

CONNECT

COVE

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SEABED TO SPACE:
WHERE MARINE INTELLIGENCE
POWERS GLOBAL INNOVATION

COVE

CANADIAN
INNOVATION
GLOBAL
IMPACT.

Driving innovation and shaping
the future of the marine sector.

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ACCELERATE. INTEGRATE. LEAD: Canada's Edge in Dual-Use Technology

Dual-use technologies—those that serve both civilian and military purposes, are essential to securing a sustainable, sovereign, and future-ready Canada. As global challenges such as climate change and shifting geopolitical dynamics intensify, Canada's ability to merge civilian and military innovation becomes increasingly vital. COVE accelerates the commercialization of Canadian technologies and strengthens the supply chain to support both sectors. COVE ensures that innovators are market-ready and scalable, positioning Canadian companies to lead in national security, economic growth, and environmental stewardship.

Historically, military organizations have been at the forefront of technological advancement. Today, however, civilian innovators play a critical role in driving progress, especially in marine and defence sectors. This convergence creates cost-effective solutions, opens new markets, and accelerates adoption. Technologies like drones and autonomous vessels, originally developed for defence, are now transforming maritime logistics and environmental monitoring.

Canada has a strategic opportunity to lead in four key areas: advanced manufacturing, marine decarbonization, autonomous systems, and Arctic domain awareness. Advanced manufacturing, powered by AI, and robotics, boosts efficiency, reduces waste, and supports both commercial and military supply chains. Marine decarboniza-

tion—through alternative fuels, hybrid propulsion, and battery systems, help meet climate targets while maintaining naval readiness. Autonomous vehicles enhance safety, efficiency, and surveillance capabilities across applications. Meanwhile, as the Arctic becomes more accessible, technologies like remote sensing and satellite monitoring are vital to securing sovereignty and protecting sensitive ecosystems.

Central to this is Canada's National Shipbuilding Strategy (NSS), a national commitment to bolstering defence capabilities and economic growth. Focused on modernizing the naval fleet and fostering marine industry growth, the NSS relies on a strong, collaborative innovation ecosystem. This is where COVE plays a vital role. As Canada's leading hub for marine innovation, COVE connects industry, government, and academia to accelerate the development and commercialization of dual-use technologies.

COVE not only nurtures the technologies that will define the future but also builds the talent and collaborative culture needed to sustain them. Its role in supporting dual-use innovation is critical to building a resilient, responsive, and future-ready marine and defence sector. Through strategic investments and ecosystem leadership, Canada, powered by hubs like COVE, can secure a prosperous and secure future for generations to come. 🌐

EMILY MACPHERSON: Championing Communication & Innovation in Marine Technology



Emily MacPherson's career in the marine technology sector is a story of passion meeting purpose. As Director of Marketing and Communications at COVE, she is not just shaping messages, she is shaping the future of marine innovation. With more than 20 years of experience in the marine sector, Emily brings a rare blend of strategic insight, creative energy, and heartfelt commitment to the role, helping marine companies thrive and championing technologies that protect our ocean.

Her journey didn't begin in a lab or on a boat—it began in the world of brand marketing. But it was the moment she discovered how innovation could directly contribute to marine sustainability, that everything changed, and Emily found her calling. She began working with organizations that shared her values, gradually carving out a space where her skills in strategic planning, communications, and relationship-building could fuel something bigger than herself.

One early moment that stuck with her was watching meteorological buoys being constructed—a hands-on, behind-the-scenes glimpse that sparked her curiosity and gave her a new appreciation for the people and the precision behind marine tech. It helped shape her superpower: translating complex, technical work into stories that connect, resonate, and inspire action.

At COVE, Emily leads marketing efforts with a clear sense of purpose. Whether she's building partnerships, crafting campaigns, or amplifying COVE's mission, she brings a deep understanding of how communication can drive impact. Her work doesn't

just promote innovation—it humanizes it, bringing to life the stories behind the technology and the people who create it.

Emily is also a vocal advocate for the next generation of talent, especially those from non-technical backgrounds who may not yet see a place for themselves in marine technology. She believes there's a powerful role for communicators, storytellers, and creative thinkers in this field. From strategy sessions to filming on the water, Emily shows that this industry is as dynamic as it is meaningful.

Her leadership style is grounded in empathy, curiosity, and a genuine desire to see others succeed. Through mentorship, storytelling, and collaboration, Emily continues to expand the reach of marine innovation—making it more inclusive, more visible, and more impactful. Her influence ripples beyond COVE, shaping not just how marine technology is seen, but how it's understood, embraced, and advanced. 🌊



COMPANY FEATURE

PRECISE DESIGN ENGINEERING SOLUTIONS: A Legacy of Innovation at COVE

Since setting up shop at COVE in 2018, **Precise Design Engineering Solutions** has become a trusted collaborator within Atlantic Canada's marine technology community. Founded by Bruce Stover, the company was built on a simple but powerful idea: to give clients a one-stop experience—where they can walk in with a challenge and walk out with a production-ready solution. From concept and design, to prototyping, testing, and full-scale manufacturing, everything happens under one roof.

