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STAND ON NITROX PROPELLER PROPOSITION CHAMBER OF HORRORS LADY IS A TRAMP BOAT SCHEDULES ...AND MORE!



### SUB AQUA JOURNAL

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## "UP THE ROAD A WAYS."

**Texas is BIG.** Don't ever let anyone tell you differently. It all started with moving my travel plans up three days to attend the SDRG Nitrox workshop. The three days I was to be editing and laying out this issue. Our plan was to have everything ready when we came back so we could simply drop in the DEMA stuff and go to press. The best laid plans of mice and men.

The workshop was to begin at 8:30 Monday morning and end at 5:00 P.M. (It went on till at least 7:30.) Off to dinner – old home week style. We discussed the next day's plans. As dinner progressed I decided to cut two stories to report on the workshop and expand the DEMA article. The industry was about to begin working together, I felt you needed to know about it.

By midnight I realized I needed to check into my hotel that I thought would be right in the heart of town; no such luck. "Up the road a ways," is usually about an hour if you know where you're going. I didn't. Arriving on the other side of town I find the maintenance people had turned off the water for the next few hours. No shower tonight. (Plan B, sleep.)

Next morning, up at 6:00 A.M., race down the road a bit to the second day of the hottest industry debate about Nitrox. Progress in the making. By 8:00 P.M. we had come to an agreement (more on page six).

Wednesday morning 8:00 AM. Within hours the empty convention cavern turned into the hugest dive store in the world! Crates of gear were eagerly unpacked by people using duck tape and cable ties to put it together. Kind of like going diving.

Thursday morning 6:00 AM–show day. Did we forget anything? Do we have enough Journals? There's still editing to do, articles to write, people to meet, parties to attend, photos to be taken and ... on with the show.

Wherever we turned there was someone from the East Coast (see Local Heroes). We also met divers from across the country who were excited about how accessible and unique our Atlantic really is. Our mission met with enthusiasm as we told our story.

We added a new writer at DEMA, Cathie Cush. She's well-known within the dive community and she tells you what we found at DEMA. I'd like to welcome Cathie and all our new readers from around the world to the Sub Aqua Journal.

The events of the week unfold in these pages, while back home-In New Jersey bureaucracy gets in the way of safety, Kirby is still thawing out and Danny, well, we'll let him tell you about it.

This year is definitely starting fast. We think you may be seeing the positive results of DEMA at your local retailer and on dive charter boats. Perhaps with a little help from the Journal more divers will be visiting our waters this dive season. After all, we're only "up the road . . . a ways."

Joel Silverstein, Editor

# MIDWINTER MIGRATION Diversuston

by Cathie Cush

When this year's first snow fell on the East Coast, a contingent of Atlantic divers headed to Houston to see what's hot for '92. DEMA, the Diving Equipment Manufacturers' Association annual trade show, drew an estimated 11,000 dive industry professionals to the four day event from January 16 through 19. Held at the George R. Brown Convention center, the show featured 30 aisles of booths and displays by manufacturers, dive resort and tour operators, certifying organizations, publications, non-profit and special interest groups, plus others with products or services of interest to scuba divers.

DEMA participants had opportunities to attend an almost mind-boggling list of diving related seminars and workshops on topics ranging from physiology to Fiji vacations, from retail displays to regulator repair. Selling and celebrat-



John Stella of Dacor displays new Extreme regulator.

ing continued long into the night, as vendors and various agencies invited clients and potential buyers to a sea of professional cocktail parties.

Sub Aqua Journal came to Houston before the show opened to attend a workshop on oxygen enriched air (Nitrox) use by recreational divers. The meeting was upbeat and, after listening to presentations by experts from NOAA, NASA and the commercial dive industry, several recreational certifying agencies agreed to re-examine their stance on enriched air for sport divers. After setting up the magazine's display (courtesy of DUI) on Wednesday, Journal reps walked miles continued on page 8 *If you're not diving with a DUI CF200X, you may not be getting all that wreck diving has to offer...* 

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# INDUSTRY takes a stand on by her Silverstein

by Joel Silverstein

The use of oxygen enriched air NITROX for recreational diving has been a major issue for the past few years. Manufacturers and certification agencies have raised questions and made statements that warrant open discussion. On the negative side, DEMA published unsubstantiated warnings, and a scathing editorial recently appeared in the Alert Diver (DAN's publication) by Dr. Peter Bennett. Countless articles have cropped up about Nitrox with erroneous opinions and information. Many sport divers trained in Nitrox took exception to this. Whether Nitrox will be used by divers who obtain education and training, or by divers who mix it in their garage without the proper equipment or training (definitely not recommended), Nitrox is here to stay.

In response to the many legitimate issues and concerns raised, a workshop to

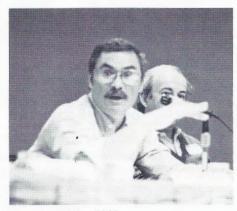


Micheal Menduno, Glenn Butler, Dick Long and Dr. Bill Hamilton

evaluate Oxygen Enriched Air Technology took place in Houston on January 13 and 14, before the DEMA show opened. The Scuba Diving Resource Group (SDRG is a nonprofit group) organized the workshop in cooperation with Micheal Menduno of AquaCorps, Glenn Butler of Reimers Engineering, Dick Long of DUI and Dr. Bill Hamilton of Hamilton Engineering, LTD. This workshop was significant not only because it put to rest some very disturbing misinformation, but because it set a precedent for how future issues can be handled within the community.

