MARITIME ARCHAEOLOGICAL AND HISTORICAL SOCIETY

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Pamunkey River Survey, 2011

By William A. Palmer, Jr.

n a gray and drizzly late-September morning the Pamunkey River meanders serenely through unspoiled Virginia countryside toward its confluence with the Mattaponi at the head of the York. Only the most committed fishermen are putting in an appearance and recreational boaters are nowhere to be seen. It's almost hard to believe that this peaceful prospect ever was otherwise. But it was, in the spring of 1862, as Confederate forces made the river an avenue of retreat, leaving in their wake scuttled schooners to block the advancing Union navy and half-built gunboats burned to their waterlines to keep them from falling into the hands of the enemy. Into the vacuum left by the southerners' departure a flotilla of northern vessels warships, troop transports, hospital ships, and supply ships of every kind—would fill the Pamunkey from bank to bank. Sprawling army camps would spring up at Cumberland Landing and White House. They, too, soon would exit the scene; eventually the river would return to its measured tidal pulses and quiet commerce. Yet beneath the placid surface, now rippled only by raindrops, lie artifacts of those chaotic days a century and a half in the past. And we are there to search for them.

Our team is composed of MAHS volunteers; Bruce Terrell, of the National Oceanic and Atmospheric Administration, who is sponsor and project archaeologist; and local historians Terri Lindsay and me. Crammed with us into a 25-foot Parker workboat is a wealth of equipment, including a Klein 595 side-scan sonar, Marine Magnetics Explorer magnetometer, Syquest "Strat-box" sub-bottom profiler, and a Shark



S. Anthony monitors remote sensing displays in the cabin of Geomar LLC's workboat. Photo by J. Smailes.

Marine Navigator with BlueView 900-kHz-90 hand-held sonar head. Several large computer monitors fill the cabin. The remote sensing equipment is available to our team thanks to Geomar Research, LLC, a commercial

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Notes from the Prez – Steven Anthony

The 2011 diving season was a busy time for MAHS volunteers. We kicked off the summer with our annual MAHS picnic at Seneca State Park which was well attended. The picnic was a great opportunity for MAHS folks to kick back and share stories about all of our adventures, and it also provided an opportunity for new members to learn about our activities and become involved. We watched a PowerPoint presentation on our Pickles Reef project, and Will Blodgett travelled all the way from Pennsylvania to share his extensive video coverage of the project. Will obtained excellent footage of the wreck site along with fascinating shots of a pair of nurse sharks that make Pickles Reef their home. He also obtained extensive footage of moray eels, trumpetfish, and a wide variety of sea life that make Snappers Ledge on the southern part of the reef one of the most beautiful dive destinations in the Florida Keys.

We returned to our Pamunkey River project in September. Partnering with Geomar, LLC, MAHS conducted a second remote sensing survey of the river to supplement our 1994 survey. This year we were very fortunate to have Jeff Morris lead the study. He directed a comprehensive survey that included deployment of side scan sonar, a magnetometer and a sub bottom profiler. Jeff ran survey lanes on stretches of the river from Garlick's landing all the way down to Cumberland landing. He has been a regular contributor to MAHS activities over the years and we were especially grateful for his support this year. Jeff also provided MAHS volunteers with the opportunity to learn how to use the new Shark Marine hand-held sonar unit. See the enclosed article for more information about this exciting technology.

Last year, Abe Roth, a diver in the Bodkin Creek area, was exploring one of the wrecks MAHS located during the Bodkin Creek project. Much to his astonishment he found skeletal remains on the wreck. We reported this finding to the State of Maryland, and Susan Langley, underwater archaeologist for Maryland, asked MAHS to perform a more extensive survey of the wreck and document the findings. The project is scheduled for December when the visibility is better. Once again we will be partnering with Geomar, LLC. The plan is to deploy the Geomar ROV along with the Shark Marine hand-held unit to get a better idea what the wreck looks like and to document the skeletal remains for evaluation by Maryland officials.

This year the MAHS Board of Directors decided to try scheduling our membership meetings on a bimonthly basis. This seemed to work well during the

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MAHSNEWS will consider articles and notices for publication which enhance public awareness and appreciation of maritime history, archaeology, and heritage preservation.



Geomar's Parker workboat. All photos by J. Smailes



B. Terrell prepares to deploy the magnetometer.

firm that specializes in oceanographic data collection, interpretation, and training for a variety of private and government clients. Jeff Morris, who heads the company, is a long-time friend of MAHS and conducted the survey.

Today's effort will supplement an investigation begun in 2004, when MAHS partnered with archaeologists from Washington College, in Chestertown, Maryland, to survey the river with side-scan sonar. A portion of that study yielded corrupt data; therefore our objective is to fill the gaps in that coverage.

We set off from the public boat ramp at Lester Manor on the King William County bank of the Pamunkey and head downriver to the vicinity of Cumberland Landing on the opposite shore. Somewhere along this stretch of the river, retreating Confederates loaded commercial schooners with dirt and rocks and sent them to the bottom in an unsuccessful attempt to



D. Knepper and B. Terrell prepare the sub-bottom profiler.

block the waterway. As in any archaeological investigation, the hours ahead are tedious. Our vessel follows a search pattern that carries it up and down the river in lanes fifteen meters apart. Now and then there is a flurry of excitement as the equipment reveals a "hit" on the riverbed beneath us. Occasionally the monitors display an image that needs no interpretation, even for a layperson. Ghostly keels, ribs, and gunwales materialize on the screen.

At White House, where the railroad still crosses the river as it did a hundred-fifty years ago, the team takes a break from its methodical survey of the river's bottom to visit with local residents, B.T. and Peggy Smith. Next to a stack of crab traps, B.T. shows us a rusted Civil Warera anchor that came up with his catch (see photos on page 5). In a garden nearby sits a charred sternpost. Could it have belonged to one of the gunboats hastily burned here in May 1862?

Darkness and the tide both are beginning to fall by the time we arrive back at Lester Manor. Another day's searching will take the team even farther upstream, to Garlick's Landing, where additional Civil War wrecks lie in the Pamunkey. Local residents have informed us that they've seen divers who have discovered the presence of these wrecks as well. The history guarded so long by the river slowly will disappear as souvenir hunters pick it clean. As our data are analyzed and recorded, a small step will have been taken to preserve for future generations the evidence of an exciting and painful chapter in our nation's story.

William A. Palmer, Jr., is Publications Chairman of the Historical Society of West Point, Virginia, http://hswpva.org.

A follow-up article on page 4 describes the second day of survey on the river, including the testing of a new hand-held sonar unit, the Shark Marine Navigator.

MAHS Tests Hand-Held Sonar on the Pamunkey River

by James Smailes and Steven Anthony

he following morning we returned to the Pamunkey River to complete our sonar runs, this time upriver of the railroad bridge. Launching from Garlick's (now William's) Landing, our crew was smaller, consisting of Bruce Terrell, our Captain Jeff Morris, Steve Anthony and me. The launch ramp was crowded, with fishing boats both landing and launching with us, so we pulled away to assemble the equipment. After a short trip we were on site and began our runs with the side scan, magnetometer and sub bottom profiler. As targets were found they were marked and then confirmed on the next run. The area we needed to survey was smaller than on Saturday, and we finished our work by early afternoon.