Though Precise Design supports a wide range of sectors—from aerospace and defence to oil and gas—it has built particularly strong roots in the marine industry. Whether it's working with a local start-up to build casings for their innovation or helping a global company refine a complex system, the team brings deep expertise and a collaborative spirit to every project. Their work can be as straightforward as designing a custom bracket or as intricate as developing a full-scale piece of automation equipment.

While it's easy to focus on Precise Design's impressive manufacturing capabilities—after all, that's the most visible part of what they do—the company's strength lies in its complete, end-to-end approach. With multiple full-time designers and thousands of square feet dedicated to prototyping, assembly, and testing, the team supports every stage of development with care and precision. They also offer build-to-print services, often working closely with marine companies that already have in-house design teams but need a trusted partner to manufacture parts at scale.



At the heart of their process is SolidWorks, which allows the team to fully visualize and refine designs before any material is cut. Once designs are finalized, Precise Design uses advanced Computer Numerical Control (CNC) machining and automation to produce high-quality components, whether it's a single prototype or a full production run.

One of their standout tools is the Mazak Integrex i-400, a high-performance, multi-tasking machine that combines turning, milling, drilling, and tapping in a single setup. With full 5-axis capability, powerful spindles, and a long Y-axis stroke, it handles even the most complex parts with speed and accuracy.

"Being based at COVE has made a real difference," says Bruce Stover. "With office space and a fully equipped machine shop, including a Mazak Integrex i-400 that lets us shape complex parts with incredible precision, we're easy to find and quick to respond. That accessibility has sparked countless spontaneous conversations and collaborations that simply wouldn't have happened anywhere else."

Today, with a growing presence across Atlantic Canada, Precise Design continues to help shape the future of marine technology. Its team remains committed to working side-by-side with clients, turning bold ideas into smart, reliable solutions that are ready for the real world. 🌐



ENGINEERING SOLUTIONS



MARINE INNOVATION

The Future of Marine Technology Collaboration Calls for Critical R&D Infrastructure

COVE's world-class infrastructure and dynamic ecosystem provide a unique platform for innovation, enabling companies to scale cutting-edge marine technologies while fostering economic growth and advancing ocean science.

By facilitating collaboration across industries and sectors, COVE supports the seamless integration of groundbreaking solutions into the market, positioning itself as a pivotal player in the future of marine technology innovation. Through its advanced physical and digital infrastructure, COVE accelerates the development and scaling of new technologies, driving advancements in ocean science and contributing to economic progress.

A prime example of COVE's commitment to fostering innovation through collaboration is its recent partnership with Defence Research and Development Canada (DRDC) on the Seasonal Vessel Tracking Project (SVT). This project is focused on developing dual-use acoustic technology for vessel tracking across varied operational conditions. Halifax Harbour, with its high marine traffic and proximity to key ferry routes, serves as an ideal testing ground for validating these tracking technologies.

COVE's state-of-the-art infrastructure plays a vital role in the SVT project. The hub collects critical navigational data through Automatic Identification System (AIS) data from local marine traffic and GPS data from ferry vessels. Additionally, meteorological data, including temperature, atmospheric pressure, humidity, and wind speed, is gathered from a weather station located on COVE's tallest building. This data helps scientists assess how environmental factors influence acoustic signal propagation in underwater conditions.

To monitor underwater conditions accurately, COVE deploys an automatic profiling system and an Acoustic Doppler Current Profiler (ADCP). These instruments collect data on water currents, temperature, pressure, and sound speed, which is then transmitted via fiber optics to a central server, ensuring real-time monitoring and secure storage. The collected data will support the development of passive Detection, Classification, Localization, and Tracking (DCLT) algorithms for vessel tracking across diverse marine environments.

The SVT project will generate a significant unclassified dataset that will be shared with industry partners, helping to refine algorithms and create tracking solutions adaptable to global marine environments.

Through these efforts, COVE continues to strengthen its role in commercializing dual-use technologies, bridging the gap between commercial and defence sectors. This work further positions Halifax as a global leader in marine innovation, driving the development of transformative solutions for the future of marine technology. 🌀



BEHIND THE SCENES OF DEMO DAY AND PITCH+ROLL: Powering Innovation at COVE

COVE is more than just a venue for Demo Day—it is an environment designed to help marine innovators push the boundaries of what is possible. A combination of cutting-edge infrastructure, expert resources, and a shared commitment to advancing marine innovation makes hosting this high-impact global event possible.