The open workshop consisted of over 85 diving professionals representing equip-





Dr. Morgan Wells, NOAA

ment manufacturers, instructors and retailers joined by scientific, academic, aerospace and commercial diving experts. The objective of the workshop was to establish guidelines to direct the safe implementation and use of Oxygen Enriched Air. The preliminary findings of the two-day workshop were summarized by working groups.

Before I get into the ultimate outcome of the workshop, it is important to understand not only what oxygen enriched air (Nitrox) is but what it is not. It is not a breathing gas for deep (below 130 fsw) diving. It is not limited to use by commercial, scientific or military divers, although they use it extensively. It does not require special expensive "high tech" gear. Nitrox is not difficult to understand. Simply, it is air that has a concentration of oxygen between 21% and 50%. Divers use it to provide a safer, more efficient means of lowering the nitrogen content of the air we breathe while diving. This reduction of nitrogen inherently reduces the risk of decompression sickness and nitrogen narcosis. Nitrox, when used with NOAA Nitrox dive tables, can also be used to extend the no decompression time limits. Nitrox has been in use by the commercial, military and scientific communities dating as far back as the late 1950's.



Brett Gilliam, Ocean Tech

The major issues evaluated were: equipment compatibility, cleaning procedures, filling techniques, compressor design, training facilities, programs, and warning labels for gear.

Each speaker had sufficient time to present their research, including the use of charts, graphs and technical films, whether they were for or against Nitrox for recreational use. After hearing from industry leaders and technical experts like Dr. Morgan Wells (NOAA), Dr. Lee Greenbaum (UHMS), John Crea, Dwight Janoff (NASA), Brett Gilliam (Ocean Tech), Mike Parker (RIX), Irv Becker (Air Products and Chemicals Inc., Dr. R. W. Hamilton, Lad Handelman (Cal Dive) as well as scores of other experts, the group was able to come to some major conclusions.

**CONCLUSIONS** Enriched air nitrox is an alternative to breathing compressed air and is suitable for recreational diving with proper equipment, gas mixtures, training and certification.

Users, instructors, and dispensers must be trained by a current enriched air Nitrox (EAN) certification agency, either the American Nitrox continued on page 11

# **BENEATH THE SEA**

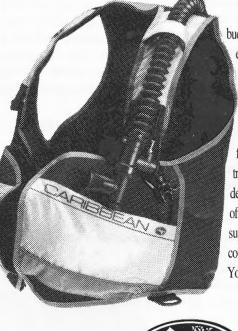
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### **DIVE WRECK VALLEY**

Impatiently I sat on the ocean bottom watching Hank Garvin and Jerry Moran slowly begin filling the 6,000-pound lift bag. I knew this salvage operation was finally going to be successful. We had started the project over three months and thirty dives ago.

We were attempting to raise a four foot in diameter bronze propeller. The dive teammemberswere recreational divers with light artifact salvage but no commercial cutting experience. Most of our problems started when we tried to cut through the four inch bronze shaft that held the massive propeller.

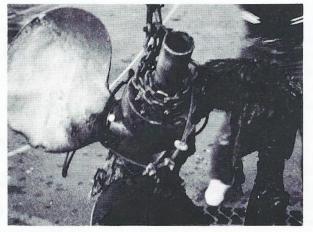
Two years ago, Joe Koppelman and I spotted the glimmer of brass under a wood wreck off New Jersey. The artifact turned out to be a brass propeller. Since the prop was firmly attached, we photographed it and continued our exploration. Earlier this year I began thinking about recovering the propeller. What made this propeller interesting was its variable pitch designes and huge V strut mounting bracket.

The first task was to revisit the wreck, take a good look at the artifact and devise a plan for its removal. When we descended, everything seemed simple. After the inspection, my dive partner, SteveLombardo and I decided we would unbolt and remove the V strut. Then we would cut through the four inch prop shaft and free the propeller with lift bags. With my machinist background, it was easy to calculate the weight of the propeller. I estimated 800 pounds and 300 pounds for the bronze V strut. Our plan was easier said than done. After our first working dive we realized our fool proof plan had some flaws.

The V strut was attached to the ship with ten one inch diameter bolts. Each had two nuts that had locked on and were permanently fixed by marine growth. After four more dives, the purchase of some large deep socket wrenches and a lot of aching muscles, Joel Silverstein and I were finally able to remove the nuts. The wood around each bolt was water logged causing an extremely tight hold. Using ten pound sledge hammers it took another two dives to remove the bolts.

### PROPELLER PROPOSITION

By Daniel Berg



With the wreck sitting in forty feet of water and with each diver wearing double eighty cubic foot tanks, our dives lasted about two hours. By the time we unbolted the strut we accumulated a total of twenty four hours of bottom time.

