In June of 2010, MAHS was issued a revised permit by the Florida Keys National Marine Sanctuary (FKNMS) to survey unidentified shipwreck remains on Pickles Reef within the Sanctuary. The project had two goals: first, to conduct a preliminary reconnaissance survey of ship wreckage located on Pickles Reef; and second, to conduct the annual MAHS Field School in Underwater Archaeology on a selected portion of the reef containing wreckage.

Field School
The MAHS field school is designed to train sport divers in the techniques of non-intrusive archaeological mapping and documentation, providing the participants with valuable experience in maritime historical resource stewardship. The 2010 field school was conducted in two 2-day sessions, from June 23 to 26, concurrent with the survey project. The first session included four students and three MAHS trainers; the second session, three students and three MAHS trainers. This year most of the students were from the MAHS distance learning program, having taken the Introductory Course in Underwater Archaeology via the video course, Diving into History. The field school classes included students from California, Colorado, Indiana, and Virginia. Dive operations were again provided through Quiescence Diving Services, Inc., Key Largo.

As is often the case when working on the open sea, weather conditions determined the final schedule and location of the instructional dives. The initial project plan called for the field school to be conducted on Pickles Reef in coordination with the
Notes from the Prez –
Steven Anthony

In the spring edition of MAHSNEWS, I announced that MAHS would be working on Pickles Reef in the Florida Keys National Marine Sanctuary under the direction of Roger Smith, Florida State Underwater Archaeologist, and John Halas, NOAA Upper Keys Regional Manager. This is one of most extensive site survey projects that MAHS has undertaken to date. The project plan calls for a multi-year survey of cultural and natural resources on the reef with particular focus on a site locally referred to as the Gear Wreck. This wreck is thought to be the remains of a Florida East Coast Railway barge used during the construction of the overseas railway to Key West. The barge was reportedly carrying a load of cement and the concreted barrels are strewn all around this area of the reef. On our arrival, in Florida however, the weather turned rough and windy: we were able to accomplish some of the survey work, but much remains to be done. See the cover article for the full story.

In January, MAHS was pleased to learn that its appointment as Institutional Associate Member of the Advisory Council of Underwater Archaeology was renewed for another two-year term. Jim Smailes and I attended the annual ACUA Board Meeting in Amelia Island, Florida, in January, preceding the annual SHA conference. MAHS will be very active with ACUA this year. Jim volunteered for the Ethics Press Kit Committee and I volunteered for the Recreational Diver Training Guidelines and the Amicus Brief committees. There will be more to report on this later in the coming year.

In March, Jim Smailes conducted a presentation at the annual Maryland Archaeology Workshop updating the public on the various programs, activities and field projects that MAHS has ongoing throughout the year and the opportunities for volunteers to become involved.

Our multi-year Bodkin Creek Project came to a close this year and MAHS submitted a 300-page report to the Maryland Historical Trust titled “Bodkin Creek: A Maritime Archaeological and Historical Study.” The project was a comprehensive study that combined archival research and terrestrial and underwater archaeological investigations. The report included a survey of the history of indigenous watercraft of the Chesapeake Bay, an assessment of known terrestrial archaeological sites on the margins of the creek, and a comprehensive narrative synthesizing the historical, terrestrial, and underwater findings. The report was well received and will be the subject of our presentation to continued on page 18
survey work there. The skies were clear and the air was warm when the students and trainers arrived in Key Largo, but a storm system well to the south in the eastern Gulf of Mexico generated unusual winds and waves. Small craft warnings were posted each day of the project and seas ran 4-6-feet. The resulting surge in the shallow water on Pickles Reef made the site too rough for effective training. The field school was therefore transferred to another site in FKNMS that was more sheltered, the wreck of the Charles W. Baird.

The Charles W. Baird was a schooner-barge that sank in shallow water following a fire on board in the 1940s. A schooner-barge was a cargo ship converted for use as a barge. It had what is referred to as a reduced schooner-rig, indicating that it retained truncated masts allowing the ship to be sailed short distances on its own if necessary. As the story goes, one of the Baird’s crew lit a fire on the wooden deck. Not only did the wood in the fire burn, so did the deck, and the vessel soon burned to the waterline and sank.

The remains of the Baird sit upright on the sandy bottom with relatively little surrounding debris. During the field school, mapping exercises were conducted along the exterior of the vessel’s hull and in a small debris field at the north end of the wreck. Mapping was carried out by means of baseline trilateration, supplemented by 90-degree offsets where appropriate. Baselines were set up along the port and starboard sides of the vessel from which major structural features of the hull were measured. In addition, students drew and photographed various disarticulated features around the edges of the wreck such as knees or sections of framing that had separated from the hull.

At the end of each day the students and trainers headed off to the MAHS training room at Quiescence Diving Services for the plotting session. Here the students learn how to apply drawing techniques to create a scale map of the site. As the site comes to life on paper, a general feeling of accomplishment pervades the room which is the customary signal that MAHS has completed another successful field school.
Pickles Reef Survey

The survey work on Pickles Reef was conducted by six MAHS volunteers during the same four days as the field school. MAHS was asked by the Florida State Underwater Archaeologist, Roger Smith, to locate and document three sites, along with other features observed on the reef. The sites were described as:

1) a shipwreck known locally as the Gear Wreck or Barrel Wreck;
2) a nearby scatter of solidified cement barrels; and
3) a ballast pile possibly located some distance from the other two sites.

Florida Bureau of Historic Preservation site files indicate the presence of three archaeological sites on the reef, with the Smithsonian trinomials 18MO1315, 18MO1316, and 18MO1333. Yet site forms for these sites contained little detailed information concerning the nature of the sites, and exact locations were not documented.

Survey of the reef began with recording coordinates of several major surface features using a hand-held GPS unit. The features included a series of three buoys fringing the southern edge of the reef; two additional buoys marking a well-known natural feature, Snappers Ledge; and a pair of pilings located on the shallowest part of the reef near its northeast end. The coordinates helped us place the locations of the features on a map of the area that included a geo-referenced navigation chart and allowed us to use the features as reference points for future mapping of shipwreck features underwater.

