



**\*\*PRESS RELEASE –EMBARGOED FOR RELEASE UNTIL August 19, 2020\*\***

**Washington Maritime Blue leads Joint Innovation Project to design and deploy new “Mosquito fleet” with innovative, high-speed ferries**

- Highly efficient hydrofoil ferry will reduce carbon emissions and improve transit options
- Innovative design and collaborative approach will solve challenges and enable economic opportunities in Washington

**SEATTLE – Aug. 18, 2020** – A consortium of players in the blue economy have come together to launch a Joint Innovation Project to speed the design of a fast foil ferry, an innovation that promises a leap forward in low-emissions, high-speed passenger ferry service. In this unique public-private partnership, three ports in Washington have joined forces to support the effort: Port of Anacortes, Port of Bellingham, and Port of Skagit. The vessel is under design by Glosten, a naval architecture and marine engineering firm, and Bieker Boats, a performance marine craft designer. Kitsap Transit has identified a potential route for their ferry operations and sponsored the team in applying for additional funding to advance the concept. Leading this collaborative joint innovation project effort is Washington Maritime Blue, a strategic alliance formed to foster maritime innovation and sustainability in support of an inclusive blue economy, and DNV GL, a technical assurance firm providing independent advisory services to the maritime and energy industries. The team was convened to advance this concept to reality in order to provide economic development opportunities for their communities while broadening transportation options for the region that also reduce emissions. Project partners Skagit County and EDASC (Economic Development Alliance of Skagit County) share the maritime focus and joint goals of lower emissions, less road congestion, and opportunities for the innovative designers and manufacturers in the County such as Bieker Boats and many others.

The idea began when Paul Bieker returned to Seattle after his work designing the first hydrofoil vessel for the Americas Cup-winning Team Oracle and was stunned by the traffic. He realized that applying hydrofoil innovations to ferry vessels would improve speed, efficiency, and access. Working with Glosten, they created a preliminary design that would enable Washington State to recreate the “Mosquito Fleet.” Aptly named because of the numerous ferries travelling from port to port like a “swarm of mosquitoes,” the fleet had its heyday from 1850s through the 1930s, but ended as road and rail transportation began to dominate. With increased congestion from land-based transportation, a



new fleet of ferries could alleviate regional transportation issues and take advantage of the advanced design, manufacturing, boatbuilding, and materials capabilities found in the region.

The project will advance an innovative, replicable business model for an extremely efficient electric transit concept: a high-speed hydrofoil passenger ferry. The Foil Ferry is designed by industry leaders Bieker Boats and Glosten, and leverages private sector innovations including hydrofoil design, lightweight carbon fiber construction and battery technology. It supports transit options by connecting urban, suburban, and rural communities with green transit alternatives that can take cars off the roads.

“Our three local Ports see this innovation as an opportunity to spur economic recovery in the boat-building world, a critically important industry in our region,” said Patsy Martin, Executive Director of the Port of Skagit. “There are strong maritime industry clusters in each of our districts that could benefit from the design and construction of these vessels in our communities, resulting in a direct economic impact.”

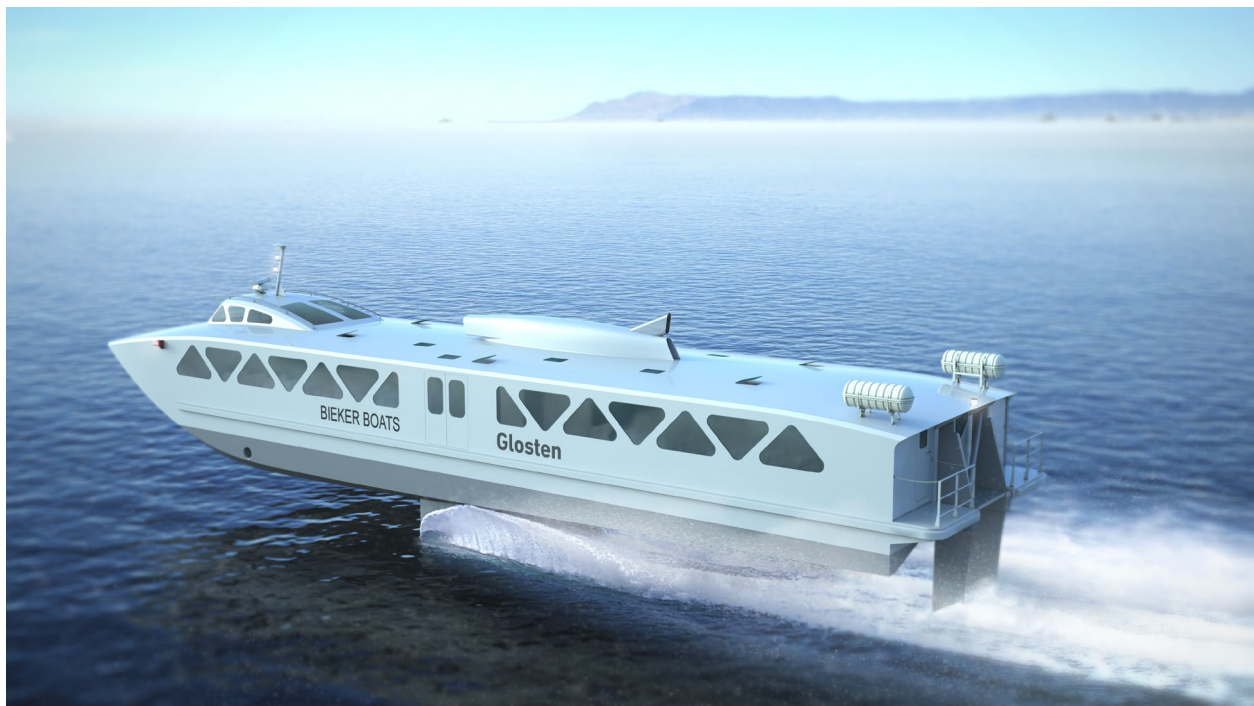
Because of the nature of joint innovation projects, the expected time it will take to complete the entire project, from business model to the first demonstration project, is compressed. Several streams of work will occur either in parallel or in succession, as appropriate, creating efficiencies and avenues to take advantage of the collective strengths of each of the organizations involved. This will include design, an exploration of required infrastructure, a review of environmental benefits and impacts, regulatory and permitting needs, and determining possible routes and operators.

