



Figure 3: The new 3D scanner and printer at Charleston Field Office. (Photo by Nate Fulmer)

how well University of South Carolina and Clemson can get along under one roof. Our relocation to Warren Lasch is a perfect fit for the division's presence in Charleston, and the close proximity to other underwater archaeologists and conservators has already spurred several collaborative efforts with our colleagues from Clemson and Hobby License participants. Shortly after our arrival at the lab, we also obtained a new 3D printer and scanner courtesy of a 2018 Archaeological Research Trust (ART) grant, to copy and replicate isolated finds and produce an educational projectile point typology for use in our Artifact Identification Workshops.

Beyond the obvious advantages of improved facilities and access to more reliable internet connectivity, I know our presence here at the lab will continue to facilitate closer collaboration with our colleagues on other projects as we carry on the Maritime Research Division's mission to preserve and protect South Carolina's maritime archaeological heritage through research, management, and public education & outreach.

Please take note of the new mailing address and telephone number: SCIAA Maritime Research Division, 1250 Supply Street, North Charleston, SC 29405, Office Phone: (843) 747-1500. As always, you can contact us via email anytime at [mrd@sc.edu](mailto:mrd@sc.edu).

Atlantic Offshore Wind Energy Development: Geophysical Mapping and Identification of Paleolandscapes and Historic Shipwrecks Offshore South Carolina



US Department of the Interior  
Bureau of Ocean Energy Management  
Office of Renewable Energy Program

BOEM  
Bureau of Ocean Energy Management

## SC-BOEM Cooperative Agreement Completed

By James Spirek

The day after the Fourth of July, myself and the other three principal investigators traveled to Washington, D.C. to present our findings at the Office of Renewable Energy, Bureau of Ocean Energy Management. We discussed the scope, parameters, and results of our geophysical and archaeological survey of the study area, approximately 11-16 miles offshore North Myrtle Beach in the Atlantic Ocean, to a group of BOEM administrators and scientists. The study of potential offshore Wind Energy Areas resulted in several important geophysical and archaeological findings. From the geophysical perspective, the project identified a number of areas of live or hard-bottom, also known as Essential Fish Habitats, as well as subsurface features, including infilled paleochannels, or relic rivers that once flowed towards the continental shelf during lower sea levels. Varying bottom and sub-bottom types will require consideration when deploying future wind farms composed of either fixed or floating turbines to account for seafloor constraints. From the archaeological perspective, there were two avenues of inquiry to detect prehistoric or historic sites in the study area. Several millennia ago, the Outer Continental Shelf (OCS) was available for living, gathering, and hunting by prehistoric peoples until continual ocean transgressions inundated the land. Study of prehistoric terrestrial archaeological sites reveal a penchant for living around waterbodies, such as rivers, ponds, swamps, or estuaries. In looking for Paleoindian to Middle Archaic sites on the OCS, preserved relict paleolandscapes, such as paleochannels, offer some hope for preserving evidence of prehistoric peoples. Geoarchaeological analysis conducted in support of the project revealed two high

sensitivity areas adjacent to two paleochannels that may preserve prehistoric sites. To identify the existence of such sites, consisting of lithic points, habitations, and organics, would require systematic, dense corings to recover archaeological materials. On the historical side, no new shipwrecks were discovered in the survey area. While there may be no shipwrecks in the survey blocks, the absence of shipwrecks in our 18 X 5-mile survey block may also be due to several factors, including too wide of lane spacing with the magnetometer and no overlap in the acoustic imagery that left gaps. As the project was a reconnaissance-level survey, any WEA development would require tighter lane spacing at the BOEM recommended 30-meter offsets to better detect historic wooden shipwrecks. A near-by historic shipwreck, *Sherman*, formerly known as *Princess Royal*, was investigated and future operations were recommended to determine eligibility to the National Register of Historic Places. The trip also marked the formal submission of the project report *Atlantic Offshore Wind Energy Development: Geophysical Mapping and Identification of Paleolandscapes and Historic Shipwrecks Offshore South Carolina*. Following review of the report, and revising as needed, the document will be available for public download at <http://www.boem.gov/Environmental-Studies-EnvData/>. In addition to the written report, an online StoryMap (<http://helios.esri.sc.edu/boem>) was created using raw and processed data layers, underwater video, and basemaps to provide a convenient means for an end user to display the datasets in a variety of configurations to explore the project findings. For more information about the project please see earlier *Legacy* articles (vol. 21, no. 2, Dec. 2017, pp. 15-17; vol. 19, no. 1, July 2015, pp. 4-5).