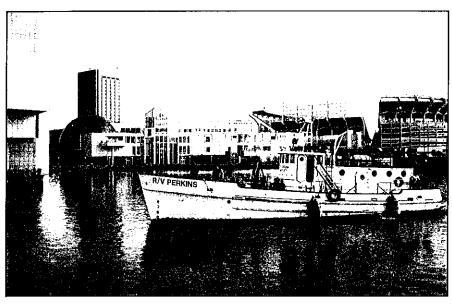
Program in Maritime Studies, Volume 15, Winter 2000



THE BROWN'S, THE GREAT LAKES AND ROCK N' ROLL: The R/V Perkins steams past the Brown's stadium, the Great Lakes Science Center, and Rock & Roll Hall of Fame in Cleveland, Ohio. (photo: Tim Runyan)



WRAPPING IT UP: Crew of the Polias Project aboard the R/V Shearwater Metinic Island, Maine. (photo: Judy Post, August 1999)

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Stem to Stern

Newsletter of East Carolina University's Program in Maritime Studies

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If you would like to receive a free subscription to *Stem to Stern*, please call 252-328-6097, Fax: 252-328-6754, or write: *Stem to Stern*Program in Maritime Studies
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From the Editor:

This year has been a particularly busy one for the Maritime Studies Program. The name was officially changed from Maritime History and Nautical Archaeology to the Program in Maritime Studies. Students and faculty gave a wide range of presentations around the world and United States. We brought the R/V *Perkins* to Washington, North Carolina, and sent students and faculty out into the field, around the world to give papers; AND we survived the flooding of our homes and university.

This summer witnessed more field projects consecutively worked than any other. One hardy group of maritimers worked in the field non-stop together from DSO training in May through fall field semesters in Wisconsin and Bermuda. The projects for the year ran the gamut as well from eighteenth century vessels to a twentieth century steam-driven ferrous-concrete merchant vessel. Our upcoming field season will be just as enthusiastic and diverse.

The flooding that struck eastern North Carolina in September left a pall on an otherwise fantastic year. Maritimers were affected, and while not everyone lost a home or belongings, we all shared the stress and disbelief that accompanied those happenings among our classmates. Never before have so many people sent so much help specifically to the Maritime students, faculty and staff. We received donations of money, food, bedding, clothing, cleaning supplies, books, tooth brushes, and other items. The outpouring of assistance from people living hundreds of miles away was unbelievable, we received packages from Hawaii, New York, and Maryland, just to name a few. Thank you to everyone who helped us get back on our feet.

On a different note, the program ran two fall field semesters this year, one to Bermuda and one to Sturgeon Bay, Wisconsin. Both projects were resounding successes and I encourage you to check our web page to learn more about the projects and the upcoming site report for Wisconsin. We finally got Eller House repainted and looking great, so please stop in and take a look. The new Ph.D. program is up and running with two students focusing on Maritime Studies, and the nineteenth class in the MA program arrived in August ready to run.

We have tried to represent as best as possible all of the activities that our program has been involved with this year. Understandably, something will have been forgotten, but please write and tell us what you think. In all this has been a busy and productive year for those of us here at Eller House. Thank you to all who made this possible.

- Kimberly L. Eslinger

From the Director....

The consequences of Hurricanes Dennis and Floyd dominated the news and experiences of the Maritime Studies Program here in eastern North Carolina. Dennis wandered in and off the coast for a week, soaking the tidewater's low lying farm lands, fields and towns. Then Hurricane Floyd struck on 15 September with dramatic effect. Most of the eastern portion of the state was submerged and "beachfront" property extended inland 100 miles from the Atlantic Ocean. East Carolina University is located on the Tar River whose normal slow meandering keeps the water level at about eight-nine feet of depth. Flood stage in Greenville when the Tar overflows its banks is 13 feet. The all-time high water mark was set in 1919 at 24.5 feet. But this benchmark 100-year standard was shattered in September when waters reached 29.7 feet – the 500-year flood! No one was prepared for this. The campus was damaged, 2000 students lost their housing and one student drowned in the parking lot across from Brewster Hall where water levels went well above the height of cars parked there. The university closed for two weeks, but by eliminating some holidays and fall break, remained open to complete the fall term.

Our newly acquired research vessel, R/V *Perkins*, was moored west of Washington, N.C. and rode out the storms and rising flood waters, but only returned to her berth in late November when the Route 17 bridge was able to operate again.

Two program students suffered damage to their homes – second year students

Kim Eslinger had a tree drop on her apartment and Sam Belcher, wife Della and two children lost all but the dog and a suitcase of clothes when waters went above the roof of their rented house. Giovanni Wagemans, a first year student from the University of Ghent, Belgium, was forced to evacuate his campus dormitory room when the university closed. I tried to find him, only to discover he had been "adopted" by a dorm neighbor and was taken into their home near Raleigh. This is indicative of the generosity of people during this crisis – the worst in the history of North Carolina with damage in the billions of dollars and considerable loss of life. This includes animal life also, as an estimated two million chickens and turkeys died and over 50,000 hogs. Pollution in the rivers reached dangerous levels and Pitt County Memorial Hospital served as a center for National Guard helicopters that flew constantly; we were a MASH command post. Our summer field school for the past two years was at Castle Island off Washington, N.C. where Brad Rodgers and Frank Cantelas taught the basics on the remains of several vessels found there. Concerns about water quality and contamination of bottom sediments will likely force movement of the field school to another site for 2000.

Although the flood dominated recent news, the program made some notable progress in 1999. The new MA curriculum was put in place, the Maritime Studies concentration in the Coastal Resources Management Ph.D. program began this fall as we admitted two students. Faculty member Brad Rodgers was promoted to associate professor with tenure and Larry Babits and Michael Palmer were promoted to professor. Michael Palmer was elected chair of the History Department. Carl Swanson, new Graduate Director, was recognized as an outstanding teacher, as was Donald Parkerson, who frequently sits on maritime thesis committees or helps with quantitative techniques. David Long taught a new course on the naval history of the Civil War. Larry Babits won two book awards for his Revolutionary War study, A Devil of a Whipping: The Battle of Cowpens (UNC Press). Dean Keats Sparrow hosted a Founder's Day Queen Anne's Revenge exhibit highlighting the Program. ECU Trustees' chair Phillip Dixon and Dean Sparrow gave insightful talks on Blackbeard. Faculty and student activities are chronicled in the following pages.

New initiatives include a proposal with the North Carolina Center for the Advancement of Teaching to share use of the former Ocracoke Coast Guard Station as a research and teaching center. Another is a proposal to establish a coastal institute on Roanoke Island in Dare County, NC. This will be a purpose-built facility for research and teaching in nautical archaeology, cultural and coastal resources management. We are pleased to have entered into a cooperative agreement with the Mariner's Museum in Newport News, VA.

Of special note is the financial support we have received from Barbara and Matthew Landers to establish student fellowships, by James and Bren Cheatham to acquire R/V *Perkins* and support program activities, the Perkins Trust, Eddie Smith of Grady-White Boats and Milton and Lea Fields. We appreciate your support.

- Timothy J. Runvan

Relief from the Great Flood of '99

The floodwaters of Hurricane Floyd brought terrific devastation to eastern North Carolina. Everyone in the region was affected in some capacity or another. Many lost a lifetime of memories and mementoes. Yet, others lost far more; their lives. When the waters finally receded and the loss was realized, a host of caring individuals stepped forward, ready to lend a hand to those who were less fortunate. The Maritime Program was blessed by a number of these angels of mercy. We would like to take this brief space to thank them for their kindness and generosity.

R. Christopher Goodwin & Assoc., Frederick, MD
The Woodruff Museum of Civil War Naval History
Charles Tulin of Saratoga, NY (high school student
who gave his personal savings as a
donation)

International Archaeological Research Institute of Honolulu

Albany Academy, Albany, NY (who gathered personal supplies for victims)

The many volunteers from all points within the United States for the Red Cross, FEMA, the Salvation Army, and churches

Rotary Club

Joseph Zarzynski, Wilton, New York

Diana Strickland, Greenville

Dr. and Mrs. William Still. Hawaii

Mr. and Mrs. James Cheatham, Greenville

Dr. Tom and Pam Burkart, Washington, NC

Karen and Matthew Eslinger, Glenville, NY

Dr. Timothy and Laurie Runyan (who tirelessly fought the good fight)

Dr. Larry Babits

Elizabeth Abrahanson, Sun City, AZ

Mike and Tef RoDeffler, Tuscon, AZ

Susan Langley, Annapolis, MD

Kathy Concannon, Lusby, MD

Judy Wood, Savannah, GA

Bob and Jane Holcombe, Columbus, GA

Mr. and Mrs. Raymond Ball, Reidsville, NY

Frank Cantelas, Brad Rodgers, Steve Sellers

Frank and Beth Velde, Greenville

Coral Magnusson, Hawaii

A special thanks to the many donors who have wished to remain anonymous and others who deserve recognition and we have failed to acknowledge due to the chaos of this troubled time.

Each of these individuals gave abundantly during a time of crisis that dramatically affected everyone involved. To them all goes a heart-felt thanks and a deep appreciation.

- Samual Belcher

The Voyage of the R/V Perkins

The Program in Maritime Studies acquired the R/V *Hydra* in 1998. She was built in 1953, a 65-foot U.S. Army T-boat, for harbor and near-coastal use. The Environmental Protection Agency modified her for water quality testing, adding a laboratory, bunks for eight, and a galley.

The 1,400-mile trip to bring her home began on May 9, 1999. Frank Cantelas, Wayne Lusardi, and I left from Eller House bound for Bay City, Michigan, where the boat spent the winter.

In Bay City we met crewmembers, Brad and Barry Rodgers. We found the vessel in good condition. We benefitted immensely from the knowledge of Bob Passage who directed the refit of the R/V *Hydra* for the EPA.

That began a week of preparations for departure. Every system was checked. The engine and both generators ran flawlessly. The name was officially changed from the R/V *Hydra* to the R/V *Perkins*. The days were long for everyone. We cast off on May 14 for Port Huron, where Tim Runyan joined the crew.

We sailed down the St Clair River, past Detroit, and into Lake Eric. We arrived in Cleveland where we tied up by the 618-foot museum ship *William G. Mather*. Dr. Runyan led the campaign to make the ship a floating public attraction. He then took us out to dinner and gave the crew a whirlwind tour of Cleveland by night.

The next morning we took on 1,000 gallons of fuel and headed for the Welland Canal connecting Lake Erie with Lake Ontario. We began locking through at 2:30 a.m. The locks of the Welland Canal are designed for the large 1000foot commercial cargo ships that transit the lakes. When pulling into the locks, the tenders have lines set up along the wall for crewmembers to stop the ship from drifting in the lock. Slowly the water level drops and the descent begins, sometimes to 40 feet. As the gates open, the crew casts off the lines and away you go to the next lock. We passed through 8 locks in the Welland Canal and arrived in Lake Ontario around dawn.

The next leg of the trip took us through the Oswego and Erie Canals. The Oswego Canal joins Lake Ontario to the Erie Canal system. The Erie Canal runs from Buffalo to Troy, New York. Although the Erie Canal starts on Lake Eric, near Buffalo, it only has 15 feet of vertical clearance under the bridges, which we couldn't clear without making the R/V *Perkins* a convertible.