The next task at Pickles Reef consisted of a series of snorkel surveys aimed at locating any cultural features visible on the shallow portions of the reef. Seas were running up to six feet, which did not make for ideal snorkeling conditions. But the survey crew was nothing if not resolute, and after determining that conditions were within safety margins the snorkel survey began. We were soon rewarded by locating the so-called Gear Wreck near the buoy to which we had moored. Further snorkel surveys were carried out across the northeast end of the reef from the buoy to the pilings, but no additional wreckage or cultural material was observed.

The Gear Wreck site was then surveyed on SCUBA. Three general areas were noted:

1) metal wreckage to the northeast occasionally interspersed with hardened cement barrels;
2) a widespread distribution of cement barrels adjacent to the metal wreckage to the southwest; and
3) a scattered distribution of rounded ballast cobbles west of the barrel scatter.

Due to the high seas and active surge, detailed mapping of the site was not practical. Nevertheless, sketch maps of the site area were drawn. Further, several MAHS volunteers managed to define the limits of the main concentration of cement barrels at the site and take preliminary measurements along the perimeter of the concentration. These data were combined with the sketch maps and a series of contextual photographs to develop a rough sketch of the area that included the metal wreckage (the Gear Wreck), the barrel distribution, and the ballast stone.

Our current interpretation of the site is that all three of the sites MAHS was asked to document are represented by the wreckage and other material documented during the current survey. The metal debris appears to comprise the Gear Wreck. Based on the absence of curved frames or hull plating and no evidence of a keel or keel-like structure, the wreckage may be that of a barge. The cement barrels among and adjacent to the wreckage are presumed to represent the second of the two sites, the barrel scatter. Based on the proximity of the barrels to the metal debris and the fact that the barrels and metal wreckage are intermixed to a large extent, it seems likely that the barrels were the barge’s cargo. Although direct evidence has yet to be located, we presently theorize that the cement was bound for construction of Flagler’s Overseas Railroad, which was constructed in the early 20th century. Analysis of cement samples extracted from the barrels by FKNMS indicates that the material was an early formulation of Portland cement.
cement, which would place it roughly within the same period as the construction of Flagler’s railroad. The ballast stone observed west of the barrel scatter appears to be evidence of the third site, and may be from another wreck, possibly unassociated with the barrels or Gear Wreck.

**Future Work**
The following future work is planned or recommended:

- A side-scan sonar survey of the reef, focusing initially on the site of the Gear Wreck and continuing to other parts of the reef as a preliminary means of locating and documenting any additional evidence of cultural material.

- Detailed mapping of the Gear Wreck, barrel distribution, and ballast scatter, as documented in the current study.

- Further documentation of individual features at the Gear Wreck site in order to determine the type of vessel represented, its date of construction, and whether all of the features at the site represent debris from a single wreck. Documentation would include photography, scale drawings, and recording of any diagnostic features.

- Analysis of additional cement samples. The analytical report suggested that additional historical background on Portland cement manufacture might be available to further assess the date and provenance of the samples.

- Archival research into records concerning wrecks documented historically on Pickles Reef. Records from Key West Admiralty Court indicate at least 23 vessels were lost on the reef from 1828-1911. Additional details from Court records should be sought along with newspaper or other accounts of wrecks in the area. Moreover, additional information about Flagler’s railroad may provide a link to the wreckage found on Pickles Reef.

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Thanks to Rob Blesser and the folks at Quiescence Diving Services, and to John Hallas, Brenda Altmeier, and Tim Runyon of FKNMS for helping make this a successful project.

More pictures from the field school and reef survey project can be found on the MAHS website at [http://www.mahsnet.org/projects/Pickles_Reef/MAHS_FS_10_web.pdf](http://www.mahsnet.org/projects/Pickles_Reef/MAHS_FS_10_web.pdf)

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Gear Wreck: metal debris and cement barrels. **Photo by J. Sommer.**

Gear Wreck: cement barrels. **Photo by D. Gossage.**

Gear Wreck: metal debris. **Photo by J. Sommer.**

K. Petersen photodocumenting the Gear Wreck site. **Photo by J. Sommer.**
Gear Wreck: cement barrels.  
Photo by D. Gossage.

Quiescence boat captains and staff.  Photo by the authors.

Students and trainers from the second field school session.  
Photo by the authors.
Admiral Lord Nelson faced a shocking amount of physical danger during his career. There was, for example, the difficult and perilous attack against Fort San Juan in Nicaragua in 1780. In that assault he led the grueling naval portion of a combined army-navy action up the San Juan River. Later he lost most of the sight of his right eye from an injury suffered during a bombardment at Calvi on Corsica.

Following his injury at Calvi, he faced mortal danger on three separate occasions during 1797. First was the Battle of Cape Saint Vincent in February, when he boarded and captured not one but two Spanish ships, and suffered a severe stomach contusion in the action. Then in July, he fought in hand-to-hand combat in a boat action off Cadiz. At several points during the boat action he was within inches of being mortally wounded. The action off Cadiz was followed later that same month by the amphibious assault at Santa Cruz, where his right arm was shattered and subsequently amputated aboard his flagship, HMS Theseus.

Roughly a year later, during the Battle of the Nile, Nelson suffered a head injury, and not quite three years later he was at the center of the bloody action at the Battle of Copenhagen. Finally, he was mortally wounded by a single musket shot during the ferocious action at the Battle of Trafalgar.

That foregoing list of events does not include the threats from exotic diseases in the East Indies, Central America, and West Indies. By any measure that is an incredible history of potential and actual bodily harm. And dramatic depictions of those scenes fill the pages of the uncounted number of books and articles about Admiral Nelson. So, it is not without good reason that his bravery in the face of injury and even death is recognized as an important part of his persona.

There was, however, another very different kind of threat that Nelson routinely braved, and this other category of danger threatened, not his life, but his career. This danger of a different kind does not receive the level of attention devoted to his derring-do. Yet it played a very significant role in the career of the man who changed the course of history from the quarterdecks of his ships.

