

SURVIVING TO THRIVING

Providing Valuable Connections When Needed Most



When Ben Sorkin was a child, he spent his free time rebuilding old outboard motors. One of his favorites – a 1962 6-cylinder Mercury 1000 dubbed “tower of power” – got roughly 3 miles per gallon. Although constant maintenance was expected, Sorkin was horrified to learn about the motor’s emissions, specifically the secretion of fuel that slicked the surfaces of his local upstate New York waterways.

Technology has advanced since the days of the cantankerous two-stroke engine, but marine industry regulation is far behind the adjacent automotive and power sports industries. This was one reason Sorkin began to explore the world of batteries while studying at Princeton University. He spent a summer working at Tesla and began developing his vision for an electric outboard that could conquer challenges others in the marine space have been unable to surmount. To help execute his vision, Sorkin added Daylin Frantin and Jonathan Lord to the team—and the race was on.

They created Flux Marine, an up-and-coming startup based in New England. The team won several high-profile pitch competitions and competitive grants. They had been working out of the Autodesk Technology Center in the Boston Seaport, developing their prototype demonstrator, and generating interest from early customers and investors. At that point, the team felt they built enough traction to quit their jobs and work on Flux Marine full time—and then the COVID-19 pandemic struck.



Benjamin Sorkin
CEO/Founder
Flux Marine Ltd.

FLUX MARINE

FINDING CONNECTIONS THROUGH 401 TECH BRIDGE

Like many other facilities around the nation, the Autodesk Technology Center was forced to close at the onset of the pandemic. Technology center staff generously offered to machine parts and provide virtual design assistance, but Flux Marine was in a pivotal state. The founders were balancing relations with early investors while trying to finish building a motor for their first customer. They needed a space to rapidly iterate through ideas in the physical world, and the clock was ticking.

"How did we survive? That is where the 401 Tech Bridge story comes into play," explained Sorkin. "401 Tech Bridge got right to work brainstorming solutions. They facilitated our migration to the IYRS School of Technology and Trades in Newport, Rhode Island."

401 Tech Bridge helped Flux Marine connect with IYRS and effectively conveyed why it was a win-win situation for both entities. Additionally, 401 Tech Bridge awarded the company a Materials Innovation Challenge grant that gave Flux Marine access to IYRS's composites expertise and prototyping equipment. These resources helped the company accelerate the development of its technology.

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"We were able to deliver a prototype to our first customer," said Sorkin. "It was really exciting for us and IYRS. It was the first materials innovation challenge award IYRS had received, and the partnership with Flux Marine is going to help bridge their vision of becoming more technology-focused."

The connection to IYRS facilitated by 401 Tech Bridge became a key component in Flux's early success. 401 Tech Bridge continued to seek opportunities for Flux Marine. Sorkin and Flux Marine also reached out to connect with the Rhode Island Marine Trades Association, whose mission is to grow the Rhode Island recreational marine industry through advocacy, education, and promotion.



Additionally, 401 Tech Bridge helped Flux Marine develop a proposal for the Rhode Island Commerce Innovation Voucher program to provide much-needed funding to continue collaborating with IYRS. The company was awarded \$50,000 to continue its work and the school is now helping them evaluate composites to displace metal components used in parts such as the propeller.

"You need persistence and perseverance in a startup," said Sorkin. "At the same time, no matter how good a sailor you are, if you do not have a map or a good ship, it is going to take you a very long time to get where you are going. To us, 401 Tech Bridge has become a part of that map."

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"I think the most powerful part is the people," added Sorkin. "401 Tech Bridge is able to really build and cultivate relationships. To overlook that is a missed opportunity."

Beyond providing the right support at a defining moment in time, 401 Tech Bridge continues to be a resource for Flux Marine. Moving forward, the relationship could even help bring lasting change to the marine industry.



PHOTO: CORY SILKEN



ABOUT 401 TECH BRIDGE

401 Tech Bridge accelerates the journey from concept to prototype to commercial scale while creating business opportunities. It facilitates collaboration across industry, government and academia and leverages the resources and expertise of its vibrant advanced materials and technology ecosystem, which spans industries and activities ranging from infrastructure development and naval research to oceanographic and offshore wind enterprises. 401 Tech Bridge offers meeting, training, lab and equipment space for industry, government, and academic partners to collaboratively problem-solve, develop concepts, build, and test prototypes, and present solutions. It also connects companies into research divisions at the University of Rhode Island and other universities and institutions across the region, offering facilities for research, prototyping, testing and validation of concepts alongside faculty researchers and students.

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