The locks of the Oswego and Eric Canals are much smaller than those of the Welland, and usually only drop five to ten feet. We were early enough in the season that there was very little traffic in the canals, and we moved quickly to Brewerton, and on to Little Falls, New York, where we saw the opening night of "Star Wars Episode One."

After a night in Watertown, NY, we entered the Hudson River, passed through the Troy Lock, and ran down the beautiful Hudson River valley. We passed West Point and arrived in Manhattan shortly after sunset. The *Intrepid* Sea Air Space Museum provided our accommodations for the night. We docked next to the submarine *Growler* and explored Manhattan.

Early off the docks to refuel, by noon we were negotiating the traffic of New York Harbor. Our plan was to run along the New Jersey coast until we were due north of Oregon Inlet, North Carolina, and head south. The weather looked good for the moment, but it slowly deteriorated until we were in six to eight foot

seas with thirty knot winds from the south. The R/V *Perkins* handled the seas well, though our progress slowed.

We arrived in Oregon Inlet at sunset, and navigated the entrance to the Pamlico Sound. The wind had increased to about thirty-five knots which made our plan of anchoring for the night a risky one. There was no sheltered anchorage, so we decided to continue on and head for home.

The shallow waters of Pamlico Sound pounded us more than the Atlantic. Though the waves were smaller, the wavelengths were much shorter and we took a beating. We arrived in Washington, North Carolina, around 9 a.m. after a non-stop run of forty-five hours. We shut down for the final time, cleaned up the ship, packed, and headed for home.

The ten-day voyage of the R/V *Perkins* was an amazing experience. Every crewmember left with sense of accomplishment and a little relief at being home.

Thanks to volunteer Harry Stetser, we will have help to keep her shipshape. The R/V *Perkins* opens a whole new spectrum of possibilities for the Maritime Studies Program. We now have the capability to do projects we couldn't attempt before. Stay tuned for further updates on how and where the *Perkins* has been put to use.

-Mark Padover



The crew of the R/V Perkins after the trip: Wayne Lusardi, Frank Cantelas, Tim Runyan, Brad Rodgers, Mark Padover, and Barry Rodgers.

A Tale of Shipwrecks and Dolphins: Fall 1999 Bermuda Field School

Bermuda is a maritime historian's dream come true. Where else can a person dive on shipwrecks from the sixteenth century to the present in a single day? That is how members of the East Carolina University 1999 Fall Bermuda Field School spent their first day on the water. For nearly twenty years, Dr. Gordon Watts of ECU, has been bringing graduate students to Bermuda to do field work in underwater archaeology. Our host is Dr. Edward Harris, director of the Bermuda Maritime Museum.

The 1999 ECU Bermuda field school included graduate students Matt Muldorf, Don Froning, Matt Lawrence, Dede Marx, Tane Casserley, and Mark Padover. Gary Byrd came along as the Diving Safety Officer. Doug Jones returned to Bermuda as the cook. Clifford Smith of the Bermuda Maritime Museum assisted in the lab and in the field.

The primary site examined this year was a wreck found three years ago during the 1996 ECU field research project. Hull design and construction features suggested that the vessel was constructed and probably sank in the mideighteenth century. As investigation progressed, the date of construction and loss shifted into the late eighteenth or early nineteenth century. Machine cut nails and the framing pattern exposed by test excavation support the later date.

The initial field work yielded a few artifacts, including a wooden sheave from a block, small pieces of line, a few fragments of possible shoe leather, and a few small buttons.

While the grid area was mapped, a trench was dug in the ballast pile to determine the shape of the ship's hull. The ballast was removed, then grids were moved into position over the trench for mapping and profiles.

Maps hand drawn underwater by students were digitized into AutoCAD, then combined into an overall site map.

The most unusual discovery were twelve iron knees scattered about the site. One knee was selected for recovery, mapped in situ, and brought to the museum for cleaning, examination and documentation. Once concretions were removed, it was found to be a cast iron knee. This may not seem strange, but there appears to be no archaeological record of cast iron knees on shipwreck sites. Previously examined historical sources document wrought iron knees but to date no record of cast iron knees has been discovered. Other knees may be recovered in the future to confirm that they are all cast iron and to establish if they are all identical or if each one is unique.

The field school also had excitement outside of the academic activities. About midway through our time in Bermuda, Hurricane Floyd struck eastern North Carolina hitting the ECU campus. If that wasn't enough, Hurricane Gert decided to pay Bermuda a visit. A few days before Gert hit, dolphins from a local Bermuda group called Dolphin Quest were brought into the Museum's Keep Pond to ride out the storm. The dolphins were present for the duration of the field school, greeting us in the morning and upon our return from the field in the evening.

As Stephen Spender states, "History is the ship carrying living memories into the future." For the members of the East Carolina University 1999 Fall Bermuda Field School, our future lies in the history of the ship and its memories.

-Mark Padover



James Cheatham, author of The Atlantic Turkey Shoot: U-Boats on the Outer Banks has generously assigned all royalties to the Program. Copies of this stirring work can be obtained from the ECU Maritime Studies Program for \$9.95 plus \$2.00 shipping, NC residents add \$0.60 for tax.

(Tel 252-328-6097; fax 328-6754, email underwoodk@mail.ecu.edu)



The Bermuda Field Crew

Shipwrecks in Wisconsin Fall Field Semester

For the first time in several years, students in the Maritime Studies Program had a choice between two fall field schools. While the traditional Bermuda field school remained an option, students also had an opportunity to accompany Dr. Bradley Rodgers to Sturgeon Bay, Wisconsin, and carry out a Phase II survey of three mid-ninetcenth century wrecks in Lake Michigan. Graduate students Kimberly Eslinger, Catherine Fach, Russ Green, Michael Hughes, and Michael Plakos, participated in the three-week field school that began on 9 September 1999. Acting Wisconsin State Underwater Archaeologist Jeff Gray and Fillipo Ronca, former students in the Maritime Studies Program, coordinated much of the project and encouraged volunteers from the Wisconsin Underwater Archaeology Association (WUAA) to participate. The call was answered by a number of volunteer WUAA divers, including Tom Villiand and Kathy Klecker. WUAA volunteer Russell Leitz also worked in the field and made available the results of his extensive historical research, which proved invaluable for placing the vessels in their proper historical context.

The three vessels were stone barges, converted for that purpose at the turn of the twentieth century by the Sturgeon Bay Stone Company. After outliving their usefulness, the company sank the vessels and burned them to the waterline in 1931. Submerged in less than ten feet of water the wrecks lay roughly parallel to one another, as they did while afloat and tied up at the quarry's dock.

After a preliminary dive, it was discovered that the three wrecks were infested with zebra mussels and possessed varying amounts of plant growth, although a couple of hours with paint scrapers and machetes rendered these obstacles manageable. Visibility on site ranged from 5 to 30 feet and water temperature averaged 55 degrees.

Two of the surveyed vessels were built as centerboard schooners prior to their stone barge conversion and are believed to be the *Oak Leaf* (1881) and

Ida Corning (1886). Designated wrecks 1 and 2 respectively, the schooner-barges were remarkably intact below the turn of the bilge and provided students an opportunity to document both "through the keel" and offset centerboard construction. Wreck 1 is 166 feet long with a 31-foot beam, while wreck 2 is approximately 150 feet long with a similar sized beam.

The third stone barge, is believed to be the 216-foot former passenger steamer *Empire State*, launched in 1862. Wreck 3 was documented entirely by students, from laying the baseline and developing a grid system, to producing a completed site map. Carried out under Dr. Rodgers' patient supervision, but without his intervention, the exercise provided participants with invaluable practical experience and new respect for the value of trial and error.

Throughout the project, students made several excursions. These outings included dives on the well-known passenger steamer *Niagara* and the three-masted lumber schooner *Fleetwing;* the latter of which served as an "underwater classroom" due to the exceptional condition of many principal construction features. Jay Martin, Director of the Wisconsin State Maritime Museum in Manitowoc, treated us to an extensive tour of the museum. Students also toured Sturgeon Bay's Door County Maritime Museum with curator Christine Randall.

The month-long survey produced three detailed wreck maps, an overall site map, and the requisite quantity of field notes. The data will form the basis for a site report to be written by the field crew and Dr. Rodgers. Copies of all documentation remained with Wisconsin's state underwater archaeologist and the information will be added to the growing database of Lake Michigan shipwrecks. Daily field activity appeared on the Wisconsin Sea Grant website and can be accessed from the Maritime Studies website: www.ecu.edu/maritime via a link under the "Current Projects" heading. Funding for the project came largely from Sea Grant and was administered by the Wisconsin State Historical Society.

-Russ Green

Tarboro Wreck Site Survey

The Maritime Studies summer field school, directed by Dr. Bradley Rodgers, spent the first week of June 1999, in Tarboro N.C., documenting the remains of a steamboat. The vessel's remains lie in the Tar River, one mile downstream from Tarboro. Historical research indicated that Edgecombe county residents purchased the steamboat, initially named the *Oregon*, in

Baltimore. Arriving in July 1848, the *Oregon* was the first large vessel to pass through Oregon Inlet, which has since carried her name. Her activity between 1848 and 1861 is unknown, but in August 1861 the vessel returned to the Tar River renamed as the *Colonel Hill*.

Confederate forces subsequently used the steamer to transport troops and supplies on the Tar River and Pamlico Sound. After the occupation of Washington, N.C., by Union troops in 1862, the steamboat was trapped up the Tar River. In July 1863, a Union Cavalry raid caught the *Colonel Hill*, another steamboat, and a Confederate ironclad ram at Tarboro and burned them.

Site reconnaissance conducted ten years ago by the North Carolina Underwater Archaeology Unit found the wreck submerged under several feet of water, buried in sand.

Two canoes, and several inflatable rafts were employed for the daily mile-long trek to the site. Low water made the wreck site readily visible, as only six inches to two feet of water and a thin layer of sand covered the steamboat's remains. Students donned only masks and snorkels in order to carry out work in the tannin colored water. A silt barrier was constructed on the upstream portion of the site. A baseline laid the length of the site divided it into ten-foot sections. Students recorded their sections by drawing measured sketches of its contents and then trilaterated positions of the hull timbers and fasteners. While one crew mapped the wreck, another crew plotted the location of the site on the river. Using a transit and electronic distance meter, they waded through the swamps along the riverbanks to develop a map of the river around the wreck site.

Many of the wreck's timbers exhibited burn marks, likely incurred during destruction or subsequent salvage. All of the machinery had been removed from the wreck, but many iron fasteners were found, including: spikes, drift pins, and a large number of eyescrews not associated with the steamboat's construction.

Not a single rainstorm marred the project. The Tar River remained placid and clear and the site plan was generated with little difficulty. More importantly, no students fell prey to pollution emanating from the sewage treatment plant outflow. Further examination of the wreck site is planned to determine the effects of the recent Tar River flood. The survey and history of the *Oregon/Colonel Hill* are the subject of my masters thesis. Please direct any questions or comments about the project to msl0808@mail.ccu.cdu.

-Matthew Lawrence

Castle Island Field School

What do a glowing alien head, a water moccasin, a dead squid, a gar fish, and rain all have in common? The 1999 Summer Field School at Castle Island, Washington, NC, under the direction of Dr. Rodgers, of course. The crew spent fourteen days mapping, surveying, and dredging the wreck in the Pamlico River. The vessel has yet to be identified, but measures 92 feet in length with a beam of 30 feet. While the vessel name is unknown, diagnostic artifacts indicate either mid-to late eighteenth century or early nineteenth century construction.