These non-physical but career-threatening circumstances often emanated from the Admiralty and from Whitehall and were described by Nelson as “scrapes.” Some of those “scrapes” were unavoidable and could be expected during the career of an active Royal Navy officer of the Georgian era. But many—perhaps the most threatening—were actually precipitated by Nelson himself.

Arguably the most significant thing about this second category of dangers was that Nelson met them with a level of what could be called political courage that matched his physical bravery. And of equal importance, his political courage was a very significant part of his persona, as important to his role in history as his physical bravery: any one of Nelson’s “scrapes” could have ended his career before his date with destiny at Cape Trafalgar in 1805.

Evidence of this willingness to take political risks in the pursuit of important goals is sprinkled throughout Nelson’s written words. And those words are, I believe, the source of the most illuminating clues in the search for the meaning of Nelson’s “scrapes.” I have relied on them heavily to try to provide the tone and texture of this special aspect of Nelson’s career.

In 1795 for example, while in the Mediterranean and in command of HMS Agamemnon, Nelson was detached by his commander-in-chief, Vice Admiral William Hotham, with eight frigates for an independent assignment. The assignment involved cooperation with Austrian and Sardinian armies headed by Austrian General Baron de Vins. The objective was to drive the French from the Riviera coast. He wrote exuberantly to his wife Fanny:

“Here I am, having commenced a cooperation with an old Austrian General, almost fancying myself charging...”
at the head of a troop of horse. Nothing will be wanting on my part towards the success of the Common Cause…I am acting not only without the orders of my Commander-in-Chief, but in some measure contrary to them. However, I have not only the support of His Majesty’s Ministers, both at Turin and Genoa, but a consciousness that I am doing what is right and proper for the service of our King and Country. Political courage in an Officer abroad is as highly necessary as military courage.”

That last sentence shows that Nelson clearly understood the need for career-risking courage, and his tone suggests that he actually reveled being in a position of independence and importance.

It is also worth noting that Nelson pointed out that while he was acting contrary to his orders, he was nonetheless pursuing the “common cause” of Great Britain and its allies, which he claimed was more important than the specifics of his orders. But there is also something troubling in Nelson’s apparent pleasure in taking actions that he understood to be contrary to orders from his superiors. The Royal Navy of his time, like any first-class military organization was based on strict obedience to orders.

Later in November 1799, in a letter to the Duke of Clarence, Nelson further illuminated the thought process leading to his willingness—at times it seems eagerness—to interpret his duty himself:

“To serve my king, and to destroy the French, I consider as the great order of all, from which little ones spring; and if one of these little ones militate against it, (for, who can tell exactly at a distance?) I go back to obey the great order and object.”

In this instance, the great order, which was strategic rather than tactical, was to defeat the French enemy.

But let me take you back to an earlier point in his career when Nelson’s willingness to face the political dangers inherent in defining his duty himself really emerged. It was in fact during the three year period between March 1784 and July 1787, when he commanded HMS Boreas in the West Indies, that we can see this aspect of Nelson’s astonishing career come into very sharp focus. And interestingly there was no combat involved while he was serving in the West Indies in Boreas. Britain’s ongoing war with France had been suspended and there was no overt combat with other forces in the theater. It is also worth noting that Nelson was only 26 years of age when he deployed in Boreas. Although he was a seasoned officer at the time, he was still maturing as a leader.

Clearly the most significant example of political danger that Nelson precipitated during his West Indies deployment revolved around his controversial enforcement of Britain’s Navigation Acts, the series of laws that were designed to further Great Britain’s mercantile rise and, specifically, the ocean trade that was the lifeblood of Britain’s global empire.

When Nelson had arrived in the West Indies, the Navigation Acts were for the most part being ignored by the local colonists, merchants, and even the local officials, including the Captain-General of the Leeward Islands, retired Major General Sir Thomas Shirley, and most important for Nelson, his reporting military senior in the West Indies, Rear Admiral Sir Richard Hughes. A coincidental dispute arose with the Commissioner of the Antigua Dockyard, Royal Navy Captain John Moutray, over military precedence. But it was Rear Admiral Hughes and General Shirley who became the most dangerous threats to his career while he was in the West Indies.

Both Admiral Hughes and General Shirley were more interested in maintaining cordial relations with the local populace and avoiding local friction than in enforcing the Navigation Acts. In fairness, it should be recognized that there was more to their approach than a desire to not “rock the boat.” A legitimate argument can be made that they were helping to sustain the economic viability of Britain’s West Indies colony, which was a vital part of the British Empire at the time.

Initially Hughes and Shirley tried to reason with Nelson. Nelson, however, insisted on stopping American ships suspected of carrying such cargos as lumber, foodstuffs, and tobacco for trade in the West Indies. And he did so because he was—rightly or wrongly—thinking strategically by putting the laws that protected the trade that was the lifeblood of the British Empire before the economic interests of the region’s British colonists.

What developed was a series of angry exchanges between the young frigate captain and his seniors. In November 1784, Nelson had personalized the dispute in a letter to his former commanding officer and mentor Captain William Locker:

“This station is far from a pleasant one. The Admiral and all about him are great ninnies.”
The degree of Nelson’s commitment to his position and his aggressive approach was evident in a letter to Admiral Hughes a few months later in January 1785. The letter read in part:

“While I have the honour to command an English Man of War, I never shall allow myself to be subservient to any Governor, nor co-operate with him in doing illegal acts. Presidents of Council I feel myself superior to.”

Nelson’s actions and words amounted to direct disobedience to his military commander and an inability to cooperate—at the very least—with his government’s senior administrator in a major colony of the Empire. It was evident from that letter and Nelson’s other words and actions at the time that he was applying the combat doctrine he espoused before the Battle of Copenhagen to his “scrape” with Admiral Hughes and General Shirley. That doctrine was, “the boldest measures are the safest.” In this instance, however, the phrase “out on a limb and sawing energetically” also comes to mind.

