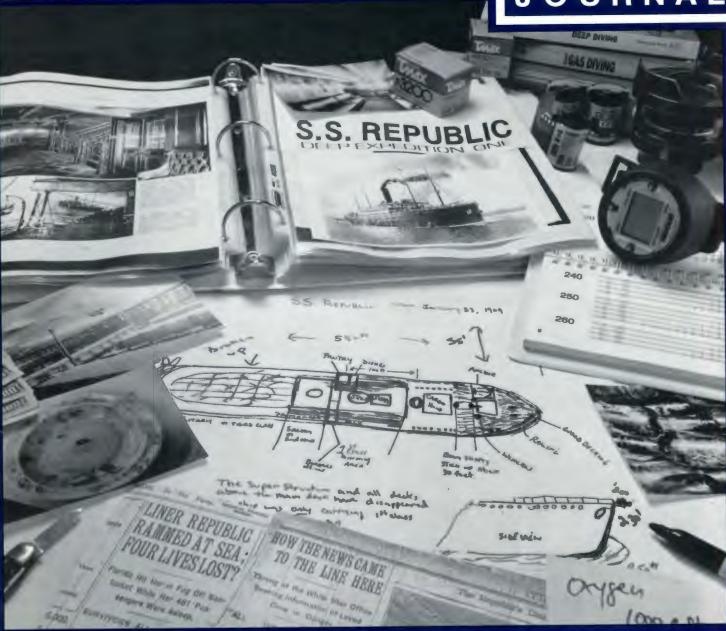
# SUB AQUA

Sept./Oct. 1993 Vol. 3, No. 8

JOURNAL



ShipWrecks

## No Matter What Type Of Dry Suit You Want, DUI Has The Material, The Style, And The Colors You Desire



DIVING UNLIMITED INTERNATIONAL, INC.

For more information on our complete line of dry suits see your local dealer, or call DUI direct at 1-800-325-8439.

© 1992 Diving Unlimited International, Inc. • 1148 Delevan Dr. • San Diego, CA 92102-2499

#### SUB AQUA JOURNAL

750 West Broadway Long Beach, NY 11561 Voice & Fax 516 / 889-1208 CompuServe 72650,220

> PUBLISHER / EDITOR JOEL D. SILVERSTEIN

ASSOCIATE PUBLISHER / MANAGING EDITOR JAMES F. CLEARY

ASSOCIATE EDITOR
JEFFREY J. SILVERSTEIN

SENIOR EDITORS
TOM BAKER, DANIEL BERG
CATHIE CUSH, CAPT. HANK GARVIN
KIRBY KURKOMELIS, BARB LANDER
DAVE MORTON, BOB RAIMO
CAPT. ERIC TAKAKJIAN

MEDICAL EDITOR
STEPHEN J. LOMBARDO, M.D.

WRITERS & PHOTOGRAPHERS EDWARD BETTS CAPT. STEPHEN BIELENDA DR. JOLJE BOOKSPAN **GLENN BUTLER** DR. JENNIFER A. FLYNN BERNIE CHOWDHIIRY JOHN T. CREA ROD FARB GARY GENTILE BRET GILLIAM LES GLICK PETER E. HESS PROF. HENRY KEATIS CAPT. HOWARD KLEIN JOZEF KOPPELMAN CAPT. JOHN LACHENMEYER WARREN MACKEY JOHN PFISTERER GEORGE POWER GEORGE SAFIROWSKI BRADLEY SHEARD **BRIAN SKERRY** HILLARY VIDERS, Ph.D

Sub Aqua Journal welcomes unsolicited materials, both written and photographic. Submissions and queries should be accompanied by a self-addressed envelope to insure their return. All material published is subject to editing. Mail all editorial correspondence and photographs to the editor.

ANDREA ZAFERES

#### 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.

SUBSCRIPTION RATES: Single copy \$3.95. Annual subscription (6 issues) \$21.95. Subscription outside of U.S. add \$20.00 postage. Paid orders U.S. funds only. Send requests to the circulation department. Postage paid at Garden City, NY, permit # 149.

Entire contents Copyright • 1993 by: SAJ Publishing Inc. All rights reserved. No portion of this publication may be reproduced without permission.

# "Jacques, you were right, it's much better down there."

**Enzo, The Big Blue** 

Each time I slip beneath the surface I am reminded of why I love to dive so much. The experience of interaction with different species is one that very few can know. These creatures who have made their homes on the crumbling remains of man's mishaps are a rare sight. I wonder what they think.

I overheard the instructor say to the wide-eyed new diver "There's nothing to see below 130 feet." Columbus was crazy too. Yet he had that need to see if it were true, that there was another world and that he could reach it.

This issue of the Journal celebrates the the accomplishments of our modern day explorers. They each have dreams of finding treasures. Some look for material things. Others just go to look.

...as the tired old diver sits on the dock, the children gather and listen to the tales of his adventures in the deep ...

Joel D. Silverstein, Editor

FEATURES	
The Coal Collier Suffolk by Dave Morton & Eric Takakajian	6
Lobster Diving by Daniel Berg	8
Capt. Roger Huffman by Barb Lander	9
South East Florida Wrecks by Bret Gilliam	10
Dorla Yields Rare Artwork by Peter Hess	12
SS Republic by Joel Silverstein	14
Deans On Deep by Joel Silverstein	17
Big Wheels on the Oil Wreck by Barb Lander	20
Stretching by Stephen J. Lombardo, M.D.	22
Night Hawks by Kirby Kurkomelis	25
DEPARTMENTS	
The Hang Line	4
Happenings	5
Equipment Reviews	19
Wreck Reading	24
Boat Schedules	26
Local Heroes	27
ON THE COVER - "Planning for the Republic" Taken with a Hasselblad 500 C on liford XP-2 film by Joel Sil	verstein.