When the field school began, it was believed that this vessel was a centerboard schooner, which would have placed its construction and loss sometime after 1840. While laying the steel cable baseline and nylon cross lines, no centerboard or trunk were located.

Students working on the Colonel Hill in the Tar River before the great flood.

The vessel lies upright with it's port side against Castle Island and the starboard side facing the channel. Unfortunately, most of the vessel's starboard side is missing. The port side, is still quite intact and gives excellent information on the framing pattern and construction of the vessel. Severe burn marks on the vessel indicate a fiery end.

In the two weeks at Castle Island, the crew took turns spending the night on site in the SS *Castle Queen*, our large houseboat, and diving took place from our sturdy pontoon boat. While temperatures and weather ranged from 50-90 plus degrees, and from sunny to violent thunderstorms, the crew maintained high spirits and continued to work hard throughout the project.

With crew chiefs Larkin Post and Sarah Milstead, students entered the water and began mapping every day by 9am. Visibility was 5-8 inches on a good day and zero on a bad one (or when the dredge was running). The divers spent the first few days on site laying the baseline and cross lines, and triangulating the ends to make them into perfect 10 foot by 10 foot square grids. Meanwhile, the land team took over the job of surveying the vessel in relation to the vessels mapped in 1998. GPS coordinates were also acquired to relocate the site in the future.

We planned to return to the site this fall, and then again during the winter, to pursue further archaeological research; unfortunately, the coming of hurricane Floyd and resultant flooding scuttled those plans.

This mystery vessel is my thesis topic, which will be defended in the fall of 2000. If anyone has any information that may prove helpful please contact me at kle0502@mail.ecu.edu.

-Kimberly Eslinger

The Polias Project

The evening of 6 August, I faced a very happy archaeology crew. It was the last day of the *Polias* Project. On Metinic Island, a small midcoast Maine island, team members finished up the last elements of the wreck-site map as the smell of freshly cooked lobster floated through the air. Other team members collected wood for a bonfire that would be the night's entertainment after the well-earned lobster dinner. With a few less than adequate words of thanks to the crew, fieldwork for the *Polias* Project came to an end. The project was an unqualified success.

The concrete steamer *Polias* was a product of a nation that found itself in desperate need of additional shipping tonnage as America entered World War I. The 273- foot, 3500 dead weight tonnage collier was built in New York. Returning from its fifth voyage on February 6, 1920, the ship strayed off course during a blizzard. Shortly before 6:30 p.m., the ship, off course nearly a mile, grounded on 'Old Cilley Ledge' six miles west of Metinic Island. The force of the impact all but welded the ship to the ledge where it remains today.

Seventy-nine years later, an underwater archaeological crew from East Carolina University conducted a two week non-invasive survey of the *Polias's* remains. This crew included: Cathy Fach, Dede Marx, Mike Plakos, Matt Muldorf, Kim Eslinger, Mike Hughes, Tane Casserley, Russ Green, Sarah Milstead, Matt Lawance, Frank Cantelas as faculty adviser, Steve Sellers as DSO, Larkin Post as principle investigator and Ripley as team mascot.

The crew quickly fell into a daily routine, having a hot breakfast followed by loading the workboat, R/V *Shearwater*; for an by 8:00 a.m departure. The first diver usually entered the water at 9:30 a.m., with the entire crew making 26 to 38 total dives a day. Dive operations were conducted in a rotation that placed only half the divers in the water at one time. Maximum depth on the site was just under 35 feet and average water temperature hovered around 60 degrees at the surface and near 50 degrees at the bottom. All divers had the option of us-

ing dry suits, but many found the use of heavy wet suits preferable as they improved maneuverability.

Over ten working days, the team mapped all major sections of the wreck, including the engine, shaft and propeller, the bow and chain locker, boiler remains, and eargo handling equipment. Though the ship had broken up, it was still in large segments, 60' by 40' being the largest, and after some de-kelping, these sections were easily mapped.

Weather during the project, with the exception of some fog, was generally favorable, and work was completed a day ahead of schedule. Thank you, one and all, who were involved in making the *Polias* Project such a success.

-Larkin Post

Remember Maine!

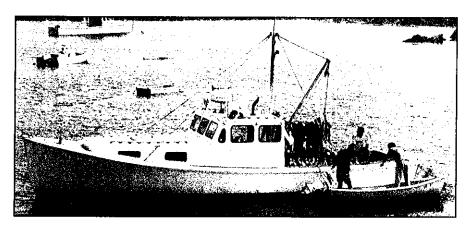
With fond memories of the *Polias* project still fresh in the minds of ECU students and staff, a second summer of fieldwork "down east" is currently being planned. The project will consist of a Phase II survey of a Revolutionary War vessel suspected of taking part in the ill-fated Penobscot Expedition during the summer of 1779.

The largest American naval operation of the Revolution, the expedition was

charged with preventing newly arrived British troops from erecting a garrison at Castine, Maine, near the mouth of the Penobscot River. Though only a modest earthworks when the rebel flotilla arrived, Fort George was unsuccessfully besieged by American land and naval forces for nearly two weeks. Upon arrival of a Royal Navy detachment out of New York, the rebels effected a chaotic retreat up the river and, in the end, twenty-six American vessels were scuttled and burned by their crews at various points in the river, from Searsport to Bangor.

The wreck to be surveyed lies in a tidal flat at Devereaux Cove. across the river and one mile north of Castine. Firmly ensconced in thick mud, the visible remains consist largely of floor timbers and cover an area approximately 30 feet by 15 feet. Dr. Warren Riess, an authority on the history and archaeology of the Penobscot Expedition, has kindly agreed to lend his expertise to the project. Dr. Riess is currently at the University of Maine's Darling Marine Center. Fieldwork on the Devereaux Cove vessel is scheduled for the second week in July. Details on island accommodations will be forthcoming.

-Russ Green



Unloading the R/V Shearwater after a long day of diving and mapping.

Investigation of A Second Jeffersonian Gunboat

During three weeks in July 1999, nautical archaeologists and graduate students from East Carolina University's Program in Maritime Studies conducted a Phase II and limited Phase III archaeological investigation of a wreck located in St. Leonard's Creek, Calvert County, Maryland, The National Park Service American Battlefield Protection Program, Department of Defense Legacy Resources Management Program and Maryland Historical Trust provided funding and support for the archaeology and subsequent artifact conservation and report preparation. The purpose of the excavation was to identify the wreck, determine if it was one of two Jeffersonian gunboats from the War of 1812 Chesapeake Flotilla, and assess its potential for inclusion on the National Register of Historic Places.

Two Jeffersonian gunboats were reported scuttled adjacent to one another in St. Leonard's Creek to prevent British capture in 1814. During archaeological excavations in 1998, one wreck site, labeled Vessel D1, was discovered in St. Leonard's Creek, and identified as a Chesapeake Flotilla Jeffersonian gunboat (see Enright 1999, An Archaeological and Historical Survey of a Jeffersonian Gun-

boat, MA thesis, East Carolina University). The investigation uncovered components of a second, separate vessel lying adjacent to D1, labeled Vessel D2. Following analysis of the D1 site, it was determined that a second field season focusing on D2 would answer many questions. Most significantly, discovery and identification of a second Chesapeake Flotilla Jeffersonian gunboat would not only provide vital information about an American War of 1812 naval force, but also provide two physical examples of a fledgling United States Navy vessel; a unique, often overlooked, vessel type of which little is known.

The 1999 archaeological investigations centered on the hypothesis that if Vessel D2 resembled D1, then the identification of both as Jeffersonian gunboats would be solidified. Archaeologists battled extreme heat, sea nettles, zero visibility and several feet of mud, clay and razor-sharp oysters. Restricted by time and money constraints, a simple trilateration method with a baseline and a series of transects was used for underwater documentation. Visibility was a limiting factor, but with patience and experience, well-trained archaeology students managed to uncover and precisely record areas necessary for comparison. Selection of areas was based on the 1998 D1 investigation so D2's bow, stern, and

a section of hull framing were chosen for inspection and comparison.

Due to the disarticulated nature of Vessel D2, timbers were mapped in situ and then removed to shore for closer examination and analysis. From the initial stages of excavation, it was clear the D2 components closely matched those found on D1. So much evidence was available, that it can be stated that the vessels are, in fact, the remains of both War of 1812 Jeffersonian gunboats scuttled in 1814.

Built in 1808 in Baltimore, Jeffersonian gunboats Numbers 137 and 138 were added to Commodore Joshua Barney's Chesapeake Flotilla to help protect against British depredations in the bay. Their careers were short as the entire flotilla was driven into St. Leonard's Creek and blockaded. Barney's American flotilla and the British Royal Navy participated in several skirmishes in the creek. As the gunboats were considered poor-sailing unwieldy vessels, Barney had them both stripped and sunk before the flotilla's breakout. Barney's decision guaranteed preservation of two Jeffersonian gunboats in the anaerobic mud of St. Leonard's Creek.

As so little was documented in the historic record concerning this vessel type, the ability to study a physical example, much less two, is an extraordinary and rare opportunity. Through careful analysis and continued research and investigation, the wooden remains of these two relies buried in Maryland's soil will enlighten scholars about an important aspect of this nation's rich naval history (For a more detailed analysis and interpretation of the 1999 findings, see Enright 1999, Nautical Archaeological Investigations of Jeffersonian Gunboat Number 138, MS on file, Maryland Historical Trust).

-Jeffrey M. Enright



Jeff Enright and Larry Babits examine artifacts from the War of 1812 Jeffersonian gunboat.

Mona Island Survey

In September a diverse group of underwater archaeologists arrived on Mona Island, a remote speck of land rising from the deep waters of Mona Passage forty miles off the west coast of Puerto Rico. It is surrounded by formidable, two hundred foot cliffs broken in just two areas, Sardinera on the west and Playa Pajaro on the southeast, where beaches and anchorages can be found. Over the past five hundred years, mariners have sought supplies and shelter on the island but today it is a natural preserve administered by the Puerto Rico Department of Natural Resources.

The survey is the first systematic inventory of submerged cultural resources of Mona Island's waters and is under the direction of maritime student Richard Fontanez. It brought together an unusual group including James Timber (Puerto Rico Department of Natural Resources), Roger Smith (Florida State Underwater Archaeologist), K.C. Smith (Florida Division of Historical Resources), Jerome Hall (Executive Director, Institute for Nautical Archaeology), Wayne Lusardi (NC Division of Archives and History, Underwater Archaeology Unit), Frank Cantelas (ECU), and Patrice Reyes who prepared splendid evening meals. The National Oceanic and Atmospheric Administration provided funding through a coastal zone management grant to the Department of Natural Resources. This is the first year of a four-year project to examine the waters around Mona, an area largely unstudied. The inventory is the initial step in developing a management plan for the island's submerged cultural resources, which will also consider marine life found on underwater sites. Each site discovered during the survey was examined by marine biologist James Timber to see what kind of sea life inhabits the area. This year's field season discovered numerous submerged materials demonstrating the island's use for nearly 500 years.

Despite the forbidding coastline, Mona has a long history of human occupation, beginning with the pre-Columbian Taino Indians who left behind pictographs and petroglyphs in some of the island's caves. In the early colonial period, Mona Passage was the major route into the Caribbean for European seafarers. Mariners traveling through the passage often stopped at the island for water and food including Ponce de Leon. During the nineteenth and early twentieth centuries, guano miners worked the island's caves. The Department of Natural Resources acquired the island in 1975 to create a natural preserve.

