

Long-Duration, Energy Harvesting & Storage USVs

April 24, 2023 | 12:00–12:50 pm PST | SP 103-F

Michael B. Jones

Managing Partner

SubSeaSail® LLC

Abstract

SubSeaSail LLC (SSS) has developed two lines of disruptively affordable unmanned surface/subsurface vessels (USSV) with unique sensors fit for purpose. These vessels are lightweight, 100% energy harvesting (wind + solar), edge-computing, low-signature, multi-mission systems designed for long duration autonomous data collection mission sets. The first line is a semi-submersible monohull observation vessel named HORUS™; the second is a line of fast multi-hull (trimaran) cargo vessels named HERMES™. They represent “the small, the agile and the many”. They are primarily uncrewed surface vessels with the ability to submerge and quietly float underwater for extended periods, providing numerous tactical advantages. Energy management is a critical aspect of the vehicles. SSS is driving the energy usage of on-board processors and sensors down, increasing the scope and efficiency of solar energy capture, and managing power usage to be as efficient, as possible. The company’s proposed HERMES-e vessel will be a dedicated energy capture and delivery vehicle able to be used on the shore or the ocean.

Biography

In 2017 Michael Jones became Co-Founder and Managing Partner of San Diego-based SubSeaSail®, LLC, which is developing patented, autonomous, 100% energy harvesting, long-duration vessels & unique sensors. Michael received his undergraduate degree from the University of Arizona in 1973, having spent his junior year in Freiburg, Germany. He earned a master’s Degree from Johns Hopkins University School of Advanced International Studies (SAIS) in 1977. His graduate studies included a year in Bologna, Italy; a year at the Catholic University in Lima, Peru; and an internship at the European Community headquarters in Brussels. Michael is an angel investor and Board Chair for TMA BlueTech, one of the largest ocean tech clusters in the world.



ENERGY ACADEMIC GROUP
NAVAL POSTGRADUATE SCHOOL

