# SUB Marcha 1993 Vol.3, No.

GOLD FEVER

Treasures from Long Island

Wm. B. Cowin Wilkes Barre Capt. Billy Deans Emergency O<sub>2</sub> Throgs Neck Jetty Boat Schedules

GARDEN C

The

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#### SUB AQUA JOURNAL

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## THE SUN IS RISING

Winter is quickly leaving us. Those dreaded dark cold mornings are starting to disappear as the sun rises earlier and earlier each day. March has always been a transitional month for me, even more so since diving became a way of life. I start to get my gear in order, repair what was worn or broken, check over tanks, service my regulators, and start preparing for the busy season ahead. Since most of the dive schedules are available now, I can fill in the places I want to dive with a little more definitiveness. This is also a transitional month for another reason — I have decided not only to put my gear in top shape, but my body too.

In this issue Dan Berg sets out to find gold. He opens the issue by sharing some special times with his friend Mike McMeekin — a modern day treasure hunter. Not only does Mike scan the shores of Long Island for valuables from days gone by, but he has also spent over ten years diving the rivers of the Carolinas searching for both Native American and Civil War artifacts. But that's for another story. For now it's just Gold Fever.

Dave Morton and Capt. Eric take us on a tour of a ship that had a problem keeping one name — the William B. Cowin. Having broken up on a reef in Buzzards Bay this ship is producing artifacts for those who work her in some challenging conditions. Hank Garvin is back talking about divers and their responsibilities, a good topic to look at as we enter the season. Barb Lander interviews "Mr. Deep" — Captain Bill Deans. Billy was there in '81 when the Wilkes Barre was found and he was there when we dove the Barre in January. The Wilkes Barre is a tremendous dive. Fortunately my dive didn't end up like the one Les Glick went out on one night. Les tells us what not to do with friends who have boats. We wrap up the diving with Kirby taking a shallow winter dive where he hears voices from above.

This issue also examines a hot area for divers, The Scuba Forum on CompuServe. This international communications system has thousands of divers talking to each other 24 hours a day. Information about everything on diving can be found with your telephone and a computer. Hillary Viders, a new member of the Explorers Club examines not only the reasons for oxygen, but whether you have enough with you in the event you need it.

Dawn has broken and the sun has come up. The diving season is just about to start. Use this month to reevaluate your goals and objectives for this season. Plan it out, do it safely, and remember that when the sun rises, the water will shimmer and shine, and you never know, you may just find some gold out there.

Joel D. Silverstein, Editor

# Birth of a Treasure Hunter by Daniel Berg



I walked parallel to shore, neck deep in the chilly waters off Long Island's South Shore. In my right hand was a metal detector; my left held a digging scoop. Behind me was a floating strainer of chicken wire, wood and an inner tube from a motor cycle. My total concentration was on listening for small changes in the constant tone through the ear phones. I had been walking for almost two hours and had recovered only a small assortment of junk. Suddenly, I heard another soft beep. Quickly homing in on the signal, I dug through the sand and dumped the load into the strainer. As the sand fell through, all that was left was a shining gold ring. I was hooked. Gold Fever had me.

I had known of Mike McMeekin for many years. A young, thin, muscular man, he has himself been a hard core wreck diver. One day he casually pulled out a small display box containing over twenty gold rings - found in only one month's time. The treasures he has recovered while wading off old hotel sites and swim beaches amazed me. At Mike's house he has displays of Indian arrow heads and huge petrified sharks teeth from his river diving years in the Carolinas. He has old hotel

keys, lead toys, brass locks, watches, and old coins. Best of all is the collection of gold rings and jewelry.

Although many people use detectors while they walk the beaches or scan the shallow waves, Mike's specialty is researching old hotel and swim beaches. He likes the history and enjoys finding older antique jewelry.

The first step in water hunting is equipment. I already had the dry suit, gloves and weight belt. Other equipment included a metal detector, strainer, and a digging scoop. We would be using the Garrett Sea Hunter which has a mello-tone for easily spotting targets. Mike explained that the discrimination knob should be set on zero. On land the discriminator can be used to eliminate junk, but in salt water we dig all targets. He also told me the proper way to slowly scan the coil back and forth and how to pin point an object's position by using an "X" pattern.

He also advised me to set the audio level low so I could barely hear the constant tone. I should then listen for deep small objects by hearing the audio tone change when passing the coil over the target. Once a target is located I would put my left IF

foot on the spot and dig up a scoop of sand. Before hauling the sand into the strainer I would first pass the coil back over the hole. Only once the target was no longer heard should the scoop be lifted and dumped into the sifter. With a little practice with a hidden coin I quickly mastered the basics. We would plan our day around low tide to allow us to walk further offshore into more productive areas.



Mike brought me to a beach on Long Island's South Shore that had produced a lot of old silver coins and old rings. We each went out and before long Mike found a beautiful gold ring. I noticed that he was finding more targets and digging less than I was. He was putting seven targets into his bag for every one I dug up. After three hours I had a few coins but no gold. Mike suggested heading in, because the tide was pushing us out of the productive area. On the way in he reminded me to listen for the faint deep signals, and said it was my turn for a ring. The next signal came up in one scoop; I looked into the screen but only found clam shells. I walked closer to shore and scooped up another signal.

Before lifting the heavy scoop I noticed that the screen still contained clam shells from before. I grabbed it and started to dump them when the sight of a small gold ring emerged from under a shell. I had almost tossed a gold ring back into the muddy bottom.

Gold fever hit me like a ton of bricks! When would we go again? That Saturday morning I met Mike at 4:30 AM and we drove to the same site where we began scanning the bottom at dawn. Unfortunately, the wind had shifted and was now gusting out of the south. We had hoped for a north wind which would have aided the out going tide, allowing us to walk further out. What we got was two to three foot white caps rolling over the small bay. It wasn't too bad, in fact I had a few laughs as Mike, who is a bit shorter than I am, would have to hold his breath each time a wave crashed over his head.