This year, the project surveyed the Sardinera anchorage using tow boards and a magnetometer. The Department of Natural Resources provided two boats for the survey and site documentation. A large variety of sites were encountered, but the most revealing finds were the numerous anchors illustrating the island's historic importance. The anchors show continuous use of the island from the sixteenth to the twentieth century, which included periods of exploration, colonization, piracy and war.

-Frank Cantelas

MSA News

The Maritime Studies Association hosted a number of successful events during 1999. Officers for the 1999-2000 academic year are: Tane Casserley, President; Michael Plakos, Vice-President; Kim Eslinger, Treasurer; and Deborah Marx, Secretary. Matthew Lawrence is MSA's representative to ECU's Graduate Student Advisory Council.

MSA's goals for this year are: to coordinate academic and social events for members, to purchase and maintain academic aids, and to provide an open forum concerning Maritime Studies at the university. An internal Zip drive was purchased with funds from the Graduate Student Advisory Council, and installed in the multimedia computer station at Eller House.

MSA sponsored a number of social activities this year, including a reception for incoming students, and the annual Halloween party held at Mark and Candace Padover's house. Costumes ran the gamut from the hastily thrown together to authentic chain mail armor with hand forged swords. Additionally, MSA brought back underwater hockey; the scason is in full swing and new participants are always welcome.

-Tane Casserley



Field Crew in Puerto Rico: Frank Cantelas, Wayne Lusardi, Roger Smith, K.C. Smith, Patrice Reyes, Jerome Hall, Richard Fontanez, and James Timber:

NC UAU Internship

Every year the North Carolina Department of Youth Advocacy sponsors a summer internship at the North Carolina Underwater Archaeology Unit (UAU) at Fort Fisher. This past summer, I was fortunate enough to be the recipient of that internship. Primarily, the job entailed working in the UAU's artifact conservation lab. However, the two-month internship also provided numerous opportunities for hands-on experience in other aspects of archaeology such as remote sensing, site mapping, historical research, equipment maintenance, and public education.

For the majority of the internship, I worked with Nathan Henry, head conservator for the UAU, and with Wayne Lusardi, chief conservator for the *Queen Anne's Revenge* project, Julep Gillman-Bryan, the UAU's technician, Mark Wilde-Ramsing, archaeologist, and Richard Lawrence, director of the UAU. My primary objective was to complete

conservation of artifacts collected from the CSS North Carolina, a Civil War Confederate ironclad that sank in the Cape Fear River near Southport. Many of these artifacts are now on display at the Southport Maritime Museum in Southport, North Carolina.

I also participated in lab and field work concerning the wreck believed to

be the *Queen Anne's Revenge*, Blackbeard's flagship. In late June, we worked at the QAR site, located about two miles off Beaufort, NC. The purpose of this particular field expedition was to conduct a magnetometer survey using a gradiometer placed at predetermined points along a grid constructed over the site, to find buried iron objects.

Discoveries were made. Most

interesting are several cloth fragments, animal bones, ceramic pieces, and two hand grenades that still contain powder.

In August, I went to Elizabeth City, NC, with the UAU team where we conducted a magnetometer survey in search of the *Black Warrior*, a Confederate schooner that sank in the Pasquotank River. The *Black Warrior* was part of the famous Confederate Mosquito Fleet, which was destroyed during the defense of Roanoke Island and Elizabeth City in February 1862. The *Black Warrior* was located in two days. She was in excellent condition, in ten feet of water.

This internship was an invaluable resource for gaining practical skills in underwater archaeology. Working extensively in both the field and conservation lab, was an experience that complemented what I was taught in a classroom. The internship was a product of the close relationship between the UAU and the Maritime Studies Program. For the benefit of the students, I hope that the rela-

tionship will continue to develop.



NC State Underwater Archaeology Unit director Richard Lawrence.

S.S. Winfield Scott Project — Summer of 2000

This coming summer ECU students, in conjunction with the National Park Service, NOAA, and the state of California, will travel to California's Channel Islands to document the remains of the S.S. Winfield Scott, a mid-nineteenth century Gold Rush steamer. The wreck is located ten miles off the southern California coast. Built in 1850, in New York, the steamer played a pivotal role on both coasts of the United States, and made regular trips from New York City to New Orleans. The ship transported goods and passengers along the United States coasts. Changing routes in 1852, she rounded Cape Horn and started service between San Francisco and Panama. Between 1852 and 1853, the Winfield Scott steamed along the Pacific coast carrying passengers, freight, and California gold, to and from San Francisco. Various steamship companies owned the Winfield Scott and profited from the lavish accommodations the steamer provided for its passengers.

On the morning of I December 1853, the Winfield Scott left San Francisco for Panama, carrying several hundred passengers and a shipment of gold. The following evening, the ship missed the Santa Barbara channel and ran into the rocks off Anacapa Island. All of the passengers climbed into lifeboats and rowed to a beach on the island. Before the ship sank, the crew carried supplies to the passengers on shore, as salvage attempts were made to recover portions of the machinery and cargo.

The project is scheduled for the last week in July and the first week in August. For further information contact Dede Marx at; Dmarx0405@aol.com.

-Dede Marx

The Pohnpei Shipwreck Survey, August 1999

The Pohnpei Shipwreck Survey team conducted two weeks of fieldwork in Pohnpei, Federated States of Micronesia. Pohnpei, known historically as Ponape or Ascension, is three thousand miles west of Hawaii, lying about 7 degrees above the equator. This island was a popular rest stop and watering hole for whalers and traders during the 19th century. Eleven ships are recorded as wrecked during this century, including four whaling vessels sunk by the CSS Shenandoah during the U.S. Civil War. Research into this incident led to the field project undertaken this past summer.

The three-member team consisted of Don Froning Jr., a graduate student in the Maritime Studies program, Martina Kamaka, MD, and myself. Don served as lead diver and Martina served as surface tender and alternative diver. Our base of operations was the Ponape Agriculture and Trade School (PATS) located in Madolenihmw province. This is also the location of the Marine Environmental Research Institute of Pohnpei (MERIP). Special thanks go to the staff at MERIP, director Greg Muckenhaupt, SJ, Laura Rice and Luan, our boat operator and local guide, for their invaluable help.

Our goal during this phase was to survey as much of Pohnahtik Harbor in Madolenihmw province as possible. Pohnahtik, also known as Lohd, Middle, or Second Harbor, is described in 19th century whaling logs and journals as an ideal anchorage. This is also the identified location of five shipwrecks, all whalers. While conducting an underwater visual survey of Pohnahtik, we discovcred evidence of a wreck. The debris is of a wooden hulled vessel with copper sheathing. Scattered in one area are large bricks, a strong indication of whaling wrecks, especially if found in conjunction with ballast stones. The bricks were used to build large stoves called 'try works' on the deck of the ship to melt whale blubber into oil for storage. Unfortunately, we were unable to locate any debris indicative of ballast stones. However, the proximity of the bricks in close association to the hull remains, coupled with archival research indicating whalers were the only ships to sink in this particular harbor, make a compelling argument that this is a whaling ship.

Archival information suggests, this ship is most likely the remains of a whaler sunk by the CSS *Shenandoah* during the U.S. Civil War. Of the five whalers lost in this harbor, four were sunk in 1865 by the *Shenandoah*. The last surviving grandson of Captain Eldridge of the whaleship *Harvest*, who settled in Pohnpei after his ship was lost, supports this theory. I had the opportunity to meet with him during my stay. His family's oral history mentions a location similar to our site where his grandfather's whaling ship sank.

In addition to the discovery of this wreck, the survey team conducted an underwater visual survey of the entire Pohnahtik Harbor, at a depth of between 25-30 feet. At this depth, coral formations end and the wall of the harbor becomes covered in silt. It seemed likely that we would find debris within this area that could be easily identified as cultural remains. In fact, it was at this depth that the above mentioned wreck was located on day three of our survey. The remainder of the harbor did not yield additional cultural debris.

The survey substantiates my contention that this harbor has not been widely used during the 20th century. While there we saw small canoes used by individuals for fishing but no indication that this harbor sees much activity. Underwater, there is virtually none of the 20th century debris such as bottles, plastic, or fishing line one would expect within an active harbor. Further investigation is strongly warranted.

Information about this research is on the University of Hawaii Marine Option Program web page at: http://www2.hawaii.edu/mop/gmahcp/pohnpei_shipwreck_survey.htm. The next stage is to complete the final report, documenting the photos and slides and drafting a rough sketch of the wreck site. I will also be presenting my findings at the annual Society for Historical Archaeology meeting in January 2000.

Funding for this project was made possible through grants from the

University of Hawaii Arts and Sciences Advisory Council and the American Association of University Women – Hawaii Chapter. Special thanks goes to Dr. Michael W. Graves, Department of Anthropology, University of Hawaii, and Dr. William Still Jr., Kailua-Kona, HI.

Pohnpei Phase Two: Summer 2000

Plans are underway to conduct Phase Two of the Pohnpei Shipwreck Survey in summer 2000. Phase Two is a comprehensive mapping of the shipwreck discovered during Phase One, plus additional survey work in other harbors mentioned in the historical record. These include Rohnkiti Harbor in Kiti province, the main portion of Madolenihmw Harbor and the reef area off the island of Nah Pali.

Eleven ships are listed in the historical record as sinking in the harbors surrounding Pohnpei. The first, a British whaler named the *Falcon*, was lost in 1836. The last, the Hawaiian bark, *Kamehameha V*, sank in 1873. None of these ships have been documented. During World War II, several Japanese supply vessels are known to have sunk near the coast. There is still so much to be done before a comprehensive survey of all submerged cultural resources in Pohnpei is complete.

For more information on future investigations, contact Suzanne Finney at: sfinney@hawaii.edu. To learn more about Pohnpei and the Federated States of Micronesia, check out www.fm

-Suzanne S. Finney, MA

(Editor's Note: Suzanne is currently a Ph.D. student in the Coastal Resources Management Program at ECU.)

War of 1812: The Upper Elk River Preliminary Survey

By the close of 1812, the Royal Navy had accomplished little in its second war with the United States. Indeed, the young American Navy fared well against the dominant British Navy. The following year, British Admiral Sir John Borlase Warren and Rear Admiral George Cockburn agreed to adopt a more aggressive approach towards the United States. The two admirals opened the 1813 campaign with a series of raids along the shores of the Chesapeake Bay designed to disrupt commerce and disable American naval vessels stationed within the bay. The Chesapeake campaign was also designed to divert American forces from the northern states and Great Lakes region in order to take pressure off comparatively weak British-Canadian forces. The British, not confident of taking Baltimore at this time, focused on attacking smaller ports. On 28 April 1813, the British sailed for the village of Frenchtown, located on the Upper Elk River at the head of the Bay. The British were interested in Frenchtown primarily because it was situated at one end of the Baltimore-Philadelphia stage road, and constituted a vital link between the Chesapeake and Delaware Bays. The road considerably shortened the length of time it took goods and travelers to move between Baltimore and Philadelphia. The British targeted Frenchtown hoping to disrupt commerce in the northern part of the Bay.

Upon their initial approach, the British were fired upon from a small battery manned by local militia. The British soon overpowered the battery and began burning the town, destroying large quantities of flour and military goods, along with several vessels lying at anchor near the wharf.