What It Takes to Make Demo Day Happen

Executing a seamless Demo Day requires months of careful planning and outreach to industry partners, a robust setup, including dedicated indoor and outdoor stages, a well-equipped technical team for real-time demonstrations, and high-speed connectivity for digital presentations. The COVE team ensures that innovators have access to vessels, marine technology experts, and technical support to maximize the impact of their demonstrations. Additionally, industry and investor engagement is critical, making networking spaces and presentation areas key components of the event.

Pitch+Roll: The 'Why' Behind the Event

As part of Demo Day, Pitch+Roll provides start-ups and small and medium-sized blue tech companies a unique platform to refine their storytelling, showcase their progress, and engage directly with investors who are looking to support innovative solutions. The name itself reflects the challenges and motion of the marine industry—where adaptability and resilience are essential.

This event is more than just showcasing technology; it's an opportunity for emerging companies to attract investment, form strategic partnerships and secure the support they need to scale. Pitch+Roll is a catalyst for transformative growth in the marine sector, and COVE is leading the charge in making these connections happen. By focusing on investment, the event accelerates the industry's evolution, empowering investors to back the next wave of innovation. 🌊

NATIONAL PERSPECTIVE

CANADA'S OCEAN ENTERPRISE: A Blueprint for Growth and Innovation

Canada's vast ocean territory, spanning three coasts, positions the country as a global leader in marine innovation, sustainability, and economic development. The **Canadian Ocean Enterprise White Paper** serves as a pivotal roadmap, outlining the opportunities, challenges, and advancements that define Canada's ocean sector in a rapidly evolving global economy.

Ocean Enterprise Methodology: A Foundation for Analysis

In 2020, COVE released the **Canadian Ocean Enterprise 2020 White Paper**, the first comprehensive study benchmarking Canada's capabilities against those of the United Kingdom and the United States. This study set a baseline for understanding the country's ocean industries and utilized the Ocean Enterprise Methodology—a widely recognized approach employed by both the US and the UK for assessing businesses and organizations involved in developing, producing, and utilizing technology and services that support ocean-related activities and industries. This methodology ensures the validity of results and facilitates international comparisons.

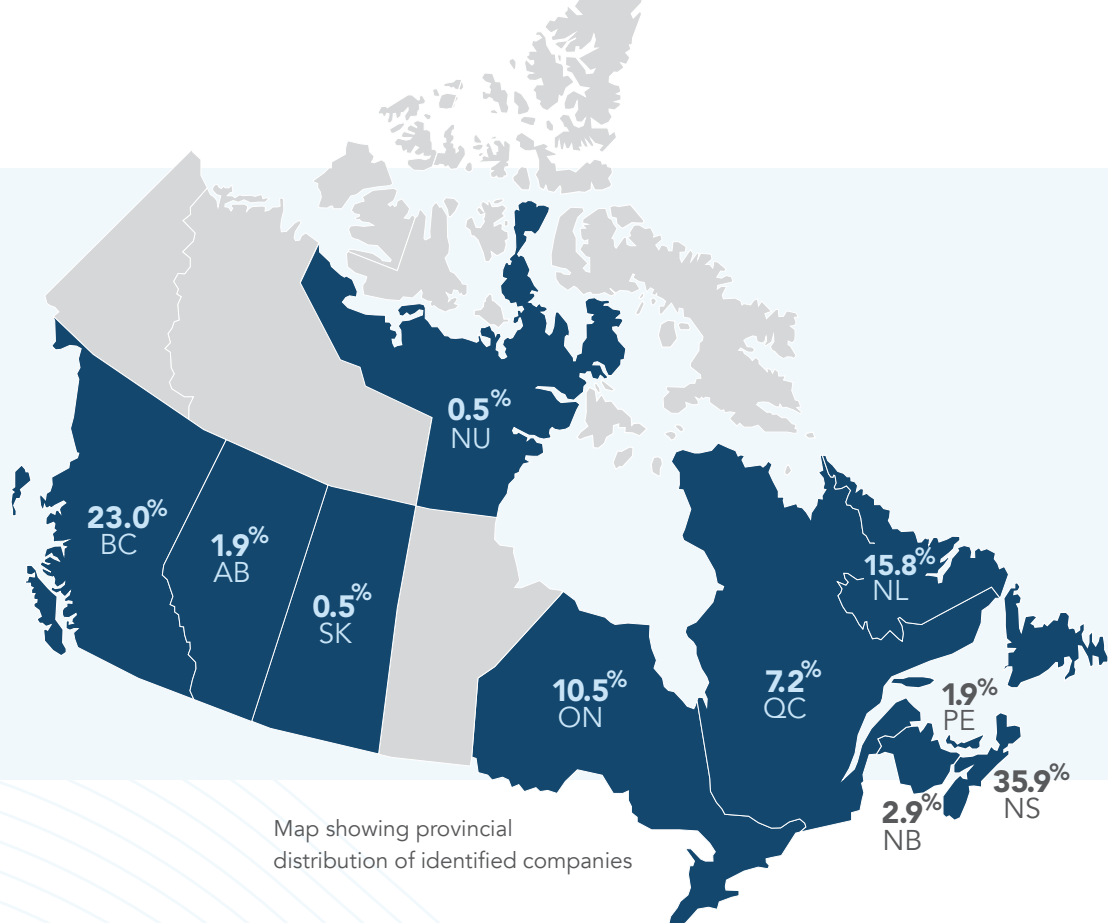
Two years later, the **Canadian Ocean Enterprise 2022 White Paper** showcased impressive growth, with expansions in ocean technology, workforce development, and sustainability initiatives. Now, the **Canadian Ocean Enterprise 2024 White Paper**

