USS Arizona Memorial

US Department of the Interior National Park Service Submerged Resources Center GIS Division



USS Arizona: Mapping in 2003

In 2003, Submerged Resources Center consulted with Trimble Navigation, Ltd. to plan further survey operations on the



site. Trimble's recommendations included use of a Trimble survey-grade 5700 GPS base station and rover units and TerraSync GIS data collection software.

The advantage of the new GPS receiver is that it communicates to the base station by radio, receiving differential correction in real-time, thus eliminating post processing and greatly accelerating data acquisition and use. The survey equipment could achieve centimeter accuracy and could collect the data in five seconds rather than two minutes.



Trimble's Brian McInnis and NPS surveyor Mark Duffy setting up 5700 base station receiver near park headquarters in 2003. (NPS Photo by Tim Smith)



Trimble's Recon receiver. (NPS)



NPS divers Larry Murphy and John Wehrle complete field data collection. (NPS Photo)

At Pearl Harbor, the survey team used the software to carry GIS location and map data with them on a Trimble Recon, an ultra-rugged, waterproof PDA designed for field data collection.

By viewing the data collection screen, they could see how close the divers were to the super-points on the deck, and they radioed instructions to them to move the tripod to the right spot for reoccupation.