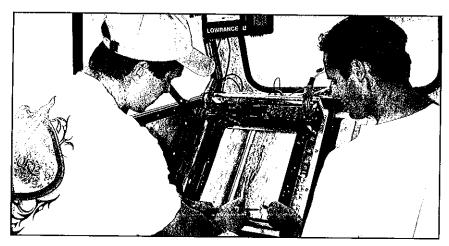
This past October, the site of Frenchtown saw another force heading up the Elk River, though this time they were not on a barge armed with cannon and marines. Rather, this force motored up the Elk in the *Bay MMAP*, Maryland Historical Trust's underwater archaeology research vessel. The vessel's crew consisted of Maryland Historical Trust underwater archaeologist Steven Bilicki,

East Carolina University Staff underwater archaeologist Frank Cantelas, and East Carolina University Maritime Studies Program students Michael Hughes, Jeff Morris, Jenna Watts, and myself. Armed with an EG&G 260 Side Scan Sonar and a Geometrics 866 Magnetometer, the survey was an attempt to locate vessels sunk by the British in 1813.

The area we initially decided to survey was littered with submerged tree stumps, logs, and an assortment of other obstacles. After some deliberation, we decided to modify the search and concentrate on an area that was more likely an anchorage during 1813. Towards

structed of wood held together with iron fasteners. Much of the wreck was covered with ballast stone and sediment; however, we felt a number of exposed frames and portions of inner and outer hull planking.

Limited by time, we were unable to discern anything further about the site, though we were content with what was accomplished. A subsequent project is currently being planned for the spring of 2000, the results of which will comprise a large portion of my thesis. The project will attempt to determine the vessel's identity and how it fits into the local history.



ECU students Jeff Morris and Michael Plakos examine an anomaly recorded by the side scan sonar.

the end of a long day, two vessel-shaped anomalies appeared on the side scan readout. Other anomalies were subsequently recorded, but the first two appeared most promising. Our confidence was further bolstered after we consulted Mike Dixon at the Cecil County Historical Society in Elkton, Maryland. Mike provided us with a number of historical sources about the area of Frenchtown during the War of 1812, including an eyewitness account describing the attack on Frenchtown in 1813.

Diving on the anomalies proved challenging because of near zero visibility conditions. On the first anomaly, we found a plastic steering wheel still attached to the center console of a small modern vessel. Ruling this vessel out as a War of 1812 vessel, we proceeded to ground truth the remaining anomaly. This too proved to be a vessel, and was con-

We would like to thank the American Battlefield Protection Program, the Maryland Tourism Development Board, the Maryland Historical Trust, the Susquehanna Museum of Havre de Grace, and the Cecil County Historical Society, who all gave us assistance during this project. Questions or comments can be forwarded to Michael Plakos at his email address: mjp0728@mail.ecu.edu

-Michael Plakos

The Monitor: A New Look

Early on the morning of March 9, 1862, the first ironclad warships to meet in battle faced off at Hampton Roads, Virginia. Though an important chapter in our nation's history, the battle ended in a draw with no significant damage to either vessel. The USS Monitor and CSS Virginia (formerly the USS Merrimac) never met in battle again. In May 1862, the Virginia's crew destroyed their vessel to prevent its capture and in December the Monitor was sent south. While in transit to Beaufort, North Carolina, the Monitor was caught in a gale off Cape Hatteras. Around midnight on December 31, 1862, the Monitor began to take on water and sink. An accompanying vessel, the Rhode Island, rescued most of the crew, but the famed ironelad sank beneath the water not to be seen again for over 100 years. After being rescued from the sinking Monitor, the Paymaster, William Keeler, wrote to his wife "What the fire of the enemy failed to do, the elements have accomplished."

The Monitor was discovered in 1973 by a team of scientists testing the applicability of using marine geophysical survey equipment to conduct marine archaeological surveys. The interdisciplinary team was led by John G. Newton of the Duke University Marine Laboratory and included geologist Dr. Robert Sheridan from the University of Delaware, researcher Dorothy Nicholson from the National Geographic Society, nautical archaeologist Gordon P. Watts, Jr. from the North Carolina Department of Cultural Resources, and engineer "Doc" Harold E. Edgerton from the Massachusetts Institute of Technology (MIT). The Monitor is located 16 miles southeast of Cape Hatteras, in 200 feet of water. On January 30, 1975, the Monitor became the nation's first marine sanctuary under the jurisdiction of the National Oceanic and Atmospheric Administration (NOAA).

In 1999, Robert Church, a marine archaeologist for C & C Technologies, Inc. (C & C), contacted John Broadwater, the manager of the *Monitor* National Marine Sanctuary, to request permission to conduct a

side-scan sonar and multibeam survey of the *Monitor* site. After getting clearance from NOAA to conduct the survey, marine archaeologist Daniel Warren and survey chief, Paige Melancon oversaw the survey operations on board C & C's 240 foot research vessel, *Ocean Alert*.

At the time of the survey, R/V Ocean Alert was equipped with a Klein 5500 Side-Scan Sonar and a Simrad EM300 multibeam system. Positioning was accomplished using a Satloc differential GPS. The Klein 5500 is a high resolution, high-speed, side-scan sonar. It has a 455 kHz operating frequency and is a multibeam sonar using 5 beams per side, which allows faster survey speeds than conventional sonars using only one beam per side. Its operating speed ranges from 2-10 knots with up to 150 meter range scale per channel. The Simrad EM300 Multibeam Echo Sounder is designed to perform seabed mapping in water depths ranging from 20 to 4,000 meters. The EM300 utilizes 137 beams and has a 30 kHz operating frequency. The unit has a coverage capability of 140 degrees and the transmit beam steering compensates for roll, pitch, and yaw. The survey was designed to provide complete multi-sided coverage of the Monitor site for optimal data acquisition.

The *Monitor* is lying upside down, listing slightly to the south-southwest with the bow pointing westward. The famous turret is located slightly pro-

truding from the port stern quarter obscured by the acoustic shadow in the image below. An intact section of the flat lower hull can be seen directly forward of the damaged skeg assembly that supported the Ericsson propeller. The anchor well is clearly visible at the bow. Much of the visible structural damage seen is suspected to have come from depth charges during World War II when the vessel was likely mistaken for a German U-boat.

C & C Technologies, Inc., based in Lafayette, Louisiana, is a global survey company founded by Thomas and Jimmy Chance. C & C specializes in high resolution geophysical surveying and mapping. They are the first organization in the world to purchase the complete suite of Simrad Multibeam Echo Sounders and also one of few companies that own the Klein 5500 side-scan sonar. Robert Church and Daniel Warren, both trained at ECU's Program in Maritime History and Nautical Archaeology, are the staff marine archaeologists at C & C.

-Robert A. Church & Daniel Warren

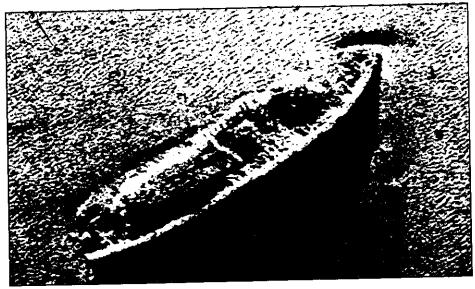


Image of the Monitor collected with the Klein 5500 side scan unit on the 75 meter range scale at a survey speed of 6 knots.

"Triumph of the Human Spirit."

On 15 October 1999, a new exhibit opened in the North Carolina Collection of J.Y. Joyner Library. "Friday Jones: Triumph of the Human Spirit," embraced the importance of the American slave narrative both in American and in North Carolina history. During a 1997 cataloguing project in the North Carolina Collection, the only known catalogued copy of "Friday Jones an Autobiography, A Record of his Trials and Tribulations in Slavery" published in 1883 was discovered. The narrative focuses on his life as a slave in Wake County from 1810 to the time of his emancipation during the Civil War.

Friday Jones was a unique man in a challenging time. He tried desperately to keep his family together in the face of almost overwhelming odds. He was born a slave in 1810, then lost his parents at a very young age. As time passed, Friday met the woman of his dreams and proceeded to have a family with her. Their life together during slavery was difficult as they were owned by different people, and were often separated during Jones's work on the State Capitol in Raleigh, and his time working on the Raleigh & Gaston Railroad. Friday tried to hold his family together and keep them safe until emancipation in 1865. After the Civil War, Jones gained more and more prominence in Raleigh and in the African American community. His rise peaked in the 1880's when was introduced on the floor of the House of Representatives in Washington, DC, and he held the position of Chairman of the Committee of Arrangements for the Emancipation Celebrations in Raleigh. At his death in 1887, blacks and whites alike in Raleigh recognized Jones as a prominent figure.

When this project began, all we knew about Friday Jones was what he told us in his autobiography. Thus, interested in finding out more about the book and author, the head of the North Carolina Collection, Maury York contacted Maritime Program director Tim Runyan to inquire about the possibility of a graduate assistant to research Jones'

life. When Dr. Runyan approached me about the project I was hesitant at first, but the opportunity seemed to be a good one to practice my research skills.

Friday Jones does not appear often in historical documents. I read every issue of every paper published in North Carolina from 1810 to 1887. For a month, I read all the papers until I finally found Friday's obituary.

My research progressed in this manner for months, I would read and dig for a month or weeks and suddenly find a key document to another string of information. Numerous trips to the Library of Congress in Washington D.C, the University of North Carolina at Chapel Hill, the Division of Archives and History in Raleigh, Roanoke College in Salem, Virginia, and Duke University in Durham, finally gave me most of the pieces to the puzzle of Friday Jones' life.

After a year of research, I began to prepare for the public forum that developed out of this project. Speakers were invited for their expertise; a new edition of the original narrative was republished with a prologue by Maury York and myself, with an introduction by Dr. William Andrews from UNC Chapel Hill. Finally the exhibit was completed and it all came together. We received funding from the North Carolina Humanities Council and a generous grant from Dr. and Mrs. Charles Moore to pursue the research. Dr. Charles Haley came from the University of North Carolina-Wilmington, and talked about the changing sentiment towards African Americans during Reconstruction. Dr. Andrews addressed the topic of the American slave narrative, a subject on which he is the foremost expert. East Carolina University's Dr. David Denard addressed the importance of the slave family and a slave's life in North Carolina.

I foolishly believed when the project began that the hardest part of it would be the historical research. I was wrong; perhaps the most difficult part of all this was to find a way to put an exhibit together that would do justice to this remarkable man. While I didn't have room for every piece I wanted to include, there was just enough space to celebrate the life of a man who truly did triumph over inconceivable odds. Friday Jones's

life truly is a triumph of the human spirit.

With the forum over now, and the exhibit up, I am happy to say that the opportunity was an incredible experience. I worked not only with some of the foremost experts on slavery, and learned about an amazingly humble man who departed this earth 112 years ago; a man who worked not only to protect his family during a dangerous time, but who also united his community in their freedom. If you are interested in learning more about Friday Jones, the exhibit or publication please contact either Mr. Maury York in the North Carolina Collection at #252-328-6602 or myself kle0502@mail.ecu.edu.

