

Coming Events

- September 11, 1999 Association of Great Lakes
Maritime History annual meet-
ing in Sturgeon Bay.
- July 24-31, 1999 WUAA survey project at Bailey's
Harbor in Door County. For
information contact Jeff Gray at
(608-271-1382).
- October 16, 1999 Wisconsin Underwater
Archeology Association fall
meeting in Milwaukee.
- November 20, 1999 Gales of November in Duluth.

*Yacht under construction in Sturgeon Bay
See story about WUAA's tour on page 2.*



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*For those interested in the study and preservation of
Wisconsin's underwater history and cultural resources.*

Wisconsin's UNDERWATER HERITAGE

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Reflections on Studying the *Niagara*, the Work Begins and a Big Blow (part 2)

by John Jensen

This is part two of the story of the field work done on the Niagara. Part one was in the December 1998 issue of Wisconsin's Underwater Heritage.

We would also like to refer readers to Spring 1999 issue of the Wisconsin Magazine of History, vol. 82, no. 3, for Mr. Jensen's article on the history and archeology that they developed on the Niagara.

For reasons I don't fully understand, I kept a personal journal during the period that we worked on the *Niagara*. Quite often I would begin the mornings noting my thoughts on the previous days events. The journal tells the story from the perspective of a stressed

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Shipwrecks In Review

by Dr. Richard Boyd

As is our annual custom we revisit important events which took place within approximately the last year which were associated with shipwrecks or other prominent underwater archeological entities. While emphasis is placed on sites within the Great Lakes, we also review those worldwide judged to be of significant archeological interest.

Unfortunately, this last year shipwrecks have been associated with several negative or controversial situations. The popular wrecks of Isle Royale are presently shrouded in a political dispute associated with possible contentious bureaucratic planning. The National Park Service is introducing a new long-term management plan for the Island which many perceive to be both anti-private boater and anti-

diver. For example this plan establishes numerous quiet and no-wake zones throughout the archipelago which may interfere with efficient transit to and from certain dive sites. It may also eliminate dive compressors from any on-shore use, although pumping tanks aboard ship at dive sites would still be permitted. The establishment of a shoreline air shack with electricity has been proposed where divers could operate or store their compressors. Unfortunately, the location of this building would be at a spot far removed from any popular shipwreck.

The new management program also includes the removal of certain docks to reduce competition among divers, boaters and back-packers for campsites. It also seems to place strong emphasis on accommodating day-trippers and hikers seemingly at the

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*The Edward L. Ryerson in Sturgeon Bay
See story about WUAA's tour on page 2.*



Wisconsin's Underwater Heritage

is published quarterly by the Wisconsin Underwater Archeology Association, a nonprofit association of individuals and organizations interested in studying and preserving the underwater cultural resources and historical sites of Wisconsin.

In addition to publishing this newsletter, the Association also holds semiannual meetings and provides support to members' research and publication projects. Annual membership dues are \$15. For membership information, contact the secretary or write to the address below.

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What A Tour!

If you missed WUAA's last meeting, in Sturgeon Bay, you missed a good one. We met at the new Door County Maritime Museum and proceeded from there to check out two very interesting sites as part of Sturgeon Bay's annual shipyard tour. At Bay Shipbuilding Company we had the opportunity to get up close to a number of large vessels including a partially constructed 500-foot tank barge, a huge self-unloading cement barge and a 1000-foot ore carrier. At Palmer Johnson Inc. we walked through the inner workings of a shipbuilding yard and had hands on contact with a number of large (100 to 195-foot) aluminum yachts in various stages of completion. (See the photographs on pages 1, 3 and 10.)

Finally, for WUAA members only, we had a guided tour of the U.S. Coast Guard Cutter *Mobile Bay*. This ship was modified after the sinking of the *Mesquite* in Lake Superior to accommodate a specially built barge to perform maintenance of the shipping buoys on the Great Lakes.

During the business meeting Andy Jalbert was elected to the position of vice-president of the association. It was announced that Richard Boyd and Jeff Grey were donating \$500 to WUAA, as a result of their underwater archeology workshop at Our World Underwater. We thank them very much for their generosity. Also during the meeting WUAA director Richard Boyd and treasurer and past president Tom Villand received distinguished service awards from the Wisconsin State Historical Society.

