

SUB AQUA JOURNAL

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NOTICE

Diving is a potentially dangerous activity. Persons engaging in this activity should be certified by a reputable training agency. Once certified you should dive within your training and personal limits. Information published in the Sub Aqua Journal is not a substitute for education or training. Sub Aqua Journal is not responsible or liable for the contents of any information or recommendations published herein.

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GO DIVING!

April is special here at the Journal, it marks our third anniversary. The April 1991 issue of the Sub Aqua Journal was first presented at that year's Beneath the Sea Underwater Exposition. Remember a small six page photocopied newsletter? Look at us now! April is also special because it opens up the dive season in the North East region of our country. Divers from New York, New Jersey, Connecticut, Rhode Island, and Massachusetts are all dusting off their gear and getting ready for an exciting dive season.

While getting our dive gear in order we thought we'd remind you about the most important piece of equipment to tune up — that body of yours. Dr. Steve Lombardo starts his series on getting fit not only for diving but for the rest of your life. Start now and within a few weeks when the seas calm down and the sun shines every day you won't be hiding in your sleeping bag between dives.

Our New England correspondents Dave Morton and Capt. Eric Takakjian take us on a dive to the USS Bass, a huge submarine resting just off Block Island. Dan Berg runs down to New Jersey to dive the Western World, a beach dive for all divers. New to the Journal is John Pfisterer, a dive master on Long Island who shares some dive sites in south Florida — his only problem was finding a boat to take him out on his "planned" vacation. Hillary Viders instructs us about first response dive accident management. Even the untrained can help out in a dive emergency by following the eight steps she outlines. Kirby rolled over this month, looked out the window, saw his shadow, and buried his face in his pillow. He woke up with a dive tale we all would have loved to tell.

This month opens up the *Question Locker*, a new column edited by Bob Raimo. Bob answers reader questions about dive problems. Send us yours. Local Heroes is back with all your friends who enjoyed Beneath the Sea. The Boat Schedule literally bursts with dive sites for April and May. Book a trip today and start your dive season now.

Another dive season is upon us. All of us here at the **Journal** want to wish you safe and adventurous diving. Take the time to explore the wondrous dive sites along our coastline. Share your experiences with friends and family and if you can, encourage someone new to join in our fun.

Ready, set, GO DIVING!

Joel Silverstein, Editor

The USS Bass

by Dave Morton with history by Captain Eric Takakjian



The world's attention was captured on July 9th, 1916, when Germany's freight-carrying submarine Deutschland arrived unannounced in Baltimore Harbor. This action, the first crossing of the Atlantic by a submarine, made apparent the vulnerability of the U.S. East Coast to attack, a thought that was previously considered impossible. Although this shocked most Americans, it also caused some others to start thinking of the viability of using submarines as cargo vessels.

Shortly after the start of W.W.I, a program was funded for the development of a larger class of American subs that could carry cargo, but would be much larger and have a greater operating range than the Deutschland. The second of this new class, the V-2, was launched on December 27, 1924, and commissioned on September 26, 1925. The 341' long V-2 was an impressive sight, armed with 6 torpedo tubes (4 forward, 2 aft), a 3" deck gun, and two machine guns.

The V-2 started operating in the Atlantic and Caribbean, and then was transferred to San Diego in 1927. On March 31, 1931, the Navy changed the numerical designations of submarines to

fish, and the V-2 became the USS Bass.

This new class of submarines proved to be a bitter disappointment to the Navy. The main propulsion system was unreliable and they handled poorly. Even worse, they took a long time to dive, an undesirable trait for subs. The *Bass* was decommissioned and mothballed at the Philadelphia Navy Yard in 1937.

In September of 1940, the *Bass* was reactivated, and in the first days of W.W.II, she made four war patrols in the Pacific, but did not encounter the enemy. Late in 1942, a fire broke out in the aft battery compartment room which killed 25 crew members, and caused crippling damage. She returned to Philadelphia, and by orders from President Roosevelt (a self-proclaimed naval expert), during the repairs her aft engine room and torpedo room were converted to storage space, and the *Bass* was transformed completely into a cargo sub.

The sub proved to be worthless as a cargo boat (a fact learned years earlier by Germany), and the *Bass* was transferred to New London, CT for use as a training boat until she was decommissioned for a second time on March 3, 1945.

On March 18, 1945, the Bass got

underway for the last time when she was towed to a position south of Block Island, and left at anchor as a target for a top secret experiment. At 12:30 P.M., a Catalina PBY-5A flew over and dropped two aerial mines. The first failed to detonate, but the second exploded as planned (which also ignited the other), causing fatal damage to the boat. The Bass started to sink; the bow hit the bottom first. The stress induced by the angle caused the bow to shear off at the forward engine room bulkhead. The aft section landed upright on the bottom, with the 80' bow section resting on its port side a short distance away.

The Bass is considered by many to be one of the most spectacular dives in New England, and for good reason. Its offshore location on a hard, bright sand bottom typically affords good visibility. The immense size of the sub, combined with its upright position on the bottom and the severed bow close by, creates a dramatic setting for a memorable dive.

The depths of the Bass keep it out of reach of many divers. The conning tower rises to 135', and the maximum depth attainable is 165', so every dive is a decompression dive. Due to the size

of the wreck and the limited bottom time available, a typical dive started at the conning tower would allow the dive team to view either the bow or the stern section. Most divers do not try to circumnavigate the entire wreck on a single dive, because a full round trip journey would mean swimming approximately 800 linear feet, at depths between 135' and 165'.

