



## Eric J. Aronchick, B.S.

### Oceanographic Field Technician

#### Expertise

Background in oceanography and coastal zone management, with a focus on beach erosion and morphology, remote sensing and GIS. Experienced in conducting offshore and near shore environmental sampling and surveys, vessel mobilization, demobilization, deployment and recovery of deep-water moorings, buoy systems and towed sensor sampling/surveying equipment on offshore vessels and platforms. Highly proficient in the installation, maintenance, testing and troubleshooting of offshore real time oceanographic monitoring launch and recovery systems (LARS) on mobile drilling units (MODUs). Well versed in the construction and installation of elevated platforms and structures for real-time monitoring of tidal changes and currents, as well as conducting routine and emergency maintenance, field testing, and replacement of oceanographic and meteorological equipment. Has performed and published multiple static GPS and geodetic leveling surveys adhering to second order, class one precise leveling techniques in accordance with NGS requirements and specifications.

#### Education

B.S. Oceanography – 2010  
Florida Institute of  
Technology

#### Certificate of Training

- T-BOSIET
- Open Water Survival/HUET
- SafeGulf/SafeLand
- PADI Open Water Dive Certified
- First Aid/CPR/AED
- SEMS Awareness, HAZCOM, Hearing Conservation
- Fall Protection, Lock Out-Tag Out/Job Safety Awareness

#### Professional Affiliations

Marine Technology Society -  
MTS

Young Professionals in Energy –  
YPE

#### Work Experience

2013-Present Oceanographic Field  
Technician, Woods  
Hole Group

2013 Hydrographic  
Technician, TerraSond  
Limited

2011-2012 Marine Field  
Technician, Air-Sea  
Systems

2010 Offshore  
Oceanographer, Tellus  
Applied Sciences

#### Qualification Summary

- Over 5 years of field experience operating in both coastal and offshore environments servicing, installing, and operating oceanographic and meteorological sensors for real time data collection and dissemination.
- Experienced in the installation, maintenance, repairs, and factory acceptance testing of offshore rig based real time current meter Launch and Recovery Systems (LARS).
- Experienced in the construction, installation, and removal of nearshore water level and current meter stations.
- Party Chief – Deployment/recovery of offshore deep water buoy and mooring fixtures.
- Party Chief – Vessel mobilization and demobilization for offshore oceanographic operations.
- Party Chief – Maintenance and servicing operations of Real Time Met-Ocean Mooring systems.
- Deployment/recovery of towed sensors via standard “back-deck” operations.
- Collection of deep water sediment coring and water samples.
- Laboratory testing for chemical residues and microscopic organisms.
- GIS geospatial analysis.

## Key Projects

### **Deep Water MetOcean Mooring and Buoy Deployment and Recovery Operations, Gulf of Mexico – Party Chief/Lead Oceanographic Field Technician**

Onsite project lead for mobilization/demobilization, deployment, recovery, and maintenance operations regarding the Woods Hole Group, inc. (WHG) designed WatchDog 1000 Real Time Deepwater Meteorology and Ocean Monitoring System. The WatchDog 1000 is a real time met-ocean monitoring (RTMM) system deployed offshore, US Gulf of Mexico, at a depth of over 1370m (4500ft). The RTMM is a complex mooring, consisting of a three meter surface buoy loaded with numerous meteorological, oceanographic, and communication instrumentation, a subsurface float containing upward and downward looking ADCPs, and a near bottom current measurement suite. All subsurface measurements are transmitted to the surface via an acoustic telemetry package, where the data is compiled and disseminated to the WHG base station computer via satellite radio communications.

### **Real-Time Oceanographic Measurement Systems: DS-3, DS-4, West Auriga, West Capricorn, West Vela, Gulf of Mexico – Party Chief/Lead Oceanographic Field Technician**

Lead field technician for all WHG offshore oceanographic measurement launch and recovery systems (LARS). WHG designed, installed, and maintains a number of real time current measurement systems on offshore mobile drilling units (MODUs), providing 1000m current profiles in real-time to the vessel and to the National Data Buoy Center. Upward and downward looking ADCPs are mounted on a frame suspended from two electro-mechanical cables that are positioned with dual hydraulic winches. An articulated A-frame supports the winches and sheave blocks. The system, which is largely automatic, provides power and control signals to the instruments, collects and processes data, and provides real-time displays to operators over the on-board CCTV network.

