SeaTrac SP-48 USV Selected for Environmental Monitoring in Mississippi





SeaTrac Systems has announced the sale and delivery of one of its SP-48 persistent uncrewed surface vehicles (USVs) to a team at Mississippi State University's (MSU) Geosystems Research Institute (GRI), in Starkville, MS, USA. GRI selected the SP-48 to support a research study funded by the Army Corps of Engineers to study real-time water quality monitoring and a threat assessment of

navigable waterways of the Gulf of Mexico region.

GRI develops, operates and maintains an increasingly integrated research and transition programme, the results of which raise awareness and understanding of the Gulf region.

The MSU team was attracted to the <u>SeaTrac</u> platform for its ease of use and versatility to navigate in a variety of waterways, as well as its ample available power to support a rich payload over long durations. The custom payload includes the following: Pro Oceanus CO₂-Pro CV sensor, Seabird SBE 63 dissolved oxygen sensor, 3 Seabird ECO Triplets, AML CT Sensor and AML pH Sensor.

Real-time Monitoring and Data-collecting Goals

"The team at SeaTrac is first-rate; they can integrate anything and have been a pleasure to work with, pushing the envelope to fit into their boat all of our complex demands," notes Dr Robert Moorhead III, director of GRI. "Because of its versatility, we plan on deploying the SP-48 in a number of our waterways, ranging from very shallow waterbodies to the open ocean in the Gulf."

"Increasingly, customers' missions have grown in complexity, requiring a range of sensors, and they're looking for less costly, less resource-intensive and more flexible solutions to carry out a variety of tasks simultaneously in challenging marine environments," said Buddy Duncan, co-founder, SeaTrac Systems. "We are pleased to help the MSU team achieve its real-time monitoring and data-collecting goals."



SeaTrac SP-48 at work sampling the waters in Whites Creek Lake, Mississippi.

Wide Variety of Operational Scenarios and Payloads

The SP-48 is designed for users who require a flexible data gathering and communications platform that adapts to a wide variety of operational scenarios and payloads. The solar-powered, 4.8m SP-48 is a low-logistic, sensor-agnostic persistent USV with Automatic Identification System (AIS) collision avoidance, a speed of 5kts, a 500W payload power, and a 70kg payload capacity that can host a variety of sensors perfect for the collection and communication of real-time ocean data over long durations. Built to operate in all marine environments – from inland, near shore to open ocean – the SP-48 has a self-righting hull and efficient electric motor that frees it from reliance on wind or waves for propulsion. It is easily deployed from a boat ramp, pier or ship. Communication is achieved by line-of-sight radio frequency (RF), cellular, high-bandwidth satellite or custom networks.

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