MIB, Electric Boat, Lincoln Electric Advance Additive Manufacturing for Submarine Building

From Lincoln Electric

WASHINGTON & CLEVELAND, Sept. 30, 2025 – The U.S. Navy's Maritime Industrial Base (MIB) Program, General Dynamics Electric Boat, and Lincoln Electric today announced an investment to accelerate the integration of additive manufacturing (AM), also known as 3D printing, into the construction of nuclear-powered submarines.

America must deliver one Columbia-class ballistic missile submarine and two Virginia-class attack submarines each year by 2028, while sustaining the current fleet. Meeting this demand requires innovative methods to increase throughput, reduce bottlenecks, and strengthen supply chains. Additive manufacturing provides critical solutions to these challenges.

Matt Sermon, executive director of the Maritime Industrial Base Program, noted, "The MIB Program is charged with strengthening and expanding the shipbuilding and repair capacity our nation needs for deterrence and warfighting. By investing in additive manufacturing at scale, we are helping ensure our industrial base has the tools, technologies, and resilience required to meet the Navy's mission."

Through MIB Program funding, General Dynamics Electric Boat will source critical components from Lincoln Electric's new large-scale metal additive manufacturing capability, anchored by four state-of-the-art SculptPrint™ machines. This

represents Lincoln Electric’s largest government-funded AM capital investment to date, located at its advanced Additive Solutions facility in Cleveland.

“Material availability continues to drive construction delays across the submarine enterprise,” said Ken Jeanos, vice president of supply chain, materials and logistics for General Dynamics Electric Boat. “3D-printed parts have the potential to accelerate construction and delivery of submarines to the U.S. Navy by cutting lead times for critical components.”

“This Maritime Industrial Base investment is a pivotal step to further unlock AM capabilities, enabling the defense industry to address complex supply chain challenges with innovative, efficient solutions,” added Jeanos. “This partnership expands the use of AM and other innovative technologies that Electric Boat’s engineering and procurement teams have been working on for several years.”

Steven B. Hedlund, chairman and CEO of Lincoln Electric, underscored the partnership’s impact: “This investment strengthens our partnership with Electric Boat and solidifies Lincoln Electric’s commitment to delivering transformative solutions for the defense industrial base.”