There were also reports on past events and discussions of projects by the Wisconsin Underwater Archeology Association, the Wisconsin State Historical Society, the Underwater Archeology Society of Chicago and individual members.

The date of our fall meeting is set for October 16, in Milwaukee. The plan is to have the typical business meeting and then tour the Wisconsin Lake Schooner Project. Yes, we did this before, but the WLSP felt we would be astounded by the progress since the last tour. They assured us that it would be a worthwhile trip. Also, it has been suggested that a river tour might be interesting. We'll have to check this out – there will be more information in the next newsletter.

Elections will take place at the fall meeting. If you are interested, please speak up. Input by members is the only way interesting things will happen.

A reminder – the *Christina Neilson* mapping project will take place July 24 – 31 (Baileys Harbor, Door County). Also, plans are being formulated for a steam engine workshop and possibly a speaker on Civil War related underwater archeology – more information later.

Rhode Island Shipwreck Case

A federal court judge has awarded custody of wooden shipwrecks at the bottom of Newport Harbor to the State of Rhode Island.

The state attorney general sought the decision after marine archeologists determined that one of the shipwrecks might be the *Endeavour*, the 18th century vessel that took Captain Cook on his South Pacific expedition.

The custody will hopefully prevent wreck hunters from interfering with the vessels. Two weeks ago, divers were spotted taking an artifact from the site, said Newport marine archeologist D.K. Abbass.

"Divers don't realize that there may be something historically significant here. They think they can pick up a piece of pottery or metal," said Abbass, "and they may be taking the one piece away that will tell us what ship this is."

Earlier this month, Abbass uncovered clues that suggest the wreck at the bottom of the harbor is the *Endeavour*. Since then, she has formed a foundation in Cook's name and has organized an international team of archeologists and historians for a dig.

The custody ruling, handed down Monday, will lay the groundwork for what could be an international fight if the wreck is that of the famed British explorer.

The British government might have owned the ship when it sank. But a researcher who set out last week to track down ownership documents returned empty-handed.

Rod Mather, an underwater archeologist at the University of Rhode Island, traveled to London in search of the paperwork, but was stifled by the millions of documents (about Cook).

(From an article in the Hartford (CT) Courant, March 30, 1999.)

UASC Project

The Underwater Archeological Society of Chicago has a story and photographs on the raising of the Tymbarge, a large, wooden, experimental tanker. The UASC website address is:

www.businessform.com/uaschome.htm

WMHS new website

The Wisconsin Marine Historical Society has a new web site. The address is:

www.execpc.com/~wmhs/

The WMHS email address is:

wmhs@execpc.com

The WMHS has five, searchable, databases for Great Lakes vessels which contain over 51,000 ships.



expense of other user-groups. The current structure of park user fees is also considered by many to be discriminatory on the private boater. In fact, the overall plan has brought strong condemnation from cruising clubs including the Isle Royale Boating Association itself. Most user-groups are eyeing this new plan with suspicion and trepidation since it is rumored to be an archetype for other national parks such as the Apostle Islands. NPS replies that the plan is misunderstood and several aspects are still under refinement.

In October 1971 the Michigan legislature passed a law making it a felony to photograph underwater human remains without written permission from relatives. Certain exceptions are made for court orders, law enforcement situations, and archeological, medical, or scientific purposes. This action was an outgrowth of the controversy over the unidentified body photographed by Fred Shannon on the *Edmund Fitzgerald* several years ago. Approximately one month after its passage, the regulation was contested via a lawsuit brought by Shannon on the grounds that such laws interfere with personal observations as guaranteed by the first Amendment. Michigan legislators were confident that the law will withstand any challenge.