As the dispute continued, Nelson again defended his position in another letter to Captain Locker, written while at sea in March 1786. In this letter he saw fit to use the term “disobey my orders,” but he was also clearly detailing his defense:

“General Shirley and others began by sending letters (to local officials) not far different from orders…but they thought it right to let me know it. Mr. Shirley I soon trimmed up and silenced. Sir Richard Hughes was a more delicate business; I must either disobey my orders, or disobey Acts of Parliament, which the Admiral was disobeying. I determined upon the former, trusting to the uprightness of my intention, and believed that my Country would not allow me to be ruined, by protecting her Commerce.”

In 1897, United States sea power visionary, then-Captain A.T. Mahan, provided a presumably objective perspective on Nelson’s actions in the West Indies in his biography The Life of Nelson. Mahan reflected the view of a navy captain on the question of Nelson’s defiance of his senior. Here is what he wrote:

“It is difficult for the non-military mind to realize how great is the moral effort of disobeying a superior, whose order on the one hand covers all responsibility, and on the other entails the most serious personal and professional injury, if violated without due cause; the burden of proving which rests upon the junior. For the latter it is justly and necessarily, not enough that his own intentions or convictions were honest; he has to show, not that he meant to do right, but that he actually did right in disobeying in the particular instance.”

Mahan’s distinction between intending to do right and actually doing the right thing is an insight into the professional relationship between military senior and junior that reaches far beyond Nelson’s disputes in the West Indies. And Mahan’s point is clear: good intentions will not be a justification for failing to strictly carry out one’s orders. There is a stark contrast between Nelson’s enthusiastic description of how he was actually disobeying the orders of his senior and Mahan’s description of the profound consequences of disobeying a military order. That contrast alerts us to the unspoken but real inner conflict that Nelson was dealing with.

It took an inordinate amount of self assurance for Nelson to take the actions that he did in the West Indies, and there is no doubt that he was running a high risk by aggressively defying his military commander and the senior local colonial administrator. In the immediate term, for example, he was sued for £40,000 by the local merchants and American captains for the losses they suffered from his strict enforcement of the Navigation Acts. During the suit Nelson was subject to arrest at any time or place he stepped ashore from Boreas. Until that particular legal action was resolved in his favor, he was a virtual prisoner in his own ship, and if the court had decided against him, he would have been financially ruined and his naval career ended.

In the end Nelson was supported by the local court, but he had to know that there would be a negative aftereffect at the Admiralty and elsewhere from his tour in the West Indies. Nevertheless, when Nelson was relieved of command of Boreas and he returned to his home in Burnham Thorpe in 1787, he assumed that he would soon have a new assignment. He wrote to his father in September of that year:

“A war seems at present inevitable…It looks like a general War….and (I) should not like to be an idle spectator.”

But based on his enforcement of the Navigation Acts, and a number of additional controversial actions he took while in the West Indies, he had developed a reputation at the Admiralty as a troublemaker. That reputation, and particularly the bruised feelings among those Nelson opposed during his deployment in Boreas, resulted in five years “on the beach” on half-pay. It was the price he paid for not only what he did, but more importantly, how he did what he did.

For five long years he was what he feared most: a spectator, and he gradually realized that he was no longer perceived at the Admiralty to be a rising young captain. He claimed at one point that he was in ill favor even with the King. It was a difficult time for him. He had married Frances Nisbet on Nevis in 1787 and life at Burnham Thorpe in Norwich had not agreed with her, either physically or temperamentally. He persevered in his efforts for a new command, however, and on the 17th
of January 1793 he wrote with palpable satisfaction to Fanny:

“Post nubila Phoebus:--After clouds comes sunshine. The Admiralty so smile upon me, that really I am as much surprised as when they frowned. Lord Chatham yesterday made many apologies for not having given me a Ship before this time, and said, that if I chose to take a Sixty-four to begin with, I should be appointed to one as soon as she was ready; and whenever it was in his power, I should be removed into a Seventy-four.”

As it turned out, his assignment to the 74-gun HMS Agamemnon occurred during the same month.

In retrospect, Nelson’s tour in the West Indies in Boreas was without a doubt a serious threat to his career. He had aggressively defined his duty for himself, and in the process he had escalated his local dispute to the Admiralty in London, which violated another general military precept: solve problems at your own level.

At this point it is fair to ask: what was the basis of this quality of Nelson, this willingness to risk dangerous political “scrapes” to pursue his duty as he defined it, even if it meant disobeying direct orders from his superior?

I suggest that at the heart of this high degree of political courage was, in a word, his individuality. Are there any readers who cannot visualize more than a few occasions in the Board Room of the Old Admiralty when Nelson was referred to as “one of a kind,” “a character,” “a difficult customer,” or as tempers strained, even as “a damned nuisance”?

As an aside and related to Nelson’s personal life, I would further suggest that it was Nelson’s individualism that allowed him to not only have a mistress—that was certainly not shocking at the time—but to expect everyone, including those at Court, to treat his paramour as if she were his wife! That was dangerous to his career.

Now I come to an observation about Nelson’s political courage. It was his ability to couple “doing the right thing” with his willingness to define his duty in his own terms that enabled him to survive so many “scrapes.” That ability to know and do the right thing was the necessary companion to his political courage, when, for example, he defied Admiral Parker’s signal at the Battle of Copenhagen, or later, when he left the Mediterranean without orders in pursuit of Admiral Villeneuve in 1805. Each instance was an example of how Nelson was willing to repeatedly risk his career to do what he thought was the right thing—and how often what he did turned out to actually be the right thing.

Finally I return to Mahan, excerpting from both the beginning and the end of his biography of Nelson:

“(He was) the one man who in himself summed up and embodied the greatness of the possibilities which Sea Power comprehends, the man for whom genius and opportunity worked together, to make him the personification of the Navy of Great Britain....There were, indeed, consequences momentous and stupendous yet to flow from the decisive supremacy of Great Britain’s sea-power, the establishment of which, beyond all question or competition, was Nelson’s greatest achievement...he needed and he left no successor.”

It is that “genius” to which Mahan refers that we continue to explore and illuminate, and it is not simply what Nelson did that compels us. It’s what he was as a man, rather than as a hero—the strengths and weaknesses and the strengths that were also weaknesses—from which we probably learn the most.