I found my first silver medallion within five minutes, soon after another gold ring. Mike had only found a penny. He asked if my ring had come from the same area as my first ring two days earlier. It had, and we both went to concentrate our efforts in this 20 foot by 40 foot area. He found a small religious medallion and I told him that was a sign. I had found a medallion too, and then a ring so it was now his turn for a ring.

I had just heard a signal when Mike yelled. He was jumping up and down in 4 feet of water with a smile from ear to ear. I had seen Mike's reaction to gold before and it was usually only a passive smile. Mike had found a 1.5 carat diamond engagement ring. He looked at me and said he knew there was a reason he enjoyed this sport so much.



On Sunday morning Mike found a Seiko watch, a gold wedding band, and a beautiful gold chain with a gold medallion while working on a North shore beach. I found only a few coins and a cheap stainless steel ring. You can't win them all! That week I had developed much respect for the experience, but most of all I enjoyed a new friendship developed with Mike Mc-Meekin. Many other hunters would not be as helpful and would have been very secretive with productive areas. In only three days I was transformed from a wreck diver to a treasure hunter. This doesn't mean that I won't dive anymore. It only means that I'm going to incorporate my love of both sports into one.

The prime time to water hunt is in the winter months when the beaches are not crowded and when the diving season slows down. In addition I have already used my own new metal detector on wrecks in Wreck Valley, many of which have never produced artifacts for me before. Some of which are now producing gold. As Mike McMeekin says, "I love this sport."

#### THIS MONTH'S COVER

Portrait of treasure hunter Mike McMeekin with some of his Long Island finds. Shot with a Canon T-90 using an 85mm 1.8 FD lens, on Kodak T-Max 100 film. Norman electronic flash @ F/8. Photograph by Joel Silverstein.

## COLONEL WILLIAM B. COWIN Artifact Central by Dave Morton and Capt. Eric Takakjian

A large crowd turned out at the Bath Iron Works shipyard on March 4th, 1911 for the launching of the pride of the Maine Central Railroad fleet. Built as a passenger/freight vessel, the Moosehead was considered the finest railroad steamer afloat. She was 185' long, displaced 719 gross tons, and had a speed of 18 knots. For over a decade, she served her company well from her home port of Portland, ME.

In the mid-1920's she was sold to Mr. William Mills of New York, who renamed her the Porpoise, and placed her into daily service between Bridgeport, CT and New York City. During the winter of 1927-28, modifications were made to the ship, and rectangular windows were installed along both sides of her hull.

In 1931, the ship was sold for a third time to Captain Frank Drake, and renamed the Mayflower, though she continued the New York run. By the summer of 1941, American involvement in the war was imminent, which was bad news for the captain. On July 1st, Captain Drake sold his ship to the war department, probably against his will, for \$125,000, far below the vessel's appraised value of \$350,000.

Commissioned into the U.S. Army Transportation Corps and renamed the Colonel William B. Cowin, her new home port became New London, CT. On the afternoon of December 17, 1941, the Cowin departed New London under the command of Captain William Evans, on what was to be her final voyage. She was bound for a Boston shipyard for an overhaul, with the automobiles of some of her officers in her forward hold. While approaching the entrance to Buzzards Bay, the Cowin struck Hens and Chickens Reef. A large hole was torn in

her hull, and she sank within 30 minutes. The crew of 17 escaped in a lifeboat, and rowed the three miles to shore. Luckily, no one was hurt in the incident.

Although the wreck has been down for over 50 years, the Cowin had rarely been visited by divers. The waters in Buzzards Bay can be tricky, and in the summer months plankton blooms can seriously reduce the visibility. But in the Spring and Fall, visibility is usually good, and diving in this area south of Cape Cod can be great. In the early spring of 1992, a charter ran out to the Colonel William B. Cowin for the first time in many years, and found out just how great it can be.

There was quite bit of excited talk going around the wreck diving grapevine. Talk about the Cowin. The Cowin was built as a classy passenger ship, and no expense was spared in making her plush

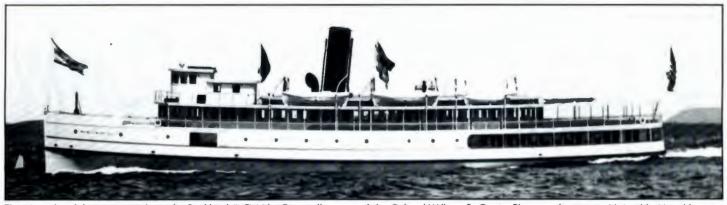
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The Moosehead during sea trials on the Rockland (ME) Mile. Eventually renamed the Colonel William B. Cowin. Photograph courtesy Maine Maritime Museum.

and ornate. She is still loaded with artifacts, as those early spring divers found out. Cage lamps with perfectly preserved glass globes were brought up by several. Two portholes were recovered by another. An officer's dress hat was found, complete with brass insignia on the front of the band. Brass seemed to be everywhere. There was no doubt about it, I just had to make it out to this wreck.

The gods of wreck diving were not smiling favorably on our attempts to make a dive on the *Cowin*. The first charter got cancelled, and although we made it out to the wreck the second time, it was right after a storm, and visibility was poor, at best. Waiting on the surface for my buddy Pat to enter, I could barely see my fins. The visibility didn't improve during the descent, and we almost crashed into two divers at the bottom who were trying to decide whether to continue or head back up. We swam a few feet away and tied off a wreck line, although we didn't know quite where we were on the wreck, and visibility was no more than 3-5 feet. We swam down along what turned out to be the bow section, and headed aft along the remains of the rectangular windows.

Visions of awesome artifacts were dancing in my head, but the dismal visibility was working against me. Recognizable objects faintly appeared out of the gloom, and my imagination was quick to fool me into thinking I had stumbled across finds of the century. A huge three foot diameter porthole turned out to be a 1940's white wall tire. A beautifully preserved piece of shiny brass pipe turned out to be white nylon fishing line dangling in the current.

As we continued to stumble through the wreckage, it was obvious that the dive was becoming more work than fun. I had thought we were travelling along the entire wreck and was just about to



turn the dive, when we crossed our own wreck line! The visibility was so poor, we had swum in a full circle without even knowing it. Seeing the whole wreck of the *Cowin* was getting to be quite a challenge, and one that would not be met on that day.