This gave us the rest of the day to experiment with the Shark Marine Navigator sonar unit. Jeff Morris had field tested an earlier model in April and now had an upgraded model that looked almost the same. But this was an entirely new product with refinements to the controls, software with twice the battery capacity, and twice the running time. The multi-frequency sonar unit provides real time position of targets, distances and measurement information up to 200 meters and 360 degrees.



The Shark Marine Navigator unit features multi-frequency sonar with profiling and sector mode, surface navigation with GPS, optional digital HD camera, multi-beam sonar, magnetometer, and sub-bottom profiler.

Image from www.sharkmarine.com.

Steve and I had an opportunity to use the device when we returned to the Smiths' property just downstream of the railroad bridge. B.T. Smith had invited us to come back and test the equipment on a small wreck near his dock. We were glad to return and take advantage of his offer.

After suiting up and receiving instructions from Jeff on how to manipulate the buttons and pull down menus, and after a little dry land practice, we entered the water and Jeff handed the sonar unit down to us. We were very careful with such an expensive piece of equipment. Steve took the unit first having clipped the two rechargeable batteries to his weight belt. The connector from the batteries is long, providing easy maneuverability when using the sonar unit.



S. Anthony and J. Smailes hold the Shark Marine Navigator. Two rechargeable batteries are clipped to Anthony's weight belt. Although 11.25 pounds on the surface, the unit weighs only 2.5 pounds in the water. Photo by J. Morris.

As our eyes adjusted to the gloom of the water, the images on the 5-inch LCD screen became clearer. The screen brightness can be adjusted as needed and is readable in daylight. However, there was a lot of hydrilla in the water causing some back scatter on the screen. The images are displayed in orange against a black background, so they are very clear even in dark water. We both explored the area with the unit, manipulating the buttons to adjust the range as we went; the greater the range, the lower the resolution. So, as one approaches a target, the range can be shortened to increase the resolution and clarity of the image. We could see the dock posts easily, but it was obvious that the hydrilla had to go. I removed several large armfuls of the plants, pushing them downstream with the current. As we explored the area where we were told we could find an old boat, our booties discovered it before we could see it with the sonar unit. Bottom sediments had covered the edges of the boat almost completely. So Steve and I scraped the edges of the wreck with our booties, exposing one-to-two inches of the gunnels of what had been an old row boat. Removing the mud and





S. Anthony and J. Smailes work as a team using the Shark Marine Navigator, with one diver operating the sonar, the other serving as guide. Photo by J. Morris.

the hydrilla allowed us to see a decent outline of the vessel. The sonar unit records all images which can be played back and any image frozen for examination. So after returning to shore Jeff played back what we had recorded and confirmed that what we thought was the outline of the boat was correct. There was still some back scatter, very faint orange lines, but the bolder orange lines of the vessel were clearly evident on the screen.

The unit is great for finding things above the bottom, but it takes some practice to get used to working with the computer screen, understanding what one sees, and manipulating the buttons through gloves to control

B. Terrell, D. Knepper, and S. Anthony take measurements of the anchor. Photo by J. Smailes.

the mouse movement and left-right click. More practice will be needed to become proficient, but this is a great tool for exploring in poor visibility.

Smith noted that there are several additional wrecks along the shoreline that we did not get a chance to explore, but we learned they are often exposed during low tides in winter. We hope to return to photograph those wrecks should they become exposed in the coming winter season. **±**



19th-century iron folding stock anchor recovered by landowner, B.T. Smith, near White House Landing. Photo by J. Smailes.

1812 Victory at Sea: One Clear Winner in a Murky War Was the New – and Overmatched – U.S. Navy

by Joseph Callo

ate on the afternoon of June 22, 1807, the 36-gun frigate USS *Chesapeake* cleared Virginia's Hampton Roads and entered international waters. Outbound for the Mediterranean, the vessel was provisioned for a long patrol and carrying passengers and their baggage, its decks cluttered and guns obstructed by unstowed equipment.

Just off the coast of Norfolk, Chesapeake encountered the 50-gun HMS Leopard, one of several British vessels blockading French warships that had sought shelter in American waters. Leopard's captain, Salisbury Pryce Humphreys, demanded permission to search Chesapeake for Royal Navy deserters he believed had joined the American frigate's crew. Commodore James Barron refused, and Humphreys opened fire on the unprepared U.S. vessel. After enduring 20 minutes of unanswered broadsides from Leopard—which killed three Americans and wounded 18, including Barron the frigate's captain struck his colors. A boarding party removed four seamen, one of whom the British hanged as a deserter. The U.S. Navy ultimately blamed Barron for the debacle. He was court-martialed, convicted of negligence and poor leadership and suspended from Navy service for five years.

While Barron's dismissal may have been a personal tragedy, *Leopard*'s attack on his ship sparked outrage across America and was seen as a haughty assault on the national honor. London's grudging apology for the attack in November 1811 did little to assuage American

public disgust with what it widely perceived as Britain's arrogance, and on June 18, 1812, the United States declared war. Neither America nor Great Britain was prepared for the subsequent conflict, and both sides would ultimately pay dearly in blood and treasure. Yet at war's end both would justly be able to claim victory.

The War of 1812 was a conflict neither belligerent government really wanted. Great Britain was militarily and economically overextended in its ongoing global conflict with France, and in the years since the American Revolution it had come to consider the United States an important trading partner. The Americans had fought a brief war of their own against France and were politically divided along regional lines over the question of war with Britain. But above all the United States was militarily unprepared for a shooting war

against a nation that was a leading global power. Its unreadiness for war was particularly evident at sea. President James Madison's predecessor, Thomas Jefferson, had advocated a defensive course of action to counter Britain's aggressive foreign policy, implementing a policy of proactive diplomacy with a limited naval plan based on gunboats stationed in American ports.

At the outbreak of the war Britain was the most powerful maritime nation in the world, with approximately 1,000 commissioned ships in the Royal Navy. It deployed more than 100 of those ships in the American theater, including seven ships of the line and 31 frigates. The entire U.S. Navy comprised just 18 warships, none larger than a frigate, and some largely irrelevant gunboats. On paper, at least, the outcome of a war at sea between the United States and Great Britain seemed a foregone conclusion.

Despite the obvious naval mismatch, some positive surprises for America emerged as the war unfolded. The first occurred on August 19, during a single-ship fight between the 44-gun USS *Constitution* and the 38-gun HMS *Guerriere*. The American ship, commanded by Captain Isaac Hull, had a leg up in the weight of metal it could deliver. But Hull's opponent, Captain James Richard Dacres, could rely on seasoned gun crews to maintain a faster rate of fire. Hull gained the early advantage through more aggressive tactics and



HMS Guerriere with a mast down is raked by USS Constitution. From a painting by R. Holden, 1865.

eventually shot away *Guerriere*'s mizzenmast. With the British ship's maneuverability compromised, Hull then raked *Guerriere* several times. As both sides prepared boarders, *Guerriere*'s main and foremast followed its mizzen over the side. The British ship was helpless, and Dacres struck his colors.