-Kimberly L. Eslinger

Maritime Studies Ph.D. in Coastal Resources Management

What do shipwrecks, aquatic biology, marine geology, fisheries management, and coastal development have in common? These are all study areas in the new Coastal Resources Management Ph.D. program at ECU. This new interdisciplinary doctoral program was the brainchild of Dr. William Queen, Director of the Institute of Coastal and Marine Research. Dr. Stanley Riggs in Geology and Dr. Robert Christian in Biology helped him in the formative stages, which took nearly a decade. Maritime Studies' Dr. Michael Palmer was on the steering committee, Dr. Runyan and Frank Cantelas wrote the proposal for the Maritime Studies track.

Twelve students were admitted to the inaugural class specializing in four "tracks" within the program: Ecology, GeoScience, Social Science, and Maritime Studies. Two of the students admitted are concentrating in the Maritime Studies track: Suzanne Finney and Rick Jones. Suzanne comes from the University of Hawaii where she has been working in Micronesia studying whaling vessels sunk by the Confederate raider Shenandoah. One of Suzanne's current

interests focuses on cultural resource management in Micronesia. Rick is a former "maritimer" who received his MA in 1996. Rick's interest is in coastal development and its effect on traditional maritime communities.

In conjunction with a field of specific concentration, students are required to take a total of 18 hours in two of the other disciplines. This brings together the biological, geological and social sciences, along with maritime studies, to create a unique understanding of coastal issues from a diverse viewpoint. Dr. Thomas Feldbush, vice chancellor for Research and Graduate Studies, stated "There is no program in the country today that combines those four disciplines; this is the first. I think it is the exact combination for people who are going to be involved in sustainable development and eco-tourism in coastal regions."

The program director, Dr. Lauriston King, feels that; "We now recognize that there is a need for a doctoral program designed to meet the needs of resource management practitioners and those needs are based on the integration of disciplines rather than the pursuit of individual disciplines." Dr. King went on to say "There are very few Ph.D. programs in the world that are deliberately designed to have an interdisciplinary focus in coastal resources management. Other programs were based nor responding to the needs of international law of the sea, territorial boundaries, fisheries depletion, etc., but the approach was not to integrate other disciplines into the program."

The emphasis on the interdisciplinary studies melds well with the program's goal of balancing human and environmental needs within the coastal community. Dr. Feldbush states: "I see the coastal resource management program becoming a major program at ECU. I think in this program we are training people who are ideally prepared to take positions of leadership in government and industry." On this subject Dr. King says, "One of the things we will be striving for is this balance between conservation, preservation, and development. What we are trying to do is explore alternative ways to conserve and wisely use our coastal resources."

One of the ways the program

intends to foster this balance is through internships and external research. Each student is expected to obtain external funding for his/her project and complete an internship with a governmental, non-profit, or research organization. The internship does two things: 1) allows a student to experience "real world" application of theoretical knowledge and 2) begins a networking process that, hopefully, will lead to a position within the students' field of interest.

The creation of this new program will foster new courses within the various disciplines. Each of the four departments has created or is creating courses designed for non-majors, a challenging task. Imagine having to design a graduate level course in geology or biology or maritime history for someone with no background in that subject. The department chairs are working to ensure that the quality of the courses do not suffer, while at the same time do not overwhelm students with specialized jargon. Dr. Runyan has designed a class dealing with the ethics and politics of nautical archaeology. A cultural resource management course will be offered this year.

The program will graduate people who can understand the technical jargon of the biologist or geologist, the charts of the economist, the behavioral surveys of the social scientist, and the needs of the cultural resources manager. These people can then, in turn, advise policy makers (or make policy themselves) on the preservation and sustainability of our coastlines.

- Rick Jones, MA

Society for Historical Archaeology Conference

Students and Faculty participated in the 1999 Society for Historical Archaeology Conference. Six members of the Maritime Program attended the conference in January 1999 at Salt Lake City, Utah. Thirteen of the 49 maritime papers presented were given by ECU alumni, faculty, and students. In fact, the SHA underwater program co-chairs, Matt Russell and Adrian Neidinger are former ECU students.

Three symposium chairs were ECU folks as well: Larry Babits, Bruce Terrell, and Hans Van Tilburg. Papers were presented by Jim Allan, Larry Babits, K. Bequette, John Broadwater, James Delgado, Jeff Enright, Charlie Ewen, R. Folse-Elliot, Glenn Forest, Nathan Henry, Matt Krivor, Coral Magnuson, Roderick Mather, Gordon Watts, David Moore, Bruce Terell, Hans Van Tilburg, and S. Buck. Students who made the long trip out to Utah but did not present were Wendy Coble, Doug Jones, Matthew Lawrence, Matt Muldorf, Jenna Watts, and Judy Wood.

This year's conference in Quebec, Canada, will see another large ECU contingent. Papers will be presented by James Delgado, Sarah Milstead, Jenna Watts, Dave Cooper, Jeff Gray, Ryan Harris, Wayne Lusardi, Jeff Enright, and Dr. Tim Runyan. Dr. Larry Babits once again organized the book room, and is hosting a seminar on military material culture. Suzanne Finney, one of Maritime's doctoral students, will be cochairing a session as well.

- Matt Lawrence

In Classroom and on the Battlefield

Larry Babits and his son John served as Continental Infantry privates during filming of a Columbia Pictures movie about the Revolutionary War in South Carolina. The film, "The Patriot," will be released July 4th, 2000 and stars Mel Gibson in the role of a Quaker who, after his family was brutalized by British raiders, became an American leader. Although this film is only "loosely based" on Francis Marion, it provided an opportunity for research. During breaks in the filming, Babits documented losses of equipment and uniform parts for later presentation at an international battlefield archaeology conference.

ECU Maritime Students Visit Mariners' Museum

A number of ECU Maritime Studies students, led by Dr. Timothy Runyan and Frank Cantelas, visited the Mariners' Museum in Newport News, Virginia, in April and November. The purpose of the trips was to acquaint students with museum resources, staff, and to use the library.

The ECU contingent was greeted by Dr. William Cogar, chief curator for the museum, and formerly on the faculty at the US Naval Academy. In November, he led us on a tour of the museum's newest permanent gallery, "Defending the Seas." The gallery opened earlier this fall and is a thematic presentation of the role of the U.S. Navy from its inception during the American Revolution to the present.

Cogar led everyone to the Great Hall where he shared his plan to use the room as the site for the museum's next permanent exhibit, a presentation on maritime commerce and transportation. The tour was followed by a lunch generously provided by the museum. Students had an opportunity to introduce themselves and share their individual research interests with museum staff.

The afternoon portion of the visit consisted of a 'behind the scenes' tour of the museum for first year students, while second year students settled into the library to pursue various research topics. The first year students were led through the museum's numerous storage rooms, office areas, design shops, and conservation labs. Students met conservator Angela Kotakis, who took time to talk about the artifacts presently undergoing conservation and answer questions.

Next was a stop at a tank containing the propeller and shaft from the USS *Monitor*. This gave students a first hand look at a very large artifact undergoing the lengthy conservation process that will eventually result in a public display. Chief conservator for the *Monitor* artifacts, Curtis Peterson, took time to explain the conservation process, and discussed problems specific to conserving such an enormous and valued artifact. The stop at the conservation tank was followed by a trip to the NOAA *Monitor* National Marine Sanctuary office (which is located on museum grounds). Director John Broadwater, Dina Hill, education coordinator, and researcher Jeff Johnston talked with students about the *Monitor* site, NOAA's plans for future work, and the conditions affecting archaeology on the *Monitor*.

The final hours of the afternoon found all students working in the archives with help from archivist Heather Friedle, and her staff. A number of students located crucial source material for various paper topics and thesis research.

Friday night, the ECU group enjoyed a fine dinner and surveyed the night-life of Newport News. Dr. Runyan and Frank Cantelas even led an impromptu, late night field trip to colonial Williamsburg. The next morning was spent at the library.

The trip to Mariners' Museum was an unqualified success. An important educational experience and source of research material, it also afforded participants a valuable insight into the museum world. All those that participated would like to extend their thanks to Bill Cogar and the entire staff of the Mariners' Museum. The Memorandum of Agreement between the Maritime Studies Program and the Mariners' Museum has proven invaluable, and the relationship between the two institutions will undoubtedly continue to grow.

- Marc Porter



NOAA Monitor Marine Sanctuary director John Broadwater dicusses recent diving operations at the Monitor site with Maritime Program students.



Dr. William Cogar, chief curator of the Mariners' Museum and ECU History Chair Dr. Michael Palmer.

Meet the Incoming Class of ECU Maritime Students

This year's incoming class of maritime students have varied backgrounds and research interests. They are the 19th class of students to enter the Maritime Studies Program.

Jeff DiPrizito is originally from Acton, Massachusetts. He received his BA in political science and MAT in social studies education from Boston University. His interests are the English East India Company's trade with China and the history of U.S. Life Saving Service.

Scott Emmert is from Chattanooga, Tennessee, and he received his BA in anthropology from Florida State University. Scott served as a machinist's mate in the U.S. Navy from 1989–1995 where he served on two frigates, a destroyer, and a destroyer tender. Scott's interests include frigate actions of the British Navy, 1750 to 1850.

Stephen Hammack is from Macon, Georgia, and received his BA in cultural history, philosophy, and world literature from New York University. Stephen has a certificate in German from the Goethe Institute in Germany and is interested in studying the impact of the Scotch-Irish on Ulster and the American South from a maritime prospective.

M. J. Harris grew up in England and Oregon and received her BA in archaeology from the University of Virginia. Her thesis topic concerns a thermal underwater site in Yellowstone Na-

tional Park. Her other research interests include steamboats on western rivers of the United States.

Dave Miller, a native of Plymouth, Massachusetts, received his BA in anthropology from George Mason University. He is interested in American Revolutionary War privateering in Massachusetts and New England.

Steve Mitchell is from New Bern, NC. He received his BA in history from NC State University after attending the US Merchant Marine Academy. His research interests include the merchant marine and the history of World War II.

Kevin Nichols received his BS in anthropology from Michigan State University. His research interests include the history of the American Civil War, medieval history, and military history.

Marc Porter is from everywhere but most recently from Worton, Maryland. He received his BA in history from St. Mary's College. His research interests include the maritime history of Cuba, World War II "Hell Ships," and underwater technology. He holds a 100-ton captain's license

Giovanni Wagemans is from Vosselaar, Belgium, and he received his BA and MA in art history from the University of Ghent. He worked at Christics in Amsterdam, and in the family antique business.

Scott Whitesides hails from Utah and comes to the program from Seattle, Washington. His BA is in anthropology from Utah State University and most recently he worked as a shipwright

on several historic vessels in the Seattle area. Scott's research interests include historic ship preservation, early watercraft use and design, maritime hunters and gatherers, and behavioral and ecological maritime use patterns.

Sarah Wolfe was raised in Middletown, Maryland, and received her BA in history and anthropology from Colorado State University. Her research interests include artifact conservation, muscology, and social history.

In January 1999, three new students joined last year's incoming class. While we no longer consider them to be incoming students they should be introduced as well.

Michael Hughes came to the program with a BA in anthropology from Rhode Island College and is working on a thesis about War of 1812 merchant ships lost in the Elk River, Maryland.

Dede Marx joined the program after completing her BA in political science at the University of San Diego. Her thesis is a historical and archaeological study of the SS *Winfield Scott* in the Channel Islands, California.