The Cowin rests upright and partially intact, with a slight list to port. The bow section rises twenty-five to thirty feet off the bottom, making the forward compartments easy to penetrate. A cargo winch and the anchor windlass are still bolted to the deck in this area. At the very forwardmost point on the bow a large davit, used for handing the ship's anchors, is still in place. Approximately fifty feet aft of the bow the hull is collapsed to a level almost even with the bottom, leaving large piles of hull plates and the remains of automobiles. Continuing aft, the ship's two large boilers rise almost twenty feet off of the bottom, lying in line fore and aft, with hull plates rising up five to ten feet on either side. Directly aft of the boilers are the ship's two 1350 horsepower steam engines. The rest of the hull is intact, rising fifteen feet off of the bottom,

although the fir decking has rotted away, exposing the steel deck beams. Under the elliptical stern, the two propeller shafts and struts are plainly visible.

With a maximum depth of seventyfive feet, long bottom times are easily attainable, and safety stops can be mercifully short. With unpredictable surface and bottom conditions, the *Cowin*, although relatively shallow, can be a difficult dive. Wreck reels are

mandatory, and divers should have an emergency ascent plan, in case the anchor line can't be found. However, if your timing is good and you get to the wreck with favorable conditions, you may have to decide which artifacts to take, and which to leave behind.

# RESPONSIBILITIES

an opinion by Hank Garvin

I've spent the last year talking about, and promoting the rights of divers to think for themselves. Last summer several publications stood up against some formidable opponents of free thinking and knowledge. An evergrowing group of divers wants to access more information about deep diving than appears in their textbooks. They want to understand more.

Last year I saw an industry slowly attempting to fit the new technical diving into its own niche, assimilate portions of it into the system, or take sides on its legitimacy. It was a stand the industry was pushed into, but it was a stand that it was headed toward anyway.

In October 1992 there was the NAUI ICUE where at least four different symposia the main discussions were about nitrox, tri-mix and extended range diving. In November the Dive New Jersey and Beyond show did the same, featuring speakers who discussed their deep explorations. In December at a local dive club meeting. Bret Gilliam lectured on safety and deep diving. He gave us a peek at its history and future direction.

January brought us tek.93 which proved there is a market and a marketplace for deep technical diving. They also had lectures on safety in deep diving. The next day the Scuba Diving Resource Group (an organization of manufacturers, publishers, and educators) met to discuss the subject of "How Deep is Deep?" They too recognized the existence and legitimacy of diving on mixes other than air to depths deeper than 130 fsw.

The next four days found DEMA, the largest trade show in the industry, recognized the same issues and gave the Extended Range Diving Organization (a not-for-profit communication group) a forum to address them.

I know I've left out other get togethers at local dive clubs and shows all over the country, but I think the direction is clear.

Divers are interested in new technologies. They are interested in

learning ways to do things with less risk. Some are interested in more challenge.

The industry has its challenges also. Manufacturers need to be able to furnish equipment that will remove as much risk as possible for the divers who choose to dive longer and deeper. The educators have the challenge of providing us with the knowledge to grow into the new diving techniques which include nitrox, mixed gas, and in the future, rebreathers.

Publishers have the challenge also, but they must go further.

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They must inform us of the good and the bad in the industry. They are our eyes and ears and must show all sides of an issue and allow the public to come to its own conclusions.

Finally we come to us, the divers. What are our challenges? Our list is the longest, because we are the ones who make the whole industry run.

We must commit to learning all the time. It's our job to improve on our skills. We must think for ourselves. Not every diver is a warm water, cold water, lake, cave, night, nitrox, mixed gas, wreck, ice, scientific, archaeologist or deep diver, nor should we be. It's our responsibility to ourselves to rise (or dive) to the level of our own desires and competency. We must protect our own right to dive where, when, and how we want. We must join organizations that will help protect diver's rights. We must be responsible divers.

The dive season of '93 is upon us. If last year is any indication, it will see more varied kinds of diving. Don't let the tragedies of '92 dampen your desire to dive, but don't let your desire to dive forget them either. Responsible diving is a way of life. ■





Divers approach us with a zillion different questions on every aspect of diving, recreational, technical, training, equipment — the list goes on. Should I store my scuba tanks empty, full, or partially filled? Why did my scuba tank rust on the inside though I never completely drained it? Which set of dive tables should I be using? Is decompression diving safe? Is one agency better than another? Which film should I use for my underwater camera? What is a technical dive?

The Journal has selected veteran instructor Bob Raimo to edit The Question Locker. Bob is a well-known PADI Staff Instructor, IANTD Instructor-Trainer, ANDI Instructor, Medic First-Aid Instructor, and NYS EMT.

All too often a diver is either afraid or embarrassed to ask a question. More often than not the person answering it is misinformed. However, once your question is in **The Question Locker** it will be properly treated. Bob will select two to four questions each month that have the widest appeal to our readers. He will answer them thoroughly, bringing in the expertise of outside experts where necessary.

Not all questions will make it to print, but if yours is short, specific, and important, it has a good chance. If your question does go to print only your initials, city and state will be used unless you specify otherwise.

This column is for all divers, newly certified through highly advanced. You can submit your questions by mail, to the Sub Aqua Journal address, attn: The Question Locker, through our fax or CompuServe address 72650,220. ■

# SURFACE Captain Bill Deans

by Barb Lander

Attentive divers studied the emerging diagram with its maze of lines and the wreck beneath it. The artist used his pen as a pointer to emphasize the importance of the cross-over line. He circled the spot where the divers would drop their stage bottles, reviewed the custom tables, and double-checked planned bottom times. He concluded the pre-dive briefing by explaining where the divers could access the surface-supplied oxygen and reviewing the role of the support diver.

This is Captain Billy Deans doing what he does best; he explains simply, "I'm an operations man."