takes the next step forward. While referencing the previous reports, this edition stands as an independent analysis, incorporating new research and industry feedback. Fresh questions in this year's survey uncovered insights not previously explored, making it a valuable tool for international comparisons and a critical guide for policymakers, businesses, and researchers alike.



Mapping Canada's Marine Strengths

From cutting-edge ocean observation technologies to autonomous marine systems and sustainable offshore energy, Canada's ocean enterprise is thriving. The industry has been rigorously studied over the past several years to gain insight into its strengths and potential.



TOP 10 MARKETS

CANADA

UNITED STATES

UNITED KINGDOM

NORWAY

FRANCE

GERMANY

NETHERLANDS

JAPAN

AUSTRALIA

NEW ZEALAND

Regional Focus: Where Canada's Ocean Enterprise Thrives

BRITISH COLUMBIA

With a focus on **academic research, ecosystem monitoring, government research, and defence**, British Columbia remains a powerhouse for innovation in ocean technology.

NEWFOUNDLAND & LABRADOR

With a focus on **defence, oil & gas, and government research**, Newfoundland & Labrador continues to play a critical role in the sector's growth.

NOVA SCOTIA

Nova Scotia remains the heart of Canada's Ocean Enterprise, with **35.9% of the country's companies in sectors like academic research, defence, fishing, and ports & harbours**.

Key Findings: A Growing Sector

Canada's Ocean Enterprise is experiencing remarkable growth, expanding both in scope and revenue.

Growth in Companies

BETWEEN 2022–2024:



Revenue Projections



Job Creation

SINCE 2020:



Optimism for the Future



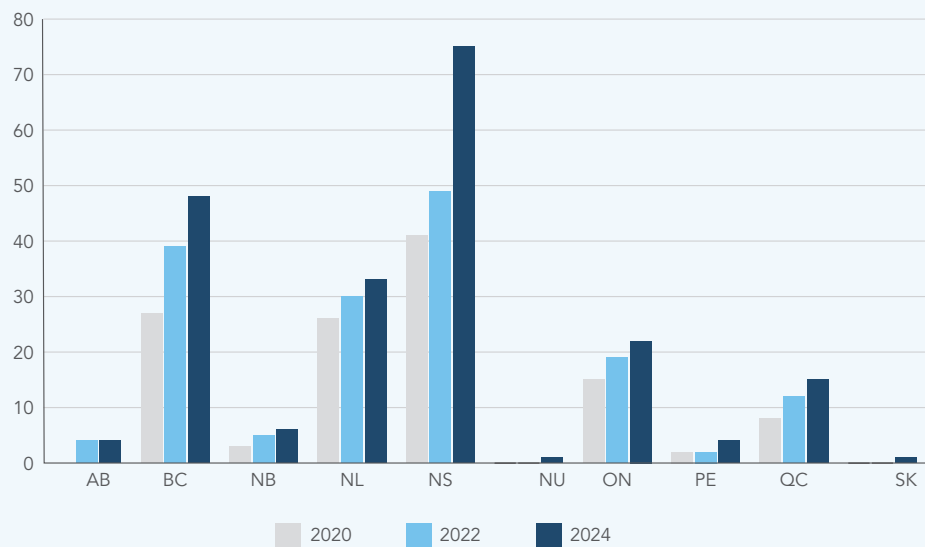
Technology and Innovation are Leading the Way

Canada is a global leader in ocean technology. From AI-driven marine analytics and underwater robotics to high-tech environmental sensors, Canada's innovation ecosystem is setting new standards. The adoption of artificial intelligence (AI) continues to grow, with AI being applied in data analysis, management, and research & development. Leading into 2026, the sector is poised to expand AI into environmental monitoring and predictive maintenance, with a focus on improving efficiency and sustainability.

Challenges and Opportunities

Despite rapid growth, the sector faces significant challenges—chief among them, securing long-term investment. While grants have been invaluable for funding marine technology, a critical shortage of capital is hindering further advancements and innovation.

