



Building on the legacy

Joe O'Rourke

**Vice President and General Manager,
Victoria Shipyards**

Photo by Dave Roels (www.daveruels.com)

In replacing Malcolm Barker, Joe considers himself "lucky" to have inherited a very good team with a strong and efficient operation that has a reputation for high quality.

It can't be easy taking over from one of the most well-known and respected characters in B.C.'s maritime industry, but that's exactly what Joe O'Rourke did. In replacing Malcolm Barker as Vice President and General Manager, Victoria Shipyards, Joe considers himself "lucky" to have inherited a very good team with a strong and efficient operation that has a reputation for high quality. As Joe notes, if it's not broken, don't fix it. Having said that, the departure of a key figure will have an impact on any company, and indeed, any industry. Joe's strong skill set and experience, coupled with a personable, professional approach to business, is proving to be a successful combination in propelling Victoria Shipyards through this exciting time for B.C.'s ship repair industry.

BCSN: *Tell us about the career path that brought you here.*

JO: I came from a family of Certified Professional Accountants and accounting

professors, so naturally I studied and became a CPA for the first six or seven years of my business career. When I decided that I wanted to do something different, I ended up getting a position as a cost accounting manager for a ship repair company called Northwest Marine Shipyard in Portland in 1987. I fell in love with the industry right then and there.

I worked my way up to Vice President of Finance and, by 1994, took over as the General Manager of a shipyard in Los Angeles, and then held successive senior executive positions up until I left in 2005. Northwest Marine went through a number of acquisitions and, by the time I left, it was absorbed by BAE Ship Systems, now a large U.S. company focused on United States Navy repair and modernization.

After a brief period of time off to spend with family, I joined Vigor Industrial in Portland and assisted with their expansion

throughout the Pacific Northwest for about six or seven years. The company was roughly five times the size when I left as when I joined. Following that, I served as a senior maritime consultant, a position I held as I searched far and wide for an executive position that was the right fit for my skill set and experience. That was a year and a half ago, and it has turned out to be one of the best decisions I've ever made. Not only are we the class of our industry, we're in a good market, we have a world-class team and you can't argue with being located in beautiful Victoria, British Columbia on Canada's West Coast.

BCSN: *What are some of the differences between the Canadian and U.S. industries?*

JO: First, I think you have to distinguish between shipbuilding and ship repair/conversion. For example, Seaspan's Vancouver Shipyards is a build yard, while Victoria Shipyards is a ship repair and conversion yard. In terms of shipbuilding in Canada, the industry was essentially dead for several decades. With the help of Seaspan and Halifax-based Irving Shipbuilding, Canada is now on its way to revitalizing and completely rebuilding the industry for generations to come.

In the U.S. however, shipbuilding never completely died. The U.S. Navy operates a significant number of vessels and although they have public shipyards, they are the largest revenue-generating shipbuilder in the country. Interestingly enough though, at the same time, the U.S. is also down to a handful of yards that specialize in the construction of certain vessels, for example, Newport News which builds carriers in Norfolk Virginia. There is minimal competition because you don't need that many carriers and they're obviously a very specialized, complex and expensive vessel. *The Jones Act*, which stipulates that vessels trading between U.S. ports must be U.S.-flagged and U.S.-built, has also helped the U.S. build market. By doing so, this has also kept the construction of a certain number of large vessels in the U.S. Meanwhile, there is tremendous demand (and construction activity constantly underway) for smaller vessels such as barges, supply boats, and anchor vessels specifically tailored to support the oil industry in the Gulf of Mexico.

So, while shipbuilding in Canada essentially disappeared and has a dire need for reinvestment, the U.S. industry is consolidated to a handful of large yards building specific types of vessels primarily for the government and local industry.