#### NEW DIVERS CENTER AT ST. AGNES HOSPITAL

In White Plains, N.Y., a monoplace hyperbaric chamber was recently installed, with plans for a multiplace chamber and a full range of health services for the dive community.



Nara Sullivan, Zig and Ed Stolzenberg

Inspired by Armand Zigahn's tireless efforts, the "Beneath the Sea Hyperbaric Medical Center," will be coordinated by Nara Sullivan. Andre Galerne, of IUC, supplied the chamber and will be involved in future installations. Edward Stolzenberg, president of St. Agnes Hospital, is himself an active diver and PADI member. Their plans for expanding dive medicine training at New York Medical College are welcome. ■

#### **DUDAS' DORIA DIVE**



Inspired by her own words in the Sub Aqua Journal, Evie Bartram Dudas made her first mixed gas (trimix) dive on the Andrea Doria this summer. "I was able to see things I never saw before," said the first woman to dive the Doria. We asked about her dream to recover the Doria's binnacle, to complement the compass and cover recovered many years ago by her and late husband John: "I have a feeling...it just might be there."

#### TODAY'S THE DAY

Treasure super-hero Mel Fisher invited us to visit his gold and emerald-laden museums in Sebastian and Key West. While our eyes were wide with Spanish-galleon fever, he wove his spell of diving for lost millions. At a late-breaking press conference he railed against NOAA's efforts to impede his progress through the creation of a marine sanctuary. We were enthralled by this larger-than-life buccaneer...and you will be too as he tells all in an exclusive interview in the next issue of Sub Aqua Journal.





## Fast, Safe and Easy to use.

After an exhilarating dive, you reach the surface happy and fatigued. It's time to change tanks.

The Murray Tank Coupler® allows for easy maintenance as you couple and uncouple your tanks in less than ten seconds. It's a snap. This unique stainless-steel coupling device can outfit three tanks for fast, safe ready-use.

Visit your authorized dealer, or call for more information:



2402 Neptune Avenue Brooklyn, NY 11224

718-372-0165

#### Aqua Woman '93: A Couple of Dive Chicks Sittin' Around Talkin'

by Cathie Cush

Some mucho macho guys would turn up their noses at the idea of a boat load of broads. But not at all. When Steve "Wheels" Wieland heard I planned to be aboard the Aqua Woman dive he quickly responded, "I'll carry your gear. I'll haul your tanks. I'll jump out of a cake during your surface interval." Sorry, Wheels, for more than a decade this annual wreck trek has been For Ladies Only. Here's what you missed.

About 15 women of all sizes, shapes and color schemes loaded gear onto Captain Howard Klein's Eagle's Nest for a trip to the U.S.S. San Diego. Karen Gurian organizes the event, with sponsorship from the American Sports Divers Association and the Long Island Divers Association. After a blushing briefing (life preservers under the sofa cushions and "girl stuff" under the sink), some brought out tool boxes and adjusted gear, a few munched bagel breakfasts and the rest of us caught up on our beauty sleep. Does this sound suspiciously like the same thing guys do on their way out to a wreck?

Wheels, you would have been in your glory surrounded by a fascinating array of females—health care professionals, an information system specialists, a psychologist, a stockbroker, even a flavor chemist. If you're hoping to find a stereotypical female diver, you're out of luck. It was heartening to see such a variety of women enjoying the Atlantic wrecks, although I have to admit I was a bit nostalgic for my early dive days. Surrounded by mer-males, I felt then like the proverbial kid in a candy store. "I'll take a half a pound of chocolate truffles, a box of taffy and two men in black neoprene, please."

What do women divers discuss? Camera lenses, exposure suits, equipment configurations, jobs, recent vacations, significant others and lack thereof. At one point talk turned to why more women don't dive the northeast. Was it intimidation by male divers a lack of female mentors or equipment overload?

We caught up with old friends and made some new ones and talked about getting Aqua Woman dives together more often. We debated about the strength of the current but I never heard anyone ask anyone else how deep she went. We wondered about what kind of feminist statement we were making by not using a female captain and crew. We wondered if it mattered. It was a great day, guys. I wish you could have been there, but it wouldn't have been the same.

#### **SEPTEMBER**

#### **Environmental Clean-Up**

Divers will gather to restore the beauty to two popular dive sites. Bring your gloves.

Bagels and coffee will be provided.

September 18th Clark's Beach, Greenport, LI September 19th Beach 8th St., Rockaway, NY Contact LIDA at 516 269-7358

#### Why We Dive

Underwater photographer Peter Nawrocky will premiere his new multi-media presentation on September 15th at the Staten Island Sport Divers club. For information Contact: Dr. Stephen Lombardo 718 720-4994 ■

#### **OCTOBER**

#### Dive Philadelphia Stan Waterman and Dee Scarr

Beneath the Sea of New York will present the best in underwater films with Stan Waterman and Dee Scarr. Hosting the event will be noted scientist Dr. Jolie Bookspan and the producer of the show David Batalsky.

Stan Waterman is world-renowned as the dean of underwater cinematographers. He was recently profiled on Discovery Channel's documentary "The Man Who Loves Sharks." Dee Scarr's *Touch the Sea* programs have inspired countless thousands in the interaction with sea life. The latest works of these fine image-makers will be presented. Sunday October 17th, Sheraton Valley Forge Hotel, King of Prussia, PA 1-5 P.M. For more information contact: BTS 914 793-4469

#### NOVEMBER

#### LIDA FILM FESTIVAL

The 11th Annual Long Island Divers Association Film Festival will feature multi-media presentations by Bradley Sheard, Professor Hank Keatts, Pete Nawrocky, Keith Ibsen, and Nara Sullivan.