On the next trip, we planned to remove and lift the strut using crow bars and lift bags. We were not successful. The strut was wedged into position with the wreck's hull planks on top of it. Jerry Moran, returned a week later and successful using a hydraulic jack, he lifted the wreck just enough to move the strut and send it to the surface with a 500 pound lift bag. After Jerry's success the dive team whose enthusiasm was starting to dwindle was hyped and ready to get the prop itself.



Using a small pneumatic disc grinder rigged to a scuba tank, Rick Schwarz and I descended. Moving all the tools and gear into position, we started to cut. Everything seemed to go almost too smoothly. Before long I was grinding a thin slice into the top of the bronze shaft.

The problem was that after five minutes the grinder had consumed all the air in the tank after only just scratching the massive shaft's surface. "At

this rate," I thought, "the job would literally take forever."

I phoned Captain Steve Bielenda, who had experience in heavy salvage. Steve suggested that we use underwater cutting torches and called Captain Don Schnell who had the tools and the know how. Don lent us a set of underwater torches that would quickly cut through the shaft. But first I had to learn how to use them.

The torches are similar to arc welding tools. The striker plate is attached by cable to the negative terminal of a 12 - volt battery, the torch head has a hose attached to an oxygen supply and a cable attached to the battery's positive side. The rods are about eighteen inches long and hollow, allowing oxygen to flow through the shaft. There is a trigger in the torch head that allows the diver to turn on the flow of oxygen to be pumped through the hollow rod. Once ignited the torch will burn at around 10,000 degrees.

I practiced on land and in the creek where my boat is docked. Learning to cut through steel of various thickness, I figured it would take only twenty-five minutes and about twelve rods to burn through the bronze prop shaft. Over the next few weeks the weather made a turn for the worse and delayed our salvage operation.

Finally back on the wreck site, we carefully moved ourselves into position. A sand anchor held our bow up current while a stern mooring allowed us a near vertical descent through the swift current. Commercial diver and cutter Joe Boccino (I wasn't taking any chances this time) and I jumped in to do the cut. We got to the bottom and arranged the torch head and striker plate. Joe inserted a rod into the torch and tried to ignite it. At that point we knew something was wrong. The torch was sparking but the magnesium rod was not igniting. Finally, after a ten minute eternity, we managed to get one rod to ignite. Joe pushed it into the shaft and melted a descent groove before the rod consumed itself. Over the next two hours we ignited two additional rods. The power supply failed and we just weren't getting enough juice through the cable.

By now we were frustrated and considered drastic measures. We'd unbolt the propeller shaft coupling aft of the engine, attach a steel cable to the propeller and rip it from the wreck with a friend's tug boat. After a little discussion, we decided this approach would destroy the wreck. All we wanted was to remove the propeller, not create a debris field. Back to square one using hydraulic tools.

This time I had called upon the assistance of another friend, Bart Cariello, who owns Barton Commercial Diving Supply. He provided us with a gas powered hydraulic grinder with seventy-five feet of hose. This was what we needed, commercial tools. We worked in teams of two, first Joe and me, then Jerry and Steve.

It was approaching mid-afternoon. The sun would be going down soon, we had missed slack and dive visibility had



reduced to less than one foot. This was definitely not the time to drag a 6,000-pound lift bag into the water.

With the diving season in New York coming to an end we made one last trip to

the wreck. It was a beautiful, sunny November morning. We set up a stern mooring and descended to accomplish our plan. This time everything went like clockwork. I had set the anchor and rigged the propeller with a cable sling. Hank and Jerry dragged the huge lift bag down and secured it with a shackle. As they added air, the bag unfurled standing a full ten feet tall. It only took another few minutes for the propeller to pull free of the sand and the bag to break the surface.

By noon we were on our way back to Staten Island. But we had incorrectly calculated the drag that towing the massive lift bag and prop would cause. We chugged along at only two knots instead of the scheduled six knots and missed passing the inlet at high slack tide. We had another nervous moment when we realized the propeller was suspended at least ten feet below the surface. With our eyes glued to the depth recorded we went from thirty feet to eleven before getting past the sand bar and returning to deeper water.

We lifted the propeller out of the water with a fork lift and fortunately, it fit snugly into the back of my van. The entire project was a learning expierience for all and another example of my old motto, 'persistence pays off'.

continued on page 10



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#### **DEMA SHOW** continued from page 2



#### DUI harness/weight system.

of show floor to find new products of interest to North Atlantic divers. Our search was successful.

TAKE A LOAD OFF Dry suit divers will be particularly interested in the new harness design weight and trim system from Diving Unlimited International. It is meant to keep the diver comfortable by redistributing the weight of the belt from the hips to the shoulders. Weights are placed in bags along the belt. The position of the weights can be adjusted from front to back and also higher or lower on the diver's torso to achieve the best individual buoyancy. Unlike commercial harnesses sometimes used for sport diving, the DUI system has two quick-release handles that allow divers to pull all or half of the weights clear of the body in the event that it is necessary to ditch them. Reasonably priced it may be the best solution yet for dry suit divers.

For those of you that get cold even with the best underwear or are using trimix, DUI is also offering an independent argon gas suit inflation system for added thermal protection.

