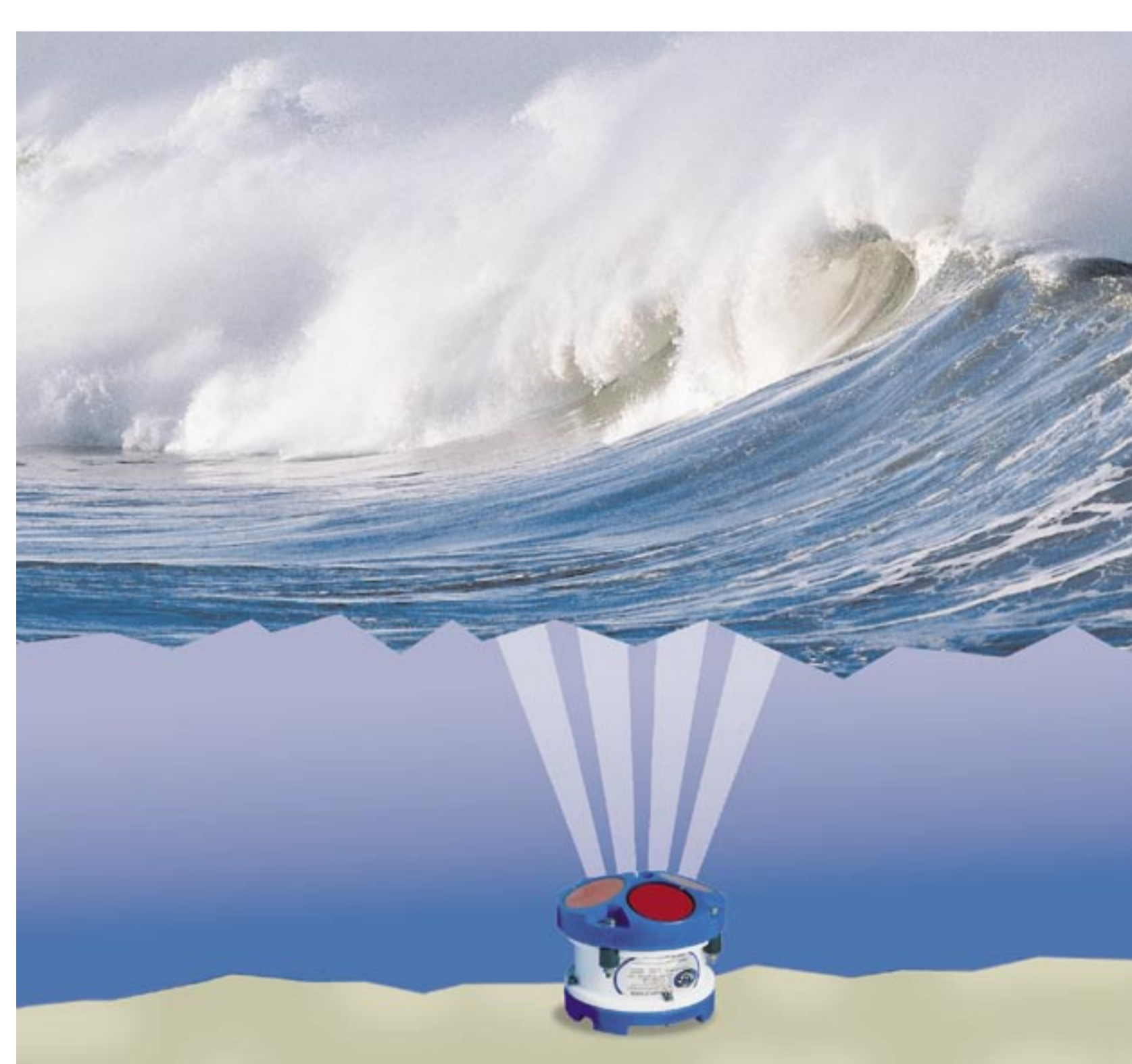


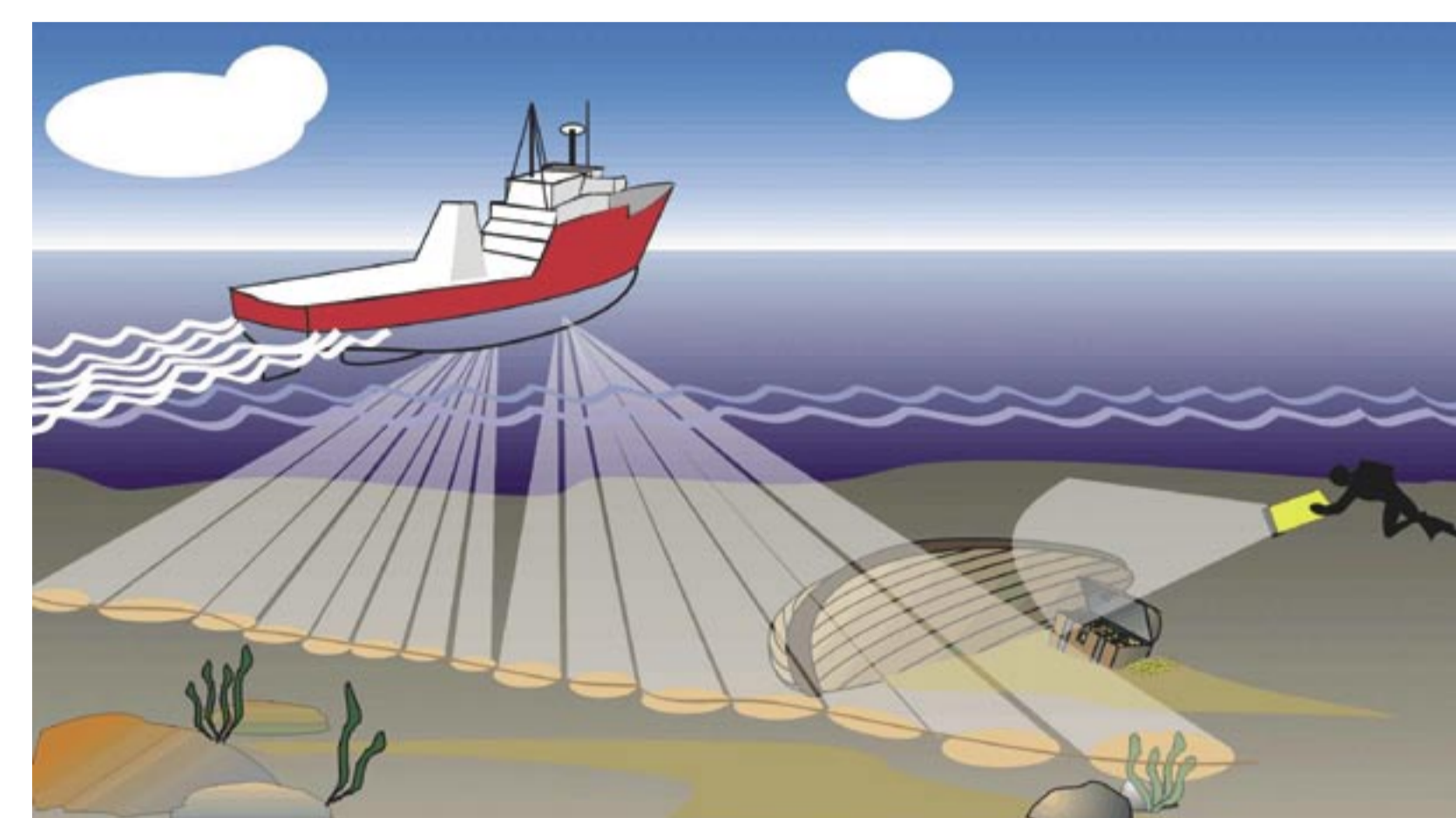
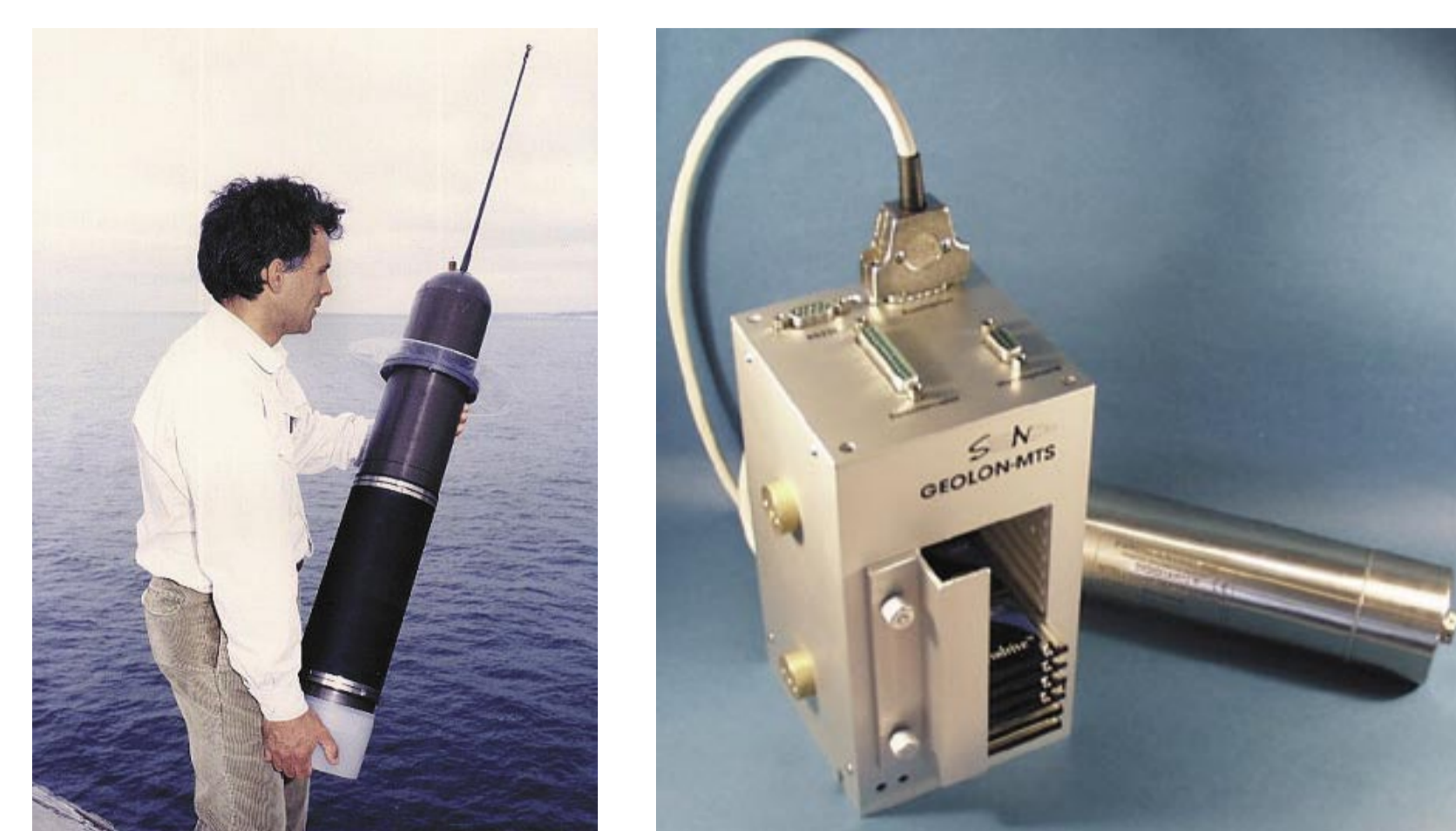
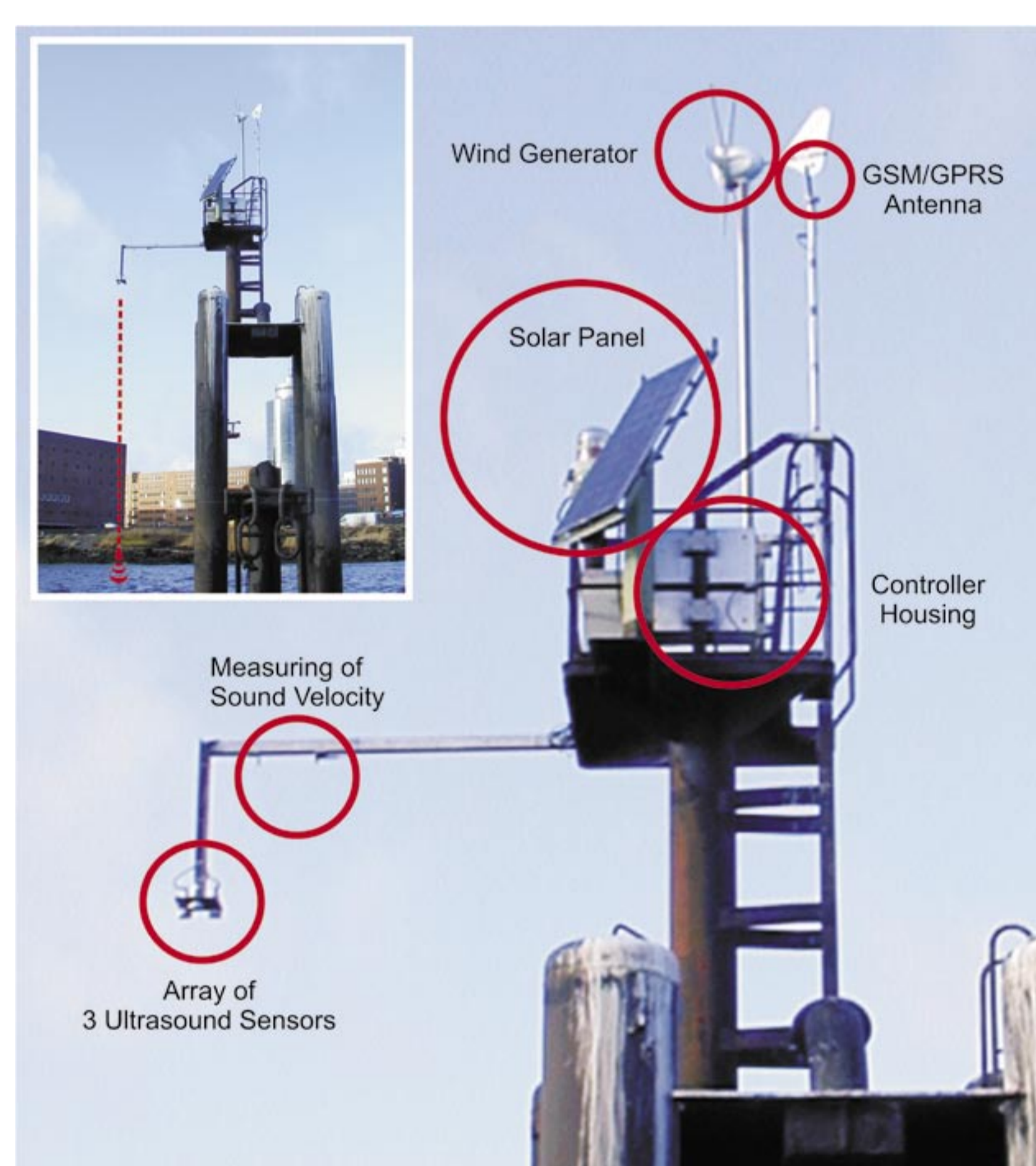
## In-situ Detection Elements

Surface and sub-surface systems are equipped with a variety of customer-specific sensors (plug- and play system), e.g.:

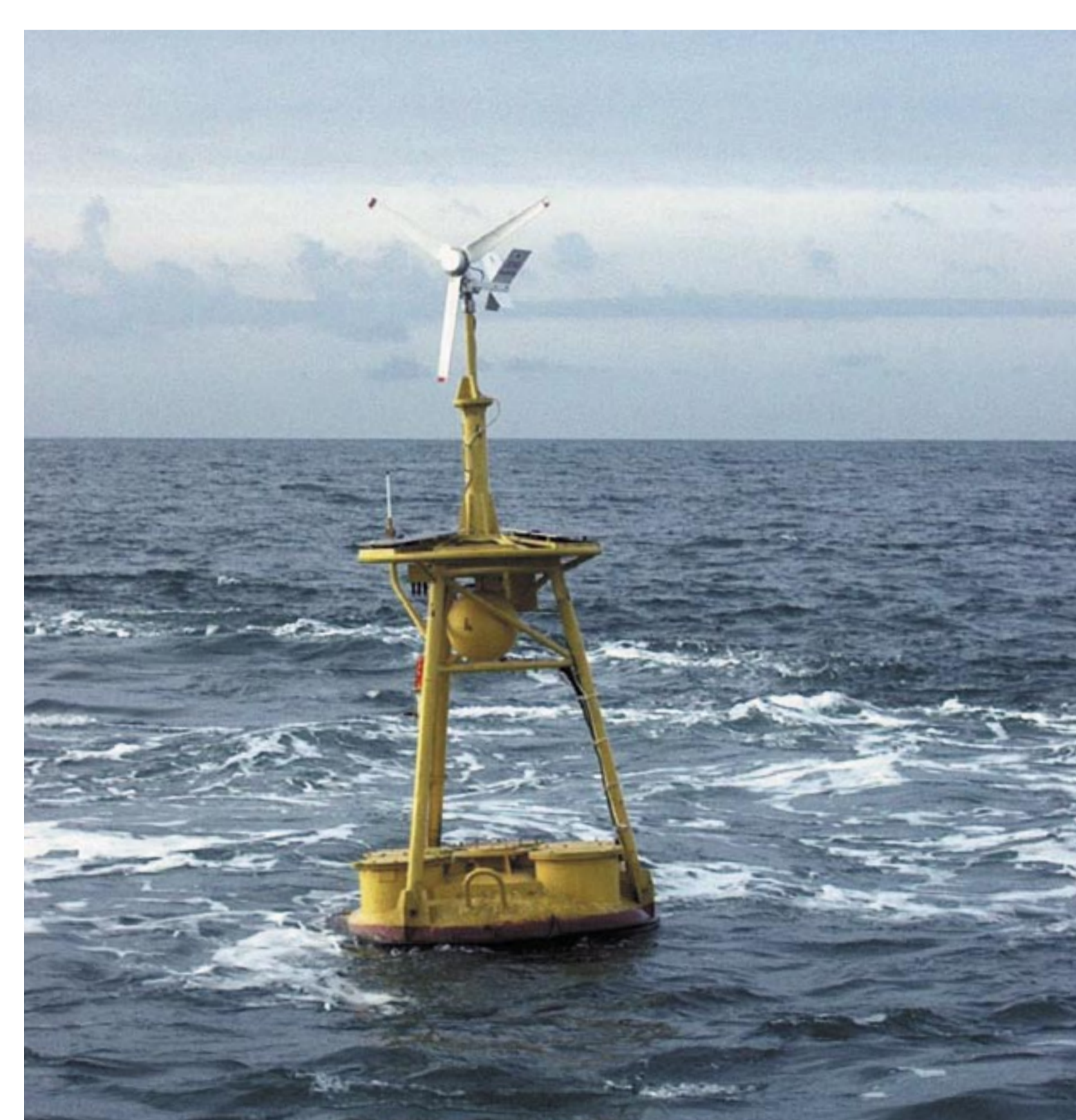
**Deep Sea Stations (DSS):** The deep sea station consists of several sensors which are connected to a Network Capable Application Processor (NCAP). The Bottom Pressure Recorder measures disturbances of the water level in low frequency surface wave bands. Sediment pore pressure and fluid flux, as well as gas flux are recorded to determine sediment variability.



**Sea Surface Stations (SSS)** contain X-band radar to determine sea-surface wind speed, current and wave measurements. A multitude of further plug and work sensors provide data on physical, chemical and biological sea water parameters, sea level variability, current profiles and solar irradiation. The SSS further contains energy supply and data transmission systems.



**Relay Buoy (RB):** The RB is equipped with sensory modules for positioning and movement as well as telemetric elements for data transmission to satellites (e.g. Inmarsat, Iridium or other systems). The buoy can optionally be equipped with additional oceanographic sensors and a GPS-based recovery beacon.



**Easy deployment and operation:** All components are designed for easy deployment and maintenance, enabling local trained staff to work independently without external assistance. The OMS Group can provide full-scale service and support during all installation & deployment stages.