



## MEMO

### Abstract DBPC

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## 1 CMR Unmanned Ocean Vessel

The CMR SailBuoy is a unmanned ocean vessel specially designed for oceanographic and meteorological measurements. It is a sailing vessel designed for autonomous operation for up to one year. Using its onboard computer and servos it automatically navigates following a user defined course.

The CMR SailBuoy uses the Iridium satellite system for communicating measured parameters and diagnostics. Since Iridium is a 2 way communication system, commands such as new waypoints, tracks and sensor parameters can be sent to the vessel underway.

The SailBuoy can be equipped with sensors and has a 10 kg payload for additional instruments. Deployment and retrieval can be conducted with ease since the vessel is remotely controlled. Coastal deployment and retrieval is cost-effective and logistically easy.

The CMR Sailbuoy has been trough several sea trials, manly in the north sea. Further testing and optimization is needed for the Saibuoy to become a successful product catering to need of meteorologists and *oceanographers*.

The development of the Sailbuoy is at the stage where user input and operational feedback is required for design optimization.

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