That was not always the case — as a young diver, spear-fishing was Billy's passion. He entered the water with his speargun, at first not knowing a tropical fish from a game fish. Billy learned quickly. He learned to stalk fish and to enter the water at dawn. As the sun rose the big fish would come up from the deep water to feed. Billy would be waiting. Such techniques helped him and his close friend, John Ormsby, bag over eighteen tons of fish in four months. Billy admits, "that's how I put myself through college."

Billy wanted to stay in Key West; he especially wanted to stay in scuba diving. So, despite his recently acquired college degree, he went to work for Reef Raiders as an instructor and boat captain. The following year, 1980, was a pivotal year for Captain Billy. As a favor for a fisherman, he and John Ormsby were checking out some loran co-ordinates, looking for fish. At the time the boat was equipped with loran, but not a fathometer. To locate the ridge with the fish, Billy would operate the boat while John would free-dive down to confirm the site.

On the third attempt, John came to the surface and told Billy, "you're gonna love this." What they had found was the *Wilkes Barre*. Neither of them had ever seen a wreck so big. "It was overwhelming," says Billy.

They continued to explore the Wilkes



Barre; at first, they used ten minute bottom times, then fifteen. Billy noticed that after these dives he was tired, not himself. He started experimenting with a mixture he called "K-ox;" today we call it nitrox. They didn't have any way to analyze their mix, they didn't have tables to use with it, but, used as a decompression gas, it eliminated the troubling post-dive fatigue.

Word leaked out about the spectacular deep-water wreck in Key West. In 1981, Gary Gentile, Jon Hulbert, Mike DeCamp, and Bill Nagle made their first pilgrimage to the Wilkes Barre. Other deep divers followed. Not only did Billy introduce them to the Wilkes, but to his experimental techniques too. Gradually, Key West evolved into a mecca for deep divers.

These divers invited Billy and John to dive the Andrea Doria, and in 1985 the team journeyed to Long Island for what proved a fateful trip. John Ormsby died on the Doria, leaving Billy with an obsession for diving safety.

Billy stepped back from diving for the next two years, not quitting completely, just slowing down. Reef Raiders was now his and had been renamed Key West Diver. He ran the business, but he focused his

So simple it's ingenious.

#### Captain Bill Deans continued.

tremendous energy into triathalon training. He competed in Hawaii's Ironman Triathalon in 1986 and 1987. Characteristically, Billy finished near the top.

In 1988, Billy emerged from the shadow of tragedy on the cutting edge of deep diving technology. He pioneered open-water techniques for mixed gas, nitrox decompression, DPV's and support divers. Still looking to the future, Billy has tested closed-circuit rebreathers in open water. He is working with full-face masks and communication gear, integrating equipment with technique.

Whatever the future for high-tech diving holds, you can be sure Captain Bill Deans will be there re-defining the envelope.

#### **NEW BOOK** *LONG ISLAND SHORE DIVER*

Back in 1986 Dan Berg released his first *Shore Diver* book, and it has gone through four printings since. It contained everything a diver needed to know about diving the beaches of Long Island, including directions, dive site conditions, photographs and triangulation maps.

Dan's new LONG ISLAND SHORE DIVER, 2nd Edition, contains everything the original book had plus information on newly discovered beach sites. This exciting 2nd edition is packed with a wealth of enlightening information that not only gives the reader a nostalgic glimpse into the history and present condition of shipwrecks, but



describes where to catch lobsters and find old bottles.

LONG ISLAND SHORE DIVER covers over 50 dive sites and includes over 100 illustrations, comprised of 90 color photographs, black and white historical photographs, and sketches.

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To many, The Explorers Club conjures up images of smoke-filled oak panelled rooms where tales of Everest ascents, safari trophies, and arctic treks are traded over vintage armagnac.

Hillary Viders, Ph.D., NAUI's Director of Environmental Programs and Projects, a Consultant to NOAA, has just been elected to this prestigious group.

Dr. Viders has written over 100 articles, papers, and book chapters, and is a well-known lecturer on subjects such as diving physiology, emergency medicine, dive accident management, marine conservation, and historic shipwreck exploration. She is an Instructor for NAUI, NASAR, and DAN and has been diving for 15 years.

Sub Aqua Journal congratulates both Dr. Viders and The Explorers Club . . . we're glad to see more divers and more women in the hallowed halls of adventure.



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DEALER INQUIRES WELCOME



by Joel Silverstein

My talking scale said "Please take your tanks off." I wasn't wearing any. We looked at the scale as it groaned to the 272 mark — this was not good (unless I was 6'11"). My annual physical was with our medical editor, Dr. Stephen Lombardo. It only seemed right that I go to a doctor who knows about diving.

We did the usual workups of a complete physical examination, including EKG, blood pressure and blood analysis, which includes testing levels of cholesterol, triglycerides, glucose etc.

Well the EKG was right on and the blood pressure was 120 over 80 — pretty good for a 34 year old 6' 1" fat boy. The problem was not that I didn't dive enough but all those surface interval meals, snacks, pizzas, hero sandwiches, and sodas, and of course no regular exercise program other than aerobic eating.

Doc suggested that I make a decision — keep getting new drysuits each season, shorten my life span or start his Fat to Fitness program.

Do you think I had much of a choice? The first thing is I go on a low fat, low cholesterol high fiber diet (yuucchh)! Cut out all (most) of the great foods I love to eat and start exercising. When I asked Doc what kind of program he said, "I work out every morning starting at 5 a.m. You're more than welcome to join me." This was on Thursday. I started on Friday.

Now I have no problem getting up at 4 a.m. to go diving, but to go to Staten Island, 50 minutes away, when I have my own gym in our condo complex (I used it once or twice in 4 years)? Friday, when I showed up, Doc wasn't surprised. He said "I knew you would be here, you were ready." We did our workout slowly and carefully, working different parts of the body with different high-tech machines and wrapped up with a 20 minute Life Cycle ride. I felt great. There are definitely aches and pains while I put this old bod into motion. I already feel the difference.

Next month Doc will report on my progress, he will discuss how my diet has affected my blood levels and we will give you the new trimmer weight. The goal — 262 and 10 more each month till we get to 230. Follow the progress. It may change your mind about Fat to Fitness.