**THE BRITISH INVASION** Polar Bears, one of the U.K.'s leading dry suit manufacturers, is now bringing its products to the U.S. Polar Bears offers the DMB1 decompression buoy. This tubular gadget (like a long, thin lift bag) rolls up tightly enough to fit in a BC pocket. Fully inflated, it serves as a marker buoy in the event that you have to do a free hang. Our guess is that it won't be picked up by U.S. dive stores, but it should be available via direct mail. Keep an eye on the **Journal.** 

Also from England is the ACE PRO-FILE, a menu-driven, multi-level dive computer that lets users choose their dive tables. program individual safety factors, select novice or expert modes and even share the unit with another diver. Optional modules include a built-in oxygen analyzer for those using oxygen-enriched air and a DATA-LINK to download data into a PC or Mac. THE DEEPER YOU DIVE, THE EASIER IT GETS Dacor has redesigned its fins, snorkels, gauges and regulators. Destined to remain a leader in the serious diver market, the new EXTREME regulator is designed for those of us who aren't content just to skim along at 30 feet on a coral reef. Its first stage will increase intermediate pressure by two psi for every 25 feet of depth, so it actually delivers more air the deeper you go. The Extreme Plus model has two 90degree port swivels on the first stage for more streamlined hose routing.

"We support that segment of the market that dives to the extreme and relies on performance," notes Dacor representative John Stella.

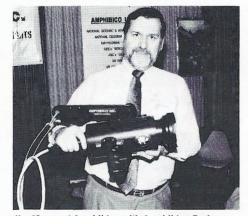
Dacor has dropped the Micro Brain Pro in favor of the new OMNI dive computer. It features a user-replaceable battery and comes with a plastic prompt card with a bailout table. It gives decompression information – including total ascent time for dives down to 250 feet.

Both Sherwood and Mares have upgraded their regulator designs to make them



Kevin Gurr designer of the Ace Profile.

more appealing to divers in North Atlantic waters. With a redesigned second stage, the Mares MR12-NAVY exceeds U.S. Navy performance limits by 20 percent, according to Mares representative Renny Koseff. The MR12-NAVY CWD kit includes a Teflon-coated demand lever and an environmental protection kit to guard against corrosion and freeze-up. Look for a demonstration when the new Mares Demo Van rolls up at this season's **Sub Aqua Journal** dive days.



Jim Moore of Amphibico with Amphibian Probe.

The Sherwood Blizzard second stage has also been redesigned for better coldwater performance. To prevent freeze-up in the demand lever support area when cold air rushes through it, engineers added a heat sink. It keeps the air in that critical part of the second stage about 10 degrees warmer so it is less likely to freeze up.

NEW FRIENDS AND FAMILIAR FACES Although he hails from San Diego, John Haywood must have had East Coast wreck diver in mind when he designed Nite Rider

light systems. These light-weight, helmet and headband mounted lights feature dual lamps and compact (really) rechargeable batteries. Two twelve-watt bulbs will burn for 2-1/2 hours on a single charge. Lights can also be removed and used topside, for bicycling and other applications.

Another accessory that looks, or rather, sounds interesting is the Dive Alert, an emergency air horn that is placed between the power inflator and the buoyancy compensator's low-pressure hose. It uses low-pressure air from the tank (as little as 50 psi) to help others locate you if you've drifted out of the range of vision or need assistance. "Next to the amount of air left in my tank it's the most important piece of gear I have" says Jim Cleary, Managing Editor of the **Journal**.



MARES Demo Van - Just add water

Are you tired of having to build in safety factors to your dive tables? The famous DCIEM (Defence and Civil Institute of Environmental Medicine) Canadian tables more conservative than both the USN and PADI tables now available. The tables are manufactured by Universal Dive Techtronics in both a plastic slate and as a computer dive planner program for your PC. The slate is easy to read and the computer planner takes all the quesswork out of dive planning. They are available through Life Guard Systems Inc.

No diver's paraphernalia is complete without the latest books on the **Sub Aqua Journal** best-seller list. The Journal's own Dan and Denise Berg were on hand at the show with some of their latest titles, including the new Florida Shipwreck book. In addition, the Bergs are offering the three new titles from Watersports Publishing on dry suits (by the engineers at DUI– a must for all divers dry or wet), women, and deep diving.

Another **Journal** contributor at the show was Ed Betts of Freeport, representing American Nitrox Divers, Inc. (ANDI). Betts also had a new book, a training manual for diving with SafeAir. The ANDI booth was always busy despite, or maybe because of, DEMA's paranoia about div-



Ed and Laura Betts of ANDI

ing with gas mixes other than air. Betts and other enriched air proponents were vindicated by positive statements at the workshop prior to the show, and the warnings that DEMA had plastered outside seminar rooms seemed only to arouse show attendees' curiosity.

The hottest item by far this year was NIKON's introduction of a single lens reflex 35mm underwater camera with interchangeable lenses. Wow! Even more impresive is the camera's autofocus feature! After almost 35 years of producing the Nikonos, this new camera is sure to set the seas ablaze. It features an aperture priority exposure system, auto focus, freeze focus, and manual power focus. It comes with the standard 28 mm lens and offers a 55 mm macro and the worlds first 20-35 mm U/W zoom lens. With a base body price of \$3,000 it has to be one of the most expensive cameras made.