A post production wine and cheese party will be hosted by the Cayman Islands Dept. of Tourism. Plus there will be Thousands of dollars worth of door prizes and raffles.

November 6th 7 P.M. Hofstra University Playhouse, Uniondale, LI. For ticket information and directions call: 516 269-7358 ■

#### Dive New Jersey ... And Bevond

The 17th Annual Symposium presented by the New Jersey Council of Dive Clubs has been expanded to a two day event. Saturday will feature dive related workshops on Wreck Diving, Oxygen Administration, an introduction to Hyperbaric treatment and more. Sunday's program will feature Stan Waterman, Mark Stanton, John Chatterton, Mike Emmerman and Herb Segars.

The exhibit hall will be filled with new products and services from over 100 different companies. Door prizes and raffles; this is a weekend you don't want to miss. November 20th at the Ocean Palace Hilton, Long Branch NJ. Tickets available at the door.

Contact: Bill Loughran 908 449-2051

#### SATISFACTION GUARANTEED!



<u>Your</u> satisfaction is guaranteed when you learn from a PDIC instructor.

These instructors take great pride in helping you become confident and enthusiastic divers.

Paul Korbin (203) 284-1880 Wallingford, Connecticut Marc A. Braun (603) 448-1222 Lebanon, New Hampshire



The Professional Diving Instructors Corporation P.O. Box 3633 Scranton PA 18505

CALL TODAY! (717) 342-9434 or FAX (717) 342-1276

# THE COAL COLLIER SUFFOLK: "A GOOD OLD JOB"

by Dave Morton and Eric Takakjian

Twenty two miles southeast of Block Island lies one of New England's better kept deep wreck diving secrets - the grave of the Suffolk, a steam collier which went down in a storm in 1943, with all hands. Built in 1911 at the New York Shipbuilding Corp., in Camden, NJ, with a length of 365', a 50' beam and a displacement of 4,607 gross tons, the Suffolk served her only owners, the C.H. Sprague Steamship Co. of Boston, well over the years. She was a veteran of many trips carrying coal from Newport News and Baltimore to various northeast ports. Although over 30 years old, the boat was still well liked by her crew, and her captain, Charles Thistle, and the Chief Engineer, Irving Bennett. Both often referred to her affectionately as a "good old job." Her hull had begun to show signs of her age, however, and temporary steel plate patches had to be welded to her hull over recently discovered holes, just weeks before her final voyage.

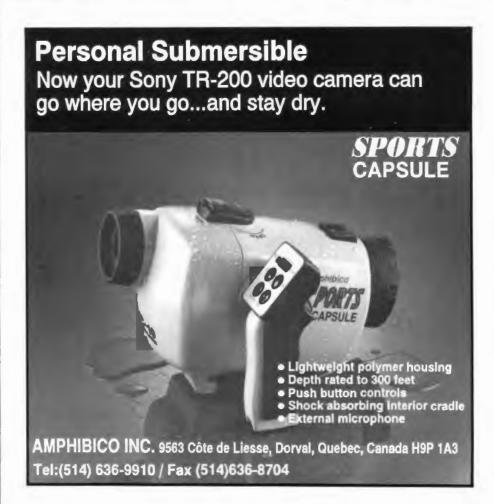
On December 9th, 1943, the Suffolk departed Newport News, VA, fully loaded but not past her marks with 6,798 tons of coal, bound for Boston, on what appeared to be another routine early winter voyage. All that changed on the morning of the 11th, when the eastern seaboard was struck without warning with a severe winter storm. Winds reached 60 knots, causing ships in the relative safety of Boston and New York Harbors to drag their anchors. The Suffolk was far from the safety of any harbor, somewhere southeast of Long Island, and bore the brunt of the sudden storm, no doubt battling violent seas and severe icing. At 11:43 A.M. the Suffolk could take no more, and broadcast her first distress call, "We are listing heavily, need help," which was repeated just 3 minutes later, and received at the Amagansett Coast Guard Station. Only twenty minutes later, at 12:03, the Suffolk sent what was to be her last message, "We are foundering - we need help immediately." Six Navy destroyers and three naval tugs were dispatched to the last reported position to search for the Suffolk, and any signs of her crew, which consisted of 37 merchant seamen, and 6 naval gunners.

The naval vessels searched throughout the night without success. Early the next morning, five of the destroyers were recalled to New York. The search was continued with the remaining destroyer, three tugs, planes and a blimp until the afternoon of the 13th, but no trace of the Suffolk was found.

Eighteen days later, a life raft containing the bodies of two of the crew members was located by the *U.S.S. Reeves*, over 300 miles south from where the *Suffolk* went down. The ships doctor determined that the two had died of exposure at least two days prior to being found.

On December 22nd, a naval tug made sonar contact with an object 35 miles east of the Suffolk's last reported position, and then depth-charged the contact believing it was a U-Boat. Upon close examination of the debris that floated to the surface, it was determined that this was in fact the final resting place of the Suffolk.

The Suffolk definitely lies on the outer edge of New England diving. Its location in 190 feet of water almost 35 miles off the mainland invokes respect from even the most seasoned deep wreck diver. Very little is known about diving the Suffolk, mainly because there have been relatively few dives made on the wreck in the 50 years that she has been down. Only a handful of charters have actually made the trek out, and have been met with a variety of conditions, typical for such an offshore site. Some information written about diving the Suffolk has described her as a deep, dark, unforgiving wreck with lots of monofilament, which certainly can be true. The wreck does have its share of mono, fishnet, and dragger shrapnel, and divers must use extreme care when navigating about the wreck. When you have mono floating around in 190 feet of water, add in bad vis-



ibility and dubious surface conditions, the recipe is about complete for a dangerous dive. But when the sea cooperates the Suffolk can be an awesome dive.