The first dive I made to the Bass was in the early summer of 1992, with my partner Patricia. We made the dive with Captain Eric, who had a lot of experience on the wreck. Our plan called for a quick check of gear at 30', where we would meet up and start a quick descent down our mooring line attached to the conning tower. At the wreck, we would check the line, adjust gear, and determine the strength and direction of the current. Although we set strict air, depth, and time limits on the surface, we would determine the direction of our dive on the bottom, because we wanted to start out against the current. If no currents were present, we would head aft to view the propellers and prop guards, which were said to be pretty impressive.

Conditions were very good, with 20-30' visibility, and the 48° F water was warmer than expected for that time

of the year. We adjusted and checked our gear on the deck at around 140', and signaled to each other that all was OK. Since the current was slightly but persistently flowing aft, we headed forward along the starboard side of the wreck. We were swimming just off the bottom, looking in the washouts and shadows along the hull. An occasional lobster was visible, along with some curious cod and flounder. Because of the large size of the Bass, when you swim along the bottom, it almost feels like you're diving on a sunken tanker or cargo vessel, rather than a sub.

We soon reached the break at the bow and ascended about 10' to look into the hatch accessing the engine room. Everything was covered with a thick, lush growth of anemones, further reducing what little room there was in there. Space throughout the aft section is very cramped, and the only exits are this engine room hatch, and one other on the main deck aft of the conning tower.

We checked our gauges, and since we were only 7 minutes into the dive, and had plenty of air, we opted to head over to the bow. We turned to look behind us to where the bow was, and were surprised to see its mammoth shadow looming in the distance. The visibility

seemed to be getting even better, as the bow was over 40' away.

The forward section seemed to be a different wreck. Swimming around the stern, it was easy to get the feel of a submarine, particularly when looking up at the nose. We swam to the break and looked inside. Where the hull was fully enclosed with only two hatches allowing access, the bow was completely open, permitting a relatively easy penetration. Although there was quite a bit of silt and debris on the bottom, and remnants of frames and collapsed decks added to the congestion, it was possible, with some care, to swim forward inside about 2030 feet.

We again checked our gauges. Our bottom time had passed 13 minutes, so we started back to the ascent line, and made it back to the conning tower well within our planned 20 minute dive. As we regretfully began our ascent, we paused to look back one more time at the conning tower, and the decks fading off in the distance. This was one dive where the decompression was a small, enjoyable price to pay.

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DIVING EMERGENCIES - WHO'S ON FIRST?

by Hillary Viders, Ph.D., EMT

Scuba diving is a remarkably safe sport, with relatively few emergencies. Its impressively low accident statistics, however, may actually have a down side. Because it is so safe, the need for dive accident prevention and management is often overlooked. Such an omission can be hazardous. In the event of a diving emergency, it is a giant leap of faith to assume that EMT's and paramedics will arrive immediately at the scene, or that they will be trained and skilled specifically in diving maladies. All too often they are not. Currently, EMT's and medics receive little or no training in decompression illness, which is a unique medical emergency, requiring prompt recompression therapy. (note - DAN will soon be introducing a video and support materials for EMS on diving injuries) Delay in recompression treatment may result in severe worsening of the injury, and even death.

Often a Dive Leader, or even an open water diver is first on the accident scene, and is faced with initiating life support measures. In the medical community, we refer to the "golden hour" as the 60-minute period immediately following an accident. The benefits of the emergency care given a victim in that precious envelope of time are critical. Efficient and effective steps must be taken as soon as the accident is recognized.

To become proficient in diving emergency procedures, all divers should continually take courses to learn and fine tune their skills in CPR, oxygen administration and dive accident management. There are many such programs, including those offered by NAUI, DAN, Lifeguard Systems, etc., now widely available to the diving community. Dive accident management programs also familiarize divers with terminology that can help you interface with and sometimes assist higher medical authorities.

You may be wondering, "Will I every really use this stuff?" Recently, a student whom I had trained in emergency oxygen and dive accident management made a spectacular rescue. He resuscitated a diver in cardiac arrest who

had embolized and had lost consciousness in the water. He performed CPR, administered 100% oxygen, contacted the Coast Guard and EMS, and assured that the victim was evacuated to a recompression chamber. The victim, who by his own admission would have died within minutes, made a full recovery and was celebrating with his family the following week!

As a diver, you should never underestimate your role as a first responder, or the importance of having premier dive accident management skills. Always remember, how long a dive accident victim *lasts* often depends on "who's on *first*!"

The 8 fundamental steps that should be taken by first rescuers on the scene:

- 1. First and foremost, it is imperative to stabilize the victim. Secure the ABC's (Airway, Breathing and Circulation). If necessary, perform CPR.
- Administer 100% oxygen, preferable by a demand valve system. (See "Emergency Oxygen-How Much Is Enough?", Sub Aqua Journal March, 1993)
- Contact emergency personnel (EMS, Coast Guard, Etc.) via marine Channel VHF 16 or by regular or cellular phone. Explain the nature of the problem, your exact location, and what first aid has been given.
- 4. Call Divers Alert Network (DAN) emergency, (919) 684-8111, to confirm the location and availability of an emergency medical facility and recompression chamber. According to DAN, the dive accident victim should be first stabilized and evaluated in an emergency room before being given recompression treatment. It is important to let DAN assist you in locating a chamber because not all hyperbaric chambers are readily available and operational 24 hours a day. Also, some chambers may not be appropriate for the specific diving injury at hand.
- 5. Keep the victim calm and in a supine position. If you suspect the victim has suffered an air embolism, you may raise the legs up to 12", if it causes the victim no discomfort. If the victim begins vomiting, turn him on his side, clear the vomitus and return him to a supine position, making sure that the airway remains clear.
- If the victim is awake and can tolerate fluids, allow him to drink 4 ounces of half strength Gatorade or water every 15 minutes. If you are certified to use IV's, administer Lactated Ringers of Normal Saline solution.
- 7. Always take notes. Your notes will provide vital information to advanced life support personnel and recompression chamber staff. Take and record the victim's vital signs initially, and then every 15 minutes. Vital signs include: pulse, respiration, blood pressure, temperature, skin color and level of consciousness. Pay special attention to changes in the victim's symptoms and vital signs. Also note any obvious injuries, deformities or neurological deficits. The DAN Diving Accident Manual explains how to conduct a 5 minute neurological exam that may provide extremely useful information. When conducting any neurological assessment, (including observing how the victim looks, speaks, and moves) be alert for abnormalities in motor, sensory or reflexive function.
- 8. In addition to vital signs, record the victim's medical history. A popular mnemonic to use is SAMPLE:

Signs and symptoms
Allergies
Medications currently taken
Prior medical illness and injuries
Last oral intake
Events leading up to the accident.

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NEW JERSEY ARTIFICIAL REEF CHARTS NOW AVAILABLE

To aid divers in finding reef structures, the Artificial Reef Association, in cooperation with the New Jersey Department of Environmental Protection and Energy's Division of Fish, Game and Wildlife has released fishing and diving charts of six of New Jersey's artificial reefs. The charts depict all the ships, barges, concrete, rock, tire units and other structures placed on artificial reefs. The reef sites for which charts are available include:

Sandy Hook Reef (off Sea Bright); Sea Girt Reef (off Harvey Cedars); Garden State South (off Beach Haven); Atlantic City Reef (off Absecon Inlet); Cape May Reef (off Cape May Inlet).

The 8" x 10" heavy gauge, plastic charts are waterproof and designed to take onboard small boats. On the front side, all of the reef structures are plotted on a LORAN C navigation grid; coordinates for each structure are provided on the reverse side.

The Artificial Reef Association is a group of 40 New Jersey party and charter boat captains who have organized a concerted effort to raise money to fund the construction of more reef sites. Money collected from the sale of charts will help pay for the cleaning and towing of ships and other structures bound for sinking on the State's 14 artificial reef sites.

Donations from divers and fishermen have helped sink the following vessels:

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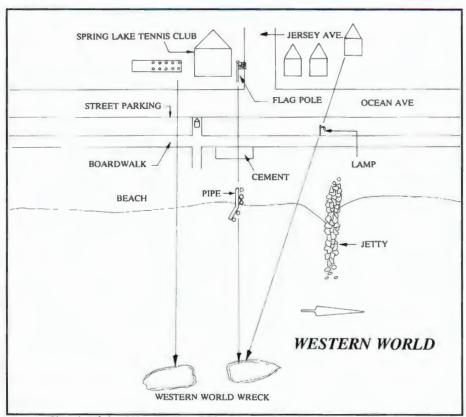
THE WESTERN WORLD

by Daniel Berg

Beneath the surf of New Jersey's bustling beaches, sometimes only a stone's throw from wading tourists, are the remains of literally hundreds of sunken vessels. These wrecks are not only rich in history that spans decades but offer divers some of the finest beach diving in the state. Many of these time capsules into history are yet undiscovered, waiting for some ambitious diver to locate their remains. Others are popular week end dive sites, visited by hundreds of divers each season. One of New Jersey's most interesting and popular beach divable shipwrecks is the Western World, located off the shore of Spring Lake.

The British sailing ship Western World ran aground in a heavy fog on October 22, 1853. At the time, she was en route from Liverpool to New York with over 300 passengers. All of her passengers and crew were rescued. The steam tug Achilles was dispatched to the scene and reported that the ship was lying with its bow to the north, broadside across the beach. Attempts to save the vessel were in vain. On October 26th, the Western World broke in two and slipped beneath the waves. For many years the yet unidentified wreck was known to divers only as the Spring Lake Wreck.

The first two divers to explore the wreck of the Western World were Charlie Strattion and Howard Rowland back in the early 1960's. These divers found the virgin wreck covered with china and artifacts. The wreck's true identity was discovered around the same time that diver Ed Maliszewski recovered her bronze capstan cover in 1962. In the 1960's, divers recovered powder flasks, hinges, drawer handles, files, latches, china, and even silver trays from the site. Some of the china recovered was manufactured by Felspar, in Burslem, England. Diver Dan Lieb reports that the wreck now consists of two congealed lumps. Her hull is intact to her boiler on a sand-over-clay bottom. She sits with her bow facing north, 100 yards off



Sketch of the Western World by Howard Rothweiler and Dan Berg

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WESTERN WORLD

continued from page 7.

the beach in about 30 feet of water. Even today the wreck is covered with pieces of china embedded in the rock-hard conglomerate. The location of this wreck so close to the beach causes its condition to change. Divers should note that many times new portions get washed out and uncovered after strong storms.