Nite Rider light and helmet

One of the groups represented at the workshop and at the show was the Scuba Diving Resource Group (SDRG), which operates under the auspices of the Out door Recreation Coalition of America. The SDRG's goal is to train industry personnel in risk management while teaching divers that they are responsible for their own actions and their own safety. The group also addresses issues of interest to the dive industry, such as ocean preservation and liability insurance. At the show, it distributed "responsible diver" posters which promoted the "I Am a Responsible Diver" program, see it at your local dive shop.

That's all for now, divers. See you at Beneath the Sea!



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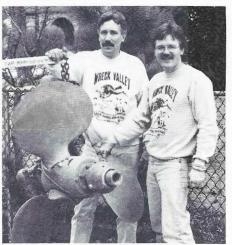
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continued from page 7



Now that we have the propeller, you may ask, "What are they going to do with it? First off, we will use it to help identify what type of ship she came from. The variable pitch feature is quite rare and may lead to another interesting story. No matter what kind of artifact you may find, it has a history and a story attached to it. With the help of some friends, a little knowledge and a lot of persistence, diving is always exciting in an area known as Wreck Valley.

#### INDUSTRY continued from page 5

Divers Inc. (ANDI), or the International Association of Nitrox Divers (IAND). These agencies are adequate for users, instructors, and dispensers of the gases. In addition to training, all air that is used for EAN mixtures should be compatible with oxygen service. Enriched air dives should be logged as such, with both mix composition and time-depth profile recorded. If breathing gases containing greater than 40% oxygen come into contact with equipment, the equipment should be cleaned for oxygen service and compatible lubricants should be used.

**OTHER THINGS TO BE CONSIDERED** Certain aspects of enriched air Nitrox diving (as with other types of diving) are not fully understood or documented; the workshop listed certain "action items" that need attention. Both ANDI and IAND must cooperate with other recreational training agencies (NAUI, PADI, etc.). Together they are to establish a common EAN industry

#### INDUSTRY continued



Working group discusses filling procedure

standard for filling (mixing and handling), training, and use. They are to encourage accurate and centralized logging of EAN dives to include details on mixes, timedepth profiles, decompression sickness, and other incidents or accidents.

**A TECHNICAL ADVISORY GROUP** has been established to explore the development a unique connector, suitable for scuba tanks used with oxygen enriched air mixtures. Beyond the connector they are to perform tests of specific scuba equipment with enriched air mixtures. The tests are to evaluate the fire and flammability behavior of mixtures of nitrogen as well as 40% and 50% oxygen, to establish material, lubricant, and cleaning requirements. Additional studies to identify compressors and review filtration requirements for oil lubricated compressors for possible use in EAN mixing. The group also will conduct a search for additional federal regulations and specifications for diving standards and historical documents applicable to EAN mix preparation and handling, oxygen compatible lubricants and nonmetallic and metallic materials to be used in contact with EAN. A detailed summary of technical findings addressing oxygen exposure limits, decompression, treatment for decompression sickness, mixing and handling of relevant gases is in preparation.

The results of this workshop were printed and distributed at the DEMA show. The response was enormous. NAUI has indicated that they will seriously consider a Nitrox training course in the future. Manufacturers alike have suggested that their engineering departments will work with the group to evaluate the viability of manufacturing regulators specifically cleaned for oxygen service.

What does all this mean? The recreational diving community was ignoring and in many ways concealing the viability of Nitrox use for recreational diving. Those concerned within the industry came together to voice what may be as important as the first amendment right of the constitution: the basic right to safety within our sport. If oxygen enriched air helps us dive more safely then we should know about it. This workshop through the efforts of the Scuba Diving Resource Group has set a precedent as to how the industry should address legitimate concerns when it comes to your safety. The research groups will meet quarterly and present the ultimate findings at next years DEMA show scheduled in Orlando.



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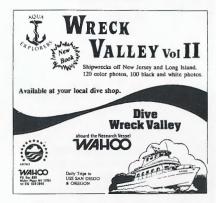
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#### **UPCOMING EVENTS**

#### February

#### **Hillary Viders**

Women In Diving Westchester-P.A. contact: Evelyn Dudas 215/ 436-0176 Hillary Viders / Pete Nawrocky

#### Women In Diving

Floral Park N.Y. contact: Bob Raimo 718/470-6858

#### **Gary Gentile**

Shipwrecks of the Great Lakes contact: Staten Island Sport Divers P.O. Box 140439 Staten Island, NY 10314

Boston Sea Rovers Dive Show

one of the nation's Idest dive clubs has one of the nation's greatest speakers, and presentaions for the recreational dive. **contact:** Mason Klinck 617/ 723-5740

#### March

#### **Prof. Henry Keats**

Dive into History Cruisers

**contact:** Staten Island Sport Divers P.O. Box 140439 Staten Island, NY 10314

#### The 16th Annual BENEATH THE SEA 1992

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#### HAVE AN EVENT YOU WANT TO ANNOUNCE?

Send typewritten copy to the Journal by the 1st of the month prior to your event. Please include a phone number and contact person.