Shipwrecks In Review *continued from page 1*

Last December down on Lake Michigan, the mysterious loss of a fishing tug and her crew resulted in the discovery of an unknown shipwreck. The 42-foot tug *Linda E* with a crew of three was returning from an early morning fishing trip with 1,000 pounds of chubs when she completely vanished without warning. The crew had made a cell phone call to shore at 9.45 AM to alert the Port Washington fish foreman that the vessel was 6 miles offshore and headed in with the catch. It never arrived. By evening a search was organized, but it turned up nothing...no tug, no bodies, no debris, no clues whatsoever! Addition to the search flotilla of numerous small craft, a Coast Guard cutter, and several helicopters still did not bring positive results.

The Coast Guard then began an underwater survey with side-scan sonar. The *Linda E* was not found, but an ancient 2-masted sailing schooner was. Underwater video showed a remarkably intact hull, masts standing upright with rigging and crow's nest still in place, plus a cook stove resting where it was last used. No evidence of the ship's identity was found and it rests in 320 feet of water, beyond the reach of conventional scuba diving. Perhaps future TEK divers will reach and identify the vessel. Meanwhile, search for the *Linda E* goes on...

(see the March 1999 issue of *Wisconsin's Underwater Heritage* for more on the *Linda E*)

Enforcement of the shipwreck protection laws has led to an Illinois diver being charged with two felony counts for wreck pilfering. The case centers on the removal and theft of a figure-head from the *James R. Bentley*, a schooner sunk intact in 160 feet of

water at the east end of the Straits of Mackinac. This schooner, found by John Steele, sank in a fall storm in 1878, but was not discovered until about a decade ago. Paul Ehorn, a well-known diver / shipwreck hunter, recovered the ornate, dragon-like structure in the mid-1980's and eventually gave it to the Wisconsin Maritime Museum in Manitowoc, Wisconsin. This act occurred well after the passage of Michigan's Aboriginal Records and Antiquities Act which prohibits the stripping of shipwrecks. Ehorn also has had run-ins with Wisconsin authorities over artifact pilfering.

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Up in Alpena's Thunder Bay Underwater Preserve, an artifact taken from the sunken 296-foot freighter *Grecian* has been returned to its original location 105 feet underwater. A toilet stolen from that wreck had found its way to a Chicago marina where it was recognized by a diver who had photographed it in detail several years before. (Underwater photographers can be fascinated with the darnest things!) Armed with these photos Michigan DNR officers confiscated the bowl from the boatyard where many other shipwreck artifacts

were noticed. Unfortunately, these could not be identified as to specific origin and so could not be legally seized. A dive team returned the recovered john to its "water closet" last September.

Out on Lake Ontario the city of Hamilton is considering raising the *Hamilton* and the *Scourge*, the famous War of 1812 wrecks resting in 300 feet of water. A plan to raise, conserve and display the gunboats has been gelling for almost a decade, and to date has consumed an estimated \$2.2 million Canadian on the project. Several years ago Hamilton obtained legal title to both vessels from the U.S. Navy, which officially owned them. If the city can successfully range another \$2 million of federal funding, the project will probably start with several exploratory dives in the year 2000!

Also on Lake Ontario, the remains of the *HMS Speedy* may have been found by wreck hunter Ed Burt. A very early wreck, the *Speedy* went down in 1804 in a storm off Brighton, Ontario. Burt obtained an archeological search permit from the Canadian government to hunt for this wreck after he found certain telltale evidence as to its whereabouts in 1991. Recent sonar contacts indicate that the hull has finally been located and dives to confirm its identity are scheduled for May. The ship was headed from Toronto (then called York) to Presqu'île for the trial of a Chippewa Indian who was charged with the murder of a fur trader. The trial was never held because the defendant was being transported by the *Speedy* and was among those lost in the foundering!

In mid-summer 1998, the Oswego Maritime Foundation on Lake Ontario announced a discovery made by the Canadian Navy of a new wreck resting

about 687 feet deep off Sodus, New York. An ROV videotaped the intact, 3-masted schooner sitting upright with a cargo of grain. The vessel sports some unusually fancy woodwork and appears to be a fairly early wreck, perhaps 1850's vintage. Its identity remains to be resolved.