Colin White, in his work Nelson the Admiral, wrote of Nelson as a senior officer who “matured by degrees into a finely rounded leader.” Tom Pocock, in Nelson and his World, called him “Superman with Everyman’s weaknesses.” Between those two very different characterizations there is a complex personality, part of which was the ability to survive something I have called “danger of a different kind.”

This article was adapted from the Cecil Isaacson Memorial Lecture given at the Annual General Meeting of The 1805 Club, Royal Naval Museum, Portsmouth, England, May 15, 2010, and previously published in the Trafalgar Chronicle, the yearbook of The 1805 Club.

Joseph F. Callo is a retired Rear Admiral with a 30-plus year career as a reserve officer. He writes frequently on naval subjects for magazines and newspapers and has written extensively on Nelson and John Paul Jones.
HMS Victory Threatened by Salvors

by James Smailes

A recent report published by Wessex Archaeology regarding the future of the wreck of HMS Victory has identified unlicensed salvage as the biggest threat to the site. The predecessor to Lord Nelson's Victory, HMS Victory was armed with as many as 110 bronze cannons, making her one of the deadliest vessels of the age when she went down in 1744. The largest cannon on board, 42-pounders, each weighing four tons, were the most powerful gun then used in naval warfare. More than 1,000 sailors drowned when the British warship sank in a storm. The Wessex Archaeology report concluded that unauthorized salvage could result in "irreparable damage" to the wreck site.

The report is part of public review into the future management of the shipwreck site in the English Channel. Wessex Archaeology, a registered historic preservation consulting firm and educational charity, produced the report for the British Department of Culture, Media and Sport and the Ministry of Defense. Citing data collected from archaeological and documentary sources, the report noted that the site has not been significantly affected by natural processes, but has suffered "some level of past physical damage" from trawling or other fishing activity. Also, said the report, the site lies within the range of some divers, and thus the greatest threat was likely to come from "unauthorized attempts to recover items such as the bronze cannon or to search destructively for bullion and other valuables."

In the history of the Royal Navy, Victory was the last warship to be lost with a complete set of bronze cannon. The high cost of bronze cannon eventually prompted the British Admiralty to replace them with iron guns.

A month after the loss, a Dutch newspaper reported that Victory had been carrying from Lisbon £400,000 destined for Dutch merchants. That would amount to about four tons of gold coins, now valued at more than $1 billion. Yet, the Wessex Archaeology report noted that there was little evidence that the gold coins reportedly aboard the ship actually existed.

O ne of the issues in dealing with this wreck is that it lies outside the territorial waters of the United Kingdom. Its exact location has not been released. The UK Government is considering three possible options for the site's future: caring for it where it lies; recovering the visible artifacts and caring for the rest of the site; or, further examination and excavation.

Managing the wreck in situ would involve monitoring, which estimates suggest would cost between £20,000 and £50,000 a year. Depending upon the number of artifacts present, the cost of the second option is estimated at £1 million, including recovery, conservation, study, and putting the objects on display. This option would also involve annual site monitoring costs.

The shipwreck was found by a vessel belonging to a US-based exploration company in February 2009. In September, after artifacts including two cannon were raised from the seabed, the wreck was confirmed as that of Admiral Sir John Balchin's HMS Victory.

Launch in 1737, Victory was the flagship of Admiral Balchin when he successfully relieved a British convoy from a French blockade of the River
Joshua Barney and the Chesapeake Naval Flotilla

The bicentennial of the War of 1812 is a little more than a year away, but activity has already begun in preparation for commemorating the event. With the anniversary in mind, we have assembled a series of articles that focus on continuing research concerning Joshua Barney, the Chesapeake Flotilla, and the defense of the Chesapeake during the war.

The Identification and Treatment of Artifacts Recovered from Past Investigations of the Suspected USS Scorpion Site

by George Schwarz

Under the leadership of Commodore Joshua Barney, the U.S. Government and citizens of Maryland united to defend the Chesapeake Bay against British forces during the War of 1812. On 24 May 1814, that force, led by Barney’s flagship USS Scorpion, sailed for the lower Chesapeake Bay in an attempt to intercept a British advance toward Washington, D.C. Over the course of several weeks the flotilla engaged the British on many occasions and succeeded in delaying the British advance. Finally, on 21 August 1814, facing overwhelming odds, Barney strategically retreated and landed his men at Pig Point, near Upper Marlboro, Maryland. After scuttling the entire flotilla to prevent British capture, Barney and his men marched on to fight in the Battle of Bladensburg in defense of Washington.

In the late 1970s, Donald Shomette and Dr. Ralph Eshleman formed the Patuxent River Submerged Cultural Resources Survey in an effort to find the remains of the flotilla. As a result of the project a number of Chesapeake Bay flotilla shipwreck sites, including what is thought to be the Scorpion, were discovered. Limited excavation of the suspected Scorpion site was performed in 1980 and later in 1996, yielding a number of well-preserved and unique naval artifacts. The array of objects recovered includes a collection of what may be one of the Navy’s earliest surgical and dental instruments, as well as military hardware, carpentry tools, galley articles, crew’s personal effects, and the ship itself. Because heavy siltation had buried the archaeological site beneath five to ten feet (1.5 to 3 m) of sediment, the artifacts were found in an excellent state of preservation.

The artifacts were documented, catalogued, and treated at the Naval History & Heritage Command (NHHC) Underwater Archaeology Branch’s (UAB) Archaeology & Conservation Laboratory, in Washington, D.C., and then transferred to the Calvert Marine Museum (CMM), in Solomons, Maryland, for storage and display. CMM was one of the entities that participated in the Patuxent River Submerged Cultural Resources Survey in 1977 and 1980, and was an appropriate repository for the conserved artifacts. After 29 years of storage at the CMM, the majority of the artifacts were returned to NHHC in summer 2008 for condition assessments and possible retreatment to prevent further deterioration. Over 30 of the artifacts are still on exhibit at CMM, and are currently under loan from NHHC.