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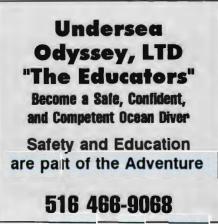


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# A Dive Filled With Imagination

by Joel Silverstein

Three anti-aircraft guns appeared out of pristine blueness as we descended the tight mooring cable. These massive weapons only appear real when you see them in three dimensions. Schools of jacks swam lazily by as we made our way to the deck.

The Key West winds had been blowing hard for three days before we could get out. This was not unusual weather for late January in the Keys. The Wilkes Barre was why we were there.

The U.S.S. Wilkes Barre, CL-103, was a Cleveland class light cruiser. Built by the New York Shipbuilding Corp. in 1942, the 610-foot long vessel had a 66.6 foot beam and displaced 10,000 tons. She was built with one goal in mind — to bring down enemy aircraft.

During World War II the Wilkes Barre saw guite a bit of action. She first screened aircraft carriers on February 16, 1945, as their planes bombed Tokyo. This air raid was only a diversion for the American invasion of Iwo Jima. On February 21, the Wilkes Barre was called in to help in the shore bombardment of Iwo Jima. She quickly responded by destroying pillboxes, ammunition dumps, fortified caves, and turned back one Japanese counter attack. On March 19, she was steaming east of Okinawa when gunners on the Wilkes Barre bagged her first enemy aircraft, a Judy dive bomber. On April 1, 1945, Easter Sunday, the Wilkes Barre supported the largest American amphibious assault in history, the invasion of Okinawa. The Wilkes Barre also shot down a Val dive bomber and three Zeke fighters on April 7. This was not the last action Wilkes Barre saw during the war; she continued to shoot down enemy planes and rescue American downed flyers! She even participated in the fire fighting efforts aboard the fleet carrier Bunker Hill after two kamikazes had crashed into the carrier's deck.

On January 13, 1946, the Wilkes Barre sailed for the United States. She had received four battle stars for her World War II service and had shot down seven enemy aircraft. On October 9, 1947 the Barre was decommissioned and placed in moth balls in Philadelphia until January 15, 1971, when the Navy struck her from its list. It was a short lived history for such an effective ship.

After resting quietly for twenty-five years it was decided that the *Barre* would be used for underwater explosive tests. The interesting part about the testing was that the explosives unit didn't use direct contact hits to damage the ship. They were experimenting with the after shock caused by an explosion underwater. The explosion and its after shock worked very much like ultrasound is used today to breakup kidney stones in the body. This was an incredible breakthrough in antiship warfare.

The explosion broke the ship in two. Her stern sank quickly, but her forward section needed an additional scuttling charge to send her to the ocean's floor where she now serves as an artificial reef. Both bow and stern sections remain intact in 255 feet of water. Her stern sits on an even keel, and her bow rests on its starboard side three hundred feet away.

Diving the Wilkes Barre is an experience. Corals have grown on her in the most interesting places. Looking

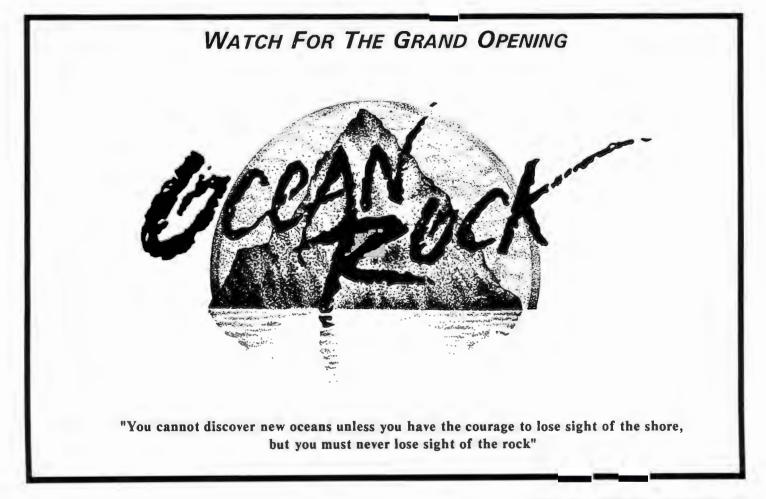


The Wilkes Barre under power. Photo courtesy, Dan Berg Wreck Valley Collection.

through the rows of portholes, many still intact, you will see a lone branch of coral sprouting from an old officer's desk. A tiger's paw scallop shell lies in the silt on a counter top. As we looked up from the 210-foot deck schools of fish were silhouetted by the sun's rays reaching deep below the surface.

Although the water was blue and the temperature warm, the *Barre* is not a lightweight dive. Preparation is crucial. Custom dive tables, nitrox and oxygen decompression for safety, and in-water safety divers were involved. Yet even with all that support you fell truly alone when you dive her. Unlike natural disaster ships, the *Barre* reaches out to you telling you she doesn't want to be there. Almost as if she is waiting to be repaired and refloated to continue on her journey to protect her country. Her guns rest in raised position.

Reaching the Wilkes Barre is not an easy trip. She lie only 10 miles off the Atlantic side of Key West. She demands that divers be well prepared for her depth and occasional strong currents. Key West Diver Inc. (see profile on Capt. Bill Deans on page 9) is one of the only operators that runs to the Barre regularly. Most divers who first dive her dive the bow section which can be reached at 160 fsw, and continue down to do the "grand tour," as Capt. Billy describes it, at around 200 fsw. These dives are usually done on air with oxygen for decompression. For those that want to explore deeper, tri-mix is the breathing medium of choice. If you are an experienced deep diver, the Wilkes Barre is a welcome change. She affords you the luxury of not having to use your lights (outside) and decompression stops that are warm and comfortable. Plus, Key West is a great place to be.



"I Won't Do That Again"

A dive fiasco with Les Glick

Ever do a night dive off a private boat? Make sure the operator knows what he or she is doing. One of my dive buddies invited me to go on a night dive with a fellow he knew from work who just happened to own the boat. The plan was to take the boat out of Stonybrook and head out to Shoreham, L.I. I felt that it was a long way to run at night with a twenty-one foot



# **HEALTHY RESPECT**

Whether you're minutes or many hours from the surface, attitude is every bit as important as the equipment you're carrying. The fact is, your safety, and the safety of your team depend on it.

