal hat and let that guide your response. One male tech in the field addressed a situation perfectly by just being a thoughtful co-worker. Garrison described a situation when she was being a bit grumpy and having an off day and she told her colleague she wasn't feeling well. After lunch, when they resumed working in the engine compartment, she saw his hand come around the motor holding a Snickers bar. Nothing said. Deftly handled.

Sometimes the stakes are higher. How do you communicate through an uncomfortable or downright hostile situation? Garrison says she likes to use what she calls "aggressive comedy" to try to fit in. I get that. I'm fast with comebacks too, which can be both lifesaving and intimidating. Sometimes, I wonder if my "roll-with-it funnies" are actually enabling the situation. Yes, it makes the moment less awkward, strips away any intended or perceived aggression, and makes me accepted into male circles, but am I furthering the stereotypical behavior by being one of the guys?

Julia Carleton works for Bruce Schwab's OceanPlanet Energy in Maine. Carleton holds a USCG 500GT Upon Oceans license and her expertise is power generation and energy storage systems, specifically for distance cruising. She spent time on research vessels and is an electrical engineer who focuses on system design and technical sales. She's been around the industry a while, so she knows about the double-edged sword that is blending in. "I wonder if I contribute to this subconsciously myself—am I supporting the narrative?" she says. "To help knock down some of these barriers, I need to not be one of the guys, but on the other hand I feel I can't stand out. It's a razor's edge."

Some extra hurdles

As if the male/female dynamic wasn't tough enough, there's an issue with education—volume, accessibility and adequacy. It can be a problem for both male and female techs. Sure, there are ABYC and NMEA programs as well as manu-

facturer product-specific training, but you pretty much already have to be in the industry to benefit from these. So how do people, specifically women, find their way in?

I've already mentioned the Skagit Valley College and OCC's Professional Mariner Program, but the truth is, most training comes from hands-on experience and that can be hard for anyone, especially a woman, to access. Some men won't take on a female apprentice, fearing perceptions or complications, and that's not only limiting for all parties, it's sad.

Assumptions are also a problem because you know what happens when you assume. Haaland says she doesn't experience too many problems once on the job as a tech, but walking down the dock, she's often the recipient of surprised looks and sometimes assumptions that she's the cleaning crew.

Then there's the age gap. Jon Thaw of Poseidon Marine Electronics in Florida describes a frustrating situation. "I once found a young woman who could have been excellent in technical sales," he says. "With some training, she would have outsold me in a matter of a year, and I was the company's number one salesman, so I went to bat for her. The owners, who were of another generation, wouldn't hear of giving a woman a chance. Shame on these people who overlook talent because it's female."

Finally, there's an issue brought up repeatedly by these women but one that wouldn't have ever dawned on me. There's a restroom shortage. Female techs face filthy bathrooms or no bathrooms at all at the job site. Garrison notes that this was especially problematic during the pandemic when you couldn't just go to the nearest McDonald's. "In most instances, I have to assess the situation right at the start of a job and figure out where [offsite] I'll have to drive during the day," she says. "Last year, that was tough."

Navigating the proving grounds

Right or wrong, women have to prove themselves, sometimes well beyond what men have to do. The good ones don't take offense to that. It just makes them better. For example, I always know when the "switch has flipped" for a broker or a boat builder when I'm testing a boat and they stop talking to me like their daughter and are suddenly eager to show me the clean electrical install or the beauty of the plumbing system. I always come prepared with good questions. The next time I walk down the dock, they remember me and that gives me a leg up.

The same goes for good female techs. "That switch is the beginning of recognition and of a reputation," says Garrison. "I went from making flashcards when I started eight years ago just to learn the terminology, to now having customers call and ask for me specifically."

Some men are a tough sell and can't shake their prejudices. Chances are that women aren't the only people they have trouble with, but the good news is that there are fewer of them these days. "My challenge is to navigate around the problem guys but not put that on all men because they're not all like that," adds Garrison.

Many guys are respectful and helpful and some don't bat an eyelash at the scenario—I suspect because they know that if a woman has gotten to a certain level, she's had to work hard to get there so she's probably no slouch. That said, this isn't the industry for a woman with thin skin, a lack of humor or sketchy skills. Here, you need a quick brain, a sharp tongue and lots of patience. And oh yeah, you'd better be really good at what you do.

Paul Prioleau is captain of an Absolute 60 in Seanet, a fractional yacht ownership program in California. He finds female techs to be organized, responsible and better at follow-up, which puts professional captains at ease with the work that's done on their boat. "Once you find a good technician, you don't let them go regardless of gender," he says. "The industry needs to remember that they're not women technicians, they're technicians."

Why women make good technicians

There are many (somewhat) innate pluses to having women on the team. We've mentioned that they tend be detail oriented, good planners and thorough with follow-up, which often translates to providing better customer service. In addition, their anticipation skills are evolved so they can piece together a whole solution rather than just one part. They also have a heightened sense of awareness and may be better with risk assessment, especially regarding what could happen with a project down the road. "Women tend to pay attention to the design overall, not just pieces of the ancillary equipment and that gets better results," says Garrison.

