

2020 TIBBETTS AWARD WINNER

SubUAS, LLC



U.S. Small Business Administration



SBIR · STTR
America's Seed Fund
POWERED BY SBA

SubUAS had developed a drone that can fly, float, swim, dive, and transition between air and water in less than one second.

LOCATION

NJ
Hillsborough Township

PHASE III SUCCESS

\$5M+

FUNDING AGENCIES

Navy
Department of Defense

Impact & Achievement

A drone that can fly, float, swim, dive, and transition between air and water in less than one second - can you believe it? It may sound like something from the latest action movie, but New Jersey-based SubUAS has made it a reality with the Naviator platform, a technology developed by Dr. F. Javier Diez and Dr. Marco Maia at Rutgers University with funding from the Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) programs.

The Naviator platform features many unique characteristics that make it far more flexible than other platforms, including tetherless operation with remote pilot control, and the ability to conduct autonomous missions. Naviator is scalable to multiple sizes, with a 16-foot wingspan and 0-90+ lbs payload, and is optimized for a variety of sensors, cameras, and other payloads. Naviator is faster to deploy than existing underwater Remote Operating Vehicles (ROVs), and is also able to reach its target faster via flight. It has longer embedded mission capabilities than similarly sized drones, and utilizes precise GPS and visual position hold, as well as power-saving buoy sentry mode. The platform can easily surface, send data, receive new instructions, and begin a new mission. Naviator technology is intended for commercial, research, and military applications.

SubUAS was founded in 2016 to develop this technology, and the STTR program has since allowed SubUAS and Rutgers University to continue working together to further develop Naviator technology. University support and resources such as access to specialized researchers, advanced testing facilities, and a direct talent pipeline have been critical to the growth and success of the company and technology. As of 2020, SubUAS has grown to 15 employees – a tenfold increase in employment - including 10 specialized engineers, 3 support staff, and 2 executives. In 2019, the company expanded to a larger office and workspace where they are able to develop and manufacture many components in-house.

SubUAS has received Phase III contracts of more than \$4 million, for one of which SubUAS will build low cost air/water vehicles for the Navy with purchase options for quantities up to 400 vehicles. The company was one of 14 small businesses selected to speak and display its product at the SBIR pavilion during the January 2020 Consumer Electronics Show (CES), where the company was able to network with heads of industry, SBIR and DoD officials, as well as – a unique opportunity that has broadened horizons for SubUAS and its Naviator technology.

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