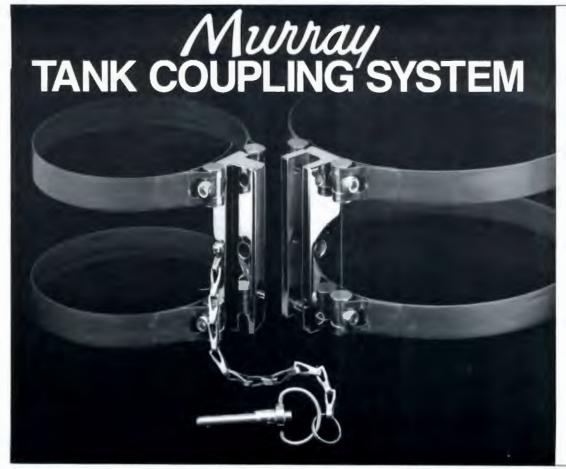
To get to the wreck, take the Garden State Parkway to exit 98. Take Rt. 34 to the first traffic circle, then make a left onto Allaire Road. Allaire will change into Ludlow Avenue. Stay on Ludlow to the end and turn right on Ocean Avenue. The Western World is located directly off the base of Jersey Avenue. The wreck is fairly simple to locate, but if you have any problems you should refer to the triangulation sketch. Parking is available on Ocean Avenue.

Be sure to check the weather conditions before attempting to dive this site; weather plays an extremely important role in any Jersey beach diver's daily plan. The best conditions are during an incoming or high tide when the wind is out of the west, and the surf is calm. When the wind is blowing from the east, the surf is usually pounding the beach making it impossible, or at least undesirable, to dive here. Divers also should note that written permission from the Spring Lake Chief of Police is needed to dive this site legally. As far as New Jersey Beach diving goes, the Western World is one of the choice dive sites, especially if you are looking for artifacts. The Western World is highly recommended to anyone planning to dive off New Jersey's coast, in an area known as Wreck Valley.

THIS MONTH'S COVER

was shot at Gold's Gym on the West Shore Expressway on Staten Island, NY. Divers Mike Lasalle and Maria Tiberi join Eric Schwartz and Laura Marando in a daily workout.

Shot with a Hasselblad 500 C / 50 mm Distagon lens on Tri-X Pan film. Two 2,500 WS Speedotron flash units light the scene. Maria's BC courtesy of Ocean Edge.



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INTERVAL Gene Peterson

by Barb Lander

By the time Gene Peterson was sixteen he had decided what he wanted to do with his life: dive. He had been diving for four years when he reached this momentous decision, unlike most sixteenyear-olds, he didn't change his mind.

He worked in dive shops, crewed on dive boats, and eventually became a NAUI instructor. He has always been able to parley his water skills into what he needs, not only to keep diving, but to make a living. He recalls how he got his first submersible pressure gauge: "I was assisting classes out of Margate and the instructor told me I needed an SPG. I told him I couldn't afford one. I wound up betting him an SPG that I could swim three laps underwater." Gene won his.

Not satisfied with his credentials, Gene added a Captain's license to his list of accomplishments. Much of the required sea time was gotten by crewing for a friend who had an ocean racer. Gene spent his winters sailing the Caribbean. They filled their scuba tanks at local dive shops but spent more of their time free diving. The menu was nearly always fresh fish or lobster, the product of the day's hunt.

Captain Gene recalls the *Odine* with pride. "It was the fastest sailboat in the world. It had the second tallest mast and the largest spinnaker in the world."

With dreams of owning his own charter boat, Gene took a job as captain of a charter fishing boat. Gene wanted to learn the business. Two and a half years later Gene decided a dive shop would be a better livelihood. In 1986 Gene took a second mortgage on his house and opened Atlantic Divers in Pleasantville, NJ.

"Atlantic Divers focuses on wreck diving," Gene explains, "that's what I enjoy." And wreck diving is what they do! There are over 170 charters a year scheduled on five different boats. Wreck hunting is a priority on Gene's diving agenda. Last year they found (or refound) six wrecks, the submarine S-5, an unknown freighter (probably the Winniconne), the *Brian C*, a tug, a schooner in 120 fsw, and two paddlewheelers, one in



90 fsw and another in 110 fsw. "It was a good season," Gene admits.

Gene recalls another good season, "It seemed like I couldn't do anything wrong." He recovered gold coins off the Vizcaya, from the January wreck, a silver bowl, a telegraph from the Varanger, and a porthole almost every time he went in the water.

His favorite story took place on a new wreck that George Hoffman wanted to check out. George explained to Gene that he would have the honor of being the first person to see the wreck as he tied in the anchor. Gene's reputation for recovering artifacts had already been firmly established, so George and Rick Jaczyn took his tools and his liftbag. Gene scouted out the new wreck, unable to remove portholes and instruments without his tools. He discovered an inflatable life raft, cut it loose, and rode it to the surface. Not to be outdone, Rick brought a refrigerator to the surface and drank the beers that were in it!

Gene explained that even on wrecks that other divers describe as boring, he can have a good time. For instance, the Lemuel Burrows, a steel wreck, is much maligned among artifact seekers. Gene turned up the brass letters. Later he found the helm sitting up in the sand. The key to wreck diving says Gene, "you have to be adaptable."

So simple it's ingenious.

FIT TO DIVE: GETTING STARTED

by Steve Lombardo, MD.

In our world of scuba, a time comes each winter when we think "maybe I'd better start getting in shape for the upcoming dive season, so I can at least fit into my wet or dry suit." How many people on the average dive boat appear to be in good shape? Are you one of them?

Diving is an athletic pursuit. Your scuba system is a respiratory machine which connects to your body's respiratory machine. When your body is in optimal shape it can better handle the stresses that diving creates. We're going to trim down your excess ballast, strengthen those muscles which all winter only exercised the TV clicker, and get you breathing. I'm not going to scare you. You know the risks of being overweight and smoking. You're big boys and girls.

Getting in shape can be more than a little intimidating. Most of the people you see in a gym don't look like they need to be there, and any diet other than the usual "SEEFOOD DIET" seems to take all the fun out of life. The hardest part is getting started. Put your sneakers on and just do it. Start a diet and commit yourself to it. But hanging in there before getting the positive feedback of looking and feeling better is tough.