Hull's victory was stunning. Two comparable ships had met, and the U.S. captain and crew had won a clear victory over their British opponents. It had been decades since a Royal Navy captain had been bested in a one-on-one struggle and surrendered his ship. But the outcome of the battle between Constitution and Guerriere proved more than mere good luck; two additional U.S. Navy victories followed in rapid succession. In late October, the 44gun USS United States, commanded by Captain Stephen Decatur, bested the 38-gun HMS Macedonian. And in December, Constitution, under Commodore William Bainbridge, defeated the 38-gun HMS Java.

What accounted for the American frigates' upset victories of over their Royal Navy opponents? First, the U.S. Navy was beginning to develop a new breed of commanders who could win in combat when on roughly equal terms with any opponent. Second, the new heavy frigates being designed and built in America were proving a breakthrough in vessel design. With seamanlike verbal economy, it was said the U.S. Navy's new frigates "could out-fight any ship they couldn't outrun."

The quick U.S. victories sent Britain a clear message that the war—at least at sea—was not going to be a walkover. The message for America was that its Navy now could, under equal circumstances, hold its own against the Royal Navy. That was a disturbing surprise in Britain and a significant psychological plus in America.

The naval vision expressed by John Paul Jones more than three decades earlier had finally begun to gain real traction with Congress and the American public. In a letter to a friend in 1778 Jones had written about the nascent Navy: "Our marine [Navy] will rise as if by enchantment and become...the wonder and envy of the world." This vision of a navy anticipated far more than gunboats.

The most far-reaching result of the



Commodore James Barron



Captain James Lawrence



Captain Stephen Decatur



Commandant Oliver Perry



Commandant Thomas Macdonough

American frigate victories was to shift the thinking of the United States about the importance of a blue-water navy. The fact that U.S. vessels had defeated warships of the vaunted Royal Navy encouraged those who believed that America's honor, as well as its economic and diplomatic future, were inextricably linked to the nation's ability to deploy a powerful and capable navy. Tangible evidence of that shift in mindset was Congress' quick vote to fund six more frigates and four larger ships of the line.

Encouraging events, for Britain, soon counterbalanced those U.S. Navy victories. The early score in naval actions between the U.S. Navy and Royal Navy wound up close to a draw, with five U.S. triumphs and four British victories. Great Britain was also able to successfully apply two significant elements of naval power against the United States: blockades and expeditionary raids.

Thus, when the British Admiralty admonished Admiral Sir John Borlase Warren, commander in chief of the Royal Navy's North American Station, that "the naval force of the enemy should be quickly and completely disposed of," Warren responded with a naval blockade and punitive raids along the U.S. Atlantic coast. To a degree Warren was able to check the U.S Navy's newfound combat proficiency.

The efficacy of the blockade was underscored by a battle on June 1, 1813, between *Chesapeake*, now under Captain James Lawrence, and Captain Philip Broke's 38-gun HMS *Shannon*. *Chesapeake* had been bottled up in Boston, and its crew lacked training. When the U.S. frigate left port, it took Broke and his well-drllled crew only a quarter hour to pound *Chesapeake* into submission and fatally wound its captain.

The British blockade—which initially targeted the Chesapeake Bay area and eventually expanded to the entire Atlantic coast—had the broader effect of crippling U.S foreign trade. By 1814, U.S merchant ship traffic was just 11 percent of what it had been before the war. The Royal Navy's punitive coastal raids made the blockade still more painful. The governor of Connecticut, for instance, complained that "Serious depredations have been committed even in our harbors and to such an extent that the



USS Chesapeake and HMS Shannon trade broadsides during a brief but furious battle as Chesapeake tries to break the British blockade of Boston in 1813. From a painting by the 20th-century painter M. Dawson.

usual communication through the [Long Island] Sound is almost wholly interrupted." Through such raids the British also sought to suppress the very active privateers—essentially pirates acting under U.S. government auspices—who had become an economic thorn in Britain's side.

The most noteworthy of the raids was the British attack on Washington in mid-August 1814. A British force sailed up the Patuxent River and put ashore in Maryland, sent American defenders packing at Bladensburg and quickly fought its way through mostly militia defenses to Washington. There they set fire to the Capitol, the White House and other federal buildings. A classic application of expeditionary warfare, it emphasized speed and focused impact to achieve its objective. Within a month the British force that

occupied Washington had withdrawn, but the point had been made: Every harbor on the U.S. Atlantic coast was vulnerable.

The most significant actions of the war, in the view of many naval theorists, occurred not along the Atlantic, but on the conflict's northern front. Before the war, American political leaders generally believed that a ground invasion of Canada would be the most efficient way to fight Great Britain. But U.S. ground campaigns in that theater were poorly led and mostly met with frustration. In fact, until the autumn of 1813 it was the British who enjoyed a string of successes on the war's northern front. An ill-conceived American ground attack on Montreal had failed, as had one on Niagara. And the British had seized the U.S. forts at Detroit and Mackinac. But the Battle of Lake Erie would turn the military tide in the north.

On Sept. 10, 1813, Master Commandant Oliver Hazard Perry put control of the lake on the line just north of Put-in-Bay, Ohio, with a nine-ship squadron formed around the newly built 20-gun brigs USS Lawrence and USS Niagara. Opposing Perry was a force of six British ships led by the 19-gun HMS Detroit and the 17-gun HMS Queen Charlottte. As the squadrons closed on one another, Perry pulled Lawrence out of the American formation and charged head-on at the British line—a tactic reminiscent of Admiral Lord Horatio Nelson at Trafalgar in 1805. For two hours and at point-blank range, Lawrence and the British ships poured heavy fire into one another until Lawrence was a total wreck. Perry transferred his flag to *Niagara*, re-entered the fray and carried the day. After the action Perry sent a now-famous message to his military commander, Major General William Henry Harrison: "We have met the enemy, and they are ours."



HMS Queen Charlotte and HMS Detroit become entangled and face a broadside from USS Niagara in the Battle of Lake Erie, 1813. From a painting by J. Davidson 1887.

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Perry's victory put Lake Erie under effective U.S. control, dashing British hopes of establishing a buffer Indian state between the United States and Canada. A year later, 31-year-old Master Commandant Thomas Macdonough won a battle of comparable importance on Lake Champlain. British forces under Lieutenant General Sir George Prévost had launched an invasion of the United States through the Lake Champlain region. Operating in close support of Brigadier General Alexander Macomb, the American general opposing Prévost, Macdonough's squadron fought from an anchored position between Cumberland Head and Plattsburgh, New York.

Macdonough's flagship was the 26-gun corvette USS *Saratoga*. Three other ships—the 20-gun brig USS *Eagle*, the 17-gun schooner USS *Ticonderoga* and the 9-gun sloop USS *Preble*—formed the American line, with 10 gunboats in support. The British squadron comprised the 36-gun frigate—and flagship—HMS *Confiance*, the 16-gun brig HMS *Linnet*, the 11-gun sloops HMS *Chubb* and HMS *Finch*, and a dozen gunboats. They approached from the north, with the intention of raking the American ships as they passed. The British were thwarted, however, by the strength of Macdonough's position and fickle winds.