Comparative growth in provincial distribution of identified companies



The Path Forward

The **Canadian Ocean Enterprise White Paper** is more than a reflection on Canada's marine sector, it is a strategic guide for the future. By investing in innovation, sustainable practices, and a resilient workforce, Canada is poised to lead in the evolving blue economy.

As the demand for ocean-based solutions grows, the insights from this white paper will shape the policies, investments, and industry collaborations that drive Canada's marine industries forward. With the right strategies, Canada can not only sustain its leadership, but also set new benchmarks in ocean innovation and sustainability for the world to follow. 🌊



Use the QR code
to access the 2024
Whitepaper.



BUILDING CONNECTIONS

WHERE INNOVATION MEETS CONNECTION: Inside COVE's Ocean Connector Events

In a rapidly evolving world of marine technology, collaboration isn't just helpful, it's essential.

At the heart of this growing sector, COVE has created a space where innovation and connections converge through its signature Ocean Connector events. Since 2014, these events have become a cornerstone for Canada's marine technology community. Drawing participation from government, academia, and the private sector, Ocean Connector events do more than bring people together, they ignite partnerships, inspire research, and spark new business ventures.

A key feature of these events is the spotlight on breakthrough technologies. From autonomous systems to advanced sensors and data platforms, Ocean Connectors offer a stage for innovators to showcase their work to a receptive, informed audience. It's about visibility, validation, and pushing the boundaries of what's possible.

Networking is a core element of these events, where attendees build meaningful relationships that support long-term professional and personal growth. These connections form a strong foundation for a robust support network, benefiting the entire marine technology community.

COVE also ensures the benefits extend to the broader community. By hosting events in local venues, Ocean

Connectors support the regional economy and build valuable bridges between the marine sector and local businesses.

Ocean Connector events offer valuable educational opportunities, helping participants stay informed about the latest trends and technologies. The inclusion of national and international thought leaders also brings fresh insights, enriching the sector with new ideas and strategies to address industry challenges. This commitment to continuous learning ensures COVE members are equipped to adapt to an ever-evolving industry.

Supported by **Cox & Palmer** and **Irving Shipbuilding Inc.**, these events continue to provide thought leadership and momentum across the marine sector. With a global network of over 3,000 companies, academic institutes, and government partners, COVE cultivates strong community connections, building a collaborative and resilient environment where innovation thrives.

In an industry shaped by tides, technology, and transformation, Ocean Connectors are where Canada's leaders gather to chart the course ahead. 🌊

For more information, visit coveocean.com/events



COMMUNITY NEWS

Atlantic Canadian Companies Trying to Turn Down Dial on Ocean Noise

Ocean noise from shipping disrupts marine life, affecting how animals communicate, navigate, and feed. In Atlantic Canada, companies are developing technologies to address this issue.

Rising Tide BioAcoustics, a COVE resident company, has created a device that emits low-frequency sounds to guide marine animals away from danger zones like construction sites and shipping lanes. Halifax-based JASCO Applied Sciences monitors underwater noise to inform mitigation, while GeoSpectrum Technologies designs acoustic systems with minimal environmental impact. Together, these companies reflect the region's commitment to protecting marine ecosystems through innovation.

Source: CBC.ca (<https://coveocean.com/news/atlantic-canadian-companies-trying-to-turn-down-dial-on-ocean-noise/>)

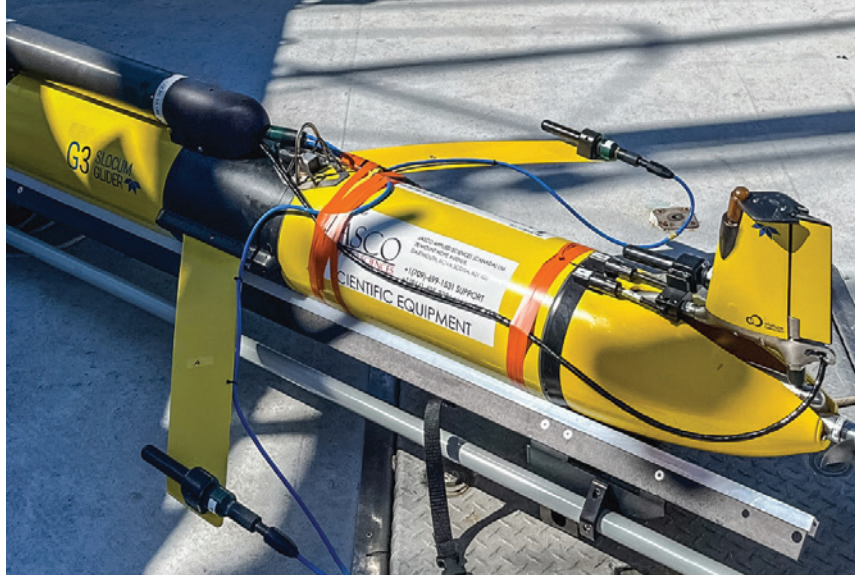


Lloyd's Register Awards Maritime Industry's First Enhanced Antifouling Type Approval to GIT Coatings

Lloyd's Register, a COVE resident, has awarded the maritime industry's first Enhanced Antifouling Type Approval to GIT Coatings, a graduate of COVE Start-Up Yard. This milestone recognizes XGIT-Fuel, a graphene-based hull coating that reduces emissions and improves vessel performance without using biocides or toxins.