Doc Lombardo uses double 120's to strengthen legs while doing squats.

So do it. Get started. Just do it and get it over with. Do it right and you'll never have to get started again.

AEROBIC ACTIVITY

First, you have to get some aerobic activity into your life. For training purposes, aerobic activity is defined as whatever exercise will elevate your pulse rate into the optimum or target heart rate area. To derive cardiovascular benefit, the target heart rate must be maintained for a minimum of 15 minutes. After you learn a few simple skills, you will know what is necessary to perform a cardiovascular workout.

RESTING PULSE RATE

You must know how to take a pulse. Get a watch with a second hand, feel your carotid pulse (either on the left or right side of the trachea or windpipe) and count the number of pulses contained in a 15 second period. Multiply this by 4 and you will have your heart rate in heartbeats per minute. A resting heart rate should be between 60 and 100, generally the lower the better. My roommate at SUNY Maritime College had a resting heart rate of 20, but he was a cross - country runner who did at least 10 miles a day! For most of us mere mortals, a resting heart rate of 60 to 72 is considered fine.

TARGET PULSE RATE

Next, use this formula to calculate your maximum heart rate: (220 minus your age). Your target heart rate for aerobic workouts is 70 to 85% of the maximum heart rate. For instance, a minimum rate for a forty year old diver would be:

 $(220 - 40) \times (0.70) = 126$

This is a minimum for cardiovascular benefit. It may take several weeks to work up to this level, but once there, it's yours and no one can take it away.

The aerobic workout should be done at no more than 85% of the maximum heart rate, which for our forty year old diver would be:

 $(220 - 40) \times (0.85) = 153$



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DOING IT

Now that you have the proper tools, it is necessary to set aside a time period of at least 20 to 30 minutes each day for aerobic activity, ideally one that you enjoy such as biking, running, or even brisk walking. Many like rowing machines, treadmills, and ski machines.



Tighten that abdomen and strengthen the back.

There are aerobic workouts based on calisthenics and dance moves which are popular. If you want to combine your love of the water with your program, swimming is one of the best aerobic workouts. One tip is to alternate activities on different days. Try a number and focus on 2 or 3 favorites. Some people enjoy an exercise tape for convenience. Most of us do better with a buddy, although the workout must happen even if the buddy, for some reason, doesn't.

As a diver oriented to "logging every dive," keep a chart of target heart rate achieved a few minutes after starting. This is helpful in making sure that the exercise is aerobic and of cardiovascular benefit. Notation should be made of the pre- and post- exercise heart rates, as these tend to drop as one gets into better and better shape.

Did he say every day? Admittedly, it's unrealistic to expect anyone to exercise in this intensive manner each and every day, but there is a psychology to this strategy. The frequency of training should be 3—5 days a week, with 3 days being the minimum for cardiovascular improvement to occur. And for those who truly don't have 20 minutes to spare, get up a little earlier. We do it for diving all the time! If you aim for every day you will average 3—5 days a week.

SEE YOUR DOCTOR

See your doctor before you begin, especially if you are over forty or have any illness, and get "medically cleared for fitness." Your doctor will be the first to tell you that the hemodynamic results of an exercise program include a decrease in heart rate and blood pressure both at rest and under a work load. You will see an increase in maximal cardiac output, and a more rapid return toward baseline in recovery. In addition, there are many metabolic benefits, including a decrease in the percentage of body fat. So you'll not only feel better, you'll look better.

JUST THE BEGINNING

Although your exercise program is built on aerobic activity, which develops and maintains cardiorespiratory fitness, it is not complete without strength and muscular endurance activities. These help maintain a degree of muscle tone and protect against injury. One effective approach is to workout the chest, shoulders and triceps on one day and follow with the legs, back and biceps on the next. With a little imagination and creativity, a diver can even use various items of scuba gear to provide a gradually increasing workload. One impressive side benefit of muscular endurance activities is to make loading all that dive gear on to the boat a relatively simple chore.

The results can be very exciting.

So make the commitment. See your doctor, set aside the time, and start your aerobic activity of choice. Get a buddy to do this with you at least part of the time. Log your resting heart rate, your target heart rate achieved. your 2 and minute post exercise heart It's rate. amazing how



Doc uses flashlights to work the triceps

the numbers can change after just a few weeks. Keep on pumpin'.

Joel's Progress

On February 25th our publisher weighed in at a whopping 274 pounds. Under supervision he started the program. Five weeks later he is down to 258 %!



HOW TO SALVAGE A DIVE VACATION

by John Pfisterer

All your plans are made. The exhausting haul of equipment is over. Your weary body stands at the edge of the dock. Tired, but excited, your eyes survey the scene. They freeze. You notice the small, red triangular flag flapping in the wind, taunting you. It's the Grim Reaper, known and despised by all divers as the small craft advisory. You glance back at the boats. They lie

dormant in their slips. You race towards the shop and enter in desperation, only to hear that all dives are cancelled. Worse yet, the storm is anticipated to be with you for four days. You know you only have seven days. Slowly your hand reaches for your trusty dive tool....

Years of training had not prepared me for the ultimate challenge, salvaging my Florida Keys vacation. It was easy, I thought, to plan these dives with the charter schedule — so easy, that I hadn't even considered alternatives. Now, banished from paradise, my trip turned into a mad chase for the sun. With little time to gamble, I defined my tasks: finding a reliable, up-to-date weather forecast and determining other sites within my reach. A dependable weather source was merely a switch away. In the Keys, the Weather is on Channel 17, twenty-four hours a day.