After more than two hours of withering exchanges, the British flagship, its commander dead, struck its colors, and the other British ships followed suit. When the smoke cleared, Macdonough had reinforced the lesson of Perry's Lake Erie victory: The U.S. Navy now had officers who could win fleet actions as well as single-ship battles.

The timing of the Lake Champlain victory was crucial. The United States and Britain had already begun peace negotiations in Ghent, then part of Holland. In their seminal work, *Sea Power: A Naval History*, editors E.B Potter and Admiral Chester W. Nimitz summed up the strategic impact of Macdonough's victory:

Macdonough's victory and Macomb's stubborn resistance to heavy British attacks persuaded Prévost to retire to Canada for the winter. As a consequence of his failure the British government restudied its position, accepted Wellington's estimate that the cost of launching a successful offensive outweighed the probable gain and modified instructions to its delegates at Ghent, paving the way for conclusion of peace before the end of the year.

Indeed, Britain and the United States signed the Treaty of Ghent within a few months of the Lake Champlain battle, ending the War of 1812. They returned prisoners and captured territory. The treaty imposed neither indemnities nor any territorial boundary changes. Surprisingly, the treaty also did not address Britain's infringement of neutral rights in ocean commerce, nor did it call for any official British concessions regarding impressment, although the latter issue faded away after the war due to a reduction in the size of the Royal Navy.

America was free to continue pushing its boundaries farther into the Northwest. The war also enhanced U.S. stature internationally, while domestically Americans felt they had successfully stood up to Great Britain and particularly to the Royal Navy. That feeling was enhanced by the decisive U.S. victory at the Battle of New Orleans, which unfolded before news of the war's end had reached the combatants.

Louis Sérurier, French foreign minister in Washington at the time, observed: "Finally, the war has given the Americans what they so essentially lacked—a national character founded on a glory common to all." Part of that national character was an appreciation of the importance of both a blue-water navy and of the tradition of courage and professionalism established by the victories of Hull, Decatur, Bainbridge, Perry and Macdonough. Back across the Atlantic, the British exploited the cessation of hostilities to concentrate on building their mercantile and colonial power for the next century.

Thus the War of 1812 can fairly be described as a long-range strategic victory for each side—a war that both sides won.

For further reading Joseph Callo recommends:

Sea Power: A Naval History, edited by E.B. Potter and Chester W. Nimitz

This People's Navy: The Making of American Sea Power, by Kenneth J. Hagan

and

Mahan on Naval Warfare, edited by Allan Westcott.

This article appeared in slightly different format in the March 2011 issue of Military History. **‡**

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A Consideration of Privateers

by Dennis Knepper

War of 1812 and growing interest in the historical impact of that conflict, we thought we would take a look at the role of privateering in the outcome of the war. The War of 1812 was the last major conflict in which the once common practice of privateering played an important part. Privateers were nautical mercenaries, sea-borne raiders with formal authorization to prey on commercial shipping. Within certain limits they acted as agents for their governments, although they were often thought of merely as pirates.

A historical definition from the heyday of privateering describes the practice. The 18th-century Swedish naval architect, Fredrik Chapman, wrote, "Privateers are vessels, which an individual arms in time of war, by the authority of governments, to take merchant ships and others belonging to the enemy." The "authority of governments" in Chapman's definition was the so-called Letter of Marque and Reprisal, a formal license or commission issued by a state to a private citizen sanctioning the capture and confiscation of ships and merchandise of an adversary nation.

The terms marque and reprisal were used in a way that may be a little unfamiliar to us in the present day. *Marque* refers to a border, and it represented the authorization provided to the privateer to operate beyond the borders—that is, the frontier or marque—of the nation granting the permit; *reprisal* derives from a post-Renaissance notion that actions short of war were authorized in retaliation for a specific injustice or to collect a debt. Originally, then, the context of reprisal was nonbelligerent. By the 17th century however,

reprisal had become an instrument of war, and the injustice in question was presumably the casus belli.

The first formal Letter of Reprisal was granted by Henry III of England in 1243. The Oxford English Dictionary notes that the first recorded use of the full term "letter of marque and reprisal" was in an English statute in 1354, during the reign of Edward III. Privateering became a widespread practice between the

16th and 18th centuries, when European powers were constantly warring among themselves. The term privateer probably originated as private menof-war and was either shortened or modeled on volunteer.

Privateers (the term tends to designate vessels, captains, or crew) were necessarily bold individuals. Naturally, the enemy nation the privateer was authorized



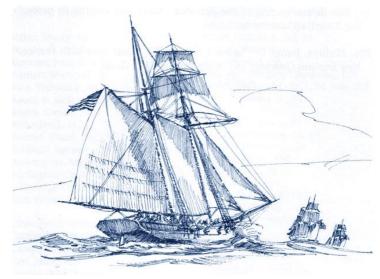
Letter of Marque from the early 19th century.

to prey upon did not usually recognize the legitimacy of the sanction and thus considered the raiders to be outright pirates, often treating them as such when captured. Captain and crew were not paid but received a share of the spoils. Privateering was considered a legitimate industry in colonial America and was an economic mainstay in places such as Rhode Island, where many were employed in building, owning, and provisioning privateer vessels in the 18th century.

Privateering was a quick and economical way for small nations to equalize forces against larger, more heavily armed enemies. At the beginning of the American Revolutionary War, for example, the Continental Navy consisted of only 31 ships, and slightly more than twice that number were under sail by the end of the war, according to the U.S. Merchant

Marine. The British Royal Navy, in contrast, commanded more than 130 warships. During the same period the Colonies issued Letters of Marque to nearly 1,700 privately owned and armed merchant ships. American naval ships boasted 1,242 guns, privateers almost 15,000. Their effectiveness is seen in the number of enemy vessels captured during the course of the war—almost 2,300—well over ten times as many as the Continental Navy.

Privateers were also



An American privateer. From a pen and ink drawing by J. Roach for The Reestablishment of the Navy, 1787-1801.

integral to American success in the War of 1812. Writing after the war, the former privateer George Coggeshall noted that the British fielded about 800 commissioned men-of-war at the start of hostilities. In opposition to this force, the U.S. commanded seven frigates and about a dozen sloops-of-war. Yet, by the end of the war the British had lost 800 vessels—military and merchant—largely at the hands of privateers. Coggeshall further noted that this figure did not include another 200 vessels considered "too insignificant to be reported," as well as many lost in actions on inland lakes, which would even further increase the number. He estimated that two-thirds of British losses (more than 1,300 vessels) were to privateers.

The U.S. Merchant Marine similarly puts the number of American naval ships at 23, totaling 556 guns, along with more than 500 privateers, totaling nearly 2,900 guns. Naval ships captured 254 enemy vessels and privateers captured 1,300, the latter including prizes worth almost \$40 million.

A slightly different accounting cities *Niles Weekly Register*, published by Baltimore journalist Hezakiah Niles in the early-19th century (1811-1849). In this estimate, 2,500 British prizes were taken by American privateers between 1812 and 1815. Of these, 1,000 were sunk, released, or ransomed while another 1,500 were sent to American ports as prizes. Ironically, about half of the latter appear to have been recaptured by British vessels (naval or privateers) *en route*, demonstrating if nothing else the fluidity of vessel ownership on the high seas.



An American privateer. circa 1812. Maryland Historical Society.

