

## Surveying Services

ATM provides a wide range of land and hydrographic surveying services. Key staff has over 20 years of combined surveying experience and utilizes state-of-the-art technology in the conduction of both nearshore hydrographic and upland surveys. ATM has adopted a range of GPS-based technologies including Post Processed Static, Real-Time Kinematic (RTK), and Differential GPS (DGPS), utilizing Trimble Navigation receivers to ensure the highest quality data acquisition. ATM's support staff is able to provide survey data in both hard copy and client-requested digital format.



ATM has several vessels from which surveys are conducted, ranging in size to suit the needs of any particular survey. ATM primarily uses a 25' survey vessel capable of deploying a range of hydrographic survey equipment including side-scan sonar, sub bottom seismic sonar, magnetometers, echosounders, Acoustic Doppler, Current Profilers (ADCP), camera systems, water quality instruments, and tide gauges. These instruments are regularly used by ATM for the completion of nearshore survey tasks. ATM's survey team has completed many large scale boundary and topographic surveys as well as hydrographic surveys which include the following:

- Pre and post dredge bathymetric surveys
- Mean High Water Line (MHWL) surveys
- Submerged land easements
- Conditions Surveys
- Control Surveys
- Seagrass and marine resource mapping
- Environmental assessments
- Offshore borrow site investigations
- Conservation easements
- Construction as-built surveys
- Beach profile surveys
- Wetland delineation surveys



Our GPS-based survey and mapping capabilities allow for rapid and flexible topographic surveys at remote locations. ATM's Trimble 4800 Real-Time Kinematic (RTK) GPS, which provides 2 cm accuracy, is used to establish horizontal and vertical control networks for the variety of surveys required for coastal and environmental projects. In addition to the RTK survey-grade GPS, ATM maintains a Trimble Ag DGPS with beacon, satellite, and OmniSTAR capabilities, as well as conventional survey equipment such as differential levels and total stations.



In addition to our GPS technology, ATM's equipment for hydrographic and bathymetric work includes an Odom Precision Fathometer, RDI Workhorse ADCP, water quality instruments, and the latest HypackMax software to provide real-time differentially corrected bathymetric data for mapping purposes. The equipment can be deployed either on ATM's 25' all-weather survey vessel or configured for other boats as required for remote locations.

The ATM survey team has conducted surveys in locations throughout the southeastern United States and Caribbean. Locations of regular travel include the Bahamas, Turks and Caicos Islands, Dominican Republic, Anguilla, Antigua, and the British Virgin Islands.



*Environmental, Coastal, & Water Resources Engineering*