Instrument Deployment

Citizen Science Opportunity in Partnership with SoFar Ocean to Engage the Yachting Community
SeaKeepers is teaming up with SoFar, a company dedicated to creating pervasive sensor networks that understand and monitor ocean environments and provide critical data for ocean enthusiasts, industry, and conservation. They accomplish this by integrating three different but critical perspectives: deep domain expertise in oceanography; human-centered product design; and the engineering know-how to get it all done. Spoondrift and OpenROV have merged to form SoFar and accelerate a future with better tools to understand and explore the ocean.

**Ocean Data Simplified**

To learn more about our planet’s oceans, we need to drastically simplify and democratize the collection of ocean data. SoFar’s first product, Spotter, is their initial contribution towards that goal. Spotter system is a low-cost, solar-powered ocean wave measurement and tracking device, fully integrated in an online dashboard. Through it, you can receive real-time data, status updates, and configure your devices remotely. All you have to do is turn Spotter on to start collecting real-time data. It’s that simple.

**Device Profile**

The Spotter Device is a compact, solar-powered, surface-follower, which measures surface waves and currents. This device is the result of extensive research and experimentation with low-cost sensing strategies for ocean waves. By integrating GPS, satellite communication, and solar technology, Spotter overcomes battery storage limitations and can operate anywhere in the world. Designed for usability, Spotter is compact and lightweight so you can carry it and deploy it from any size vessel.

**Real Time Data Access**

Data collected by Spotters is transmitted to SoFar’s own database. From there, it can be used by other entities and can help with improved ocean weather forecasting. This database will also be an open the data source for academic research. The broader implications are that SoFar and its Spotter technology can help vessel captains, as well as those studying weather systems and climate change with real-time ocean weather forecasting.

**Live Tracking & Geofence**

Spotter is designed to function indefinitely once deployed, and each unit is solar powered and built to be as durable as possible. This differs from most traditional drifters, which have a finite lifespan and are limited by their battery supply. While SoFar’s Spotters have a much longer useful lifespan, they still face the possibility of failing. For this reason, they are continuously monitored and tracked by GPS so that around the end of their 3rd year at sea, they are checked to see if retrieval is necessary.