While the exact number of vessels fielded by each nation tends to vary somewhat with the reporter, the important observation is that, as in the Revolutionary War, Britain vastly out gunned the United States at sea in formal military forces. Raising an effective naval force quickly and economically was a key to America's hopes for success in the war, and privateers were the means of achieving this end.

Privateer vessels were often small and fast, relying on speed and maneuverability rather than fire power, their object being to capture their prey efficiently rather than to battle and sink it. Although, as one writer has noted, almost any vessel would serve, sloops were often preferred. Most of the successful privateers out of Baltimore were sloops bearing five to eight guns. Perhaps the ultimate manifestation was the clipper design and, specifically, the Baltimore clipper. Based on the Bermuda sloop, the clippers were long and narrow, with low freeboard and fore-and-aft rigging on characteristically raked masts.



Plan of the town of Baltimore. Folie, 1792. (location of Fells Point circled). Library of Congress Geography and Map Division.

Baltimore had eclipsed Annapolis as Maryland's trading, and eventually political, center by the mid-18th century, due to its deeper anchorage, better loading and warehousing facilities, and proximity to wheat-growing areas, as the region converted from a tobacco economy to wheat.

During the War of 1812, more privateers sailed out of Baltimore than any U.S. port: 35 sailed from Boston; 40 from Salem; 55 from New York; and 58 from Baltimore. Another estimate suggests that 126 privateers operated out of Baltimore during the war and that they captured more than 500 British ships. The British press referred to Baltimore as "Mobtown" and as a "nest of pirates." Among the first and most successful Baltimore privateers were *Revenge* and *Rolla*, 14 and five guns, respectively. *Rolla*'s successes included seven prizes worth more than \$2 million taken in just three days off Madeira. Other notable Baltimore privateers were *Lawrence*, a 9-gun schooner, and *Ameila*, 6-guns.

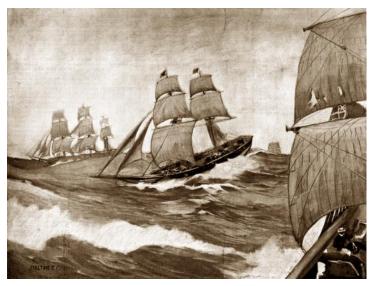
Said a British frigate commander to George Coggeshall, after Coggleshall had been taken prisoner: "In England, we cannot build such vessels as your Baltimore Clippers...and we would never sail them as you do. We are afraid of their long masts and heavy

spars, and soon would cut down and reduce them to our standard. We strengthen them, put up bulkheads, after which they would lose their sailing qualities, and are of no further service as cruising vessels."



Among the more famous American privateer commanders was Joshua Barney, who led raiders in both the Revolutionary War and the War of 1812. At the end of the Revolutionary War, Barney commanded the 16gun Hyder Ally, commissioned by the state of Pennsylvania to rid the Delaware Bay of British privateers, capturing a British sloop of war, the General Monk, off Cape

May. At the start of the War of 1812, Barney commanded the *Rossie*, an "intrepid little 12-gun." *Rossie* was the first letter of marque vessel to depart Baltimore in the war, and Barney took 18 vessels on her initial cruise. Following his return to Baltimore, Barney reportedly received offers to command numerous other vessels. But in spite of *Rossie*'s apparent success—the captured tonnage was estimated to have been valued at \$1.5 million—the costs of disposing of the prizes and the duties imposed on them left Barney with little profit, and so he declined.



Comet runs the blockade of Baltimore. Harpers' Weekly, Jan. 19, 1895.

Any of the famous Baltimore privateers were built in the shipyards at Fells Point, perhaps the most well-known yard being that of Thomas Kemp, who developed a reputation for building speedy, high quality boats. He built the four most successful privateers of the War of 1812: Rossie, Rolla, Comet, and Chasseur. The Baltimore privateers were so successful and their predations so injurious that the British blockaded the port in an attempt to bottle them up. The speedy sloops and clippers nonetheless slipped through the cordon with apparent ease. Comet, commanded by Thomas Boyle, captured 27 vessels in a little over a year.



The Baltimore privateer Chasseur battling HMS Lawrence. From a modern painting by E. Fosberg.

Chasseur was launched from Thomas Kemp's yard on December 12, 1812, six months after the start of the war. Originally designed as a blockade runner, she was reportedly the largest of the Baltimore clippers, at just under 116 feet and 356 tons. At first unable to break the

blockade, she was eventually sold to a syndicate that included her builder, Kemp, and was outfitted as a privateer with four long 12-pounder cannon. She broke the blockade and in a successful first cruise under Captain William Wade took 18 merchantmen. She was sold again in 1814 and had ten 12-pounders added to her armament (another estimate put her total



Thomas Boyle.

complement at 16 and noted that ten of the long cannon were eventually replaced with shorter carronades that were quicker to reload). She left New York for the English Channel, commanded by Thomas Boyle, late of *Comet* fame. After two highly successful cruises, where she was chased by various British warships dispatched specifically to find her, *Chasseur* had her last major success and perhaps her toughest challenge battling the

British schooner Lawrence (or St. Lawrence) off Santo Domingo in February 1815.

Niles Register noted that Chasseur was known familiarly as the "Pride of Baltimore... She is, perhaps, the most beautiful vessel that ever floated on the ocean. Those who have not seen our schooners have but little

idea of her appearance. As you look at her you may easily figure to yourself the idea that she is almost about to rise out of the water and fly into the air, seeming to sit so lightly upon it." The success of Chasseur, and other American privateers, severely affected the morale of British merchants and caused their insurance rates to skyrocket. Boyle proclaimed a blockade of all English and Irish ports, to match the socalled "paper blockades" of the British on American ports— British Admirals Warren and Cochrane declared a blockade of all American ports but actively enforced the blockade in only a few cases, and thus it was a blockade on paper only. This single declaration alone, posted in Lloyd's Coffee House in London by way of a captured merchant vessel, caused British shipping and insurance rates to soar.

A privateer listed in George Emmons' History of the US Navy, written in 1850, was the Baltimore schooner *Lion*, with a crew of 22 men and 2 guns. Lloyd's Register of American Vessels lists her as a

brig or schooner of 161 tons, sheathed in copper and copper fastened, with a single deck, and drawing 12 feet of water. The *Lion* was reported to have destroyed 15 English merchant ships along the coast of Brittany in 1814, amassing a prize cargo which she sold at the French port of L'Orient for the equivalent of \$400,000 in silver. The Master's Log from the British warship HMS Menelaus, sailing as part of the blockade of Baltimore in 1814, and the journal of Marine Lt. Beynon, assigned to the Menelaus, describe in detail the discovery, capture, and burning of a schooner that Beynon identified as the Lion of Baltimore near the mouth of Bodkin Creek on Maryland's Western Shore. Was this schooner the

privateer that had so successfully raided British shipping off the coast of France? This question has been the subject of an ongoing investigation by MAHS volunteers. After many hours of research at libraries and repositories across the country and two trips to the British National Archives, we were led to the conclusion

> that the story of the Lion of Baltimore may be apocryphal.