Such conditions were present in early July when the Grey Eagle left Rhode Island on the first charter to the Suffolk in seven years. With oily flat seas and a promising forecast, the boat steamed towards the rising sun. As we approached the wreck site, we thought we had been beaten out to the wreck by a boat full of cod jiggers, but we were relieved to find that the other boat was drift fishing for blues. As the marker line went over the side we were thrilled to observe 30 feet of vertical visibility.

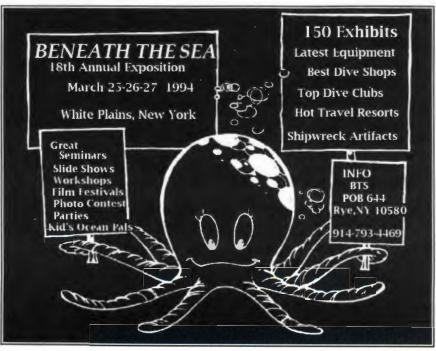
The tie-in team went over the side. In minutes the cups were floating on the surface. Lines were secured, oxygen was deployed, and all the divers were in. Artifacts recovered that day would include the 24 inch brass engine order alarm bell, and a brass engine gauge.

The mooring line was shackled into a deck plate about 40 feet forward of the stern, in 42 degree water with visibility that was at least 30 feet, but could have been pushing 50. Dive lights were only needed to illuminate the inner reaches of the engine room, as most of the interior was exposed through the broken hull.

The Suffolk lies turned turtle on the bottom, but the stern area has plenty of openings, most likely caused by the depth charge attack during the war. One hole in the engine room is so large, an ill-fated 20 foot long scallop dragger rig rests inside. Rumors of lots of monofilament were definitely true, but the wreck has no more than any other well-fished wreck in New England, and perhaps less than some of the heavily fished wrecks south of New York, such as the Arundo. The propeller is still in place, providing a great photo opportunity, although the rudder is missing, which may have been a major cause of the sinking.

Brass shone like gold from the dive lights everywhere you looked, and artifact hunting divers were limited by having to make decisions as to what to take, and what to leave behind. Others were just content to use their limited bottom time on the one scheduled dive to see as much of the wreck as possible. One dive team observed what looked like the engine order telegraph hanging upside down from a deck plate only 20 feet from the anchor line, but had neither the tools nor the time to further investigate their discovery. It's good to see that the years have been kind to her underwater, and the Suffolk can still be referred to as "a good old job."





## LOBSTER DIVING

by Daniel Berg

Cold water lobsters or Maine Lobsters (Homarus Americanus,) make their home in and around northeast shipwrecks. In fact lobsters are the main diving attraction of some wrecks. These crustaceans known as bugs, are delicious, once captured and cooked that is.

To catch a lobster the diver must first find him. Usually the diver will swim around looking into every hole with his light until he sees the claws or antenna. As a rule larger lobsters are slower than their younger counterparts. No matter the size of the creature, their claws can be quite painful. The diver must position himself to make what may be his only attempt at catching his prey. The diver must then quickly thrust his hand into the hole, grabbing the lobster just behind or on top of its claws. If the lobster is deep into the hole you can pin its claws down while slowly working your fingers up its body into position. When the lobster is caught simply pull him out and put him tail first into a catch bag. Lobsters swim backwards so insert them tail first to make sure they swim into and not out of the bag.

True bug fanatics know which shipwrecks hold more lobsters, usually low lying wood wrecks are best. They also know tricks to get the big bugs out of their deep holes. When a lobster is deep into a pipe and can't be reached from either end, the diver can try to beat the pipe with a sledge hammer. The lobster will usually try to escape the noise and can then be tracked down and caught. When a big bug is deep in a blind hole you can try

a few tricks, first try catching a smaller lobster and releasing him into the bigger bug's hole. Usually the larger bug will quickly come out to guard his territory against the intruder. When he comes close to the opening - grab him.

The best trick I know for consistently catching lobsters is to know where the best holes are on each wreck. Lobsters are very territorial and seem to live in a hierarchy of sorts. The biggest lobster gets the best hole. Once you have found one big lobster, make a mental note and simply return on future dives. You will most likely find another large lobster living in the same hole. Some divers use tickle sticks made from either a collapsible car antenna or a wrapped-up wire that can be unwrapped and bent into almost any shape in order to get it in behind the bug. They then touch the bug's tail and the lobster walks right into their hands.

Remember to always gauge the lobster before putting it in your bag, plus be sure to check for eggs. One trick is to tape a lobster size gauge onto a dive light. This way you find, catch, and check the bugs without having to fumble around. A lobster gauge measures the length of its carapace. That's the distance from the eye socket to the beginning of the tail. If it has eggs on the underside of its tail release it back into its hole to assure a good supply for future years.

I learned how to lobster from one of the



Lobsters from the USS San Diego.

true masters, Captain Steve Bielenda. For several years Steve and I would drop off on the way back in from an off-shore dive to hunt bugs on wrecks like the Dodger, Hylton Castle, Kenosha or the Reggie. I would quickly scout around, light in hand, looking deep into every hole, catching a bag full of lobsters on each dive. Within a few seasons I knew where the good holes were on each wreck and could always catch the big ones.