The approval confirms the coating's effectiveness before and after hull grooming, aligning with IMO's 2023 biofouling guidelines. It helps ship-owners meet stricter environmental regulations while promoting cleaner, more efficient marine operations.

Source: lr.org (<https://www.lr.org/en/knowledge/press-room/press-listing/press-release/2024/lr-awards-maritime-industrys-first-enhanced-antifouling-type-approval-to-git-coatings/>)



Kraken Robotics Demonstrates New KATFISH Autonomous Launch and Recovery System to Navy Customers

Kraken Robotics, a COVE resident company, demonstrated its new Autonomous Launch and Recovery System (ALARS) for the KATFISH™ sonar to over 40 naval representatives in Halifax Harbour. Housed in a 20-foot ISO container, ALARS enables rapid, autonomous deployment on various vessels, even in rough seas.

During the demo, Kraken streamed real-time seafloor data—including imagery of the Governor Cornwallis shipwreck—to analysts at the Canadian Naval Mine Countermeasures Symposium. With advanced autonomy and live data sharing, KATFISH supports modern mine countermeasure operations.

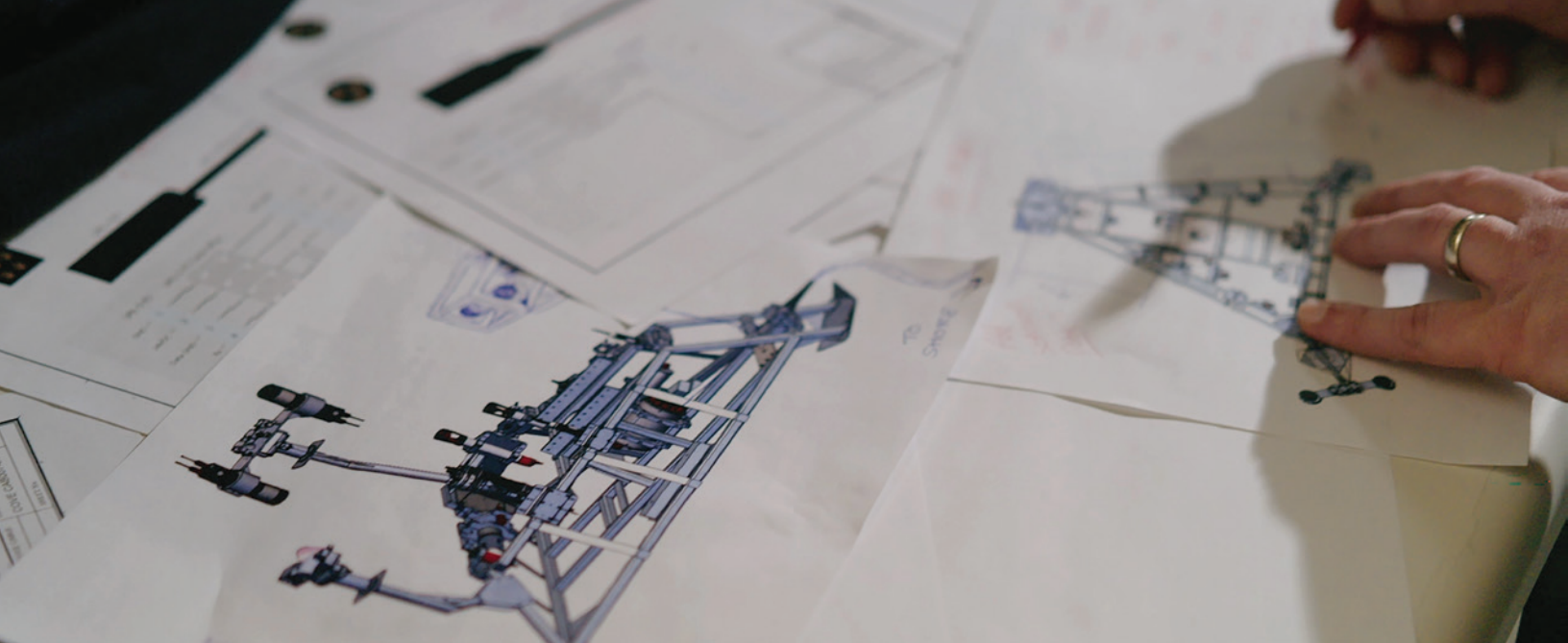
Source: [krakenrobotics.com \(https://www.krakenrobotics.com/kraken-robotics-demonstrates-new-katfish-autonomous-launch-and-recovery-system-to-navy-customers/\)](https://www.krakenrobotics.com/kraken-robotics-demonstrates-new-katfish-autonomous-launch-and-recovery-system-to-navy-customers/)