Deterioration of Artifacts from Underwater Sites

As material becomes submerged during the sinking of a ship or other structure, objects are deposited into a new environment (i.e., water) and the compounds that make up each object must adapt. During this period, a material transformation occurs which continues until an object reaches a state of near equilibrium with its new surroundings. When metal and organic objects are later recovered from underwater environments they are affected by the ambient changes in temperature, light, oxygen level, and other variables. This typically results in the rapid physical, chemical, and biological breakdown of materials that may continue until they undergo stabilization in a conservation laboratory.

Treatment of Artifacts from the Suspected USS Scorpion Site

The 181 artifacts previously recovered from the suspected Scorpion shipwreck can be classified into six basic types: rigging and navigational equipment; pharmaceutical equipment; medical gear; military hardware; carpentry tools; and galley articles.
hardware; crewmembers’ personal belongings; and structural components of the ship. In general, those artifacts composed of animal, vegetable, and mineral materials survived better than those made of wood. The metal and ceramic artifacts were also recovered in a good state of preservation. The following describes treatment methods used on selected artifacts from the wreck site.

Historical documentation suggests that USS Scorpion was a hospital ship as well as Barney’s flagship. Several artifacts collected during the 1980 excavation provide some evidence for this hypothesis, including a collection of intact pharmaceutical phials. Most of these containers were composed of hand-blown light green glass, a few with residual cork and other substances preserved inside. The glass phials were kept wet while awaiting documentation. Conservators later cleaned the small bottles and soaked them in baths of manganese and phospholene to stabilize them. Other pharmaceutical objects recovered from the wreck, which are currently on display at CMM and National Museum of the US Navy, include mixing spatulas, creamware pill tiles, corked bottles, a piece of a pestle, mixing bowls, and plates.

Other hospital related artifacts included a surgical scalpel guide, likely deformed after the sinking of the vessel. This iron object, along with many other ferrous artifacts, was treated by electrolysis, using a low voltage electrical current to remove damaging chlorides. The basic procedure is as follows. The artifacts are placed in a vat and surrounded by a form-fitting anode, then immersed in an electrolyte (usually a dilute solution of sodium hydroxide or sodium carbonate). A low current electrical charge is directly applied to the cathode (artifact) for extended periods of time while the chlorides in the solution are monitored. The solution is regularly changed, and when the measured chloride count is consistently low the object is removed. Following chloride removal, the object is typically coated with tannic acid and a sealant to protect the metal from further corrosion. A number of other medical artifacts, such as surgical scissors, dental forceps, and a dental toothkey, were treated in this manner and can be seen on display in the museums.

A two-tined fork was also recovered from the wreck, representing the cutlery used by the crew. Like the scalpel guide, the fork was treated via electrolysis and continues to resist corrosion. Other examples of personal equipment conserved from the wreck are pieces of leather shoes worn by the crew and a tin-plated grog cup. The leather fragments, like many of the other organic materials, were desalinated and treated with polyethylene glycol (PEG). Following an extended period submerged in PEG, the organic artifacts were freeze-dried to complete the treatment process and prevent warping of the material. The grog cup, now on display in the National Museum of the U.S. Navy, was found to be stable and was coated with a low-viscosity microcrystalline wax as an environmental sealant.

On-board security was an important consideration for the vessels on the Patuxent River, as evidenced by the padlocks and door locks discovered on the shipwreck. Records indicate that thirty-six padlocks
were purchased for the Chesapeake Flotilla at $1.00 per lock by Naval agent James Beatty. Two of the locks recently returned to NHHC for assessment are an iron sliding bolt lock and a German silver padlock back plate. The iron lock had previously been treated by electrolysis, but due to the nature of the metal the padlock was simply desalinated, mechanically cleaned, and coated with a solution of benzotriazole and sealant.

Evidence of shipboard lighting was also found on the wreck site. An intact “Paul Revere” lantern and the base and candle elevator of a second lantern were discovered imbedded in a mass of clay. The tin-plated lanterns were mechanically cleaned upon recovery and later soaked in acetone before being coated with a polyurethane resin.

The ship itself is still fairly intact below the waterline, and structural elements of the vessel were available for examination. Several of the wooden components were excavated for interpretation and display. Construction features were recorded in some detail and a variety of the ship’s fasteners were recovered and conserved, some with fragments of the wooden vessel still attached.

A versatile tool associated with the military hardware discovered on the wreck was a combination gun screwdriver, which was used to make various adjustments on firearms. It was treated by electrolysis, and continues to exhibit corrosion-free stability. Also found on the wreck were several brass hinges. These artifacts were chemically cleaned and coated with an environmental sealant.

And finally, a two-step companion ladder with grooved runners that could be placed into a lip of the deck was recovered and treated. This wooden object was treated for two years in the early 1980s with PEG and freeze-drying. It is currently stored at NHHC in a stable environment with low relative humidity to maintain its preservation.

In summary, the Archaeology & Conservation Laboratory at NHHC serves as a multifunctional facility where Navy’s marine artifacts are fully documented and analyzed by NHHC archaeologists and are treated for long-term preservation. The artifacts described in this article, along with 120 other Chesapeake Flotilla objects currently being curated at NHHC, have undergone assessment and in some cases retreatment to prevent further deterioration. As with all of Navy’s underwater archaeological artifacts, they will be available for academic study, public viewing through scheduled tours of the Archaeology & Conservation Laboratory, and for national and international museums to borrow and exhibit through NHHC’s artifact loan program.

George Schwarz is manager of the Underwater Archaeology Branch Conservation Laboratory at the Naval History & Heritage Command http://www.nhhc.gov/.
Joshua Barney and the Chesapeake Naval Flotilla

The Chesapeake Flotilla and Ongoing Projects of the Maryland Maritime Archaeology Program

by Troy J. Nowak

The Maryland Maritime Archaeology Program had a very successful year in 2010, and expects to continue its success during 2011. We have a number of exciting ongoing and upcoming projects involving remote sensing and diving investigations of sites from the American Revolution, the War of 1812, and the Civil War.