“An ambitious but needed project like the relaunch of this type of ferry service would be exponentially more difficult if each individual stakeholder acted alone,” said Joshua Berger, Founder and Board Chair of Washington Maritime Blue. “A cluster organization like ours can bring together the technologies, required local knowledge, and resources that will ensure that this joint innovation project will be successful.”

The intent of the project is to bring to market a zero-emission high-speed waterborne transportation alternative in Puget Sound. The design includes the options of fully electric propulsion or diesel-electric propulsion for extended range. Owing to its extreme efficiency, the diesel electric option is two to three times more fuel efficient than conventional fast ferries and has the potential to save 1,500 tons of CO<sup>2</sup> emissions a year, while the fully electric version offers even greater improvements.



“Developing the Foil Ferry in collaboration with the Washington Maritime Blue Joint Innovation Project exemplifies the very best of our Pacific Northwest values and capabilities. This partnership of ports, designers, builders, and operators is a catalyst that is propelling our design into a reality, to the benefit of our economy, the environment, and the passenger vessel community at large,” says Glosten Project Manager Matthew Lankowski.



### Washington Maritime Blue

[Washington Maritime Blue](http://www.maritimeblue.org) is a non-profit strategic alliance formed to foster maritime innovation and sustainability in support of an inclusive blue economy. It is a partnership between industry, public sector, research & training



institutions, and community organizations. Maritime Blue works to create a world-class, thriving, equitable, and sustainable maritime industry through knowledge sharing, joint innovation, entrepreneurship, commercialization, business, and workforce development. Its mission is to implement Washington State's Strategy for the Blue Economy delivered by Governor Jay Inslee's Maritime Innovation Advisory Council.

## **DNV GL**

Driven by its purpose, to safeguard life, property, and the environment, [DNV GL](#) helps tackle the challenges and global transformations facing its customers and the world today and is a trusted voice for many of the world's most successful and forward-thinking companies. DNV GL is an independent expert in risk management and quality assurance, operating in more than 100 countries. Through its broad experience and deep expertise, DNV GL advances safety and sustainable performance, sets industry benchmarks, and inspires and invents solutions. We provide classification, technical assurance, software, and independent expert advisory services to the maritime, energy, and oil & gas industries. We also provide certification and supply chain services to customers across a wide range of businesses. Whether assessing a new ship design, optimizing a wind farm's performance, analyzing sensor data from a gas pipeline, or certifying a food company's supply chain, DNV GL enables its customers and stakeholders to make critical decisions with confidence.

## **Glosten**

[Glosten](#) is a full-service consulting firm of naval architects and marine, electrical, production, and ocean engineers. Founded in 1958, the firm is recognized throughout the marine industry for integrating advanced analysis with practical, experience-based design. In recent years, Glosten has emerged as an industry leader in the design of hybrid and electric-propelled commercial vessels, with two such vessels already in operation. The firm's electrically powered designs include both catamarans and monohulls, ranging from 70 to 160 feet in length.

## **Bieker Boats**

Bieker Boats was founded in the commercial naval architecture world; however it has spent most of its time working in the world of high performance carbon fiber composite racing boats. Over the past 8 years Bieker Boats has played a significant role in the evolution and refinement of hydrofoiling carbon fiber racing sailboats for the Americas Cup competition.