Steve taught that you had to be unafraid to be successful. If you hesitate to long or were afraid of getting bit you would most likely miss the bug. I even remember doing some pretty stupid things just to catch lobsters. Like taking my tanks off to squeeze inside a wreck while on a night dive, or walking a half mile with twin tanks to the Shoreham Jetties, or letting a small bug bite my hand in order to maneuver my other hand in position to catch it. Lobstering is a fascinating sport, but in order to become a good Lobster Diver you have practice. It's also pretty easy to judge once you've become successful, it's when your wife, kids and your parents are all sick of eating lobster.

Although it not an obsession anymore, lobstering is still an important part of my diving enjoyment. On most dives I just catch the bugs that I casually observe, but at least one or twice each season I have to leave the cameras on board and I ask Steve to drop me back off on one of those productive wrecks for a little lobster mania, in an area known as Wreck Valley.

# Captain Mike's

**DIVING & CHARTER SERVICES** Monday, Wednesday and Friday Nights 7:30 PM LOBSTER DIVING!!

Saturday and Sunday 7:30 AM (civilized time) Wrecks and Lobsters in Long Island Sound

(718) 885-1588

PADI IDC Prep Courses **Dry Suit Specialties** 

Full Service Repair Facility for: Viking ● Poseidon ● AGA

CITY ISLAND, NEW YORK Minutes from Westchester, New Jersey and NYCI

## Surface Interval with: Captain Roger Huffman

by Barb Lander

Brows furrow together over clear blue eyes as Captain Roger Huffman glances intently from depth finder to loran to compass. The helm spins expertly under the waterman's hands, and the mutter of the diesels softens as Roger nudges a pair of levers to the neutral position. I lift the grapnel expectantly, waiting for the signal to throw the hook. He looks at me and shakes his head. We drift quietly for a few minutes with nothing much seeming to happen. Some quick calculations and the purpose of our drift becomes clear. "One point seven knots of current," Roger announces

The Dive Vessel, Rapture of the Deep, responds to the commands of her captain, and this time when the diesels idle Roger nods, and the grapnel descends toward the wreck. Soon the line tautens. We're in.

Captain Roger Huffman brings a different approach to boat handling than most divers are used too. You see, he was a waterman long before he was a diver. For him the ocean is a living, breathing, mistress-seductive and vexatious in turn.

Roger grew up in Ocean View, Virginia only minutes from the beach. As a kid he thought the best thing that could happen to him was if the lifeguard on the beach let him pick up trash. In return the youngster got use of a raft for an hour. A few years later Roger bargained with his father for a boat. He recalls ruefully that it wasn't very long until his mother had the Coast Guard out looking for him. It was a rough day when his worried mother called the Coast Guard. They dispatched a helicopter to look for the errant 12-year-old. They found him anchored up, fishing without at care. The helicopter circled the boat, waved, and left. The Coast Guard dispatcher notified Roger's mother that he looked okay.

Roger's interest in fishing and boats continued, and he abandoned a career as an electrical contractor to pursue commercial fishing. A few years as a scalloper primed Roger for independence and his own boat, *Quiet Waters*.

In the meantime Roger had served a stint with the military, stationed at Okinawa. A friend rigged him up with scuba



gear and asked him if he knew how to use it. Roger just nodded and said, "yeah." He learned fast. He rigged up a fire extinguisher as a tank and bought a Voit regulator. When he moved back to the States, Willy Davis, the patriarch of scuba in Norfolk, refused to fill his "fire extinguisher." Conceding to the inevitable, Roger took lessons and bought real tanks.

It was only six seasons ago that Roger started carrying divers on the Quiet Waters. At the time there were no other dive boats in Hatteras or Oregon Inlet. The divers and diving grew on Roger, and last season he bought a new boat, one rigged out for divers. The Rapture of the Deep is a 42 foot converted crew boat and carries seven

divers comfortably.

Roger offered me a guided tour of one of his favorite wrecks, the Hesperides. Located in shoal waters, the wreck is only 40 feet deep and requires a slick calm day to dive her. When we arrived the current was ripping, to say the least, and I questioned whether the dive was doable. Roger pointed a sun-browned finger at me and said: "I haven't got no Doria patch, and I haven't got no instructor patch and I haven't even got a deep diving patch, but I do have a current patch, and soon you're going to have one too." Roger rigged his current lines with care using extra weight. I wanted to take my camera, and he rigged a way to get it almost to the bottom on the anchor line. I didn't have to drag it through the current. We plunged over the side and to my surprise the granny line led nearly to the bottom. I followed Roger's advice. "Don't fight the current, stay low, get dirty. Don't hang around in the open."

Captain Huffman's advice was good; we tooled around the Hesperides for nearly an hour, sightseeing and feeding the fish.

Sunk almost 100 years ago after running aground on Diamond Shoals, the boilers, engine and steer quadrant of the Hesperides rise nearly to the surface. The rudder is in place and two blades protrude from the sand giving the impression that the voyage of the Hesperides continues.

We had to return to the real world where he awarded me my current patch.



Don't get lost at sea; be found with Dive-Alert, the surface signaling device that emits a loud blast heard up to a mile away. Quick disconnect fittings allow easy integration with most power inflators and low pressure hoses. Models now available for SeaQuest® AirSource and Scubapro® A.I.R. 2.

Ideations \ 800 275 4332 206 281 0067 • FAX 206 285 6897

U.S. Patent No. 4950107 and foreign patents

# Discovering Southeast Florida's Deep Wreck Sites by Bret C. Gilliam

I'll admit to a certain skepticism toward the typical Florida diving. I don't like crowds and I do like a bit of challenge in my diving. What could south Florida offer me? As it turned out, everything I was looking for in high voltage deep wreck diving.

I went out on Jim Mim's custom twin engine catamaran *Dive Cat* in Pompano Beach (just north of Lauderdale). Mims is the well-respected owner of Ocean Diving and one of the first facilities to cater to serious technical divers in the area.