The most helpful information turned out to be at the Maritime Museum. The museum is small yet offers a wealth of history about the original salvors of the Spanish galleon. Although this is the staff's specialty, they are also very knowledgeable about local diving. I met the owner. Joe Kimbell, who also runs a treasure hunting dive to the remains of the El Infante that lie inside the reef and are, therefore, less affected by the weather. He pointed out that the Pennekamp Park charter, the most conservative, is a good barometer to judge whether the private boats are going out. The museum had a good selection of books including Florida Shipwrecks by Daniel and Denise Berg, and Florida Keys Diver's Guide by S. Clheom which focused more on the Keys. You can also call the local dive shops free of charge at the Chamber of Commerce.

The nearest place outside the range of the storm was Ft. Lauderdale. Upon arrival, I headed to ProDive. They visit a variety of sites, but for the wreck diver the *Mercedes* is the most rewarding. However, they only go there Wednesdays. The *Mercedes* was a German freighter that had the distinction of washing up on valuable beachfront property. It was later purchased as part of an artificial reef program and sunk on March 30, 1985 and rests in 100 fsw.

Force E does wrecks twice daily. Site selection is flexible and it's good to know their policy; the first to sign up chooses the site. One wreck worth seeing is the Captain Dan, formerly a Coast Guard tender, which was sunk on February 20, 1990 also as an artificial reef in 110 fsw. Recently, the bow has shifted due to





damage incurred from Hurricane Andrew (August, 1992). When the storm followed me up North, I returned to Key Largo where it was clear and sunny. At Ocean Divers, I arrived in time to make the 1:00 P.M. dive. Fortunately, due to certain conditions, their normal schedule was changed to more interesting sites, the Benwood Wreck and the French Reef. The latter has unique coral caves; some are large enough to swim through. The former is fascinating for its history. While taking precautions to avoid U-Boat attacks, by running without lights, the Benwood crashed into another ship. Ironically, while staying afloat with its pumps, it became an easy target and was apparently torpedoed. Down since 1942, later used for target practice by the military and blasted for being a navigational hazard, all that's left are steel plates and a few horizontal ribs in the bow.

By not limiting myself to Ocean Divers, I could take advantage of nearby Lady Cyana in Islamorada which was going to a wreck, the Eagle, the next day. This wreck is a large freighter that gets its name from the Eagle Tire Company which donated a portion of the money needed to purchase it for the

artificial reef program. Generally, there is a substantial current in this area, but it is not a factor once you breach the wall and swim into the large cavernous bay. Because the ship lies on its side, you can see the holes from the demolition along the keel.

The next day I went back to Ocean Divers to dive the U.S. Coast Guard Cutter, Bibb. I find that most wrecks which are artificial reefs lack personality. This wreck, however, has many unique features. The ship lies on its starboard side in 130 fsw, allowing its large propeller to be seen unobstructed. On the main mast is an American flag that symbolizes its service during World War II. Unfamiliar with the wreck, I found the bridge a simple, yet worthwhile place to penetrate.

Key West is the southernmost point of the United States and a fitting place to end my vacation. After the long dive, it was a pleasure to learn that Looker's charters went out at a civilized 10 A.M. and when I got there the tanks were already waiting for me on the boat. My luck prevailed and the charter that day was the USCG buoy tender the Cayman Salvager. The ship originally sunk at its

dock, but was resunk by the Navy. It is easily recognizable by its large cable reel on the bow and a spool hole in the stern. The abundant sea life, some of which are permanent residents, rushed out to greet me like all proper hosts. The welcoming committee included one enormous Jewfish, and four morays, but when they noticed I was empty handed, they lost enthusiasm for my visit.

Most reviews in the major dive magazines give the impression that every dive vacation comes problem-free. It may be tempting to tie into one charter that includes hotel accommodations, etc., but this could be your downfall. To prevent this, you should always research all of your alternatives in case of circumstances out of your control. In other words, know the whole picture, not just a detail. Even this article covers just a smattering of the available opportunities and does not intend to be all-inclusive. With this approach, you need to panic, like me, and for that brief moment consider that long surface swim to Cuba.

John Pfisterer is an engineer by trade and a diveraster by choice. John lives in Elmhurst, NY. The author would like to thank Caroline Part for her invaluable assistance.

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EVENTS CALENDAR

APRIL

Delaware Underwater Swim Club is sponsoring their 20th Annual Swap Meet at the Delaware 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

24 Metrowest Dive Club
Wrecks '93 Diving Symposium.
Focus will be famous New England
wrecks and techniques. Featured
speakers include: Brian Skerry, Prof.
Hank Keatts, Bradley Sheard, Bill
Carter, Erik Takakjian, and Butch
Amaral. Advanced ticket sales only,
club members \$18., non-members
\$20. Contact: Metrowest Dive Club,
Wrecks '93, P.O. Box 2496,
Framingham, MA, 01701.

MAY

23 Bay State Council of Divers will hold its 8th Annual BSC Treasure Hunt at Stage Fort Park, Glouscester, MA., Beginning at 9:00 A.M., the day's events will include a SCUBA Treasure Hunt and a snorkeling competition. Advance registration is \$7.50 or \$10.00 at the event.

Contact: Bay State Council of Divers 55 Sea St., Quincy, MA 02169 or call (617) 391-1034 for more information and events schedule.

JULY

Second Annual Undersea Hyperbaric
Medical Society Recreational Diving
Symposium. The focus this year:
"Physiology of Diving Injuries."
Featured speakers are: Surgeon
Commander Francis of the British
Royal Navy, Dr. Carl Edmonds,
Australia, and others. The specially
selected faculty will present the latest
medical information about decosickness, 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.