To get a better understanding of the ship repair and conversion industry, you need to take a step back and consider that most vessels on this coast trade in a very large circle around the Pacific Rim from the ports in North America to Asia. Starting in the 1960s, and accelerating in the 1970s, the movement of repair operations started to shift overseas — starting with Korea and Japan, then China, Malaysia, and the Philippines — each with significantly lower labour costs and lower environmental standards. If the customer wants to get the best price, they're not going to find it in North America. So within that context, repair work migrated across the sea to the low price centres, and many shipyards perished in the process. To put it in perspective, there's approximately 10 per cent of the number of shipyards and employees now than there were in the 1970s. It has stabilized in the last 10 years, but still you're down to a handful

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Joe stands in front of Victoria Shipyards' latest project, the Crystal Serenity. VSL has a reputation for quick turnaround of quality work, characteristics that appeal to cruise lines.

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of big, prominent players — Seaspan, Vigor, BAE, etc. For Canada, the industry never died but it did shrink to a small percentage of what it was in the days before and after the Second World War when the U.S. and Canada were both maritime powers in building and repair.

BCSN: *With the trend toward more technologically advanced ships, do you think this puts Asia at a disadvantage?*

JO: It depends on how you look at it. You can always build your vessel in one place and do your systems integration in another. The largest builders are in China, Korea and to some degree, Japan although not quite as large as they used to be. They build the largest vessels and still have a predominant share of the market. In terms of more complexity — and a good example would be cruise ships — these are still built in Europe where they still have a competitive edge.

BCSN: *Do you see any trend that would indicate niche builds and specialization within the West Coast, or even the North American market?*

JO: I believe there will be partnerships between West Coast yards and other international companies that already have a leg up in terms of structure and personnel to execute large contracts. I could see joint ventures where you're using a North American resource to generate a product.

One trend that is a popular topic in B.C. is the increased interest in LNG as a fuel. I believe we're going to get into LNG work, but there are also companies around the world that already specialize in building the large LNG tanks, so you could see the potential for partnerships where they provide the specific skills and we carry out the conversion.

BCSN: *How have technological advances impacted Victoria Shipyard operations?*

JO: It's more of an incremental change but new technology is incorporated every day. For example, the paint systems and products used now are much more sophisticated than they have ever been. Recently, in May, we had the cruise ship *Celebrity Millennium* in the yard for a full paint removal on the hull. That entailed

removing 125,000 square feet of paint, all the way down to the metal, and then applying the new paint. Between today's regulatory environment and the need for speed, the best option is to use robotics. We had four robotic crawlers on that vessel — essentially, men and women with joysticks who drive these crawlers with high pressure water up and down the hull. Following this process allows us to avoid the normal clean-up you would have had to do before with abrasive blasting while using significantly less labour. And you start seeing those applications all the way throughout the yard.

If you look at Vancouver Shipyards' new world-class, state-of-the-art facility, the new panel line machines basically take the flat steel and the structural members that support the steel and do all the welding to come out with large fabricated sections — compared to the old days where you had a man and a torch.

Propulsion systems on vessels have matured as well, especially on the larger vessels. All vessels used to have a shaft and a propeller with a rudder in the middle. Now, for example, with cruise ships, they have azipods attached to propellers which rotate 360 degrees.

So, technologically, we see it even if it is slow moving. New technology or new capabilities aren't always automatic; you end up working, especially with smaller vessels, with engineers and customers who have always done it in a certain way. Moving them to a new technology requires a leap of trust, as well as getting a classification society involved, but eventually, it does move incrementally forward.

BCSN: *You mentioned skipping the clean-up stage in the new paint removal process. Could we touch on what sort of impact the move toward environmental sustainability has had on Seaspan?*

JO: Our Core Value of Care for the Environment is at the heart of everything we do. For us, it's important that we don't just meet environmental standards but exceed them. From the top of this organization to the bottom, exceeding environmental standards is not only mandatory but is simply a function of employment. We do a tremendous amount over and above the regulations and it's leaps and bounds over what we see our competitors doing or overseas practices where they're

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still operating under environmental standards that the Western world abandoned years ago.

For Victoria Shipyards, the graving dock makes it easier to keep our waste stream contained and, when painting, we tarp the vessels to make sure there's no release of paint. We're part of Green Marine and are driving toward a policy of zero waste. In addition, we have an efficient waste treatment centre where we've managed to reduce the amount of solid waste coming out of our shipyard by more than 50 per cent over the last couple of years.