On Lake Michigan last summer an exhaustive, but unsuccessful, search for the steamer *Chicora* was carried out by shipwreck hunter Dave Trotter, an acknowledged expert with side-scan sonar. The \$6,000 project was financed by a historical group based in the area of South Haven, Michigan. The *Chicora* is one of the last prominent "ghost ships" of Lake Michigan not yet found. This 210-foot packet steamer was traveling from Milwaukee to St. Joseph when it disappeared in a snow storm in January, 1895.

Although debris from the ship was found, no bodies were ever recovered. Inexplicably, the ship's dog did reach shore alive, which led to speculation that the vessel must have gone down within a few miles of port. Nevertheless, her final resting place still remains a mystery.

Over a decade ago the *Chicora* took center stage in a little-reported confidence scheme. An underwater construction crew was laying a pipeline in southern Lake Michigan with a commercial diver checking the bottom ahead of the trenching. This diver claimed to have discovered a shipwreck, and after further examination of hull, reported that it was the *Chicora*. He displayed a number of convincing artifacts that certainly could have come from a turn-of-the-century steamer. Because this was vaunted as a major discovery, the exact location of the ship was kept secret!

This event occurred just before the enactment of the Abandoned Shipwreck Act, so the diver was able to negotiate joint ownership of the vessel with the state of Indiana. He then proceeded to raise funds and hardware to launch a major recovery project; this eventually culminated in a sizeable bank account and several fully-equipped dive/salvage boats. The cooperative project was to be officially consummated in a meeting where the wreck's Loran location would be released to the State. On the day of that meeting, the diver never showed! In fact, he had completely disappeared, boats and all, but only after cleaning out the bank account! Only one boat was ever found, sold to a marina on a Kentucky reservoir. End of story. And some say that Lake Michigan had no pirates...

From upper Lake Michigan came the report of a new wreck located near Poverty island. In truth, this vessel had been found several summers ago by the Kaniff brothers from Washington Island and their associates, but the discovery was kept reasonably quiet while attempts to identify it were underway. The wreck, a 2-masted schooner in 105 feet of water, was reported to be in fair shape with many artifacts still aboard. Because of the location and nature of the wreckage, it was first believed to be the *E.R. Williams*, lost in September of 1895. However, this initial identification was dismissed because related newspaper reports clearly stated that the *Williams* had sunk while riding at anchor, and this new wreck had both anchors still aboard. However, further research has recently turned up additional information which explains this inconsistency.

The *Williams* was being towed by

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Shipwrecks In Review *continued from page 5*

the steam barge *Santa Mara* along with the scows *Teutonia* and *Thomas Gawn*. A violent gale forced the steamer and her consorts to seek shelter in the lee of St. Martin's Island. During the night, the *Williams* sprung an uncontrollable leak which soon forced the crew to abandon ship. The vessel settled, cracked in two, and sank with her cargo of iron ore. The crew eventually made it safely to Big Summer Island and were later rescued. Sailors on the *Santa Marta* saw the lights on the *Williams* disappear about 9 PM at which time the tow line also parted. The steamer cruised around looking for the schooner, but found nothing until daybreak when masts were seen sticking out of the water. Thus this new wreck is indeed the *E.R. Williams* which sunk with anchors still tethered because only the towboat had actually dropped anchor.

Down in Virginia, two canal boats have been unearthed which were apparently intentionally buried in an abandoned arm of the James River and Kanawha Canal. This early waterway was opened in 1789 as a commercial link into the Ohio Valley and was built to accommodate Bateaux freight boats of the type used in the fur trade. From 1840-50 the canals were upgraded to handle larger boats towed by mules but by 1880 the entire system was put out of business by an adjacent railroad. The buried boats were discovered by a cultural resource firm checking in advance of a crew laying a sewage pipeline in Richmond. Interesting artifacts recovered from one vessel, included a bottle, pre-Civil War coins, knives, horseshoes and assorted freight-handling tools. After excavation the hull will be reburied in place.

This publication previously mentioned research to find the remains of a 1559 Spanish fleet used to transport colonists into Pensacola Bay (Florida) (*Underwater Heritage*, January 1994). A small flotilla, commanded by Tristan de Luna, brought settlers to this desolate area to beat the English and the French at establishing a permanent presence. Eleven ships were assembled and outfitted in Vera Cruz, Mexico, with men, livestock, tools, weapons, foodstuffs and other provisions. When the fleet sailed in mid-summer, aboard were 540 soldiers, 240 horses and over 1,000 colonists including Aztec Indians who would do the necessary farming. The expedition had about 80 days worth of supplies which was thought to be sufficient for the trip as well as for locating a site and founding a settlement.