> > * * *

The War of 1812 was the last hurrah of privateering. The practice was formally declared illegal by the Paris Declaration Respecting Maritime Law of 1856. The United States however withheld formal adherence to the Paris Declaration until the Civil War. At the start of that war, the Confederate states offered letters of marque to vessels of any country, while Congress authorized the President to issue similar letters. But in the end, none were issued by either side. Most of the vessels taken or sunk in that war were the result of the Union blockades of Southern ports, and all losses were reportedly the result of naval action.

Whereas, It has become customary with the admirals of Great Britain, commanding small forces on the coast of the United States, particularly with Sir John Borlaise Warren and Sir Alexander Cochrane, to declare all the coast of the said United States in a state of strict and rigorous blockade without possessing the power to justify such a declaration or stationing an adequate force to maintain said blockade;

PROCLAMATION

I do therefore, by virtue of the power and authority in me bested (possessing sufficient force), declare all the ports, harbors, baps, creeks, rivers, inlets, outlets, islands, and seacoast of the United Kingdom of Great Britain and Ireland in a state of strict and rigorous blockade.

And I do hereby caution and forbid the ships and vessels of all and every nation in amity and peace with the United States from entering or attempting to enter, or from coming or attempting to come out of, any of the said ports, harbors, bays, creeks, rivers, inlets, outlets, islands, or seacoast under any pretense whatsoever. And that no person may plead ignorance of this, my proclamation. I have ordered the same to be made public in England. Given under my hand on board the Chasseur.

THOMAS BOYLE, Esquire, Commander of the Private Armed Brig Chasseur, etc. Information for this article was gathered from the following sources: History of the American Privateers, and Letters-Of-Marque, During Our War with England in the Years 1812, '13, and '14, G. Coggeshall,

The Navy of the United States from the Commencement 1775 to 1853, G.F. Emmons, 1854.

A History of American Privateers, E.S. Maclay, 1899.

The Fells Point Story, N.G. Ruckert, 1976.

The Republic's Private Navy, J.R. Garitee, 1977.

The Reestablishment of the Navy, 1787-1801, M.J. Crawford and C.F. Hughes, 1995.

The Prize Game: Lawful Looting on the High Seas in the Days of Fighting Sail, D.A. Petrie, 1999.

American Merchant Marine at War, U.S. Merchant Marine, http://www.usmm.org/2003.

Flotilla: The Patuxent Naval Campaign in the War of 1812, D.G. Shomette, 2009. **‡**

by Thomas Berkey

In June of 2011, MAHS returned to Pickles Reef, in the Florida Keys, to continue a project initiated the previous year. MAHS has conducted projects annually in Florida for a number of years, the last four seasons at sites in the Florida Keys National Marine Sanctuary (FKNMS). Following up on work that MAHS conducted on Molasses Reef, State Underwater Archaeologist Roger Smith asked us to assist in investigating shipwreck debris on Pickles Reef.

At least three wreck sites are recorded on the reef according to state records, although none is welldocumented. Archaeological site forms from the Florida Master Site File note little information about the sites other than their numbers—18MO1315, 18MO1316, and 18MO1333—and general locations. Smith described three sites to us: 1) a shipwreck known as the Gear Wreck or Barrel Wreck; 2) a nearby scatter of solidified cement barrels; and 3) a ballast pile that may lie some distance from the other two sites. MAHS was tasked with determining the relationship these three sites might have with the sites recorded on in the State's files. MAHS prepared for the project this year by reassessing the project plan and dive safety plan that had been developed in 2010, accounting for potential changes in conditions between the two seasons. MAHS also applied for and received updated FKNMS permits to conduct research within the marine sanctuary. Due in part to scheduling considerations, we worked out of Tavernier this season, rather than Key Largo. Diving services were provided by Conch Republic Divers, and accommodations were secured at a special rate through Ocean Pointe Suites.

This season's project again combined survey work with the MAHS Field School in Underwater Archaeology, which is held at least once a year for graduates of the live underwater archaeology course and the video course, *Diving into History*. This year five

students, led by two instructors, participated in the field school. In addition, four surveyors worked on mapping the site.

In the field school we teach divers the basics of underwater archaeological site documentation, focusing on trilateration mapping, drawing, and photography. Following a quick review of the trilateration process, we conduct a walk-through on the beach—we sometimes call this "dry-lateration"—so that buddy teams can practice the technique and work out the details of communication, since the ability to discuss things underwater is limited.

Conditions at the site were very much improved in comparison to the 2010 season, when 6-foot seas and cross currents produced excessive chop. This year things were considerably calmer. We still had some surge to deal with, but that is to be expected in open seas and water only 10-15 feet deep.

The project was scheduled for two days. The first day we worked from two boats—one from the dive shop, the other being Kip Peterson's fast rescue boat, Gresskar (Norwegian for pumpkin, after the boat's bright orange color). Having a second boat allowed us some flexibility in terms of getting a survey crew out to relocate the site and assess conditions before the field school arrived. Little change was apparent at the site other than the fact that we weren't being tossed around by heavy surge as in the previous year. A quick survey allowed us to select locations for datum points. In the meantime, the full team, including field school participants and instructors, arrived on-site and began their initial reconnaissance dive. All took part in setting the datum points using rebar set in the bottom sediments, in a procedure authorized in our FKNMS permit.

Then the field school teams got down to trilateration mapping. The baseline was slightly more



B. Hosley recording trilateration data. All photos by W. Blodgett.



J. Hawkes taking trilateration measurements on a large metal fragment.



B. Burkett recording trilateration data.

than 50 meters long, and each team was assigned a section to document. Our goal was to locate and map the edges of the site in order to assess its overall size. The teams swam outward from the baseline, marking features at the edges of the debris field, and then mapped the features they had marked using trilateration. At the same time, a separate survey team began a preliminary video survey of the site. The purpose of the video survey was to provide a general overview of the site and its main features. Using high-definition video, the surveyors ran systematic transects parallel to the baseline. The transects were spaced approximately 5 meters apart to provide overlap. The resulting video footage supplied us with general site context and familiarized the videographer with details of the site that allowed planning for more detailed documentary survey to be conducted at a later date.

A secondary baseline was extended to the northwest from the primary datum point for recording the extent of the main concentration of barrels at the site. Smaller and somewhat more compact than the distribution of metal debris, the barrels occurred in several clusters near the datum, along with individual outliers that lay further afield.

Each afternoon after returning to the dock in gathered in the dive shop's upstairs classroom to plot the data collected during the day. It is important to note that we do not draw a site map underwater; instead, we

collect lists of numbers that represent the positions of features relative to the baseline. So, it is critical to translate those numbers into a map as soon as possible to identify any problems in the data. The field school participants did a great job with data collection, and we quickly developed an overall site map.

We also collected environmental data that helps us in our site interpretation. An archaeological site, whether on land or underwater, consists of more than just the artifacts that are discovered by the archaeologist. The site includes both the artifacts and the natural environment in which they occur. How the cultural material is incorporated into the natural environment is referred to as the process of site formation. One of our major tasks as archaeologists is determining the relationship between what is natural and cultural in the archaeological record.



Plotting data. Left to right, S. Anthony, B. Hosley, J. Hawkes, E.Coleman, D. Knepper, J. Brady, B. Burkett, J. Smailes.