Personally, having been in a lot of shipyards over the course of my career, I like to think of this subject in the context of how we are considering future generations. I want to make sure that our grandchildren can fish off our piers and eat anything they catch because we have done nothing to impact the local environment. If, 100 years from now, people can enjoy a beautiful, ecologically diverse harbour with active marine life

that exists next to a shipyard operation, then we know we've done a pretty good job.

BCSN: *What about training and upgrading skills to manage the new technology?*

JO: There is a definite distinction between the U.S. and Canada in this area. Canada is much more focused on providing assistance and funds for training efforts for the new workforce.

We have 10 different trades that we work with to be able to execute a contract: boilermakers with welders and fitters, machinists, joiners, etc., and those are still set up in the traditional fashion in terms of four-year apprenticeship programs. Whether it's our apprentices or the union's apprentices, the provincial and federal governments are well behind the efforts to train the next generation and are investing heavily. Because there hasn't been a viable shipbuilding and ship repair industry in British Columbia for the past few decades, there is now an urgent need for a variety of training.

The programs are also well-funded and supported by industry. If you pick a trade, for example, an electrician, there's a four-year program that's designed to give apprentices both classroom time and hands-on work experience to get them to a journeyman level. Once they achieve the journeyman level (even before they reach that level), it's a very good paying job. It's a job that can support a family. I don't think we've promoted or messaged that as well as we should. Working in ship repair is not just your average run-of-the-mill job with an average income. Rather, it's comparable with many professions that require a four-year university degree, especially within the first 10 years of their career.

The unique feature of the last 30 or 40 years in the industry is that the workforce age demographic is a U-shape curve. We have a significant number of workers over 50 who grew up in ship repair, and we have a significant number of young apprentices and young men and women who have just graduated within the last



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INDUSTRY INSIGHT

five years, but we don't have a lot in between because of the decline the industry experienced. We weren't adding people, rather just trying to hang on to the ones we had.

BCSN: *What sort of initiatives does Seaspan implement to attract new workers to the industry?*

JO: Seaspan and all of its companies have invested heavily into training. There's a huge amount of activity going on in Vancouver to train the new generation on how to build ships. For Victoria Shipyards and the ship repair program we conduct, we work hand-in-hand with local educational institutions such as colleges and universities to not only help train but help recruit young people to the industry. Camosun College is a tremendous example of this; we work very closely with their welding department and other trades and as a result, that becomes a feeder to our apprentice system. Camosun College is the leading Vancouver Island-based post-secondary institution for producing people entering into industrial trades.

We're also starting an outreach program where we try to hit young men and women at the high school age because they don't realize what kind of opportunities we have in our industry and how good the wages are versus other career choices. So, there are significant efforts underway in terms of both outreach, as well as having arrangements with Camosun College and other technical companies, that allow us to access new people.

You need to start early and raise awareness early. It's critical to have them recognize how bright a future they can have in

this industry even at a young age. Once you've done that, you then need to work the educational system all the way through to provide the network of applicants that are going to be our next generation.

BCSN: *I'd like to turn now to the projects being done at Victoria Shipyards but first, could you describe some of the modernization to the yard that has been done to help support the delivery of Non-Combat vessels for the Canadian Coast Guard and Royal Canadian Navy under the National Shipbuilding Strategy (NSS)?*

JO: In addition to providing support for Vancouver Shipyards, our role within the NSS is to support testing, trials and commissioning of the new federal vessels. The vessels will be about 90 per cent complete when they get here, and we'll handle the final commissioning along with the testing and trials. To support that, we've put in a significant amount of office and warehousing space. We have a new building — appropriately called the "Barker Building" — that will serve as the hub to support Seaspan's NSS work.

BCSN: *Now what about the work you've had over the last year?*

JO: Over the past 12 months, we have executed four cruise ships — two Princess ships last year (the *Ruby* in May and the *Crown* in December). As part of that work, we installed two scrubbers on each. That includes installing the scrubber cylinders as well as fabricating and installing piping all the way down to Deck 4 to allow access to the sea water. Those systems are large and these are big jobs. We've done five scrubber installations to date.