The fleet reached Pensacola Bay on August 15 and began unloading supplies and scouting for a suitable townsite. However, a September hurricane overran the anchored vessels and sank all but three with significant loss of life and provisions. Reclaimed supplies were damaged by continued heavy rain. To worsen matters, several relief voyages launched from Mexico failed. Despite valiant efforts, the colony soon capitulated to the elements and the survivors trickled back into Mexico. The sunken fleet then eluded discovery until 1992 when a suspicious shell mound in 12 feet of water was noted by Florida archeologists. This submerged knoll gave a strong magnetic anomaly when "scanned" with a magnetometer.

Probing soon uncovered the source of the anomaly, a large anchor, resting on a field of ballast stones beneath which lay a remarkably well-preserved

wooden hull. It is believed that rapid colonization of the sunken ship by shellfish actually protected the wood from total disintegration. Test excavations so far have produced an interesting picture of life aboard a Spanish ship of colonization, as well as providing insight on the vessel itself. For example, traces of liquid mercury found in the bilge suggest that she once transported that substance to the new World for amalgamating silver from ore. In another voyage, she probably carried a cargo of cowhides back to Spain as evidenced by the notable remains of a leather-eating beetle also found in the bilge. The diet of the colonists could be surmised from residues uncovered in the wreckage: pig, cow, sheep and goat bones with butcher marks revealed the animals consumed. Remnants of olives, plums, cherries and prunes were also present and nut provisions included hazel, acorn, hickory and coconut.

Work on this vessel continues as does the search for the other wrecks which rest somewhere in Pensacola Bay. To date, over 5,000 artifacts have been found and conserved; they will soon be available for public display. Of additional note, archival research in Spain has recently turned up over 100 heretofore unstudied documents on the Luna expedition. These papers may aid in the identification of the discovered wreck, plus shed light on the whereabouts of the others!

A wreck of no archeological importance has nonetheless caused recent concern over possible oil pollution in the St. Lawrence Seaway. In 1974, Algoma Central's 640-foot bulk tanker *Roy A. Jodrey* sank after striking Pullman Shoal and sliding back into 200 feet of water. She was carrying

50,000 gallons of fuel oil, 40,000 of which were recovered shortly after the sinking. The seepage presently occurring was found to be coming from eight oil drums carried on the ship's stern deck. These badly rusted containers will be recovered by divers in the near future with Algoma footing the bill.

A number of noteworthy events have occurred on the international underwater archeological scene. As reported in an earlier review article, oceanographer Bob Ballard recently conducted a search for shipwrecks lost along the ancient shipping lane which stretched from Rome (Italy) to Carthage on the north African coast. This unique survey was carried out using the sophisticated sonars in the Navy's NR-1 research nuclear submarine. Located wrecks were then examined in detail from the surface mother ship which lowered Ballard's ROV system known as JASON. Several Roman trade vessels dating from about 100 B.C. to 400 A.D. were discovered and examined in waters several thousand feet deep. Except for the removal of a few sample artifacts, the vessels were left undisturbed for future archeologists to study.

The archeologically-productive waters off Turkey have yielded another interesting wreck. Off the southwest coast about 1,200 years ago, a 70-foot merchant vessel carrying some 1,500 wine-filled clay jars sank in 85 feet of water. Divers from the Institute of Nautical Archeology at Texas A&M University now studying the ship believe that at the time of the sinking some person of means was aboard. This conclusion was based on the discovery of certain fine glass objects such as a hand-blown flask and matched goblets. Conversely, eating

and cooking utensils belonging to the crew of eight were nondescript wooden devices. The destination and home port of the vessel are as yet unknown.

