

SHOALS Beats the Weather to Provide NATO Exercise with Missing Links



SHOALS (Scanning Hydrographic Operational Airborne Lidar Survey) has recently returned from Portugal after playing a critical role in a major NATO (North Atlantic Treaty Organization) exercise, Linked Seas 2000 (LS2000), which also included 5 Partnership for Peace countries. SHOALS, along with a team from the U.S. Army Corps of Engineers, the Naval Oceanographic Office and survey firm John E. Chance & Associates, Inc. were deployed during the initial Rapid Environmental Assessment (REA) phase of the exercise.

The REA phase, which lasted only a few days, was designed to rapidly characterize the operational environment prior to initiation of full-scale military operations that included personnel totaling approximately 30,000, 80 warships, 20 support vessels, 120 aircraft, and nearly five battalions of multi-national Land Forces. Weather conditions, though immediately presented a problem as an Atlantic storm kicked up 3-5m swells and heavy surf conditions that resulted in beach and near-shore survey teams being holed up in their survey ships offshore. This left SHOALS as the only available asset that was able to operate in this environment and collect the critical landing survey data.

The exercise also included amphibious landings in the Madeira Islands, some 900 miles distant from the main exercise area. Again, SHOALS provided accurate surveys during a single 'fly-away' operation, emphasizing the contribution of SHOALS to the LS2000 operation in overcoming the elements and collecting data at a remote location. This led one observer to comment, "SHOALS was the best success of the entire exercise...SHOALS put the 'Rapid' in REA."

SHOALS is a state-of-the-art technology that uses an airborne mounted laser to determine the water depth by measuring the time difference in laser energy returns from the water surface and the lake bottom. SHOALS, a world leader in airborne lidar hydrography, is owned by the U.S. Army Corps of Engineers and administered by the Joint Airborne Lidar Bathymetry Technical Center of Expertise (JALBTCX), a partnership with the Naval Meteorology and Oceanography Command, located at the Mobile District Office. The system is operated by international survey leader John E. Chance & Associates, Inc., a member of the multi-national Fugro group of companies with 200 offices in 45 countries.