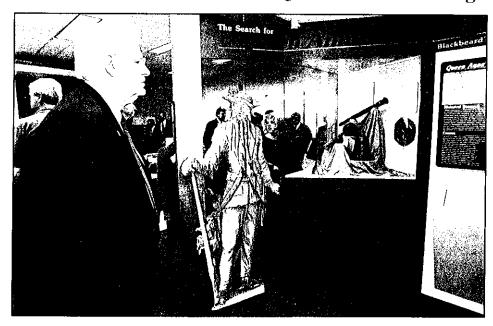
Mark Padover graduated from the University of Michigan. He worked for several years as a dive instructor and boat captain in the Florida Keys. With a 100-ton license, Mark captains the R/V *Perkins*. He is pursuing a thesis on the remains of two World War II sub chasers.

-Jeffrey DiPrizito



The Incoming Class from left to right: Suzanne Finney, Sarah Wolfe, Giovanni Wagemans, Kevin Nichols, M.J. Harris, Scott Whitesides, Marc Porter, Steve Mitchell, Mike Hughes, Jeff DiPrizito, and Dave Miller.

Blackbeard's Queen Anne's Revenge Exhibit



Chancellor Richard Eakin studies artifacts from Blackbeard's alleged shipwreck (while Blackbeard studies the Chancellor!) The exhibit was displayed at Joyner Library's North Carolina Room for ECU's Founders Day celebrations. Library director Carroll Varner, NC Collection director Maury York and Arts and Sciences Dean Keats Sparrow worked with the Maritime Studies Program to bring the exhibit to ECU.

A New Look For Eller House

We never knew quite what to expect during our daily trips to the "mother ship". A steady stream of improvements have been part of Admiral Ernest M. Eller House daily activity since late last spring. A state of confusion often met visitors, students, and professors as offices were emptied, pictures taken down and doorways hidden. The whole clan somehow survived the turmoil, although we were a little concerned that Dr. Runyan might not survive without his beloved blackboard.

Facility Services did a fantastic job. The staff picked colors for their offices that reflect their own unique personalities. The main classroom and portrait of Admiral Eller are now surrounded by the rather appropriate shade of ocean blue. Special congratulations go to Frank Cantelas and Brad Rodgers on their bold choice of office colors. The garage is now completely transformed into a wonderful computer lab so that students can all go through the torture together. The lab is fiber-optically connected and fully stocked with new computers to make our lives much easier. Even the Eller House library received some much needed renovation and organization.

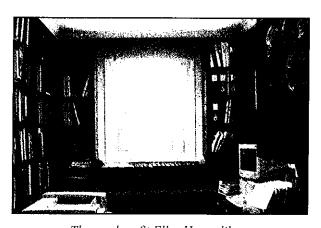
Outside Eller House, the maintenance staff have been just as busy. The shingle roof has been replaced with thirty year architectural shingles, and flat seam copper has been put onto the lower roof. The new roof will hopefully get us through a few more hurricanes with help from the brand new "K" style copper gutters. The front door is now flanked on either side by new light fixtures which give the entrance an appearance of intellectual decorum. Everything is finally back to normal, and we hope secretary Karen Underwood has recovered from the constant paint fumes.

We are very pleased with all the new paint, fixtures, and additions. Next on the agenda are new carpeting, furniture and Macintosh computers.

-M.J. Harris



Kim Eslinger, Suzanne Finney, and Doug Jones hard at work in the computer lab.



The newly refit Eller House library.

Westfield Project planned for Summer 2000

This summer a small group of graduate students from ECU will conduct a survey of the *Westfield* site. The remains of the vessel, once serving as the Staten Island Ferry in New York, lie close inshore to Staten Island in the Arthur Kill.

The second Staten Island Ferry named the *Westfield*, she was built in 1862 to replace the ferries sold to the federal government for use in the Civil War. The *Westfield* had a notorious reputation among New Yorkers stemming from a boiler explosion which killed close to 100 passengers in July 1871. The vessel was rebuilt and returned to service until 1912, when she was stripped and scuttled in her present location.

Slated for the beginning of July 2000, the *Westfield* project will involve five or six graduate students and will last one week. Any questions or information about the project should be directed to Matthew Muldorf via email at msm0710@mail.ccu.edu.

-Matthew Muldorf

Scholarships awarded to Maritime Students

On Monday, December 6, 1999 five maritime students were awarded scholarships at the History Department's awards ceremony. First year student Marc Porter received the Lawrence F. Brewster Graduate Fellowship in History. The first year Admiral Ernest M. Eller Award for study in Modern Naval History went to Scott Whitesides. The second year Eller award was given to Sam Belcher to pursue his research on naval medicine. The Babara and Matthew Landers Fellowships were awarded to Russell Green for his work in the Penobscot River, and to Mark Padover for his thesis work on navy sub chasers.

Faculty & Staff Publications and Papers

<u>Larry Babits</u>

Co-authored w/Waldemar Ossowski (Museum Morskie, Gdansk, Poland) "1785 Common Sailor's Clothing and a Ship's Camboose from General Carleton of Whitby." *Underwater* Archaeology 1999:115-122

Review of The Voyage of the Frolic: New England Merchants and the Opium Trade, by Thomas N. Layton in Historical Archaeology 33(2):159-160;

Review of Whom We Would Never More See: History and Archaeology Recover the Lives and Deaths of African American Civil War Soldiers on Folly Island, South Carolina, by Stephen D. Smith in Historical Archaeology 33(2):162-63

Review of *Winfield Scott: The Quest for Military Glory*, by Timothy D. Johnson, in *Choice* March 1999;

Review of Academy on the James: The Confederate Naval School, by R. Thomas Campbell, in Choice June 1999

Review of For Honor, Glory, and Union: The Mexican and Civil War Letters of Brig. Gen. William Haines Lytle, edited by Ruth C. Carter, in Choice July 1999

Review of Civil War Generals in Defeat, edited by Steven E. Woodworth, in Choice October 1999

Review of *Dispatches from the Mexican War*; edited by George Wilkins Kendall, in *Choice* November 1999

Review of Doniphon's Epic March: The 1st Missouri Volunteers in the Mexican War, by Joseph G. Dawson, in Choice December 1999

"Common Sailor's Clothing and a Ship's Camboose from General Carleton of Whitby" (With Waldemar Ossowski) at the Conference on Underwater and Historical Archaeology, Society for Historical Archaeology, Salt Lake City, Utah.

"Eighteenth Century Sailor Clothing." Tidy's Historical Clothing Symposium, University of Delaware, Newark, Delaware.

"New Observations on the Militia at Guilford Courthouse, 15 March

1781." Guilford Courthouse Anniversary, March 1999, Greensboro, North Carolina

Over the course of the year, Babits did living history demonstrations as a sailmaker (twice), a Continental infantryman (3 times), and a Confederate infantryman (3 times). To support the living history presentations, he made clothing from a variety of periods ranging from 1585 sailor clothing to the Civil War. Some of this research involved copying archaeological specimens including a cartridge box from the *Whydah*. He was appointed to the editorial board of the University of Oklahoma Press-"Campaigns and Commanders Series."

Frank Cantelas

"Underwater Archaeology and the Maritime Studies Program" Annual Meeting of the NC Archaeological Society, Beaufort, NC

Archaeological advisor to the Great Lakes Shipwreck Preservation Society for the America Project, Isle Royale National Park.

<u> Anthony Papalas</u>

"The Development of the Athenian Trireme Navy" at The Naval History Symposium, Annapolis, Maryland. October 1999.

"Miltiades and the Parian Expedition." at the Classical Association of the Atlantic States, Lafayette College. October 1999.

Both papers will be published at a future date.

<u>Michael Palmer</u>

Stoddert's War: Naval Operations during the Quasi-War with France, 1798-1801. 2nd ed. "Classics of Naval Literature." Annapolis: Maryland, Naval Institute Press, 1999.

Lee Moves North: Robert E. Lee on the Offensive. New York: John Wiley, 1999 (Paperback edition). "Introduction." Dudley Pope. Decision at Trafalgar: Reprint edition. New York: Henry Holt and Company, 1999.

"Operation Praying Mantis." In Jack Sweetman, ed. Great American

Naval Battles. Annapolis: Maryland, Naval Institute Press, 1998.

Review of Jack Greene and Alessandro Massignani. *Ironclads at War: The Origin and Development the Armored Warship, 1854-1891.* In *The Journal of Military History* 63 (April 1999): 451-52.

Review of Jean II. Morin and Richard H. Gimblett. *Operation Friction, 1990-1991: The Canadian Forces in the Persian Gulf,* in *The Northern Mariner/Le Marin du Nord* 8 (January 1999): 137-38.

Review of Jesse Lemisch. Jack Tar vs, John Bull: The Role of New York's Seamen in Precipitating the Revolution, in The Northern Mariner/Le Marin du Nord 8 (October 1998): 114-15.

Bradley Rodgers:

Review of James Hemphil, Beneath the Waters, Guide to Civil War Shipwrecks (1998), in The Northern Mariner/Le Marin du Nord IX, 3 (July 1999).

Review of Donna Souza, Persistence of Sail in the Age of Steam (1998), in Mariner's Mirror.

"Sunken Ships and Planes of Pearl Harbor:" Given at the Wisconsin Veterans Museum, Madison, Wisconsin.

"Guardian of the Great Lakes." Wisconsin Maritime Museum, Manitowoc, Wisconsin.

"Sail, Steam and the Profit Margin in Great Lakes History." Wisconsin Maritime Museum, Manitowoc, Wisconsin.

Tim Runyan:

Review of Richard W. Unger. Ships and Shipping in the North Sea and Atlantic 1400-1800, in International History Review.

Review of Lawrence V. Mott, *The Development of the Rudder: A Technological Tale.* (Studies in Nautical Archaeology, 3), in *Speculum.*

Review of Maryanne Kowaleski, Local Markets and Regional Trade In Medieval Exeter, in the American Neptune, 1998.

Review of Harold B. Langley, A History of Medicine in the Early US Navy, in American Historical Review 104 (October, 1999): 1299-1300.

"American National Maritime Heritage." Maritime Heritage Conference, University of Portsmouth, UK, 9-11 April 1999.

"Naval Logistics and Maritime Technology, 1300-1700." Dibner Institute for the History of Science and Technology, Massachusetts Institute of Technology, 2-4 April 1999.

William Still (emeritus):

Editor, The Queenstown Patrol, 1917: The Diary of Commander Joseph Kneflet Taussig, U.S. Navy. Newport: Naval War College Press, 1997.

"David Glasgow Farragut: The Union's Nelson," in Quarterdeck & Bridge: Two Centuries of American Naval Leaders, ed. James Bradford Annapolis: Naval Institute Press, 1998).

"The Battle of Hampton Roads," in Great American Naval Battles (ed. Jack Sweetman, Naval Editor and Contributor, The Confederate Navy: The Ships, Men and Organization, 1861-1865 (London: Conway Press, 1998).

Raiders and Blockaders: The American Civil War Afloat. With John Taylor and Normal C. Delaney (Washington: Brassey's Publishers, 1998)

"Small Boat Construction in North Carolina in World War II." North Carolina Historical Review January 2000.

Carl Swanson:

Reviews published in the Mariner's Mirror, the International Journal of Maritime History, and the Nothern Mariner/Le Marin du Nord.

In addition he received the 1999 Robert and Lina Worthington Mays Alumni Distinguished Professor for Teaching Award, presented by the East Carolina University Alumni Association.

In August Carl became the Director of Graduate Studies in the History Department.

Gordon P. Watts, Jr.:

Co-authored with Michael Krivor. "Investigation of an 18th Century English Shipwreck," Bermuda *Journal of Archaeology*, 10 1998.