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In addition to the motorized vessel aspect of a cruise ship, because they're essentially a floating hotel, they also have a much higher level of sophistication in terms of projects. There are really two packages. First, there is the maintenance of the vessel. There are regulations that require them to be pulled out of the water every five years, and so at that time we'll do the painting, testing of propulsion system, repairs, steel work, pipe work, etc. Second, for the hotel side, contractors are brought in from around the world to work on projects like marble tiling, upholstery, upgrading décor, etc. For example, a new gift shop was needed, so we did the steel and the sheet metal and the external contractor did the outfitting.

Cruise ships involve an endless array of logistics. It's very intensive work and we have a short timeframe with which to complete it. There is no room for error; you need to meet the cruise lines' schedule exactly as thousands of passengers are booked for trips and if we're late, it will not only cost the cruise line, but impair our reputation for quality and on-time delivery. We take pride in our exceptional reputation both in terms of customer service and satisfaction. This means the highest quality of work and always delivering on-time.

This year to date, we've had the *Celebrity Millennium* and the *Crystal Serenity*, both in at Victoria Shipyards. The *Millennium* was a 14-day job and involved a lot of hull work – full paint removal and replacement, machinery and steel plus maintenance on the bow thrusters. There wasn't one large dollar item but rather a number of small projects. We also assisted with some of the refurbishments — for example, we built the structure required to support a large outdoor screen for the Movie under the Stars feature.

For the *Serenity*, again, no single major project but a lot of little things — sandblasting and paint, propulsion system maintenance, the installation of some new detection systems. We installed a sonar system as well because this vessel will be cruising the Northwest Passage this year.

BCSN: *And other work? I understand you just wrapped up the Frigate Life Extension Project (FELEX)?*

JO: That's correct. We modernized five frigates over five years. *HMCS Regina* was just delivered to the Navy's dock in late April. The project was one of the most well-run and successful contracts that I've seen in North America. We had great partners — Lockheed Martin, Department of National Defence, Public Works, etc. It was an absolute home run in terms of quality and on-time delivery.

The FELEX is a 10-year program, running to 2018, so there are still additional projects — docking and top side packages — which will include engineering changes and modernizing systems as new capabilities are added.

HMCS Calgary will dock in next year and we'll continue to provide service through the end of the multi-year contract. Beyond 2018, we anticipate continuing work on the West Coast frigates and new work will flow out of the new vessels being constructed for the Canadian Navy and based in Victoria. The Fleet Maintenance Facility at the Esquimalt Naval Base will remain the first line for maintenance with Victoria Shipyards supporting their efforts.

This spring, we won contracts on a Foss barge, the BC Ferries' *Coastal Renaissance*, and other commercial vessels. As the naval

modernization program wraps up, we've been pursuing other commercial work and expect to do more of that in the future.

BCSN: *What about future work?*

JO: The future is bright. We have two New Zealand vessels coming in which will be smaller versions of the frigate modernization. We'll partner with Lockheed Martin on those. For cruise ships, we typically do two per year and we already have soft bookings for two next year and three the following year.

And, as mentioned, we've started moving back into the commercial market and are actively pursuing commercial work here and on the other side of the border, especially in the Puget Sound area which is a significant market of potential docking contracts. Given the value of the Canadian dollar, we're able to put very attractive prices on the table and, with our capabilities, we believe we're nicely aligned with how the U.S. market is currently set up in terms of competition and supply and demand. We're making great penetration into that market so I think you'll see all sorts of watercraft that operate in the U.S. and are seeking their repair solutions either here or at Vancouver Drydock in North Vancouver.

BCSN: *What are some of the differences between commercial work and government work?*

About Joe O'Rourke

Joe joined Seaspan Shipyards as Vice President and General Manager – Victoria Shipyards in February 2015, bringing with him almost 30 years of experience in positions of leadership and senior management across diverse sectors of the North American marine transportation industry. Most recently, Joe worked as Senior Vice President – Business Development at Vigor Industrial LLC in Portland, Oregon. He has accumulated nearly three decades of ship repair and shipbuilding experience in several different yards on the West Coast, including San Diego, Long Beach, Portland and San Francisco. In addition, he has also worked with, and served a wide customer base, such as the U.S. Navy and affiliates, cruise ships and commercial vessels, as well as all other maritime service ships, and was part of, or led aggressive growth and acquisition efforts for both BAE Systems as well as Vigor.