Dear Question Locker,

Why is it important to have my scuba cylinders visually inspected every year?

RC, Mineola, NY

Dear RC,

Scuba cylinders should be inspected at least once a year for many reasons. If a cylinder gets water into it, rust and/or corrosion will begin to form. If allowed to continue corroding, the tank may dangerous due to severe become corroding and/or pitting. By inspecting a cylinder yearly, a visual cylinder inspector will be able to correct a potential problem before a tank is deemed too dangerous to remain in service. This can prevent the consumer from having to needlessly purchase new tanks. You don't have to drain your tank dry during a dive to get water into it; it only takes one bad fill to introduce water into a tank. If you get one bad fill during the year and don't dive the following year, and have the tank inspected the next year, that tank has had two years to corrode. Not a good idea. If you use high pressure cylinders like the Sherwood Genesis or the US Divers HP's, I recommend a visual twice a year. These cylinders are prone to corrosion and rust when the dive store's fill person does not blow out the water that has accumulated in the DIN valve.

Dear Question Locker,

While on vacation my pressure gauge was leaking air around the console and there was water in the gauge. Is this a serious problem? It worked fine during the dives. What should I do?

ARS, Sacramento, California

Dear ARS,

The water in the gauge and the leak around the console are most likely two separate problems. Normally, the air leak could be fixed by having the gauge serviced by your local dive store or even by yourself if you have taken an equipment repair course. But the water in the gauge sounds like a problem for the manufacturer. It may or may not be covered under warranty. I recommend that you bring the gauge to your local dive store where it will most likely be sent to the manufacturer for repair or replacement.

Dear Question Locker,

I am thinking about taking a computer course. What should I ask the instructor before I sign on?

BAS, Atlanta, GA

Dear BAS,

Computer courses are very popular and informative. Find out from the potential instructor what computers are covered, what dives are included or required, and whether the dives use computers. Also ask what, if any, certification you will receive. The course should also require that you carry set of dive tables, and that you know how to use them. If it doesn't I would recommend finding another instructor. Tables should always be carried.

Dear Question Locker,

I don't dive more than a couple of weeks a year. How often should I have my regulators serviced? Also, what should I have the technician do when I do have them serviced?

Dr. FCR, Philadelphia, PA

Dear Dr. FCR,

Regardless of how often you dive, your regulator should be serviced according to the manufacturer's recommendations, which in most cases is yearly. If you fail to have your regulator serviced according to the recommendations, it may void your warranty, if you have one. Otherwise, regulators should be serviced when:

- 1. Water has entered the first stage,
- 2. A year has gone by since last service, even if no dives were made,
- 3. Your regulator is under recall,
- Your regulator begins breathing differently than it normally does, or it malfunctions,
- 5. Purchased as a used regulator,
- Used frequently on tanks with pressures higher than the regulator's recommended rating.

What should you ask the technician? Are they certified by the manufacturer for the brand of regulator they are servicing? Are they using original replacement or another manufacturer's parts?

SEND US YOUR QUESTIONS!

Instructor and service technician Bob Raimo answers The Question Locker mail. 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.

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.



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THE 1993 BOSTON SEA ROVERS CLINIC

by Dave Morton

Over the weekend of March 6th, thousands of divers from throughout the Northeast braved the snow and ice to attend the Boston Sea Rovers 39th Annual Clinic. Their reward was participating in the longest continuously running dive show in America.

Divers had their choice of over 60 booths and a full range of 50 seminars. The wreck community was well represented with presentations by Bradley Sheard on the R/V Mohawk, Hank Keatts on Ships of the Line, Captain Billy Palmer on the U-853, and John Chatterton and Bill Delmonico on the U-Who, among many others.

High tech and exotic diving presentations included those by Bret Gilliam on deep diving techniques, Richard Nordstrom on Cis-Lunar's rebreathing systems, Randy Bohrer on the mathematics of oxygen tolerance, and Phil Sharkey of The University of Rhode Island on tri-mix.

The film show was hosted by Dr. Sylvia Earle, and featured a film premier by Stan Waterman, a tribute to diving by Nikon. Dee Scarr was presented with the Sea Rovers Diver of the Year Award. Dee, new members of the Sea Rovers, and other distinguished guests participated in a blast of a christening ceremony that is a Rovers tradition. Make room on your March 1994 calendar for their 40th Anniversary bash.

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Ideations has discovered that in some units the poppet inside the female coupler on the A.I.R. 2 compatible Dive-Alert has been manufactured by its supplier undersize. If an undersize poppet is connected with an A.I.R. 2 unit that has a male coupling with an inside diameter larger than the outside diameter of the poppet, air will not flow into the A.I.R. 2 unit.

The unit has been available since January 1992. To date there have been no accidents or incidents reported. Ideations will replace all poppets for safety reasons. They should be returned to your dive shop or directly to Ideations for upgrade.

Contact: Ideations Design Inc. 1 (800) 275-4332

BENEATH THE SEA 1993

Over 10,000 enthusiastic divers, vendors, and experts jammed the Westchester County Center for a March weekend of learning, friendship, and fun. More than 125 booths showcased the latest in hardware, software and travelware. The long weekend packed more than 60 multiple track seminars with a comprehensive range of subjects. Many Sub Aqua Journal contributors were speakers in seminars and workshops. There was even a track for school-aged students, "Ocean Pals," which had top dive authorities teaching kids about ecology and our oceans. Ocean Pals sported a tabulous display of National Poster Contest Winners with the theme of "Dolphins and Whales.". Divers of the Year honors for 1993 went to Frank Fennell, Nikon's General Marketing Manager (Distinguished Service), Peter Nawrocky, photographer (Education/Arts), and diving legend André Galerne (50 Years of Service).

