H.L. Hunley Assessment Expedition Fieldwork Completed

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Charlesfort Discovered!
By Chester B. DePratter, Stanley South, and James Legg

On June 6, 1996, University of South Carolina President John Palms announced our discovery of Charlesfort. The announcement ceremony was held at the Ribaut Monument located on the south end of Parris Island, home of the U.S. Marine Corps Recruit Depot. The ceremony was attended by local dignitaries, invited guests, and numerous members of the press. We were gratified by the interest shown in this once-in-a-lifetime discovery.

What is Charlesfort?
Charlesfort was constructed in 1562 on Parris Island in Port Royal Sound, near present-day Beaufort, South Carolina, by Captain Jean Ribault. Ribault and his followers were French Huguenots seeking a place for Huguenot refugees to settle in order to escape religious persecution in their homeland. After building a fort, which was named H.L. Hunley Assessment Expedition Fieldwork Completed
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The South Carolina Hunley Commission and the U.S. Navy/Naval Historical Center initiated on 29 April a jointly funded assessment survey of the remains of the submarine H.L. Hunley. The survey was conducted during a five-and-one-half-week period. The principal goals of this survey were to confirm the identity of the object at the site as the Hunley, document the site to the extent conditions would permit, ascertain condition of the hull, and to evaluate the feasibility of a future
JAMES D. SPIREK JOINS UNDERWATER ARCHAEOLOGY DIVISION STAFF

The South Carolina Institute of Archaeology and Anthropology has a new underwater archaeologist on staff. James D. Spirek, most recently of Pensacola, Florida, joined the Underwater Archaeology Division at the beginning of March.

Prior to coming to South Carolina, Jim spent more than three years as Field Director of the Pensacola Shipwreck Survey and the Emanuel Point Shipwreck Project, both for the Florida Bureau of Archaeological Research.

Jim has a master's degree in maritime history and nautical archaeology from East Carolina University in Greenville, NC. While in North Carolina he also worked as a field archaeologist on the Atlantic Beach Project and on the Savannah River Survey for Tidewater Atlantic Research.

Jim served as principal investigator on the SouthField Project, as archaeologist on the Mobile Bay Search, as an assistant on the Western Ledge Shipwreck Project and on the Apostle Island Survey, all under the auspices of East Carolina University. Finally, he also worked as an excavator on the Yorktown Shipwreck Project for the Virginia Department of Natural Resources.

Jim brings to SCIAA vast experience in remote sensing, public education, shipwreck excavation, underwater photography and videography, archaeological and historical research, and report writing. In addition, he is an accomplished illustrator.

HUNLEY, From Page 1 recovery project. The principal parties tasked to carry out this expedition were the National Park Service-Submerged Cultural Resource Unit (NPS-SCRU), the South Carolina Institute of Archaeology and Anthropology-Underwater Archaeology Division (SCIAA), the Naval Historical Center-Underwater Archaeology Program (NHC), and the South Carolina Department of Natural Resources (DNR).

Mr. Daniel Lenihan (NPS-SCRU) and Mr. Christopher Amer (SCIAA) were Co-Principal Investigators for the project and Mr. Larry Murphy (NPS-SCRU) was Field Director. The U.S. Coast Guard, the Naval Weapons Station, and the Naval Criminal Investigative Service provided site security. A South Carolina Educational Television crew lived with the archaeology crew and documented all phases of the project. Several private companies and not-for-profit groups donated their unique expertise and an array of state of the art technology for remote sensing, geology, marine biology, sedimentology, and corrosion engineering. These groups include Marine Sonic Technology, Inc., Edgetech Corporation, Oceanengineering Inc., Geometrics Inc., Sandia Research Associates, Inc., Jim Graham and Associates, and the Institute of Nautical Archaeology.

Phase One of the H.L. Hunley Expedition was carried out from April 29 through May 6. This Phase consisted of non-invasive, remote sensing using a marine proton magnetometer, a RoxAnn bottom classification unit, a side-scan sonar, and a digital sub-bottom profiler. This sophisticated magnetic and acoustic sensing equipment relocated the site of the Hunley, defined the limits of the archaeological site, discovered other areas possibly associated with the site, and profiled the depth of the submarine below the sediments. Additionally, information from cores taken around the site provided environmental contextual information to assist in the assessment.

After several “down days” due to a series of weather fronts passing through the region Phase Two began on May 9. This phase was designed to uncover and positively identify the Hunley by discovering and recording several of the hull attributes unique to the submarine. Attributes included the forward and aft hatches with portholes and cutwaters forward of the hatches, torpedo spar, diving planes, air box and snorkel, propeller, rudder, and external iron keel ballast. On May 17 the identity of the Hunley was confirmed with the identification of five of the seven attributes unique to the vessel. While areas of the hull...
Some members of the H.L. Hunley joint assessment project. (left to right) Dave Conlin, John Brooks (NPS), Warren Fouche (SCETV), Rich Wills (Naval Historical Center), Christopher Amer, Carl Naylor (SCIAA), Lorry Murphy (NPS), Jim Spirek, Steve Smith (SCIAA), Larry Nordby, Daniel Lenihan, Matt Russell (NPS).

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were exposed and being recorded, Mr. Dan Polly, a corrosion engineer from Jim Graham and Associates, conducted studies of the corrosion levels of the metal. Both phases were hindered by high winds and heavy seas.

Once Phase Two was completed the submarine was reburied under protective sediments. The site of this significant find is currently protected by physical barriers, electronic surveillance and sensing devices to provide continuous security. The analysis of the data gathered during this expedition will take many months to evaluate. However, some preliminary results include the following:

The construction of the submarine, *H. L. Hunley*, at the Park and Lyons machine shop in Mobile, Alabama, in 1863, was overseen by one Lieutenant William Alexander. Some 40 years later, Lieutenant Alexander published a description and sketch of the vessel in the *New Orleans Picayune*. Architecturally, the Hunley differs in a number of ways from Alexander’s description and bears much more similarity to Conrad Wise Chapman’s painting of the vessel done shortly after it was built. The hull investigated has a hydrodynamic shape with smooth lines converging at bow and stern. The hull is 39 feet, 5 inches long, and approximately 3 feet, 10 inches in diameter. A 4-3/4-inch external keel runs along the bottom of the hull. Both hatches are present, each located approximately 9 feet from either end of the hull. Each hatch coaming contains a small view port on its port (left) side, while the forward hatch coaming apparently contained one facing forward but which is broken. The dimensions and configuration of the hatches approximate those noted by Alexander. A cutwater, formed from a single plate of iron, angles forward from the forward hatch toward the bow. The air box/snorkel is located directly aft of the forward hatch, although only stubs of the snorkel tubes remain. Between the air box and the aft hatch, evenly spaced along the hull, and to either side of the centerline, are 5 pairs of flat-glass deadlights, presumably to facilitate illumination of the interior of the vessel. The port dive plane, located below the air box, is 6 feet, 10 inches long (longer than the 5 feet noted by Alexander), 8-1/2 inches wide, and pivoted on a 3-inch pivot pin. No evidence for a spar was found during the assessment.

When all of the studies have been completed, a final report of the expedition and recommendations for the preservation and recovery of *H.L. Hunley* will be delivered to the South Carolina Hunley Commission and U.S. Navy.

Underwater archaeologists from SCIAA and the National Park Service prepare to dive from the Department of Natural Resources support boat R/V Anila, while the SCIAA R/V Sea Hawk (foreground) holds SCUBA tanks and water induction dredge used for excavating the site. (SCIAA Photo)