This year's work on Pickles Reef was a great success. We are starting to build a solid image of what is on the sea bottom at the reef and how it relates to the sites recorded in Florida Master Site File records. We plan to return one final season to collect additional data needed to complete the picture. In the meantime, we will continue archival research to help with our interpretation of the historical significance of the sites. ‡

The Search for the USS Scorpion

by James Smailes

n the summer of 1814, a series of skirmishes between the Royal Navy and the United States Chesapeake Flotilla took place in the rivers leading to the Chesapeake Bay. Commanded by Joshua Barney in his flagship the USS *Scorpion*, the Chesapeake Flotilla was comprised of armed barges and gunboats designed to harass the Royal Navy and stop the landing of British raiding parties on Chesapeake shores. Actions

near Cedar Point and in St. Leonard's Creek resulted in several Royal Naval vessels being damaged and two American gunboats being scuttled. Eventually, the flotilla fled up the Patuxent River and was scuttled to avoid capture. Barney and the flotilla crews marched to link up with marines and militiamen who were advancing towards Bladensburg intending to slow the British advance. Two days later, on August 24, Barney



Sign on work barge announcing the project to the public.

All photos by the author.

and his men fought the British at the Battle of Bladensburg.

The Search for the Scorpion project, begun in 2010, is a six-year effort to study and search for the flotilla and its flagship the USS *Scorpion*. The partnership between Naval History and Heritage Command (NHHC), the Maryland State Highway Administration (SHA), and the Maryland Historical Trust (MHT) has developed a three-phase plan for the project: Phase I continued in 2011 with site relocation, assessment and testing; Phase 2 will take place during Spring and Summer 2013 and will include excavation and documentation; Phase 3 will continue until 2016 and include conservation, analyses, and publication.

I had the opportunity to volunteer at the Search for the Scorpion project site on Saturday, August 6 and again on Monday, August 8. I met the team at Jackson's Landing in Patuxent River Park. From there, the team of NHHC archaeologists and interns, led by George Schwartz, left for the site and we followed shortly thereafter. The MHT team consisted of Troy Nowak, Ray Hayes, Bill Utley and I. We would meet Susan Langley at the site.

The Patuxent River is narrow and shallow where the fleet was scuttled in 1814. The shipwreck we were studying was close to shore. A barge was used as our dive platform, moored near the center of the river. A ten-foot container acted as dive locker, storage room and office. The four-unit barge was a good, stable work platform, with protection from the sun provided by three pop-up awnings. Two ladders provided access to the water.

Saturday was the last work day of the project, so as with all other projects it was a mad dash to complete surveying, recording, and removing unneeded equipment. After transporting equipment back to Jackson's Landing, Ray, Susan and I dismantled some aluminum shoring boxes. Due to the fine sediment in the Patuxent, dredging just produces a hole that quickly fills with more sediment from the surrounding area. Shoring boxes are needed to provide a secure space in which to work. As the dredge removed the fine sediments, the boxes slowly moved downwards creating an area for the archaeologists to explore the exposed remains of the ship.

Surveying, drawing and excavating was the job of the professional archaeologists and interns. Bob Neyland's group (NHHC) concentrated on a large area in the stern. Susan Langley's group (MHT) concentrated amidships, and Julie Schablitsky's group (SHA) concentrated on the bow. NHHC recovered surgical shears and an intact stoneware bottle with the stopper in place. The bottle was buoyant, so archaeologists are hopeful that the air in the bottle is from the early 19th century. It was sent to the NHHC conservation facility for treatment and analyses.

For the initial exploration, the visibility was good enough (12–18 inches) to see the structure in the bow with the decking intact and frames coming out of the sediment about 6–12 inches. Damage on the ends of the frames was visible. The stem appeared to have a large hawse hole right in front. One could see the timbers and feel fasteners and joints between the wood members. Of course, all light was quickly lost reaching down into the four-foot deep hole in front of the bow and one had to proceed by touch. The bow was decked as far as I could feel, perhaps 2–3 feet before disappearing under the sediments.



R. Hayes and R. Neyland document a stoneware bottle recovered from the vessel's stern.

My job was to move sandbags from about amidships to the bow prior to backfilling SHA's test unit. The first problem in moving sandbags was finding them. They had been covered by a fine layer of sediment, so I had to dig down through one to three inches of sediment to locate them. Then I hauled them to the bow and carefully slid them into the hole in front of the bow, being careful not to slide them across the bow decking potentially damaging it. This I did until I had 500 psi left in my tank, at which point I came up for lunch. Afterwards, more equipment was moved back to Jackson's Landing and to a parking lot upriver very close to the work site.

Monday, breakdown day, would be the only day

available to remove all the equipment on the four-unit work barge before the contractors arrived on Tuesday to move it down river to be dismantled and lifted onto semitrailers by crane. The first task was snorkeling about to remove all the PVC marker poles that had been used to outline the wreck, except for the bow which needed more backfill. Then we removed tapes, ropes, anchors and anything else from the site. Later, Ray and I were to use a dredge to backfill the bow area, which had already been partially filled by a work crew late on Saturday. Next we dismantled the remainder of the aluminum shoring boxes that had been removed from the

site by lift bags. We carefully loaded them onto a Navy boat to be transported to Jackson's Landing. Also removed were several small rafts, silt curtains and a huge amount of other gear, plus our own dive gear.







SCUBA Inventor Dr. Christian J. Lambertsen

by James Smailes and John Craig

any of us are familiar with the names of Jacques Cousteau and Emil Gagnan, coinventors of the aqua lung. But another of the pioneers of underwater breathing equipment, and the one who coined the phrase "self-contained underwater breathing apparatus", or SCUBA, was a medical doctor from Pennsylvania, with a second home at Bozman on Maryland's Eastern Shore. He passed away in February of 2011.

Christian J. Lambertsen was a medical student at the University of Pennsylvania in 1939 when he invented a revolutionary underwater breathing system later used by the Office of Strategic Services (OSS—the predecessor of the Central Intelligence Agency) and the military during WWII. His invention, the Lambertsen Amphibious Respirator Unit, or LARU, is considered



Lambertsen Amphibious Respirator Unit. www.therebreathersite.nl.

the forerunner of today's SCUBA equipment. In 1952, Dr.
Lambertsen and a colleague, Walter A. Hahn, co-authored a paper for the National Academy of Sciences describing his invention.

Before World War II, divers used heavy metal helmets with surface-supplied air. Tethered to a barge or boat, hard hat divers were not very maneuverable as they walked along the bottom. But with the LARU system, divers could swim freely and stealthily. LARU used pure oxygen in a closed system with a carbon dioxide filter. Because the diver could re-breathe the air he exhaled while underwater, the system was bubble-less and was the first "re-breather."

Growing up in New Jersey, Dr. Lambertsen had experimented with various underwater breathing systems during his summer vacations at the shore. His first experiments began with hoses and a bicycle pump. His prototypes evolved during medical school. The major breakthrough was the addition of carbon dioxide filters from anesthesia equipment. Arranged in two canisters on the diver's back, the oxygen tank and CO₂ filter were joined by four lengths of wide corrugated breathing tubes, two breathing bags and mounted onto a strong cloth jacket worn by the diver. The hoses connected to a full face mask, similar to an old style gas mask, with small eye openings.