### **CHAMBER OF HORRORS:**

When government doesn't work for you. by Capt. Howard Klein

When Abraham Lincoln spoke the words; "government of the people, by the people, for the people," he was not speaking about the State of New Jersey.

New Jersey has been without a hyperbaric facility for ten years. On October 14, 1989 Joseph Pakan and Steve Hardick, in cooperation with the New Jersey Dive Council began planning the construction of a sport diver funded, multiplace hyperbaric facility. They organized under the name New Jersey Chamber Facility (NJCF in this article).

The entire operation would be funded, constructed, and manned by medical and technical volunteers from the sport diving community. The volunteers would be trained by private sector experts in the field of hyperbaric medicine. They would be on call (like a volunteer fire company) 24 hours a day to handle emergencies requiring recompression treatment. The facility would be incorporated into the DAN of diver recom-pression chambers as both an emergency and training treatment center. Neither the chamber nor its operations would require taxpayer funding or state overseeing. The NJCF would greatly benefit the diving community since the nearest hyperbaric chambers are on City Island, New York and at the University on Pennsylvania in Philadelphia.

But New Jersey has a unique law under the State Department of Health that requires a "Certificate of Need" before opening any health or hospital related facility. The law even extends to currenty operating facilities which need the same certificate from the State Department of Health in order to install new equipment, even if funding is available.

On April 17, 1989 the NJCF received application forms for the "Certificate of Need." The application was submitted that same day. Subsequently, they found that the Department of Health lost their application. The Chamber Facility submitted another application the following week on April 24.

After the delay of the lost application on May 1, 1989, Ed Peloquin of the New Jersey Health Planning Council tried to expedite the bureaucratic process. Although Mr. Peloquin did not believe a "Certificate of Need" was necessary for a "privately funded limited use facility" the Department of Health had other ideas. Among those ideas was the requirement that plans for the Chamber Facility be approved by six State Counties, resulting in four months of bureaucratic red tape. A legal guidelines meeting was requested by state officials headed by Ted Bogue of the Health Department, which took place on June 22, 1989. When more information was requested, NJCF complied by June 27. The events that followed this last submission were a series of neverending meetings and couner proposals by the State. The chronology looked like this:

#### September 12, 1989

State Department of Health official Ted Bogue calls for another meeting.

#### September 26, 1989

NJ Chamber Facility representatives are informed that no New Jersey hospital would take on the project.

#### October 10, 1989

The Department of Heath and Point Pleasant Hospital meet to discuss a mono place chamber. (A multi-place chamber is needed to treat divers effectively.)

#### October 19, 1989

Ted Bogue requests a two month delay in the processing of the "Certificate of Need" while Point Pleasant Hospital decides on a mono place chamber. New Jersey divers say "no" to the delay request.

#### March 26, 1989

Ted Bogue requests the "Certificate of Need" application be withdrawn.

In May of 1990 the "Certificate of Need" for the New Jersey Chamber Facility was denied on the following grounds:

- 1) Health care needs were best suited outside the State on New Jersey.
- Private individuals would not be capable of keeping up hyperbaric skills if those skills could be attained.
- The facility should be within a hospital.
- 4) Sport divers couldn't carry the financial burden of a hyperbaric facility.

New Jersey Chamber Facility sponsors began the appeal process in June of 1990. As of this date the bureaucratic nightmare has not been resolved. In the three years since this project and legal maze of paper work started the NJ Chamber Facility has pressed on. Mt. Sinai Hospital in New York donated its multi-place recompression chamber (their building was demolished), land and a building to house the chamber was donated by the Garden State Recovery Unit, six medical physicians and over eighteen divers have been trained as Diver Medical Technicians. All this has been accomplished so that when the "Certificate of Need" arrives, the chamber can go on line. Materials, training and massive legal bills have all been paid through the generous donations of divers like you who care. As of this printing the State Department of Health has again delayed their decision making process.

The NJ Chamber Facility is set to be completed and to go online the end of February this year, just in time for the dive season. Why is it that the state that recently sank the USS Algol in 125 fsw as their largest artificial reef, the state with its own guide book on where to dive in New Jersey, is denying their own citizens the right to prompt diving medical treatment?

What is this battle all about? The answer is simple: POWER. The power to control our daily lives. It does not matter to the officials of the State of New Jersey that a hyperbaric facility is needed to treat diving accidents or victims of smoke inhalation from fires. It doesn't matter that the facility is funded, constructed, and manned by those who will be chiefly the end users. It only matters to the state bureaucrats that they will not control it or have any say in its operation. No state run bureaucracy would be created at taxpayer expense to employ more bureaucrats. No counterproductive regulations would be produced to enlarge an existing bureaucracy. The divers of New Jersey would have control of their own destiny and that is what State bureaucrats are unable to approve.

Support the divers of New Jersey. Help get this facility open and ready to serve the people. Write to Governor Florio and the State Department of Health to urge them to issue this "Certificate of Need." Many companies and organizations have contributed to the NJ Chamber Facility for their operating and legal defense costs.