Caution: Humility. A healthy respect for the risks involved. And the commitment to minimize them. Appropriately. Daring may take you there but it won't necessarily get you home.

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Captain Billy Deans Key West TECHNICAL DIVING CENTER

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Specialty Courses • Enriched Air Trimix • Deep Diving tri-hull but "Buddy" assured me it wouldn't be a problem.

We were to be at "Owner's" house by 7:30 pm. Buddy forgot where Owner lived and we didn't get there until eight. The boat was hitched to a very small four cylinder Japanese car. We followed Owner to the boat ramp, which took another half an hour. He launched, we loaded. Then the outboard didn't start. After about twenty minutes, he got it going, and as we got under way, Owner dropped that this was the first time he'd taken the boat out at night. Then he let slip that he is newly certified and has never made a night dive. Then he hands over the helm to his older kid, who proceeds to stay particularly close to the shoreline.

Buddy mentions that there are some underwater rocks nearby . . . which Owner's Kid hits forthwith.

The Long Island Sound was a little rough that night. A steady wind made for a nice surface chop. We decided to head for Mt. Sinai instead of Shoreham.

We arrived at Mt. Sinai and proceeded to enter the water and dive the west jetty. Because of all the delays, the tide had turned and was running out. I decided to dive by myself and let Buddy and Owner dive together. There were a lot of deep holes, but no bugs were taken.

At the end of the dive, I surfaced, and between me and the boat were Buddy and Owner. Owner was having some sort of trouble, so Buddy and I swam over to offer assistance. Buddy arrived first. Owner was panicking and trying to inflate his vest. Owner reached out and grabbed the over inflation valve from Buddy's vest, the old horsecollar style, and ripped it off.

Buddy's vest deflated. By this time, Owner was trying to drop his weight belt. His tank was twisted all around him, and he was holding onto Buddy who had no buoyancy. By the time I arrived, Owner had inflated his vest and let go of Buddy. With no air in his vest, Buddy was going down. I submerged and removed Buddy's weight belt, which was all tangled in his BC straps. Finally got it off.

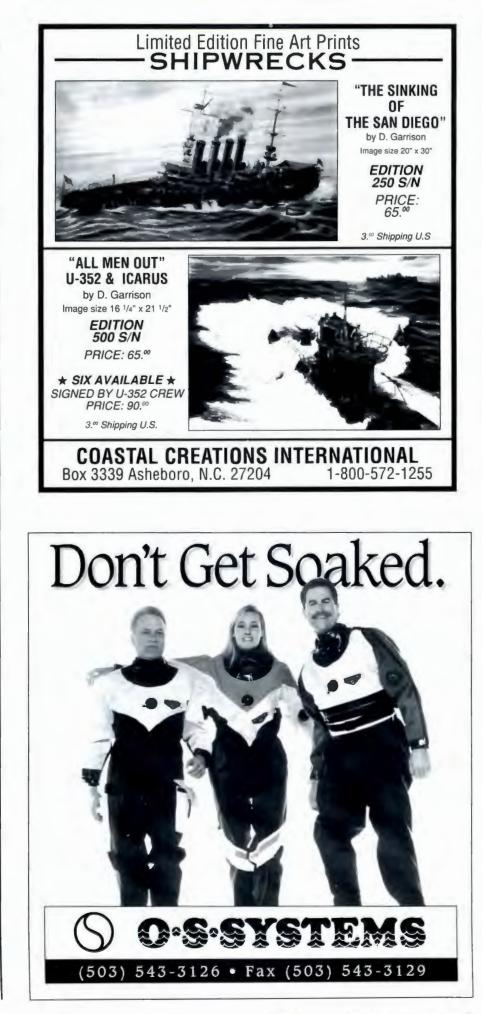
Buddy and Owner swam to the boat. I was stuck holding the weight belt. Owner and Buddy were holding on to the boat. Owner's Kid was in a panic, running all over the boat trying to figure out what to do. Meanwhile, I was still struggling back to the boat with Buddy's weight belt. I finally got the belt back into the boat. Owner was a little upset and very apologetic, and annoyed that he lost his weight belt. I went back to the approximate location where he dropped it and began an underwater search. After about five minutes I located the belt.

Owner thanked me and started to head back to the dock. By now, it's well past midnight and the overcast sky obscured the moon. Besides no natural light, Owner did not have any type of spot light that could be used. The Sound was also a little rougher and with a tri-hull, made for a bumpy ride.

Owner was quite nervous during the trip back. As we approached Cranes Neck, the entrance to Stonybrook, he wasn't sure if it was the right spot. All the shore lights were out and all we could see was the outline of the Island. I assured him that this was Cranes Neck and the right entrance. I took good notice of the area on the way out.

We made it to the dock by about two am. When we pulled the boat out of the water, his new prop was all chipped and twisted. Evidently, it happened when Owner's son hit the rocks.

I don't know if Owner made any more dives after that night. Buddy is still diving. This whole incident taught me very important lessons. If you are diving off a private boat, make sure the operator is competent. Listen to your instincts. If things start going wrong and the dive doesn't sound right, abort. There will always be another opportunity to dive that spot again.





# THE SCUBA FORUM ELECTRONIC COMMUNICATIONS

We thought it was time to tell you about the CompuServe SCUBA FORUM. It's a great place to communicate with divers all over the country. Many Journal staffers and contributors check in regularly. If you already have a PC and a modem, you need to join CompuServe and after you're on, type GO SCUBA. If you don't have a PC, '93 is the year for you get into the 20th century.

CompuServe is an information service which works like this — your modem dials a local telephone call to their system, and you hook up to an international network. You pay a usage charge (depending upon your modem's baud rate) by the hour. Others call in and





can leave electronic messages for members of specific forums, and they can also leave private E-mail messages for a nominal per message fee.

