Hydrographic Surveying Services

With over three decades of hydrographic surveying experience and over twenty years of performing these surveys using multibeam technology, we have provided our hydrographic surveying services to all levels of government agencies and private industry for many under and over water applications. EMC, Inc. (EMC) has performed hydrographic surveys of most major U.S. waterways from the San Francisco Bay to the U.S. Virgin Islands.

Quick glance back to summarize the services we have to offer & the 30 years of invaluable experience & priceless wealth of knowledge gained on these waterways:

- **Hydrographic Sections** on the Mississippi River, Atchafalaya River, Red River, Black River, Yazoo River, Ouachita River, Arkansas River, St. Francis River, White River, Wolf River, Loosahatchie River, Rio De La Plata River, Kissimmee River, St. Lucie Canal, Pacific Ocean, Atlantic Ocean, Gulf of Mexico, Caribbean Sea & the Tenn-Tom Waterway, as well as hundreds of tributaries of these major rivers.
- **Hydrographic Surveys for Dredging Operations** on the Mississippi River, Red River, White River, Wolf River, Yazoo River, Little Tallahatchie River, Atlantic Ocean beaches, Gulf of Mexico beaches & Tenn-Tom Waterway.
- **Revetment Annuals & Grading and Sinking Unit Construction Surveys** on the Mississippi, Atchafalaya & Red Rivers.
- **Depth of Cover Surveys** in the Mobile Bay, Gulf of Mexico, southeastern shorelines & river crossings across the southeast U.S.
- **Discharge Measurements** on the Mississippi, Red, Black & Ouachita Rivers utilizing Acoustic Doppler Profiling System.

We were one of the first companies to own the newest state-of-the-art Reson Multibeam system and one of the first to perform our hydrographic surveys with Differential Global Positioning Systems (DGPS). As a result, we are now perceived as one of the innovative marine surveying firms in the nation.

Our fleet of trailerable surveying vessels, well suited for all types of inland and coastal surveying, has been purposefully built to combine our hydrographic systems with our global positioning systems. They are capable of simultaneously collecting geophysical and bathymetric data. Today, our company owns and operates a large array of hydrographic surveying systems, including the latest multibeam hydrographic survey technology. Due to the wide sonar swath width (approximately 150° - 210°) of our multibeam surveying systems, anomalous features of interest, seafloor gradients, scour and sediment characteristics can be plotted quickly. High-resolution bathymetric maps of the seafloor are another advantage of our quality, hydrographic systems’ capabilities.
Our GIS/CADD team is highly experienced in all of the commercially available hydrographic data acquisition and processing software. Hydrographic data collections are performed using Hypack or Caris software, along with our hydrographic surveying systems. When the fieldwork is completed the data is edited using Hypack, Caris and/or Fledermaus software. To graphically depict the surveying data, we commonly use MicroStation V8i with InRoads. Every survey is then validated by our QA/QC team, which consists of at least three licensed professionals on average, along with our ACSM nationally certified hydrographer, using QA/QC checklists, as well as referring to the extensive experience that comes with years of hydrographic surveying.

EMC can assist you with a project of any size, from large construction and civil engineering products, building levees, dams, revetments to much smaller projects.