From Norway comes the strange tale of a sinking Viking ship...sinking into the ground, that is. In Norway's southern Ringerike district is a large earthworks measuring 184 x 157 x 17 feet which has long been suspected to be a Viking burial mound. Archeologists examining this structure noted that the center is slowly subsiding. This observation led to scanning the mound with ground-penetrating radar

Perhaps the most attention-getting underwater project in recent years was the survey of the harbor at ancient Alexandria (Egypt), once the site Cleopatra's Palace..

which revealed the contours of a large ship. Five cores extracted from the mound contained wood up to 10 inches thick. Speculation suggests that the subsidence is the result of slow collapse of the ship's hull. Norwegian history relates that a prominent Viking leader, Halfdan the Black, was drowned and buried in the vicinity, leading to further speculation that this is his gravesite. Initial dating of the hillock is between 800 and 900 A.D., consistent with the time frame for Halfdan! Work continues...

Perhaps the most attention-getting underwater project in recent years was the survey of the harbor at ancient Alexandria (Egypt), once the site

Cleopatra's Palace. The exploration of this bottomland has been the subject of numerous magazine articles, news reports and TV specials. Once considered the greatest harbor on Earth, Alexandria boasted the great Pharos lighthouse, numerous royal palaces, statutes, temples, a giant theater, plus a vast complex of warehouses, inner anchorages and islets. However, from AD. 320 to 1303, at least 23 earthquakes ravaged the region. Overtime, the harbor floor dropped more than 20 feet, collapsing and submerging virtually all the buildings and other structures. Because of siltation, sewage pollution, and general plundering over the years, the harbor was considered to be a second-rate archeological site and thus received scant attention.

Things changed in 1994 when a cinematography crew dove the harbor to film stone blocks from the famous Pharos lighthouse. These huge stones, up to 70 tons in weight, were believed to have tumbled into the water during 12th century earthquakes, although some were eventually salvaged to build a fort to protect the harbor in the late 1400's. As the divers swam the bottom at 24 feet, they encountered a 5-acre ruin field containing hundreds of columns, thousands of stone blocks, obelisks, a huge pharaonic statue and at least 25 carved sphinxes. Over the past 5 years, continued dives by archeologist / diver Jean-Yves Empereur and his crew have uncovered many artifacts ranging from the 12th Egyptian dynasty (19th century B.C.) to the Ptolemaic period of Cleopatra around 30 B.C. Many materials contain inscriptions and symbols which may reveal new facts about Egyptian life and times! It is estimated that complete study of the harbor will take another decade. ■

Reflections on Studying the *Niagra* ... continued from page 1

archeologist. It records, at least for me, the project's magic. This installment will consist of selected transcriptions of that journal.

August 6, 1993. 6 a.m.

The weather is dark and grim, marine forecast 10-20 mph winds and 2 to 5 foot seas. The *Dawn Treader* is not operational. Whoever had it out last left it in rough shape. I will be bringing up the big boat from Milwaukee. The crew is great and this really takes a load off. I laughed so hard at dinner that the lower part of the back of my head hurt. This is a sure sign of hanging out with maritimers.

August 7, 7 a.m.

A long day yesterday. About 13 hours before it was said and done. Bucky came up from Madison to work on the *Dawn Treader* and we picked up the *Nerious*. A tough day was made much easier by the cooperation of good people. Frank has really picked up a lot of knowledge about old steam engines, a very luck thing for me. And Hans is just slick. Malinda, for her part keeps us all on our toes. We got out to the *Niagara*, it is big, dark and nasty. But this is all a matter of perspective as Frank and Hans are used to seeing almost nothing when they dive. Oddly enough my sour stomach is fading away. This kind of challenge is fun.

August 8, 7:52 a.m.

Yesterday was a good day. We got up and brain stormed about the wreck, with Hans and Frank getting wild on the blackboard. We decided upon an initial game plan and got out on the water about 11 am, with Hans and I in the water at about noon. It was, for a change, an incredible dive. The visibility was great and the water rel-

atively warm. There was much more to see than I had anticipated and we laid the preliminary baseline and toured around. The visibility disappeared as the day progressed, with cold murky water rolling in like a London fog. The weather topside was excellent. We made it into the harbor and were packed up by 4:30. Closed the evening with a light dinner and by watching the movie "Abyss". The volunteers will be coming in tonight. I hope the good weather holds.