The Scuba Forum has 17 libraries of files - several hundred - on dive travel, dive sites, equipment, education, training, medicine, photography, cave/tech diving, and more. There are also 17 different message areas with matching topics. You can swap messages with divers at all levels of experience. You can get responses to inquiries about all sorts of current information, opinions and experience on just about any topic.

One warning - CompuServe can be addicting, and you can run up big usage charges if you don't plan your use. For some, it can be like one of those 900 numbers. We recommend investigating a program such as CIM (CompuServe Information Manager) to minimize your actual connect time. The trick is to log on, retrieve messages from all your favorite places, and log off. Read your stuff off-line, reply off-line, and upload your messages. Think of it like exploring a wreck - your breathing supply is your monthly usage bill. Also, although we're told that CompuServe runs routine virus checks, we have heard of viruses hiding in library files. Practice safe computing and get a good virus checker. Of course, outside of the Scuba Forum there are hundreds of interesting places to explore - from cats to movies to witchcraft - to the AP wire.

We think you'll find that being on the board increases your feeling of belonging to the dive community.

For info on the Scuba Forum call (708) 430-5070, or write to Scuba Forum 6841 W. 79th St. Burbank, IL 60459 or call CompuServe at 1-800-848-8199 — ask about a free trial membership. ■

#### **EVENTS CALENDAR**

#### MARCH

 6-7 BOSTON SEA ROVERS 39th Annual Underwater Clinic. Two days of films, presentations, workshops on U/W photography, tech-diving, O<sub>2</sub> administration and dry suit repair. The oldest dive show in the nation.
 Copley Plaza Hotel, Boston, MA, Contact: (603) 432-1997

#### 26-28 Beneath The Sea 17th Annual Dive Show

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#### 26

Second Quarter report and discussion of the issues of extended range diving. A 1 1/2 hour workshop at **Beneath the** Sea for information contact: (516) 889-1208

APRIL

Delaware Underwater Swim Club is sponsoring their 20th Annual Swap Meet at the Deleware Association of Police Building, 2201 Lancaster Ave. Wilmington Delaware. The Swap Meet is open to the public for a \$1 admission fee. 7 p.m. - 11 p.m. Contact: Lois Impagliazzo (302) 571-5920

JULY

10

Second Annual Undersea Hyperbaric Medical Society Recreational Diving Symposium. The focus this year: "Physiology of Diving Injuries." The specially selected faculty will present the latest medical information about deco-sickness, neurophysiology, lung injuries etc. Halifax, Nova Scotia, Canada. Contact: Dennis Graver (206) 387-8043 fax (206) 387-6683

List your events in the **Sub Aqua Journal**. Mail, Fax, or E-Mail on CompuServe by the first of the month prior to the event. You must include a contact person address and a phone number.

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#### New PRODUCT GMI PHOTOGRAPHIC Introduces New Flash Units



GMI Photographic, Inc., of Farmingdale, N.Y., has introduced two new Sea & Sea YS 300 professional powered flash units.

The new YS 300 TTL strobes are professionally featured, high powered underwater strobe units which are fully compatible with either the Sea & Sea Motormarine II or the Nikonos V camera systems. A built-in modeling light permits the diver to preview the flash unit's lighting pattern prior to making an exposure.

The Sea & Sea YS 300 produces a high flash output with an ISO 100 guide number of 30 in meters or 104 in feet. The flash's standard reflector produces a wide 100 degree light pattern which is suitable for properly covering the perspective of a 15mm U.W. lens. An optional opaque diffuser is also supplied for minimizing light scatter.

In the manual mode, the YS 300 can be adjusted to produce either full, half or 1/4 power output.

In the TTL mode, the YS 300 is fully compatible with the TTL automatic circuitry of the Sea & Sea Motormarine II Camera and the Nikonos V Camera. In the TTL mode, the flash will activate the in-camera viewfinder's standby/ready indication lamps and the in-viewfinder exposure confirmation light. Both flash models produce an audible signal to confirm the proper TTL flash exposure. This audible signal can be heard clearly underwater.

For further information, contact Christopher J. Davies, Marketing Manager, GMI Photographic, 125 Schmitt Blvd., Farmingdale, N.Y. 11735. ■

#### **KIRBY'S KORNER**

## **THROGS NECK JETTY**

by Kirby Kurkomelis



The Throgs Neck Jetty is located between the Throgs Neck Bridge and Fort Totten. Photo by Dan Berg,

One of the more popular dive sites I recently visited was the Throgs Neck Jetty in Queens, located southeast of the Throgs Neck Bridge. The drive on the Cross Island Parkway north was about 15 minutes. Exit Bell Boulevard; turn right on Fort Totten Avenue; take a quick left; enter parking lot; pull out dive gear.

High tide was rolling in as I entered the water. I could smell the cold air coming out of the north. The temperature was a nasty 26 degrees. But I was determined. I have heard many stories about artifacts recovered at this site. Using the east side of the jetty as my guide, I slipped below the surface and ran into a bicycle frame in the sand entangled with miles of fishing line and sinkers. A blackfish darted out from under it and I felt at home.

As I swam along the bottom towards the Throggs Neck Bridge, I saw plenty of small founders lying camouflaged in the sand. I could see their eyes sticking out. The bottom was soft sand with very few patches of seaweed. There were tiny shells, surrounded by hermit crabs trying to stay warm. It seemed that the larger fish have moved into deeper water. In the sand lay some bullet shells. I was not surprised, being so close to the Fort Totten.

I decided to head up; my depth was 15 fsw. I wanted to check my location. At the surface there was a Coast Guard boat pulling into a slip next to the fort. I headed down the opposite way.

The bottom was littered with tires, concrete, and some broken branches not too many places for fish to hide. Most of the marine life was at the jetty. That didn't include crabs, which are plentiful, and some soda cans.

I started heading back towards the jetty. It was covered with barnacles and some white coral straining for a drop of sunlight. A butterfly fish protected his territory. Looking deeper into the rocks, I saw sea urchins silently moving their spines about. As I swam south I encountered a small lobster throwing sand out of its new home. I was surprised at the visibility — about ten fsw.