Early in WWII, the Italian Navy had demonstrated an effective offensive capability against the Royal Navy using a closed-circuit apparatus. The British, in response, began to develop their own underwater diver capabilities. However, in 1940 the US Navy did not see the advantage of the device and rejected it. Dr. Lambertsen then demonstrated it in the pool at the Shoreham Hotel in Washington, D.C., to representatives of the OSS, who were impressed by the device.

After graduation from the University of Pennsylvania Medical School in 1943, Dr. Lambertsen joined the Army Medical Corps and was recruited into the OSS. He helped train members of the newly formed OSS maritime unit in the use of his equipment at the Naval Academy. One of the team divers was able to swim more than a mile underwater in the Potomac River

and remained submerged for 48 minutes. A further test of the usefulness of LARU was demonstrated in Operation Cincinnati, in which OSS divers infiltrated the heavy defenses at the US Navy harbor at Guantanamo Bay, Cuba, and blew up an old barge. The mission was a resounding success. A top-secret government report concluded that the Navy sound detection gear did not detect the presence of underwater swimmers. Later, Dr. Lambertsen was deployed to Burma where he worked on underwater infiltration and espionage missions. Major General William J. Donovan, Director of the OSS, awarded him the Legion of Merit.

Following the war, Dr. Lambertsen continued to develop and demonstrate advanced versions of the LARU to the different military branches. In 1948, he began training an elite Navy underwater demolition team, the precursor of the Navy SEALs. During one training exercise in the Caribbean, Dr. Lambertsen and another diver made the first exit from, and re-entry to, a submarine.

In the 1950s and 1960s, in collaboration with the J.H. Emerson Company, Dr. Lambertsen developed an advanced version of his underwater breathing system that was used by Navy special operations units until the 1980s.

His inventions were not limited to underwater equipment. In 1964, he co-developed with J. Lawrie and Edwin Link the first Deck Decompression Chamber, vastly improving the safety available to scuba divers working off shore.



A demonstration of the Lambertsen Amphibious Respirator Unit. Diver News, February 24, 2011.

This article was prepared using material from the Washington Post and Historical Diver. **‡**

continued from page 2

year, so we will continue the bi-monthly meeting schedule for 2012 as well. It can get a little confusing to try to recall which month we meet, so we have posted a full schedule of meetings and classes on the website so that members can confirm the dates there. If anyone does not have access to the website let me know and I will mail you a schedule.

Our speaker program remained active this year. I would like once again to extend our appreciation to Kendra Kennedy, Stephen Lubkemann, Alica Caporaso, and Dennis Knepper for volunteering their time during the year to provide our members with engaging topics in underwater archaeology.

Finally, be sure to mark your calendar for the Society for Historical Archaeology Conference which will be held in Baltimore, Maryland, between January 4 and January 8, 2012. The conference registration is expensive but all of the big names in underwater archaeology will be there to present information about their latest projects. So, check the schedule on the SHA website at http://www.sha.org/about/conferences/2012.cfm. This is a wonderful opportunity to see what the professional underwater archaeologists are working on.

See you on the water,

Steven Anthony President





January 4-8, 2012

SHA 2012 Conference, Baltimore, Maryland

MARITIME ARCHAEOLOGICAL AND HISTORICAL SOCIETY

Statement of Ethics

The Maritime Archaeological and Historical Society is organized for the purpose of enhancing public awareness and appreciation of the significance of submerged cultural resources and the science of maritime archaeology. In pursuit of this mandate, members may come into contact with unique information and cultural material associated with terrestrial and underwater sites containing evidence of the history of humankind. To protect these sites from destruction by commercial salvors and amateur souvenir hunters, the Society seeks to encourage its members to abide by the highest ethical standards. Therefore, as a condition of membership and pursuant to Article 2, Section 1 (A) of the bylaws, the undersigned executes this statement of ethics acknowledging adherence to the standards and policies of the Society, and further agrees as follows:

- 1. To regard all archaeological sites, artifacts and related information as potentially significant resources in accordance with federal, state, and international law and the principles and standards of contemporary archaeological science.
- 2. To maintain the confidentiality of the location of archaeological sites.
 - To excavate or otherwise disturb an archaeological site solely for the purpose of scientific research conducted under the supervision of a qualified archaeologist operating in accordance with the rules and regulations of federal or foreign governments. Artifacts shall not be removed until their context and provenience have been recorded
- and only when the artifact and related data have been designated for research, public display or otherwise for the common good.
- 4. To conduct oneself in a manner that protects the ethical integrity of the member, the archaeological site and the Society and prevents involvement in criminal violations of applicable vandalism statutes.
- 5. To observe these standards and aid in securing observance of these standards by fellow members and non-members.
- 5. To recognize that any member who violates the standards and policies of the Society shall be subject to sanctions and possible expulsion in accordance with Article 2, Section 4 of the bylaws.

Signature	Date	
U		

MARITIME ARCHAEOLOGICAL AND HISTORICAL SOCIETY PO Box 44382, L'Enfant Plaza, Washington, D.C. 20026 Application for Membership

Membership in the Maritime Archaeological and Historical Society is open to all persons interested in maritime history or archaeology whether or not they are divers. Members of MAHS have first preference for enrollment in all courses and other activities and projects of the Society. To join MAHS, please sign the Standards of Ethics above and send it to MAHS along with your check and this application form.

Name (print)					
Address			_ DUES ENCLOSED		
City	State _	Zip	\$30 Individual \$35 Family		
Phone (H)	_ (O)	_ (FAX)	\$50 Spansor		
E-mail			_		
Skills (circle): research / dive / video / communications / writing / first aid / other:					

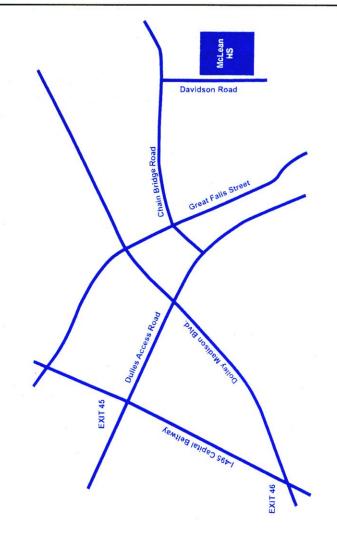
Please mail this form along with your check to: MAHS at PO Box 44382, L'Enfant Plaza, Washington, D.C., 22026

General membership meetings of the Maritime Archaeological and Historical Society (MAHS) are held at 7:30 p.m. on the second Tuesday of each month. MAHS meets at McLean High School, in McLean, Virginia, except in July, August and December. The school is located on Davidson Road, just inside the Capital Beltway (I-495) - use Exit 45, coming from Maryland, or Exit 46, coming from Virginia. Meetings in July, August and December are held at other locations for special events and holiday parties. Please join us and bring a friend.

{Check the website www.MAHSNet.org for e-mail advisories about any schedule changes }

Renew Now!

It's time to renew your membership in MAHS. It's easy. Just complete the application form on the inside back cover and sign the Ethics Statement, enclose a check for your dues, and mail! Thank you!



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