Women are persistent so the job's not done until it's fully done. King and Reiss describe a situation where a 140-pound battery had to be removed from a tight spot aboard. "It took a half a day but we kept at it until it was done. Our male helper was astounded by the effort and admitted he would have given up long before."



ABYC Master Technician Jen Haaland works for NW Explorations in Bellingham, WA. She got her technical education eight years ago at Skagit Valley College's Marine Maintenance Program. She advises women entering the marine field: "Cultivate confidence. Fake it until you make it and lean on your special edge, which is being good at detail."

Women are better at evaluating a problem from a different perspective (like the customer's) so they're more likely to exhibit compassion and a caring attitude, which could become the hallmark of your business. Women also make good teachers so they're excellent at training. They can relate in layman's terms what a customer, facing a newly installed system, needs to learn.

Oftentimes, women have to work smarter not harder so they can come up with innovative solutions that may be replicable on other jobs. And finally, women are often smaller, which is both a burden and a blessing. They may need help lifting something, but they can also fit into some of the most ridiculous engine compartments.



Fitting into smaller spaces on boats is one of those unheralded benefits of being a female tech, ably demonstrated here by Jen King. Despite challenges women face in the marine trades, she says, "Just be yourself and stick it out. In the long run, it'll be worth it because these jobs are rewarding and fun."

No easy answers

If this situation were easy, we wouldn't still be talking about it. The solution to how to make these jobs attractive and accessible to half the population is multifaceted, but usually it's two steps forward, one step back. Both men and women need to come at these opportunities with a fresh outlook. "It's hard to be 'women forward' for both sides," adds Carleton. "It's like threading a needle that keeps moving."

Knowing that, it's time to start taking steps even if the slope is slippery. The industry collectively, and some men individually, need to ask questions. How can the industry reach out to women and interest them in coming into the field? How can women be enticed to stay? How can employers leverage female techs' perspectives to help both male colleagues and boating customers?

Male techs can benefit from asking questions of themselves: How am I perceived by my female colleagues and is that perception accurate? How can I interest my daughter in following in my footsteps? Have I even thought of encouraging her?

Pigeonholing is for the birds and it can cause you to cut off your nose to spite your face. Carol Sherburne is co-owner of HWH Electronics in Florida and spent 10 years on the NMEA Board of Directors including time as President. She says her dad, who founded HWH decades earlier, didn't put a label on her. "My father took me on jobs since I was a kid and was so proud," she says regarding the family business that she has worked in since high school. "He made me unafraid."

Boldly reaching beyond the conventional is

necessary for this to work. Here are some things you can do: Volunteer to speak at high schools and trade schools. They may become great recruiting tools. Outline ascension paths for women and shut down unacceptable behavior, so the playing field is leveled. Attend job fairs and if you already have a female tech on staff, send her to the fair to help break the ice with the girls walking by. Create an old-school apprenticeship for home-grown talent. And finally: mentor everyone.

Trade schools like Skagit College and the Professional Mariner Program are rich hunting grounds for talent. Work with them by offering your time as a speaker, creating internships for students and then job opportunities for graduates. You may never have to run another "help wanted" ad again.

Thaw adds, "I expect the young women coming out of the Navy or Air Force now will make excellent candidates for tech jobs. Harness that talent and put it to work for you."

The view from here

I've studied and worked in male-dominated fields all my life. As with the women mentioned here, most of my environments have been 90/10 male/female and sometimes not even that "balanced." The truth is, I'm fine with that and I've learned to negotiate the highs and lows of this skewed mix although there are hurdles. When I arrive to test a boat, for example, I often get side eye. One broker was so flummoxed, he took me down to show me the "kitchen." He then turned on the stereo. Setting the mood? I asked him to step off the floorboards so I could check out the fuel tanks. He disappeared and didn't talk to me again.

I've been told I "don't look like a boat tester." I've had reps mansplain to me what a pantographic door was as I was standing next to one. I've had a guy tell me his windlass was so easy to assemble, even his girlfriend could do it. (I'm not sure what that said about him or his girlfriend.) I've had a Cuban official's jaw drop when "la capitania" pulled into port and a fleet manager in Tonga just kept looking behind me as if the "real" captain might be following me. And once, I had a manufacturer's rep tell me I "amused him." Sometimes, it's comical. At other times, my slappin' arm gets twitchy.

In these experiences, I know I'm not alone because the women I spoke with had similar tales to share, and I'm gobsmacked that we're still in this place in the 21st century. "Sometimes I think—is this still happening?" says Carleton. "After all this time and work, is this still where we are?"

Most women who have succeeded in this industry feel their gender doesn't warrant discussion. Sherburne advises to just be comfortable with the person you are, and the rest will iron itself out. King notes, "Just be yourself and stick it out," she says. "In the long run, it'll be worth it because these jobs are rewarding and fun."

I'd prefer not to have the gender discussion either, but here we are. I'm not particularly technical myself. In the field, I'm what you'd call "resourceful," which means I can get a hobbled boat from point A to point B and then hand it off to one of the mechanical or electrical geniuses to fix. I'm a bit in awe of these Mc-Gyvers (both male and female) who do magic. The ones who have to prove they do magic? Yeah, I'll roll with them any day and so should you because they can make your cash register ring.