Field work agrees with some folks and not with others, I like it. From the vantage point of a successful couple of days, beautiful weather, a fine site, and wonderful and interesting people, I wish that we could do this for a month every year. But, of course, this is a good day.

August 9, 6:27 a.m.

Morning comes again after a night of strange dreams. In my last dream before waking up I was desperately trying to get a volunteer to measure between two points, and having little success at it. We took most of yesterday off, although we did pull the winch and one of the rails off the *Nerious*. Tom Villand, Betsy True and Danny Aerts came in last night. We grilled out in our little court yard, major garlic steaks, followed by the movie "The Caine Mutiny". The sky this morning looks ominous, but we will go ahead with the briefing and the practice runs in the gym. (Note: One of the keys, I think, to our effective teamwork during this project was the willingness of all concerned to do literal dry runs in which the teams practiced working together in accomplishing major tasks).

August 10, 1993

Yesterday was bad. For about an hour and a half, it was one of the worst situations at sea that I have faced in many years. We left the harbor at about 10 a.m. Heading up to the site there was a little slop coming from the south but nothing substantial. The weather channel was not broadcasting, or at least we could not pick it up and neither could the Port Washington Harbor master's office.

The weather began deteriorating during the first dive, but there were no obvious signs of storms heading our way. Immediately after getting the second dive team in the water, the situation worsened. The wind freshened from the south with the waves building to 2 to 4 feet. We managed to pick up a weather notice of storms heading up the lake. I ordered the dive team recalled via a prearranged signal of revving the engines. With some difficulty we got all on board with the dive gear stored on the whaler with Hans, Tom Villand and Andy. On board the *Nerious* with me was Frank, Malinda, Danny and Betsy. We headed to Port Washington and ran right into a vicious squall.

The wind quickly picked up to 35 to 40 knots with seas of 6-7 feet. At some point the wind blew an unsecured tie up line out of the whaler, fouling the prop and killing the main engine. Hans worked like a demon and got the small kicker started. In the meantime Malinda rigged lines and I worked our boat extremely close.

Through it all the wind increased to well over 50 miles per hour. It was measured at 55 mph at Port and we were in more of the brunt of the blow. Seas climbed to about 8 feet with some rising to 10 feet and one or two

perhaps higher. But the wind posed the real danger. It was so strong that it blew the tops off of the waves, making vision difficult. It was nearly impossible to keep the *Nerious* into the wind and seas and stay close to the whaler, but we managed to do it. Through it all Hans handled the whaler with the little kicker with amazing skill. Prior, (I think) to the fowling of the prop, I notified the Port Washington Harbor master of our deteriorating situation. The county has a very staunch rescue boat, far better suited for high winds than the *Nerious*. When we were about 2.5 miles north of Port, I determined that if one more problem occurred, all of us were in serious trouble. I called in and asked the rescue boat to come out and stand by us. While they did not get to us until well after the worst was over, it was a comfort to know that they were on the way.

The wind force was well beyond the design capacities of either of our boats, especially the big one. Fortunately everybody except Frank and I had their drysuits on. Before things got horrendous I told Frank to crawl into one of the survival suits

that we carried. At no time could I chance leaving the wheel as one screw up could have done us in. I think everyone else would have probably made it, but I was most likely screwed without thermal protection.

I was never scared for my own safety. With 7 other lives at stake and all of them my responsibility, my own existence became a secondary concern. The worst moment for me was watching the whaler drop off a huge wave. The wind caught the boat and nearly flipped it pitch-pole, bow over stern. Perhaps two thirds of the boat was out of the water.

Everyone kept calm and kept their heads. Eventually we motored in safely. Hans (who had been dismasted in the Pacific Ocean) and I (who had a commercial fishing boat sink underneath me) knew what a close one it had been, and to some extent so did the others. The pattern for disaster was there, and one more problem would have turn the situation into a casualty or serious incident, rather than the lesson that it was.

To be continued in part 3.



*The Walter J. McCarthy Jr. in Sturgeon Bay
See story about WUAA's tour on page 2.*