One of our most exciting projects involves study of Joshua Barney’s Chesapeake Flotilla. In 1813, the United States did not have a navy in the Chesapeake Bay that could protect its citizens. Joshua Barney, a former Revolutionary War hero and privateer from Baltimore, proposed the development of a flotilla comprised of gunboats and armed barges that could help protect the Bay. The Chesapeake Flotilla was launched during Spring 1814 and fought a series of engagements with the Royal Navy in the Chesapeake Bay and in St. Leonard’s Creek during June 1814. Those actions resulted in the damaging of several Royal Navy vessels and the scuttling of two American gunboats. The flotilla eventually fled up the Patuxent to avoid capture and was scuttled by a small band of flotillamen near Wayson’s Corner on August 22, 1814. Barney and the rest of the flotillamen meanwhile marched to link up with marines and militiamen to slow the British advance. Two days later, Barney and his men fought the British at the Battle of Bladensburg.

This year, 2010, was the start of a six year project to study the Chesapeake Flotilla and search for its flagship Scorpion. The project involves a partnership between the Maryland State Highway Administration, Naval History and Heritage Command, and the Maryland Historical Trust. The project partners devised a three-phase plan for the investigation: Phase I, begun this year, will continue during 2011 and involve site relocation and assessment; Phase 2 will take place between July and October 2012 and will involve excavation and documentation; Phase 3 will continue until 2016 with plans that include conservation, analyses, and publication.

We began the first phase this past July and conducted remote sensing, probing, and limited test excavations. A shipwreck from the flotilla that originally was discovered and partially excavated by Nautical Archaeological Associates, Inc., and the Calvert Marine Museum during the late 1970s and early 1980s was relocated. We made a preliminary assessment of its preservation, which appeared to be excellent, and we began to delineate the extent of the site. Further test excavations will be conducted during July and August 2011.

During October 2010 we conducted investigations using a Marine Magnetics SeaQuest 3-Axis gradiometer to assess the equipment’s value for the archeological exploration of shipwrecks. We hope that the gradiometer will help us ascertain whether or not any other ships from the flotilla are located adjacent to the site that was studied this past summer. The gradiometer survey was conducted by the Maryland Historical Trust under an Ocean Exploration grant from the National Oceanic and Atmospheric Administration.
In addition to the Chesapeake Flotilla investigation, we have a number of other exciting projects planned that will generate numerous volunteer opportunities beginning in March 2011.

Remote sensing and diving investigations of a Civil War site are planned in Aquia Creek and the Potomac River under a partnership between the Maryland Historical Trust and Stafford County, Virginia. Aquia Creek was the site of one of the first naval engagements of the Civil War. The battle occurred from May 29 to June 1, 1861, when Union vessels and Confederate batteries exchanged approximately 1,000 rounds over Aquia Landing, the terminus of the Richmond, Fredericksburg & Potomac Railroad and the location of the Potomac Steamboat Company wharf. Aquia Landing eventually became a major logistical access point for the Union during the Battles of Fredericksburg and Chancellorsville. Work at Aquia Creek is scheduled to begin during March 2011.

We also will continue our work on Revolutionary War and War of 1812 sites during March 2011. We will complete remote sensing investigations in the Chesapeake Bay where we are searching for the Maryland State Navy vessels Cato and Hawk that ran aground and wrecked near Cedar Point during 1781, and near Smith Island at the site of the Battle of the Barges in Kedges Strait, where American and Loyalist forces fought the bloodiest naval engagement in Maryland during the American Revolution. Diving investigations also are planned to investigate a shipwreck and possible ballast pile in the Elk River that may be associated with the British raid at Frenchtown in 1813. All of these projects will be conducted under a grant received from the National Park Service’s American Battlefield Protection Program and will take place between March and June 2011.

Finally, the staff at the MMAP would like to thank the many volunteers who helped us in 2010 during our surveys in the Sassafras River where we searched for four ships burned during the 1813 British raids of Fredericktown and Georgetown, and during continuing our search for Cato and Hawk in the Chesapeake Bay. Anyone interested in volunteering during 2011 is encouraged to visit the Maryland Historical Trust website (http://mht.maryland.gov/Archeology_underwater.html) and submit a volunteer form. The online form is expected to be ready for use by December 2010.

Troy Nowak is Assistant State Underwater Archaeologist with the Maryland Maritime Archaeology Program, Maryland Historical Trust.

It will soon be time to renew your MAHS Membership for 2011. If you aren’t a member, become one and join us in supporting maritime historic preservation.
In 1981 Donald Shomette wrote what was considered a classic of regional maritime history: *Flotilla: Battle for the Patuxent*. It was the story of Joshua Barney, the Chesapeake Flotilla, and the Patuxent Campaign in the War of 1812. In 2009, Shomette revised and updated the book, which has been retitled *Flotilla: The Patuxent Naval Campaign in the War of 1812*, producing what may now be the definitive history of this critical part of the nation’s so-called “Second War of Independence.”

Donald Shomette, writer, historian, and underwater archaeologist, is a widely published author with 15 books to his credit. Formerly a staff member at the Library of Congress, where he worked for 20 years, he is recognized as one of the foremost scholars of Joshua Barney and the War of 1812. Shomette has received numerous honors including the Calvert Prize, Maryland’s most prestigious award for historic preservation, and was twice the winner of the John Lyman Book Award for Best American Maritime History. For his pioneering work in the maritime archaeology of the Chesapeake Bay region he has been referred to by the Smithsonian Institution as the “Father of Marine Archaeology in Maryland.” Shomette was an early supporter of MAHS and was instrumental in the development of the MAHS Introduction to Underwater Archaeology class. He maintains a close association with the organization.

The story of Joshua Barney is well known to many in the Middle Atlantic region, yet Shomette’s revised *Flotilla* brings formidable detail and context to the tale. Beginning with Barney’s personal and professional outrage at the British Chesapeake Bay campaign, Shomette follows the conception and realization of the what became referred to as the national barge fleet, and details the somewhat rocky history of the force.