H.M.S. Dream

by Kirby Kurkomelis

It was 6 A.M., and snowing. Our dive was canceled. I went back to bed, warm under the covers. A dream took me to the *H.M.S. De Braak*. She was lost in May, 1798 off Cape Henlopen, Delaware. She carried gold and silver coins, precious stones and eighty thousand pounds of gold for transport to England.

I pulled the car into the boat-yard. The night watchman was still sleeping in his office. I loaded my gear into the boat as I kept a sharp eye out. With no one in sight I started the engine.

A fine fog rose from the marsh; I disappeared in the mist. Twenty minutes later the sun came up over the East Rockaway Inlet. My destination is secret...location burned into my memory. Ten minutes later I threw the anchor. I pulled up the bimini top. With a fishing pole in place, got dressed. There would be no flag today.

One last look, I was under. The time now, 6:55 A.M. The water was alive with blue fish. Below me a dark object strained out of the clear sand bottom. At 70 fsw the wreck began to take form. A 15 foot long barnacle encrusted anchor marked this friendly spot. A lone starfish clung to the chain which was camouflaged in hard white coral.

Underneath the dark ballast stones that littered the bottom were lobsters standing guard along the path, their claws ready for combat. Seabass swam in and out of decaying worm-ridden timbers marking a shallow grave. Deadeyes reached up with sad faces, guarded by sleeping bronze cannons.

The wreck began to take form at 105 fsw. A goosefish with his large mouth open waited silently for the blue-claw heading his way. I proceeded towards the stern. The visibility was 40 fsw with plenty of sun light. I could make out the gold coins covering her broken deck.

Out came my leather pouch. I filled it with gold and silver coins that littered the bottom like broken clam shells. At the stern there was a large hole. Big enough for me to penetrate. It looked menacing, so I switched my light on, tied my line, and entered into darkness.

A six foot Congo eel crossed my path. I ventured down the passage, where no one had walked in two hundred years. I saw old wine bottles, followed by copper dishes half buried in the silt. Cannon balls piled in a corner waited to be fed into the cannon's hungry mouth. A family of ling looked on. Close relatives of cod live in this cold dark tunnel.

In the corner lay a chest. Four feet high by two feet wide, it is held together by three or four brass bands. Copper stones piled up along the sides keep the integrity of the chest. The brass lock was broken, the worm-eaten cover is off to the side. I look down at my gauges; it's time to hit and run. I open my pouch, and fill it with gem stones and a few pieces of eight. Out of the corner of my eye, I saw a greater treasure. A cutlass! All that was left was a handle, with diamonds and emeralds set in gold. Another Congo eel snaked

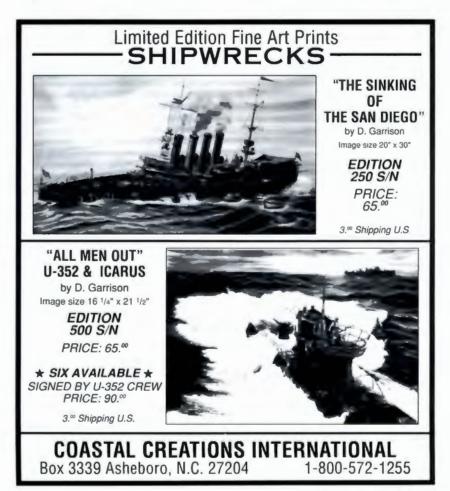
between me and the greatest prize of all. My heart raced. I called upon all my resources. In a few minutes the sword was mine!

In the distance I saw the sun's rays through the hatchway. I soon felt the sunlight on my body. On my way back along the wreck towards the anchorline, I passed mountains of coins that I left behind for another day.

I stopped in the center of the wreck for a moment, thinking of all the buccaneers who sailed on this ship. I waved good-bye to the *De Braak*. Time was running out.

On the boat it took a few minutes to stow my gear. While I was grabbing my fishing pole a boat pulled up next to me. The captain asked me if I caught anything. I was about to answer when I thought I smelled pancakes and steaming coffee.

"Kirby it's time for breakfast. Get up." my wife purred. Winter mornings. ■



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U-521 ??? 230' 11

ovemight trip

Oregon

USS San Diego

USS San Diego 19

21 Lillian 140'

22 Texas Tower 80-180'

USS San Diego

26 USS San Diego

29 USS San Diego 30 USS San Diego

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For those who can sacrifice some dexterity, the 7mm Three Finger Mitt option keeps hands warmer by grouping some lingers together. The index linger remains isolated for improved grip but can be pulled out to form a fist and warm up.

OCTOBOOT ™

Our unique and cheerful octopus design on the sole of this high quality boot is actually a very practical and patented multi-directional grip sole. EVA arch support make these cold water boots great for walking topside. Zipper barrier flap, 7mm nepreno and special Henderson fit make them comfortable and warm underwater

OCEAN LINER IM

This universal core-warmer sports neck and arm seals in 1.5mm neoprene foam skin Gives lots of layering warmth and terrific core sealing and warming properties with almost no bouyancy. Wear under any garment from Hot Skin to 7mm suits. Try on several sizes to get your perfect fit.







Although not shown, we recommend layering a hot skin under all suits for added warmth and dressing ease.

The first john to be

water sealed from

in the chest from

front zip leaks.

the neck all the way

to the ankle. No more

cold water hitting you

ENDERSON

7mm STEP-IN SHORTY

1.5mm SKIN NECK SEAL

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