The water was eight feet deep and I could hear people talking. Breaking the surface I saw two soldiers laughing on the jetty. I said, "What's so funny?" One soldier said "It's getting dark — it's time to get out of the water." He was right. ■

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Now the oceans need your help. Unless we stop them, drift nets, industrial pollution, and toxic waste will destroy the habitat and marine life we have come to know and cherish. It is our responsibility to protect the oceans, to give back a small part of what they have given to us.



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# EMERGENCY O<sub>2</sub>XYGEN "How Much Should I Carry?"

by Hillary Viders, Ph.D., EMT

Although emergency oxygen training and oxygen equipment have recently become available to the diving community, many people are still puzzled by the BIG question, "How much emergency oxygen should I bring with me on a dive?" Recreational divers diving in remote locations with no on-site medical support, and dive leaders in charge of diving emergencies, should have a definitive knowledge of how long a given supply of therapy oxygen will last. An adequate supply of 100% oxygen given immediately at the scene of a dive accident can make the difference between complete recovery or a lifetime of paralysis. In some instances, oxygen can literally make the difference between life and death.

In the medical community, the "Golden Hour" describes the critical 60 minute period following a dive accident. The benefits of the emergency care you give a victim in that precious envelope of time can never again be duplicated. A prepared dive rescue team, well therefore, should be equipped with an adequate supply of 100% oxygen, capable of oxygenating an accident victim continuously, from the recognition of the accident until medical authorities order it discontinued. A good rule of thumb for a rescue team would be to carry at least an hour's supply of oxygen for every thirty minutes away you plan to be from an emergency medical facility, and to have a demand delivery breathing system. [use the rule of thumb assuming that no helicopter may be available, ed.]

There are many factors and variables which will determine how long a gas supply being given to a patient will last, such as the patient's inspiratory rate, the patient's inspiratory volume, the volume of gas in the tank when oxygen delivery is begun, and at what residual pressure the tank is replaced, etc. Allowing for these variables, the following are figures for gas consumption in the three aluminum cylinder sizes most frequently used in field treatment — the D cylinder, Jumbo D cylinder and E cylinder:

A conscious patient breathing from a demand valve inhaling an average .5 liters of oxygen per breath, fifteen times a minute (7.5 liters per minute):

D cylinder	55 minutes
Jumbo D	85 minutes
E cylinder	90 minutes

An unconscious patient being ventilated with positive pressure via a demand valve, being given an average of 1 liter of oxygen per ventilation. (12 liters per minute):

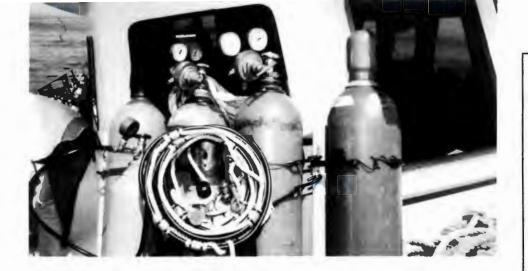
D cylinder	34 minutes
Jumbo D	53 minutes
E cylinder	57 minutes

A patient breathing from or being ventilated with constant flow equipment (non-rebreather mask, face mask, pocket mask, bag valve mask) at a 10 LPM flow rate:

D cylinder	41 minutes
Jumbo D	63 minutes
E cylinder	68 minutes

A patient breathing from or being ventilated with constant flow equipment (non-rebreather mask, face mask, pocket mask, bag valve mask) at a 15 LPM flow rate:

D cylinder	27 minutes
Jumbo D	41 minutes
E cylinder	46 minutes



A patient breathing from or being ventilated with constant flow equipment (non-rebreather mask, face mask, pocket mask, bag valve mask) at a 25 LPM flow rate:

D cylinder	17 minutes
Jumbo D	25 minutes
E cylinder	27 minutes

To appreciate these numbers, it is important to distinguish between a constant flow and demand system: constant flow refers to a system which delivers oxygen continuously via plastic supply tubing connected to a device such as a pocket mask or non-rebreather mask. In a demand system, a two-stage regulator delivers oxygen only when it is needed for ventilations, just like your scuba demand regulator does. It should also be noted that 10 liters per minute is only a starting point for victims being given oxygen with a constant flow system. Dive accident victims often need a flow rate closer to 20 liters per minute. In several states, such as New Jersey, EMTs and paramedics are taught that if they have to use constant flow devices on victims of acute medical emergencies, that they should always start with a flow rate of 25 LPM and work down if necessary. A look at the previous figures, therefore, invokes a sobering reality that if demand style equipment is not available and you must rely on constant flow equipment, a dive accident victim can empty a D size aluminum cylinder in only 17 minutes! And remember - these numbers are based on the assumption that only one dive accident victim needs the oxygen!

While some well-equipped dive boats carry large hospital size oxygen tanks which hold up to 3500 liters, or many small cylinders, dive boats in remote vacation sites can be quite another story. An example of this is a survey done recently by NAUI/NASAR instructor Frank Wells. Out of 100 dive boats in Cozumel and Cancun, Wells found that only 2 carried any oxygen equipment, and neither of those two boats that carried oxygen had a system that could deliver more than a few minutes worth of oxygen to one accident victim! When planning a dive trip to an unfamiliar area, therefore, it is advisable for divers, (particularly dive leaders) to call ahead and request specific information about the dive boat's first aid and oxygen equipment. If the equipment sounds inadequate, you may have to bring your own supplementary emergency equipment or consider booking with a more responsible dive operation.

All divers, particularly dive leaders, should have ongoing training in emergency oxygen administration. But remember, you need to understand not only the Why and the How of oxygen administration, but also the How Much. Never skimp when it comes to safety. When in doubt, think of that "Golden Hour" and whether you can afford to squander one moment of it.

Note: The gas consumption rates were calculated using the exact cubic foot and liter specifications of the major US cylinder manufacturers - Luxfer, Norris and Pressed Steel Corporation.

Editors Note: Most dive vessels operating along the Atlantic carry oxygen for emergency use. In the event you feel you need it please do not hesitate to ask for it. Many times only you know you have a problem, only you can ask for help.



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