This highly readable re-write of the Chesapeake Flotilla’s history weighs in at 500 pages, including 61 pages of appendixes, 51 pages of notes, and a useful and well-designed 22-page index. In a recent conversation with MAHS, Shomette noted that while nominally an update, the revision contains a tremendous amount of new material. An even brief comparison of the text, notes, and bibliographic references in the two volumes bears this out. The narrative text is almost twice the length of the original, appendixes have been expanded, and clearer and more detailed illustrations have been added, including a number of Barney’s own sketches and maps taken from original archival documents. New chapters have been inserted among the previous headings to accommodate new information, yet the text employs the same generally chronological organizational structure, beginning with America’s declaration of war on the British in June of 1812; the havoc spread by the British under Admiral Cockburn up and down the Bay during the Chesapeake Campaign; Barney’s return from retirement first as a privateer, then as designer and commander of the barge fleet defending the Bay; the several battles with the Royal Navy including the standout victory at St. Leonard’s Creek, the eventual scuttling of the fleet in the Patuxent; and Barney’s stand at Battalion Old Fields between Upper Marlboro and Washington during the Battle of Bladensburg that ended with his wounding, capture, and parole.

The battles are fairly well known—Cedar Point, St. Leonard’s Creek—and they are presented thoroughly and in familiar detail. Perhaps less well-known is the back story of the design, construction, and launching of the flotilla. Barney, described by Shomette as “a man of the sea who had fought as many if not more naval battles against the British than any American alive,” proposed a fleet of vernacular craft to harry the British throughout the Bay. In a document that has come to be referred to as the “Defence of the Chesapeake Bay &c.” sent to Secretary of the Navy William Jones on July 4, 1813, Barney wrote that the drafts of the present ships in the American Navy were too deep and that the gun boats then in use were too heavy to row or maneuver adequately. The solution was to build row galleys or...
barges “so-constructed as to draw a small draft of water, to carry Oars, light sails, and One heavy long gun…” Each boat ought to carry 50 officers & Men, and also 25 Soldiers…”

Shomette provides full and authoritative descriptions of sea and land battles, as well as personal and often colorful details of individuals on both sides of the conflict, all well documented in extensive notes that draw on primary archival records not referenced in the original edition.

The epigraph in the original edition of Flotilla was from Alfred Thayer Mahan, who observed that the art of war may be illustrated as readily, though less conspicuously, by a flotilla as by an armada. In the new edition the quote is replaced by lines from Coleridge that seem to decry our ability to learn from history: “…the light which experience gives is a lantern…which shines only on the waves behind us.” While one wonders at the choice of this pessimistic sentiment, the scholarship and breadth of understanding demonstrated in the new edition of Flotilla shine a bright light on this important part of our history, and make this an indispensible resource for students of the era.

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Tagus in Portugal seven years later. On the return journey, a furious gale scattered the British fleet as it entered the English Channel. On October 5, 1744, somewhere off the Channel Islands, Victory went down with all hands. The flagship was the only vessel of the returning British fleet lost at sea. Until her discovery, it was thought she had hit the infamous Casquets, the so-called graveyard of the English Channel, a group of rocky islets northwest of Alderney that protrude a few dozen feet above the water’s surface. The lighthouse keeper of Alderney had been charged with failing to keep its lights on at the time of the ship’s disappearance. The discovery of Victory 62 miles away from the Casquets cleared the keeper’s name as well as that of the warship’s commander, whose navigation had been impugned after the catastrophic loss.

In a statement following announcement of the wreck’s discovery, Koichiro Matsuura, Director-General of UNESCO, the United Nations Educational, Scientific and Cultural Organization, said “I am delighted that such an exceptional example of underwater heritage has been located. The cultural and scientific value of this artefact is considerable. In the spirit of the Convention adopted by UNESCO in 2001, I trust that all parties concerned will take the necessary measures to ensure this important vestige of British naval history is safeguarded and given appropriate attention, not used for commercial gain.”

A full archaeological evaluation and excavation would remove any potential threat to the site but would certainly disturb any human remains as well as cost several million pounds, the report found. The public have been asked not only their views on the future management of the site, but whether they would offer any physical or financial support for that upkeep and in furthering a greater public understanding of naval heritage gained from the site.

This article was adapted from a BBC News article dated 5/18/2010, that can be found at http://news.bbc.co.uk/go/pr/fr/-/2/hi/europe/guernsey/8687441.stm

A copy of the Wessex Archaeology report can be found at http://www.wessexarch.co.uk/system/files/hms%20victory%20dba%20final%20version-web.pdf

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the Mid-Atlantic Archaeology Conference in March 2011.

In October, Christopher Wolf, an archaeologist with the Anthropology Department, Office of Repatriation at the Smithsonian, provided MAHS members with a presentation describing his research on Newfoundland and his examination of contacts between the early fishing industry and maritime explorers of the northwest Atlantic. His talk described the excavation of a site at Stock Cove, where in 1612 the first official governor of a colony in Newfoundland and two ships full of men made the earliest documented contact with native groups in that area.

With so much going on there are plenty of opportunities for MAHS volunteers to get involved. We have changed our general membership meetings to a bi-monthly schedule, so check the MAHS web site, www.mahsnet.org, for meeting updates and other event and project schedules. Looks like 2011 will be a busy year—be sure to join us.

See you on the water,

Steven Anthony
President
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.

6. 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  ________________________

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 ______________________________________________________

City _________________________   State _________  Zip ____________

Phone (H) _______________   (O) _______________   (FAX) _______________

E-mail  _______________________________________________________

Skills (circle):  research / dive / video / communications / writing / first aid / other: ___________________________________________________________________________________

DUES ENCLOSED

___  $30  Individual
___  $35  Family
___  $50  Sponsor
___  $100  Patron

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 bimonthly at 7:30 p.m. on the second Tuesday of the month beginning in February. MAHS meets at McLean High School, in McLean, Virginia. 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. Please join us and bring a friend.

Check the MAHS website [www.MAHSNet.org](http://www.MAHSNet.org) for meeting schedules and advisories.

**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!