"Remote Sensing" at Conference on Deep Water Archaeology, MIT, April 1999

Graduate Theses In Maritime Studies

James Embrey

"A Search to Identify The Seventeenth-Century Shoreline of St. Mary's City, Maryland."

Jeffrey M. Enright

"An Archaeological and Historical Survey of a Jeffersonian Gunboat."

Timothy Marshall

"The Most Impudent Procedure in the History of Blockade Running: An Historical and Archaeological Examination of the Steamship Arabia."

Peter McCracken

"Symbolic History and Sailors: Image Development Through Song At Sea."

Cecil "Lex" Turner

"An Historical and Archaeological Investigation of the Scuppernong: A Mid-Nineteenth Century Centerboard Schooner:"

Where Are They Now?

James Allen - Institute for Western Maritime Archaeology, Berkley, CA

Ray Ashley – Director, Maritime Museum of San Diego

Adrianne Askins *- Submerged Cultural Resources Unit, National Park Service

David Beard – Curator of Maritime Collections, Maryland Historical Society

Colin Bentley - Sailing Instructor, College of Charleston

Kathryn Bequette – Director, Maritime Archaeology and Research, OELS, Evergreen, CO

Jemison Beshears* – Butterfield & Butterfield Auction House

Robert Browning, Ph.D. – Historian, US Coast Guard, Washington DC

Frank Cantelas – Staff Archaeologist, Maritime Studies Program ECU

Robert Church* - Nautical Archaeologist, C&C Technologies Survey Services

Wendy Coble - Aviation Archaeology Specialist, Naval Historical Center

Edwin Combs – Ph.D. candidate, University of Alabama

David Cooper – Resource Manager Grand Portage National Monument, MN

Diane Cooper – Consultant for the San Francisco Maritime National Historic Park.

Annalies Corbin, Ph.D.- Executive Director, P.A.S.T. Foundation

Lee Cox – Contract Nautical Archaeologist, Dolan Research, Philadelphia, PA

James P. Delgado – Executive Director, Vancouver Maritime Museum, Canada

Robert Dickens – DVM candidate, University of North Carolina School of Veterinary Medicine

Wade Dudley, Ph.D. - Visiting Assistant Professor, Department of History, ECU

Stan Duncan - Commercial Insurance Agent

Rusty Earl *- Computer Science, NC State University

Rita Folse-Elliot – Archaeologist for PBS&J, Texas

Jeff Enright - Archaeologist,

PBS&J, Texas

Sabrina S. Faber – Fulbright Coordinator, AMIDEAST, Yemen

Cathy Fach* – Instructor aboard schooner *Harvey Gamage*, Long Island University, Seamester Program, NY

Richard Fontanez* -- Contract Archaeologist, Puerto Rico

Glenn Forest* – International Association of Nitrox and Technical Divers

Paul Fontenoy – Curator of Maritime Research and Technology, NC Maritime Museum

Kevin Foster – National Maritime Initiative, National Park Service, Washington DC

Joe Friday – Sergeant, Greenville Police Department

Jeff Gray – State Underwater Archaeologist, State Historical Society of Wisconsin

Joe Greeley*- Maintenance/Interpreter *Elizabeth II*, Roanoke Festival Park

Amy Gottschamer – Real estate agent, Santa Fe, NM

Richard Haiduven* – Contract Archaeologist, Miami, FL

Wesley K. Hall – Director, Mid-Atlantic Technology, Wilmington, NC

Lynn B. Harris – Assistant Head, Underwater Division, South Carolina Institute of Archaeology and Anthropology.

Ryan Harris* — Underwater Archaeology Intern, Parks Canada

Nathan Henry* - Conservator, UAU, NC Division of Archives & History

Robert Holcombe -Director Woodruff Museum of Civil War Naval History

Claude V. Jackson – Book Editor, Wilmington, NC

John O. Jensen – Carnegie Mellon University, Pittsburgh, PA, Research fellow Williams College- Mystic Seaport Maritime Studies Program

Rick Jones- Ph.D. Candidate ECU

Chris Kirby* - Building site surveyor, Charlotte, NC.

Mike Krivor - Panamerican Maritime, Memphis

Wayne Lusardi — Conservator, Queen Anne's Revenge Project, North Carolina Division of Archives and History

Richard Mannesto – Great Lakes Historical Shipwreck Museum

Amy (Knowles) Marshall – Archaeologist, US Army, Fort Bliss, TX

Coral Magnusson – International Archaeological Research Institute, Honolulu, HI

I. Rodrick Mather, Ph.D. – Assistant Professor, University of Rhode Island

John McWatters – Bowling Green State University

Salvatore Mercogliano – Ph.D. candidate, University of Alabama

Ann Merriman – Ph.D. candidate, University College of London

Sarah Milstead* – Conservator and archaeologist, R. Christopher Goodwin & Associates

Amy Mitchell – Ph.D. candidate, Pennsylvania State University

Dave Moore - Registrar, North Carolina Maritime Museum, Beaufort, NC

Scott Moore – Ph.D. candidate, Ohio State University

Stuart Morgan – Ph.D. candidate, University of South Carolina

Jeff Morris*- Office of Naval Intelligence

John W. (Billy Ray) Morris – Ph.D. candidate, University of Florida, and Director, Southern Oceans Archaeological Research

Sam Newell – Greenville Public School Teacher

Chris Olson- Minnesota Transportation Museum

Glen Overton* - Owner, Cape Fear Yacht Sales and Carolina Beach Inlet Marina

Martin Peebles – Archaeological illustrator, St. Petersburg, FL

Larkin Post* – Nautical archaeologist, R. Christopher Goodwin and Associates

Edward Prados - Consultant, Navy Memorial Foundation, Technical Advisor, AMIDEAST, Yemen

James R. Reedy, Jr. -

Contract Archaeologist, Beaufort, NC

Phillip Reid – Gaston County Museum of Art and History

Filippo Ronca* – Intern Assistant State Underwater Archaeologist, Madison, Wisconsin

Matthew Russell – Submerged Cultural Resources Unit, National Park Service

John Schaefer - Management Consultant, Sacramento, CA

James Schmidt — Nautical Archaeologist, Naval Historical Center

Robert Schneller, Ph.D. – Historian, Naval Historical Center, Washington DC

Joshua Smith – Ph.D. candidate, University of Maine, Orono

James Spirek — Underwater Archaeologist, SC Institute of Archaeology & Anthropology

Paul Steinberg* - Building site surveyor in Charlotte, NC

Thomas Stoltman* – Northwest Michigan Maritime Museum

Lex Turner – G.I.S. Coordinator, City of Greenville, NC

Bruce Terrell – Maritime Historian and Acting Maritime Archaeologist, NOAA

William H. Thiesen – Ph.D. candidate, University of Delaware

Ray Tubby* — Underwater Archaeologist, Tidewater Atlantic Research

Hans Van Tilburg – Ph.D. candidate, University of Hawaii

Kimberly Watson* – Ph.D. candidate, University of St. Andrews, Scotland

Daniel Warren — Nautical Archaeologist, C&C Technologies Survey Services

Sarah Waters - Curator at the Wisconsin Maritime Museum, Manitowoc, Wisconsin.

Jenna Watts* – Intern at St. Michaels Maritime Museum, St. Michaels, Maryland

Wilson West – Ph.D. candidate, University of Alabama

Judy Wood *- Archaeologist, Savannah District, Army Corps of Engineers

Graduate Student Research and **Papers**

Sam Belcher – American Naval Medicine in the Nincteenth Century.

Eric Bruning – A Material Culture Study of the Artifacts from the *Maple Leaf*

Tane Casserley – The History and Archaeology of the German Cruiser SS *Geier*/ USS *Schurz*.

Jeff DiPrizito · The Coast Guard Life Saving Service in the United States.

Scott Emmert – Frigate actions of the British Navy, 1750-1850.

Kimberly Eslinger - An Archaeological and Historical Study of an Eightcenth Century Vessel in Washington, NC.

"Triumph of the Human Spirit," Public Program and Exhibit at ECU.

"Mystery Vessel at Castle Island," NC Archaeological Association Conference, Beaufort.

Suzanne Finney -- Nincteenth Century American Whaling in Micronesia.

Russ Green - The Devereaux Cove Vessel: A Phase II Survey of a Possible Revolutionary War Vessel.

Stephen Hammack -- The impact of the Scotch-Irish immigration in Georgia from a Maritime Perspective.

M.J. Harris - Study of an Abandoned Hotel Deposition Site, Yellowstone National Park

Michael Hughes – A Study of Vessels in the Elk River, MD.

Doug Jones – A Historical and Archaeological Study of the *Black Warrior*.

Mathew Lawrence — An Archaeological Survey of the *Oregon/Colonel Hill*.

Dede Marx – Historical and Archaeological Investigation of the SS *Winfield Scott*.

Eleftheria Mantzouka-Syson-"The Transport Amphoras from the late 5th c. B.C. Shipwreck off Alonnesos, Northern Sporades, Greece." Presented at the 100th Meeting of the Archaeological Institute America. Washington, D.C., December 28th, 1998. "Underwater Archaeology in Greece: Past, Present and Future." Presented at 4th World Archaeological Congress, Cape Town, South Africa, January 14, 1999. The paper is posted in: http://www.wac.uct.ac.za/wac4/symposia/s032.asp

Maritime Studies Association (MSA), East Carolina University, NC: Graduate Student conference fee award to attend the 4th World Archaeological Conference in Cape Town, South Africa in January 10-14, 1999.

American Institute of Archaeology (AIA): Graduate student Annual Meeting Travel Fund to attend the 100th AlA Meeting in Washington, D.C. in December 27-30, 1998.

Dave Miller – American Revolutionary War Privateering in Massachusetts and New England.

Sarah Milstead – An Archaeological and Historical Study of a Royal Navy Gunboat.

Steve Mitchell – Liberty Ships of WWII.

Matthew Muldorf – A Phase I Survey of the *Westfield*, a Staten Island Ferry.

Kevin Nichols – The Confederate Navy's Department of Underwater Warfare.

Mark Padover – An Archaeological and Historical Study of Two WWI Sub Chasers.

Michael Plakos – The War of 1812: Survey of a Merchant Vessel Sunk in the Elk River, MD.

Marc Porter – World War II "Hell Ships."

Larkin Post – A Study of the Ferrous-Concrete Collier *Polias*.

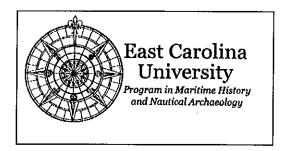
Jenna Watts – A Possible Chesapeake Bay Vessel.

Scott Whitesides - Ship Design and Construction.

Kim Williams – Maritime History of Ptolemaic Alexandria.

Sarah Wolfe – British Seaman in the East India Trade 17th and 18th Century.

The New Maritime Shirts Are Here!



The front logo for the new Maritime shirts. The back has the Monitor, a Great Lakes Steamer, and a Bermuda Sloop.

To order a shirt send a check made out to MSA with your size, color, and shirt preferences. The shirts available are:

Short sleeve T-Shirts: \$12.00 Long Sleeve T-Shirts: \$15.00 Knit Polo shirts: \$19.00 Half-Zip Sweatshirts: \$21.00

Colors available include navy, white, ash, black, and forest green.

Please add \$2.00 for shipping and handling, and NC residents add 6% sales tax.

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