ARC TO POWER DARPA'S NO MANNING REQUIRED SHIP PROGRAM



LOS ANGELES, Calif. – Arc, a marine technology company, today announced it has been selected to provide the power management and electrical systems for USX-1 Defiant, the unmanned surface vessel developed under the Defense Advanced Research Projects Agency's (DARPA) No Manning Required Ship (NOMARS) program.

Under the funded agreement, Arc Boats will integrate the vessel's high-voltage power management hardware and software, bringing the company's commercial electrification expertise into an ambitious autonomous maritime program.

"DARPA's NOMARS program challenges many of the assumptions that have shaped vessel operation for generations," said Ryan Cook, co-founder and CTO at Arc Boats. "Building a vessel of this size that can operate for months without a crew requires a fundamentally different approach to system reliability. Our experience designing and integrating high-performance electric powertrains gave us the foundation to build power systems that are intelligent, resilient, and capable of recovering from

failures autonomously.”

Defiant is a technology demonstrator designed to prove that a ship can operate reliably without a crew. The vessel has no berthing, galley, or life-support systems on board, allowing it to remain at sea, fully unmanned, for up to 90 days. Arc Boats is developing and integrating the vessel’s electrical backbone – a fault-tolerant, self-healing DC-power system that autonomously monitors diagnostic information and can resolve without human intervention. Arc Boats’ architecture also enables remote startup of high-voltage systems, a process that once required a technician. For a vessel operating unmanned for months at sea, autonomy is the difference between a mission that succeeds and one that ends early.

Chosen for its track record building complex DC power and propulsion systems for electric and hybrid electric boats, Arc Boats’ experience translates directly to the reliability and redundancy demands of unmanned maritime platforms. As part of the agreement, the company will advise DARPA throughout system integration, helping shape an electrical architecture designed to support future defense applications.

The defense sector is increasingly investing in crewless maritime platforms across a range of programs. These programs share a common need for more capable powertrains – ones that deliver extended range, greater reliability, and software-defined control. Moving from mechanical to electrical architectures like the ones developed by Arc Boats delivers those improved capabilities.

As adoption of unmanned platforms accelerates, dependable power infrastructure won’t just support long-duration, crewless missions, it will determine whether the mission is possible at all. Arc Boats’ work on Defiant marks another step in bringing its advanced integrated power systems into critical defense applications.*From*

Arc Boats, Nov. 23, 2026