A fleet of Slocum gliders successfully demonstrated the ability to detect and localize marine mammals off the Coast of Nova Scotia

JASCO Applied Sciences, a client of COVE through its programs and services, partnered with the Department of Fisheries and Oceans to deploy Slocum gliders equipped with its OceanObserver™ acoustic monitoring system near Cape Sable, Nova Scotia. The gliders successfully detected and localized endangered whales in Roseway Basin, confirming the system's real-time tracking capabilities.

Using Blue Ocean Marine Tech's SeaSuite™, teams visualized glider tracks and detections, with data also shared on Whale Insight. Funded by Innovative Solutions Canada and Defence Research and Development Canada, the project underscores the dual-use potential of this technology for both marine conservation and defence, with a parallel deployment at NATO's REPMUS 24 in Portugal. 🌐

Source: [jasco.com \(https://www.jasco.com/news/2024/slocum-glider-detect-and-localize-marine-mammals-off-ns-coast\)](https://www.jasco.com/news/2024/slocum-glider-detect-and-localize-marine-mammals-off-ns-coast)



TEST + VALIDATE

From Concept to Commercial Success

Bringing marine technologies to market requires more than a good idea—it demands rigorous validation, regulatory compliance, and operational proof in real-world marine conditions. That's why COVE exists—to remove the technical and logistical barriers that slow innovation, and to accelerate the path from prototype to product.



"Imagine being able to test your prototype just steps from your workspace, iterating rapidly and gaining invaluable insights in real-time," said Michel Lechmann, Vice President, Programs and Development at COVE. "This is the reality COVE offers."

COVE delivers purpose-built infrastructure—direct ocean access, subsea platforms, and on-site fabrication facilities—that enables iterative design and live testing, all within meters of the developer's workspace. Whether validating sensor payloads, deploying autonomous systems, or refining hardware integrations, teams can conduct repeatable, high-fidelity tests in dynamic coastal environments.

The Stella Maris Testing Solution platform provides subsea and dockside test environments with integrated power, data, and remote monitoring, enabling companies to validate systems in real time and under real pressure. Digital Harbour supports AI, modeling, and analytics by fusing data from satellites, ASVs, and seabed nodes, while SmartATLANTIC supplies vital environmental intelligence to de-risk deployment and optimize performance.

Why is this critical? Regulatory delays, underperforming technologies, and lack of credible validation can stall even the most promising innovations. COVE removes these barriers by providing structured support through programs like the ScaleUp Accelerators and NATO's Defence Innovation Accelerator for the North Atlantic (DIANA). These programs offer compliance guidance and help integrate dual-use technologies into both defence and commercial markets, enabling companies to scale more effectively and overcome critical obstacles.

Through our partnerships and with other institutions, COVE also drives innovation in machine learning, acoustics, and Intelligence, Surveillance, and Reconnaissance (ISR) capabilities, exemplified by projects like Seasonal Vessel Tracking.

The impact speaks for itself. In 2023, UK-based Hexsor Scientific joined the COVE and Innovate UK Global Incubator Programme: Ocean ScaleUp Accelerator, spending ten months at COVE. There, they utilized the infrastructure, resources, and formed key partnerships, including one with Nova Scotia Community College to refine and validate their air quality monitoring technology. Building on these early successes, Hexsor registered as a small business in Nova Scotia. In 2024, leveraging this new status, the company applied for the Naval Technology Innovation Challenges and secured a contract with Thales, focusing on air quality solutions for ships.

At COVE, marine technologies aren't merely created, they are engineered, tested to extremes, and primed for the most demanding challenge, our ocean. 🌊



ACCELERATING INNOVATION & INDUSTRY: COVE's Impact on the Marine Sector

COVE's mission is to accelerate the commercialization of marine-based products by creating a collaborative environment for global, national, and local businesses. Strategic partnerships are essential to achieving this goal. James Kesten, Director, Venture Growth, emphasizes that partnerships should help companies commercialize and access new markets.

COVE's partnerships foster business growth by providing infrastructure access and encouraging research and development (R&D) collaborations. A key example is COVE's partnership with Innovate UK through the Global Incubator Programme, which allows UK tech businesses in the marine space to explore the North American market. This program offers tailored support, networking, and industry events like the H2O Conference and COVE Demo Day.

