

## **Salvatore A. Zichichi B.S.**

*Coastal Field Scientist and Data Analyst, Applied Coastal Research and Engineering, Inc.*

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### **Areas of Expertise**

- Deployment and recovery of oceanographic instrumentation and equipment
- Pre and post instrument data processing
- Maintenance and repair of oceanographic equipment
- Navigation and vessel operations

### **Education**

2000, B.S. Nautical Science & Minor in Oceanography, Maine Maritime Academy

### **Experience**

Mr. Zichichi is a Coastal Field Scientist and Data Analyst with Applied Coastal Research and Engineering, Inc. (Applied Coastal) specializing in conducting field operations. His expertise includes maintenance and operation of field equipment in addition to data processing in Matlab, ArcMap, Winriver, Hypack, and GPS Pathfinder Office.

Since joining Applied Coastal in November 2003, he has overseen field operations, conducting the setup, deployment, and recovery of all instrumentation. This included both the collecting and processing of data from submersible data loggers, Acoustic Doppler Current Profilers (ADCP) and bathymetry equipment. Mr. Zichichi has collected tidal, bathymetric and current data for the Department of Environmental Protection (DEP) Marine Estuaries Project, collected backscatter data at a proposed construction site in the East River for CR Environmental, digitized historical maps of the mouth of the Columbia River for United States Army Corps of Engineers, evaluated morphologic change along the beach in Dead Neck MA for 3 Bays, as well as collected and processed data for other private clients. Some of Mr. Zichichi's other contributions have involved geo-rectification of imagery, the use of tins to calculating volume change and recreating spatial adjustments made to vector data sets.

Prior to joining Applied Coastal in November 2003, Mr. Zichichi worked with C.R. Environmental in North Falmouth, MA as a Captain and Oceanographic Technician. While there, his responsibilities included operation and maintenance of C.R. Environmental vessels, deployment, recovery, and maintenance of oceanographic equipment, and organization of shop equipment and supplies. Projects worked on with C.R. Environmental include the following:

#### *Task – Location - Equipment*

- Sediment sampling - New Bedford Harbor- vessel operations, Vibracore, piston core, Ted Young grab, ponar grab, box core
- Sediment sampling - Army Core, Boston Harbor Dredge Project – Vibracore, Ted Young grab, box core
- Dredge monitoring - Providence MA - ADCP, water sample collection
- Outfall monitoring – Massachusetts Bay - ROV
- Video sled -MA - video analysis and editing
- Nutrient sampling - Flushing Bay, NY – ponar grab

- Clostridium sampling- Flushing Bay, NY –
- Bathymetric survey - Tupper's Ledge, ME- echosounder, Trimble DGPS, tide gauge
- Current survey - Buzzards Bay Disposal site, Buzzards Bay, MA- ADCP, current meter

From May 2002 to February 2003 Mr. Zichichi worked as 2<sup>nd</sup> Mate, 3<sup>rd</sup> Mate and ship keeper for Sea Education Association (S.E.A.) in Woods Hole, MA. While with S.E.A., Mr. Zichichi's operational responsibilities included safe operation and navigation of S.E.A.'s vessels, maintenance and inventory on all navigation, communication and safety equipment; and inventory and maintenance of all paints, sails, and rigging (i.e. Bosun). Additionally, he was responsible for the safety and training of college students aboard the vessel as well as teaching vessel operations, navigation (coastal piloting and celestial), and coordinating deployments and scientific objectives with the scientist of the watch.

From March 2002 to May 2002, Mr. Zichichi was the chief mate on the Schooner Adventuress in Washington State. His responsibilities included vessel operations, supervision and support of the crew, and coordination with the educational program.

From January 2001 to May 2001, Mr. Zichichi worked for Oversea Shipping Group, New York, NY. He was the third mate, ship's medical officer, and safety officer aboard the Overseas Juneau, carrying grain from Washington State to Pakistan and Bangladesh. As officer of the watch, his responsibilities included safe navigation, collision avoidance, supervision of the AB on watch, and supervising the loading and discharging of cargo. As medical officer, Mr. Zichichi treated medical ailments of the ships crew, and as safety officer he was responsible for maintenance inspections and supplying ship safety and fire fighting equipment.