Less than a twenty minute run from the Pompano Beach dock and maybe a mile offshore brought us to the wreck of the Hydro Atlantic. Built in 1907 and originally christened the Delaware, the ship is over 300 feet in length with a 64 foot beam. She foundered in a storm off Boca Inlet in 1987 while under tow and settled perfectly upright on the sea bottom. Her keel lies in the sand at 170 feet and the top of her bridge pokes up to a shade over 100 feet. Since the ship is washed by the Gulfstream current, visibility today is well over a hundred feet and the resident marine life a bit overwhelming. During the descent I am

surrounded by schools of amberjack, some over five feet in length. Landing on the main deck by the stern, I clip my stage bottle to the rail and set off to explore.

The Hydro Atlantic is everything a photographer could ask for: a massive intact wreck, excellent visibility, warm water (81 degrees), covered in marine life, and no crowds! In spite of the ship's size you can swim away from the midships section and nearly see the entire wreck due to the clear water.

The wreck provides a wealth of subject matter for my camera with upright masts and two large cargo cranes and a huge anchor windlass near the bow. Passing through a collapsed section below the bridge tower I am engulfed by schooling snapper that nearly block out the light. Jim passes through the other side armed with a spear gun in search of dinner. He can afford to be choosey, there's more fish life on this wreck than I've seen in the last decade down in the Keys.

All the main compartments, engine rooms, holds and conning stations are easily entered for exploration. Ducking into the main deck cargo hatch I am nearly flattened



Tom Mount checks computer on the Lowrance.

by a grouper bigger than I am. It thumps me across the chest with a mighty tail swipe and sends about \$5,000 worth of camera gear flying. Clearing my mask I'm glad to see that the gear has settled safely on the deck and I gather it up gingerly to check for leaks. No problems. You can dive the Hydro Atlantic averaging about 150 feet of depth which works out well for bottom time and light conditions.

The next day we shift over to the wreck of the Lowrance just a few miles away. This wreck is even bigger, over 450 feet in length. She was sunk deliberately in 1984 as part of the artificial reef program that was to benefit fisherman. Again, nature smiled on divers by providing her positioned upright in 210 feet of depth. Beyond the range of most divers, the Lowrance still remains virtually un-dived. Most of this dive is conducted between 160 and 190 feet and bottom times are kept short. The wreck attracts the usual schools of bottom fish but additionally seems to be a magnet for pelagic such as wahoo and other speedy game fish. On this dive a loggerhead turtle the size of a Zodiac zooms in and out of the blue and proceeds to accompany our group throughout the dive.

What makes these sites so extraordinary is a combination of low diver impact and the friendly environment that warm clear water offers. In most regions of the United States the best wreck diving is

# The Aqua Explorer ULTIMATE DIVE REELS





- \* 5 Inch Spool Diameter
- \* Anodized Aluminum Construction
- \* All Stainless Steel Hardware
- \* Unique Lock Screw Location
- \* 1/8 Diamond Braided Nylon Line
- 1/8 Diamond Braided Nylon L
- \* Solid Delrin Core
- \* Heavy Duty

Call (516) 868-2658
For FREE COLOR CATALOG

Accept No Substitutes Ask for the #RA5 REEL or our NEW smaller #RA3 REEL.

typified by either cold dark water or remote locations that require long boat rides to get there. In stark contrast, the Pompano wrecks are located within a 30 minute run by boat from most docks and enjoy temperatures from April to October that rarely dip below 75 degrees, even at depth.

I've found that conducting training on these wrecks provides a faster learning curve since none of the distractions of cumbersome thermal suits are necessary. Also the decompression is far more "friendly". With a chance to dive every day of the week-long courses, the students rapidly progress in skill levels and, more importantly, in retention of skills. Adaptation to narcosis exposures within reasonable ranges on compressed air (200-220 fsw) are handled better without the elements of cold and reduced visibility. Of course, we emphasize that no training is a substitute for reinforcement of experience in you "home waters" and we diligently refer all graduates to mentors in their local area after completing the programs.

Jim has charted nearly two dozen wrecks within an easy run of his location. Some are suitable for traditional sport divers, but most are deep enough to satisfy the most adventurous.

Bret Gilliam is President of Ocean Tech and a 22 year veteran of the professional diving industry. He is Vice Chairman of NAUI's Board of Directors and a Vice President of IANTD. Author of seven books on diving including DEEP DIVING and MIXED GAS DIVING.

## SMILING DOLPHIN GREETING CARDS



You'll love these stunning hand-made cards featuring the diver's friend

#### A PERFECT Gift

A Pack of six 4"x6" cards in qorqeous framable Kodak color. Exclusively available at \$19.95 set.

> Sub Aqua Journal 750 West Broadway Long Beach, NY 11561



Diver explores the massive anchor windlass of the Hydro Atlantic.

Courtesy Bret Gilliam Collection.

#### WRECKS OF POMPANO

Caicos Express	188 foot freighter	190 - 240 fsw
Hydro Atlantic	313 foot cargo ship	100 - 175 fsw
Lowrance	435 foot freighter	150 - 210 fsw
Miller Lite	186 foot cargo ship	90 - 160 fsw
Renegade	150 foot freighter	150 - 190 fsw
Rodeo	140 foot freighter	75 - 130 fsw

DEEP WRECK DIVING · TRIMIX & NITROX TRAINING
TECHNICAL DEEP AIR DIVES · DECOMPRESSION SUPPORT
CONSISTENT VISIBILITY AND WARM WATER



Capt. Jim Mims

750 East Sample Road, Pompano, Florida (800) 874-6888

## **Doria Yields Rare Artwork**

by Peter E. Hess

A cheer went up aboard the Wahoo as a trio of bulging lift bags broke the surface 200 feet off the starboard bow. Hanging beneath them, rocking in the gentle swells was a unique masterpiece from the sunken Italian luxury liner Andréa Doria: a 700 pound mosaic frieze - four raised ceramic sculptures mounted on a five by six foot purple tile background.