**NAUI & NOAA SIGN AGREEMENT** On January 17, executives from NAUI and NOAA's Office of Ocean and Costal Resource Management signed a cooperative agreement at the DEMA show in Houston, Texas. The agreement officially marks an ongoing alliance between the two organizations to sponsor environmental programs and projects.

"This is an unprecedented and dynamic step," remarked Viders. "It heralds a new era of shared responsibility, an era in which the diving community and the U.S. government will work hand in hand to help protect and preserve our precious reef ecosystems. Cooperative NAUI/NOAA projects scheduled for 1992 will include a video to help dive leaders promote marine conservation and an environmental awareness video for elementary school children.



The agreement was signed by Sam Jackson, NAUI's Executive Director, Hillary Viders, Ph.D., NAUI's Environmental Liaison, Trudy Coxe, Director of NOAA's OCRM and Bill Harrigan NOAA's OCRM Acting Chief.

We hope you, the individual diver, will follow suit by contributing to the efforts of the individuals fighting for the freedom to take care of themselves.

Send your tax deductible contributions to: New Jersey Chamber Facility, c/o Garden State Recovery Unit Box 404, Milford, NJ 08848. Subscribe to the Journal Get the Best of Atlantic Diving Every Month!

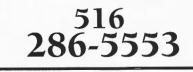


Research/Photo Excursions
CAPTAIN "WINGS"

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A British tramp steamer sounded like fun. We headed around the Jones Beach Jetty on high tide. The waves splashed icy water in our faces as the wind blew at our backs. Determined to get out despite worsening weather and sea conditions, this was to be our last dive of the season. Don Finck and I held tight to the rail of the boat skimming across the waves, I think my fingers were frozen to it. We were two divers looking for lost souls of the sea.

The *Roda* ran aground during a raging storm back in February, 1908. She broke in two amidships, her heavy cargo of ore spilling into the sea. Like most ships that ground on a sandbar, the vessel forced inshore grounding off Tobay Beach on a sandbar in 20 to 30 feet of water. Her bow and stern now lie close to the surface marking her territory as time goes on, yet they had once been awash. Many boats fish here due to her abundant marine life. As an artificial reef, the *Roda* is home to blues, blackfish, striped and sea bass, fluke and flounder, to name a few.

Heading toward the *Roda*, all I could think of were the large schools of blackfish that had a greenish color. To me, they tasted different too, probably due to the copper ore (rumored to be mixed with silver) they ingested through mollusks in their food chain. The ocean's pounding opened up her hull, badly twisting it and littering the shallow bottom for over 315' by 44' abeam. Divers still find artifacts; bottles, brass, winches and cargo that the crew pushed overboard to lighten the ship. Even the life boats got tossed. Her crew got off safely but the *Roda* broke apart.

Nearing the *Roda*, Don slowed the boat down to a halt. I threw the anchor off to the edge of the wreck site and into the sand so the outgoing tide would not drag our boat across the shallow wreckage.

Carefully we slipped over the side, each cutting the water like a knife, as though we were entering enemy territory. We made sure not to hit any of the steamship's ribs that come within inches of the surface, reaching toward the surface like plants welcoming sunlight. To my disbelief, the anchor had landed into a stray piece of wreckage next to a large horseshoe crab. The sand bottom was covered with broken hull plates and greenish rocks (copper ore). The visibility was 10 to 15 feet, not bad for a wreck a few hundred yards offshore.

Within her skeletal remains schooling blackfish calmly watched guard over their pylon despite a fast current running east to west. But Don and I had a problem. We could not remain neutrally buoyant. The current kept pushing us into the wreck, banging us around; the blackfish seemed to have it under control. Struggling to maintain buoyancy, we endured. Our wetsuits bore the battle scars of rust as we rubbed the side of the wreck. Between her ribs we found a safe haven from the rip current outside her remains. There in this entrance, close to one of her joints was a good size lobster. She was green so I left her to stand guard. Moving along her fragile skeleton we could see that although the years have not been kind to the Roda, she is covered with life.

Different colored sponges from orange to white cover the light side of her old hull, tiny shrimps dance across their little fingers moving in the surge. Anemones fixed tight to their host, nematocysts (stinging cells) reaching for small minnows that stop to pick food off barnacles. These mollusks can tear a wetsuit and gloves if a diver is not careful. (I need a new pair!) Large rock crabs patrol the broken clam shells that fishermen toss over the side to entice blackfish out of their holes.

Closer to the bottom I found a brand new anchor and chain lodged near her propeller shaft. "Another one for my collection," I thought as I cut off the rope. Don had his hand in a hole reaching for a lobster. He pulled it out and turned it over. She was a female with eggs so he released her for next time. This day we'd be buying dinner on shore.

It was getting late, so we decided to backtrack our way to the anchor. Still waiting at our entry point in the ribs. was our green lobster friend. Watching the traffic at the anchorline was our other friend the horseshoe crab (xiphosura) feeding on broken clams. We headed up the line as the tide was going out, our boat safely floating down current of the wreck.

