



In a milestone moment slated to prove that the world's waterways are primed and ready for autonomous technology, Sea Machines will circumnavigate Denmark on a multi-week 1,000 nautical mile remotely commanded commercial voyage.

(BOSTON, MA, USA; September 14, 2021) – [Sea Machines Robotics](#), the leading developer of autonomous command and control systems for the maritime industry, announced today that it will embark on a 1,000 nautical mile autonomous and remotely commanded journey around Denmark later this month. Aptly named The Machine Odyssey, the voyage marks a landmark moment for autonomous transportation and is slated to prove that the world's waterways are primed and ready for long-range autonomy.

The Machine Odyssey will depart from Hamburg, Germany, on September 30, with full onboard vessel control managed by autonomous technology, while operating under the authority of commanding officers located in the United States.



This voyage will prove to the world, and specifically to the thousands of global companies that operate the fleets of cargo ships, tugs, ferries and the many other types of commercial workboats, that operators can integrate autonomous technology into their vessel operations for a host of technology-driven benefits, from enhanced safety and reliability to leaps in productivity and new on-water capabilities. The Machine Odyssey marks a new era in the human-technology relationship propelling on-sea operations in the 21st century.

At the helm will be the Sea Machines [SM300](#) autonomy system, which will also utilize the latest in Sea Machines' industry-leading, long-range computer vision. The SM300 is a comprehensive sensor-to-propeller autonomy system that uses advanced path-planning, obstacle avoidance replanning, vectored nautical chart data and dynamic domain perception, all to control a voyage from start to finish. The SM300 provides the remote human commanders with an active chart environment with live

augmented overlays showing the mission, state of vessel, situational awareness and environmental data, as well as real-time, vessel-born audio and video from many streaming cameras.

Marine fleets operate in our planet's most lively and often potent environment where the direct forces on vessels regularly exceed those ever experienced by machines on road, air or space. Safety of ship, crew and cargo is paramount within the Sea Machines' autonomy stack, with protection behaviors that enable the industry to optimize operations with assurance and an exacting balance of safety, productivity and efficiency.



Sea Machines' autonomous tugboat *Nellie Bly* (photo credit: Arie Boer)

The project is named The Machine Odyssey – which translates to a long purpose-driven and eventful journey and harks to

Homer's *Odyssey*, which for millennia has inspired humanity by Ulysses' and his crew's courage to undertake a voyage of discovery and adventure. This in many ways exemplifies the attitude and journey of an American venture-backed, deep-tech startup such as Sea Machines. The selected vessel, a modern ubiquitous tug designed and built by Damen Shipyards of the Netherlands, is named the *Nellie Bly*, paying homage to the American journalist, industrialist, inventor and charity worker who was widely known for her ultra-bold and record-breaking solo trip around the world in 72 days.

"From time immemorial the oceans have driven the best of human innovation, designed and built by architects and engineers, and deployed by a select and special group of people, mariners, that much of society relies on today and evermore in the future for the supply of food, power, water, goods and transport. And as a technology space leader, Sea Machines takes it as our duty to embark into new waters, motor through any and all fog of uncertainty, and prove the value within our planned technology course," **said Michael Johnson, CEO of Sea Machines.** "Just as other land-based industries shift repetitive, manual drudgery from human to predictable robotic systems, our autonomous technology elevates humans from controller to commander with most of the direct continuous control effort being managed by technology. This recast human-technology relationship is the basis of a new era of at-sea operations and will give on-water industries the tools and capability to be much more competitive, end the erosion of high-value cargo to air and road, put more vessels on water, operate in better harmony with the natural ocean environment and deliver new products and services."

Throughout the voyage the *Nellie Bly* will carry two professional mariners and occasional guest passengers and will call on ports along the route to display and demonstrate the technology. Sea Machines will stream the journey live on a website dedicated to The Machine Odyssey for all to have access to 24/7 updates from the sea, the crew, the command center, and more.

About Sea Machines

Headquartered in the robotics and deep-technology hub of Boston and operating globally, Sea Machines is the leader in pioneering autonomous command and control and advanced perception systems for the marine industries. Founded in 2015, the company builds autonomous vessel software and systems, which increases the safety, efficiency, and performance of ships, workboats, and commercial passenger vessels. Learn more about Sea Machines at www.sea-machines.com.