As the panel is pulled to the stern, divers who have jumped into the clear, chilly water with their cameras were astounded by the bizarre mythological images. Inside the murk of the *Doria*'s Winter

Garden, a first class lounge, with minds fogged by the narcosis at 185 feet and their vision clouded by swirling muck loosened when the unwieldy panel was pried from its



37 year resting place, the team could hardly appreciate the unusual beauty of the art which they salvaged. On the surface, sunlight finally illuminated the long-lost mosaic frieze, the artistic mastery of the Picasso-inspired Italian sculptor Guido Gambone.

After expedition leader John Moyer finished his long decompression, admired the find, and was safely back aboard, the team realizes that their job is only partway complete. The 700 pound panel now has to be lifted onto the Wahoo. Captains Steve and Janet devised a plan and exerted the collective brawn of twenty divers to



carefully haul and secure the panel onto the swim platform.

Moyer, a veteran of 56 visits to the Andréa Doria, and an expert on the sunken luxury liner, had ambitious plans to enhance his collection of Doria artifacts in 1993. Having been part of the 1985 team based on the Seeker that recovered a Doria bell from the auxiliary stern steering station, Moyer had dreams of recovering the liner's primary bell that hung on its bow.

But divers found its davit empty, with the mounting pin still in place; someone had removed the bell before the ship sank. John's extensive correspondence with

surviving crew revealed that the bell was used only when the ship was entering or leaving a port. At sea, it was stored in a forward compartment near the bow.

In 1991 and 1992, Moyer searched for the elusive bell inside the bow of the shipwreck. The rooms in the bow were partially filled with debris and muck; one could plunge an arm into the sediment and not even reach the bottom. Excavation was required. But with the location of his repeated exploratory dives an open secret among *Doria* divers, Moyer needed to protect his operation. An admiralty "arrest" of the *Doria* was needed.

John and I discussed the legality and propriety of filing a salvage claim upon the sunken liner. I specifically did not want to repeat the *China Wreck* controversy when in 1985, a commercial salvor had laid legal claim to a popular sport diving and fishing site, off New Jersey. Outraged divers, fishermen and charter boat captains promptly intervened in the lawsuit and won a permanent injunction barring the commercial salvage of a wreck which had been in the public domain for over fifteen years.



We agreed that our intention with the Doria was limited to protecting Moyer's ongoing work, and that the arrest would neither prohibit divers' access nor assert title to any of the artifacts they might recover. However, we wanted to make it clear that the areas in which Moyer intended to work would be off limits to any other salvage until his operations were completed. In June, the legal papers were filed in the United States District Court in Camden, New Jersey. Judge Joseph H. Rodriguez granted the admiralty arrest, asserting the court's jurisdiction over the Doria and any artifacts which might be recovered from her.

Later that month, Moyer and Bill Deans physically attached a copy of the arrest papers in a sealed canister on the bow near where the bell had once hung. The *Doria* is well over 600 feet long, and since the majority of the artifacts were being recovered from amidships and in the

stern, the admiralty arrest posed no threat to any *Doria* diver.

In early July, with the east coast gripped by a heat wave, we found ourselves in the refreshing breeze and near-perfect surface conditions 200 miles due east of Sandy Hook,

N.J. The Doria is truly magnificent. Unlike older, disintegrating shipwrecks, she still carries herself proudly, the graceful lines of her hull a marvel. The ship extends beyond the limit of visibility in all directions, beckoning the diver to return again and again. I now knew why John had become so smitten. Inside is a shambles, as much of the interior has collapsed and fallen to the deep part of the wreck.

Moyer built an airlift (underwater suction dredge) whose 300 feet of hose had to be dragged through the ripping current and down into the bow. Several teams of divers later, and the airlift was sucking away decades of debris and muck, leaving in its wake a black, toxic cloud of toulene, oil and paint. The current that the divers had cursed while pulling down the hose became a blessing as the noxious blot scooted away and dissipated in the green gloom. Dig as they might, the divers nearly cleared out the supposed location of the bell, but came up empty. Blackened faces and stained dry suits testified to their efforts. Many reported pounding headaches from the lengthy immersion in and near the toxic airlift discharge. Dismayed but not

defeated, Moyer vowed to continue his search on future expeditions.

Aft of the airlist operations, other teams were able to free two mosaic panels from the Winter Garden and send them to the surface. Moyer and Deans found the Gambone mosaics partially

buried on a previous dive while looking for the bell. The second panel, also by Gambone, featured three friezes with scenes related to fish and fishing.

In August, appearing again before Judge Rodriguez, we asserted that the *Doria* was an abandoned shipwreck. Although insured by an Italian consortium, the underwriters had done nothing in nearly forty years of continual exploration and salvage of the shipwreck. Accordingly, they had abandoned any previous claim of ownership. The Court agreed, ruling that the venerable rule of "finders keepers" applies to the *Doria* and the artifacts recovered from her.

Because of the diligence with which he had conducted his salvage operations, the



Court has permitted Moyer to maintain his admiralty arrest through the 1994 diving season. His intention remains only to protect the title to recovery projects he is pursuing. Individual divers and private charters may continue to visit the *Doria* and salvage from outside Moyer's work areas, now confident that the artifacts they bring up will belong to the finder.