A graduate from Portland State University's Bachelor of Science – Accounting Program, he began his career as a Certified Public Accountant in Portland in 1981. Joe entered the ship repair industry in 1987 as Cost Accounting Manager for Northwest Marine Shipyard.

In the role of Vice President and General Manager – Victoria Shipyards, Joe is responsible for providing leadership to Victoria Shipyards as well as the profitable, productive and safe operation of the business. In addition, he is accountable for customer satisfaction with all ship repair conversion and repair activities performed in Victoria, as well as business development activities.

INDUSTRY INSIGHT

JO: Cruise ships are the best example. Last year's Princess ship work at Victoria Shipyards generated over \$12 million in revenue — \$4.8 million was in direct wages and about \$1.5 million went to Public Works for the graving dock. The economic activity that is generated within the 23 days is huge and has a very positive effect for us, the community and the care and feeding of the facility here.

The biggest difference between commercial and government work is that the commercial customer is much more focused on production over process. Personal relationships play a big factor — you still settle contracts with a handshake. They're more interested in coming in, executing their contract with high quality, getting out on time, paying quickly, and moving on. There are regulatory requirements but it's very different from the government world. There's more process involved with government vessels — more paper, more documentation, more details. The contracting vehicle for governmental work is much more complex versus commercial.

BCSN: *To wrap up, I'd like to ask you your thoughts on the industry overall, and if you have any advice for the younger generation coming into the industry?*

JO: After 30 years of being in this industry, the first point I would make is that it's engaging. You could almost call ship repair a disease — once you catch it, it's very hard to cure. If you choose to take a trade route, there's not much better than ship repair.

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Second, it's a great time to take a look at this industry. After two decades of decline in North America because of the rise of the Pacific Rim and the movement of repair and build opportunities to low-cost centres, it was tough to get enthused. But now the story is being re-written; we're in a stable growth period and it can be a solid career that will take care of you and your family.

So my advice would be to take a look, educate yourself, and get to know the industry. It may turn out to be a career path you didn't expect but in the end, it will turn out to be an enjoyable one. It's exciting and some of the most skilled people I've ever met are right here in Victoria.

If you choose to have a career in this industry, and you work hard, either in the trades or upper management level, then it can be very rewarding. If you're looking for a job where you watch the clock all day, this is not an industry for you. **BCSN**

About Seaspan and Victoria Shipyards

Seaspan ULC is a group of Canadian companies (together referred to as "Seaspan") primarily involved in coastal marine and deepsea transportation, bunker fuelling, ship repair and shipbuilding services on the West Coast of North America. In addition to marine transportation services offered directly through Seaspan's marine division, commercial ferry, shipyard and bunkering services are provided through subsidiaries including: Marine Petrobulk Limited Partnership, Seaspan Ferries Corporation, Vancouver Shipyards Company Ltd., Victoria Shipyards Company Ltd. and Vancouver Drydock Company Ltd.

Seaspan Shipyards, an affiliate of Seaspan ULC, is comprised of Vancouver Shipyards (VSY), Victoria Shipyards (VSL) and Vancouver Drydock (VDC).

The scope of Seaspan's services, the quality of its employees and over a century of successful participation in coastal commerce, make the company a major partner in the economy of the Pacific Northwest.

Utilizing the Esquimalt Graving Dock, owned and operated by Public Works and Government Services of Canada, Victoria Shipyards can dry dock and repair vessels up to 100,000 DWT. They can perform a wide range of repairs up to and including complete vessel conversions and have successfully completed countless new construction, conversion, repair, and maintenance projects, including cruise ship conversions, work for the Royal Canadian Navy, repair and maintenance work on deepsea vessels and container ships, as well as new construction and repair work on ferries, tugs, fishing vessels, Arctic Class and research vessels, barges, and yachts of all sizes and types.



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