### **Jacksonville Physical Oceanographic Real-Time System (PORTS) Installation – Oceanographic Field Technician**

Aided in the construction and installation of oceanographic and meteorological equipment regarding the setup and operation of a new real time data measurement program along the St. Johns River, Jacksonville, FL. Over 13 measurement systems were installed on USCG aids to navigation (ATON) buoys, self-standing elevated platforms, docks/piers, concrete vertical bridge footings, and individual concrete dolphins. Oceanographic and meteorological measurement equipment installed included but were not limited to current profilers, side looking horizontal current meters, acoustic water level sensors, conductivity sensors, visibility sensors, temperature sensors, barometers, and wind sensors. Performed static GPS surveys, as well as ran initial and confirmation close out second order, class one geodetic level surveys to and from tidal stations, reaching available historic benchmarks, tying the new station sensor elevations into the existing tidal database.

### **MetOcean Moorings and Data Collection Program, Caspian Sea – Oceanographic Field Technician**

Operated as a member of the offshore oceanographic team regarding the deployment and recovery operations surrounding a system of moorings deployments located offshore Caspian Sea. Pre-deployment instrument testing and calibration was performed on a variety of ADCPs and CTDs slated for installation in five mooring and buoy systems. In addition, a shore based meteorological station was installed, measuring a range of atmospheric conditions to compliment the offshore oceanographic data collected from the mooring and buoy deployments.

## Key Projects (continued)

### **Routine and Emergency Maintenance of NOAA/NOS/CO-OPS National Water Level Observation Network/Physical Oceanographic Real-Time Systems (NWLON/ PORTS) Water Level and Current Meter Stations: Pascagoula, MS – Oceanographic Field Technician**

Serve as local technical assistant/local operator and aid to operations manager and the Delaware Field Office on an as-needed basis for field support of routine operation and maintenance activities, as well as scheduled inspections and emergency service visits.

### **Seafloor Mapping and Early Object Detection Study, Gulf of Mexico – Hydrographic Survey Technician**

Operated as a member of the offshore hydrographic survey team performing large-scale seafloor mapping and early detection studies for hazardous objects and obstructions. Main duties included back deck operations of towed sensor deployment and retrieval for emergency repair and daily inspection purposes, mobilization and demobilization of back deck sensors and equipment regarding changes in project scope, and the operation of back deck winches, tugger systems, and generators. Computer based operations included the monitoring of real time data from towed sensors and side mounted multibeam for any data or visual irregularities, and the assistance in selection and set up of survey lines and navigational markers for the bridge. Towed survey sensors included the use of a dual side scan sonar, high penetration sub bottom profiler, and a transverse gradiometer configuration using dual magnetometers.

### **Routine Annual and Emergency Maintenance of NOAA/NOS/CO-OPS National Water Level Observation Network/Physical Oceanographic Real-Time Systems (NWLON/ PORTS) Water Level and Current Meter Stations in South East United States and Barbuda (West Indies) – Marine Field Technician**

Served as one of the primary field technicians/local operator providing routine maintenance and repairs for NOAA/NOS real time tidal monitoring NWLON and PORTS systems throughout the southeast United States and Barbuda, West Indies. Tasks regularly included the testing of solar powered and battery storage systems, satellite antennas and transmitter, frequency hopping radios, and a variety of meteorological and oceanographic sensors. As part of the annual inspections on water level stations, second order, class one geodetic surveys were performed in accordance with NGS requirements.

### **Construction and Installation of NOAA/NOS/CO-OPS National Water Level Observation Network/Physical Oceanographic Real-Time Systems (NWLON/ PORTS) Water Level Stations: Jacksonville Bar Pilots Association, FL; Bayou La Batre Bridge, AL; Chickasaw Creek, AL; Pilottown River Pilots Association, LA – Marine Field Technician**

Aided in the complete construction and installation of equipment for multiple storm surge and early warning systems along the US Gulf of Mexico and SE regions. Set and drilled wooden support beams, railings, and floor supports; installed aluminum protective cabinets and meteorological towers to house sensors and antennas; measured, cut, threaded and ran conduit for electrical wiring between electronics housing, solar panels, meteorological and tidal sensors. Performed static GPS surveys, as well as ran initial and confirmation close out geodetic level surveys to and from the tidal station, reaching all available historic benchmarks, tying the new tidal station sensor elevations into the existing tidal database. New NGS 3D deep rod marks were set when necessary to provide sufficient references for vertical datum leveling checks throughout the years.

## Key Projects (continued)

### **Offshore Deep Water and Sediment Sampling, Gulf of Mexico - Oceanographer**

Aided in the assessment and collection of water samples and sediment cores in the Gulf of Mexico regarding the search for oil traces and contaminants post Deepwater Horizon oil spill. Responsibilities included the setup, operation, deployment, and retrieval of a mega-corer, CTD rosette, and a box corer to obtain water and sediment core samples from a variety of depths and locations.