#### **NEW YORK**

#### Apache Jr.\*

Capt. Dominick A Cerbone (212) 885-0843 Leaves from City Island

#### Defiance\*

Capt. Mike Carew (212) 885-1588 Dive the L.I.Sound all winter Leaves from City Island

#### **Diver One**\*

Capt. Darrel DeBuono (212) 863-8799 Long Island Sound

#### Eagle's Nest\*

Capt. Howard Klein (516) 735-2254 Leaves from Point Look out Regular schedule begins April 5 call for schedule

#### **1992 SPECIALTY DIVES**

- June 23 Lillian 30 Baleana
- July 5 Aqua Woman'92
  - 6 Ayuruoca
  - 8 Texas Towe
  - 14 Montauk/Block Island
  - 15 USS Bass / Grecian
  - U-853/John 16
  - Patrick Fitzgerald
  - 28 NJ Overnight-Arundo 29 SS Mohawk-
  - Gulftrade-Tolten
- Aug. 6 Varanger overnight Varanger overnight
  - 11 Virginia 25 Coimbra

#### Jeanne II\*

Capt. Bill Reddan (718) 332-9574 Leaves from Brooklyn

**1992 SPECIALTY DIVES** April 4 USS Algol May 10 USS Algol June 20 Moonlight Cruise of Spectacular NY Harbor

July 5 USS Algol

Imaculata, Harvey's Woody Capt. Bill's Mystery Wreck 18 Moonlight Cruise 28 Overnighter USS Algol - Pinta

14 Overnighter-Pinta

- Aug. 10 USS Algol Sept. 6 Labor Day Moonlight Cruise
  - 7 USS Algol

#### Northern Star\*

Capt. Paul Pelligrino (516) 366-4231 Leaves from Captree

May 2 USS San Diego 3 USS San Diego

- 9 Hylton Castle
- 10 USS San Diego 13 Dry Dock #4
- 16 Kenosha
- Uss San Diego 17
- 20 Dry Dock #2 23 Uss San Diego
- 24 Oregon
- 25 Lizzy D
- Hylton Castle 27 30 R.C. Moohawk
- 31 USS San Diego

#### Rebel\*

Capt. Pat DeFeis Capt. Bill DeCoursey (718)897-2885 Leaves from Brooklyn

#### Sea Hawk\*

Capt. Frank Persico Capt. John Lachenmayer 6-10 pm (718) 279-1345 Leaves from Freeport

#### Sea Hunter

Capt. Sal Arena Capt. George Quirk (516) 735-8308 (516) 546-6205 Leaves from Freeport

#### **1992 SPECIALTY DIVES**

June 10 Virginia 22 Coimbra

6 Andrea Doria, 3 day trip July 16 Texas Tower

- 18 Bidevind
- 22 New U- Boat Aug. 3
- Paddle Wheeler
- 5 super trip
- 11 U-853
  - 12 USS Bass U-853, 15 Parker 13
  - 26 Dive NJ 3 dives
  - 30 Resor Sept. 9 Bacardi
    - 14 Texas Tower

#### Shearwater II\*

Capt. Jim McKoy (516) 242-0529 Fishing & Diving Charters Leaves Captree

#### Southern Cross\*

Capt.Phil Galletta (516) 587-3625 Leaves from Babylon

#### Wahoo\*

Capt. Steve Bielenda Capt. Janet Bieser (516) 928-3849 Leaves from Captree

#### **1992 SPECIALTY DIVES**

- May 22 Lillian 150' 23 Texas Tower, 80' - 180' June 12 Coimbra 180'
- 25 Andrea Doria 31/2 day Expedition
- July 2 Block Island Subs U-853, USS Bass
- 9 Andrea Doria 31/2 day Expedition
- 17 Virginia 160'
- Coimbra 180' Aua. 7
  - 15 Texas Tower 80'-180 21 Oregon Overnight
- Sept. 4 Labor Day Weekend
  - Block Island

#### **NEW JERSEY**

Deep Six\* Capt. Ed Bogart (908) 226-4477

MASS.	Asfalto
<b>Grey Eagle*</b> Capt. Erik Takakijan Turo Mass. (508) 487-4089	Bald Eagle Black Warric British Corv Cindy
NORTH CAROLINA	Coimbra
Margie II* Capt. Art Kirchner Cape Hatteras (201) 361-3018	Fran S G & D Gypsy Iberia
FLORIDA KEYS	Immaculata
Key West Diver* Capt. Bill Deans "High Tech" Dive Center Key West (800) 873-4837 <b>Looker Diving</b> Capt. Tim Taylor Daily Wreck Charters Key West (800) 245-2249	Keagon Tanl Lillian Lizzie D Martin's Mis Masodinia Oregon Pilot Ship Pipe Barge R.C. Mohaw Republic
To Capt. Frank Persico of Sea Hawk and his son "Bob," our sincere thanks and appreciation for all of your help. Capt. George Hoffman and the crew of the Sea Lion.	Texas Tower U - 853 Sub USS ALGOL USS San Die USS Tarantu USS Turner USS Bass Virginia Yankee
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150

160

120

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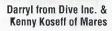
Capt. Bill Deans

Key West Diver



Jim Cleary and Bob DiBona at the U.S. Divers Party









Capt. Pat Defei of the Rebel

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Harvey Leonard.

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Dick Long with Roger Ferhrle of East Coast Diving