COVE's partnership with Germany, formalized through a Memorandum of Understanding (MOU) in 2021, focuses on knowledge sharing, trade missions, and helping Canadian start-ups enter the German market. This collaboration continues to evolve, and COVE sees significant future potential in Germany.

COVE also works with Thales, a global leader in defence, aerospace, and maritime technology.

Through the Naval Technology Innovation Challenges Program, COVE helps small-medium sized enterprises (SMEs) develop solutions for the Royal Canadian Navy. This program benefits all parties by supporting innovation, helping SMEs engage with large clients, and providing Thales with access to new technologies.

HonuWorx, a UK-based leader in subsea robotics, is a prime example of the success driven by COVE's partnerships. An alumnus of the Innovate UK Programme and a current participant in the NATO DIANA Accelerator Program, HonuWorx is at the forefront of advancing subsea technology. In April 2025, the company led a COVE Ocean Connector event, highlighting how the DIANA program is accelerating the development of its cutting-edge robotics solutions. The event explored the technology's dual-use potential and its growing impact across industries, offering valuable insights into the future of subsea innovation.

COVE's strategic collaborations continue to drive innovation and commercialization in the marine sector, supporting business growth and expanding global opportunities. 🌐



TALENT DEVELOPMENT

Nova Scotia Floating Wind Challenge Spotlights Future Talent

In February 2025, COVE hosted the Nova Scotia Floating Wind Challenge, where students from the Nova Scotia Community College and Dalhousie University tested their engineering skills by designing and deploying floating wind structures in high-wind and wave conditions.

This wasn't solely a competition, it was a strategic effort by COVE to strengthen the talent pipeline for offshore wind, a rapidly growing sector critical to the future of clean energy and marine technology. By giving students hands-on experience with complex engineering challenges, COVE is preparing the next generation to drive innovation in offshore wind. The challenge also serves as a lead-up to the International Floating Wind Challenge, hosted by the Belgium-based organization, OffshoreWind4Kids, with whom COVE partners to educate youth and post-secondary students in Canada on renewable energy.



Congratulations to team TetraTurbine from Dalhousie University, who secured first place! They will represent Nova Scotia at the International Floating Wind Challenge in Belgium this July, where their design will be tested in real ocean conditions against teams from around the world.

This challenge underscores the incredible opportunities in engineering, marine technology, and clean energy, preparing the next generation to drive innovation in offshore wind. As the industry expands, the need for skilled professionals ready to drive innovation and tackle the complexities of a sustainable future continues to grow.

A special thank you to the judges and to RelyOn Nutec for their invaluable support and for providing access to their state-of-the-art facility. Their partnership made it possible for students to test their designs in realistic conditions, helping to advance offshore wind technology and prepare the next generation of industry leaders. 🌊





ACCELERATING INNOVATION

BRIDGING INNOVATION AND DEFENCE: Inside the DIANA Accelerator Program

As global threats evolve, NATO's DIANA is helping shape the future of dual-use technologies. This program provides non-dilutive funding, mentorship, and access to critical defence and commercial networks to accelerate deep tech solutions across the Alliance.

COVE is one of 23 DIANA accelerator sites across NATO countries currently involved in delivering programming for DIANA. It offers participating companies access to world-class testing infrastructure, mentorship, and introductions to defence, security, and commercial partners. COVE fosters excellence by providing industrial expertise, and a global network for innovators to connect and solve shared challenges.

The 2025 DIANA cohort at COVE includes five companies focused on key security areas: energy, information security, sensing, human performance, and logistics.

THE 2025 COHORT



Elysium Robotics is replacing traditional motors with synthetic muscles that mimic human motion. "COVE has been dead on in understanding our needs," says CEO Rodrigo Alvarez, praising the support and connections made possible through the program.



Materials Testing Inc. and its in-house lab, A Robotics, are modernizing weld inspection to reduce waste and improve quality in heavy industry. "COVE has bridged the gap between us and potential users," says Alec Carlson, Director of Operations.



Evitado Technologies is automating aircraft ground operations for safety and efficiency. CEO Alex Kasinec values the community built through COVE and DIANA: "We've connected with like-minded entrepreneurs and defence stakeholders."



HonuWorx is developing uncrewed submersibles to replace large, polluting offshore vessels. CEO Lee Wilson points to the value of COVE's broad mentorship, particularly in navigating the defence landscape.



Reaction Dynamics is a Canadian space mobility company offering launch services and in-space propulsion systems. With its innovative hybrid rocket technology, the company aims to revolutionize global access to space with enhanced efficiency and reliability.

Through COVE and DIANA, these innovators are finding faster pathways to real-world impact, delivering next-gen technology to meet tomorrow's defence challenges. 🌐



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