John Moyer, the proud and uncontested owner of the beautiful Gambone friezes, will undoubtedly spend the winter contemplating the recovery of more artistic treasures that make a dive on the *Andréa Doria* an unforgettable encounter with the Grand Dame of the Sea.

Photographs by Joel Silverstein



# SS REPUBLIC DEEP EXPEDITION ONE

by Joel Silverstein

The deep beauty of the luxury liner Republic unfolded before me. Cloaked in danger and tales of a treasure that "left the bank vaults of New York empty of gold" when she set sail eighty-four years ago, she lay quietly until this day, save for a few failed salvage operations.

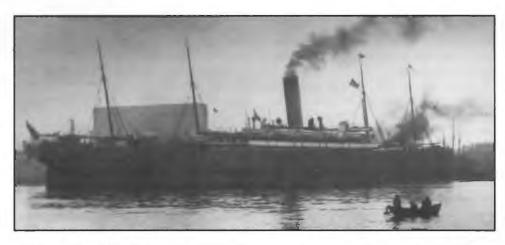
Launched as the Columbus in February 1903 for the Dominion Line, the Republic began service for J. Pierpont Morgan's White Star Line late that same year. The most luxurious liner of her time, her route was Boston and New York to the Mediterranean, for the wealthy to sail to the "old world."

In 1908 a catastrophic earthquake leveled the entire city of Messina, killing 85,000, leaving thousands wounded and homeless. Many survivors moved to other cities and towns within Sicily and mainland Italy, others set out for the New World — America. Each transatlantic crossing would bring survivors west and supplies and provisions east. The return voyage for the Republic carried 650 tons of food, clothing and supplies valued at \$61,000 for Rear Admiral Sperry's fleet. Also on board were the first relief supplies for

the earthquake victims. The rumor of the time and until today is that the Republic carried a payroll of \$3,000,-000 in gold Eagles. [1908 value]

The Republic
was sleek, 580
feet long with a
narrow 55 foot
beam. On her final
voyage she carried
only first class and
military passengers. It was
in a dense fog at 5:30 A.M.
that the Italian Liner Florida col-

lided with the Republic. Of the 461 passengers all but four were rescued and transferred to the Florida. This was the first time the "wireless" was used to summon help. The "QCD" (quick come danger) call was picked up by ships as far as 100 miles



away that came to the aid of the Republic and the Florida.

#### COMMERCIAL SALVAGE OPERATIONS

By 1981, diver Martin Bayerle, obsessed with finding the luxury liner and her lost gold, had spent ten years researching her history and mysteries. Bayerle contracted the captains and crew of the Research Vessel Wahoo to locate and identify the final resting place of the liner. Captain

Steve Bielenda was successful.

Captain Janet Bieser and shipwreck historian

Hank Keatts dived 230 feet below the surface to identify the wreck. This dive in freezing, black water was to be the first of hundreds of hours

With the Republic found, Bayerle could now set out to find the investors needed to fund

gold.

searching for the

the search. It took six years to raise sufficient funds, under the name Atlantis Investment Group, Inc. — a consortium of physicians. Bayerle's operations did not yield many finds, let alone the gold. Poor weather, crew difficulties and Bayerle's habit of suing divers, contractors and

suppliers when things went awry eventually ended his operations.

Meanwhile, another group - Marshalton & Sons, had raised over six million dollars to excavate the Republic too. Marshalton & Sons hired International Underwater Contractors (IUC) in 1986 to begin underwater research on the ship. IUC utilized ROV's and a saturation diving team to explore the wreck before starting their salvage operation. By 1987 IUC had gathered enough information to make the Marshalton operation a go. IUC placed their diving platform the Twin Drill above the site and began saturation diving operations. Divers lived at depth in an underwater habitat for up to eight days at a time, running dive operations for almost eighteen hours a day.

IUC divers spent ninety days on the site cutting and moving steel deck plates, moving and removing tons of material. Most of the artifacts recovered included, dishes, crystal, pottery, bottles, personal effects and brass. Hundreds of baskets were sent up to the surface to make room for divers to search for the gold. According to Glen Butler, operations manager of the project, "We just pushed the stuff out of the way." After ninety days of round-theclock work, money and crew exhausted, the operation ended...goldless. To recover some of the investors' money the artifacts were put up for auction. Many were sold but not enough to scratch the surface of the costs involve

#### DEEP EXPEDITION ONE

The Republic rests fifty-five miles south of Nantucket, only five or so miles from the Andréa Doria. She remained undisturbed until this past July when a team of divers set out on an expedition led by myself and Captain Janet Bieser. No recreational divers had ever been there and many of the commercial divers who worked the projects never really explored the wreck on their own.

Captains Bielenda and Bieser provided us with the R/V Wahoo and their experience in deep water dive expeditions plus the Loran coordinates. Glen Butler provided us with sketches and layouts of the wreck, pieced together from the 1987 sonar searches. IUC founder and president André Galerne warned us of the hazards that this twisted mass of steel and timber may hold. When we asked André if he thought the gold was really on the ship he smiled, "No one has found it . . . yet."

It was a challenge to assemble a qualified team of recreational divers with the desire, experience, and motivation to dive into the unknown. Our departure date directly followed the season's Doria trips and other pre-planned projects. Yet a tight team of adventurers signed on. Within days of the trip weather forecasts had been poor and a number of the divers would have to cancel. The team became smaller...but





Hank Garvin prefers to free-dive.

more focused on this expedition.

On Day One dense fog and ten foot seas forced us to take shelter at Block Island. With ninety miles still to go we would wait out the weather in some comfort. At Block we worked out our options and charted courses for other wrecks. Yet it was the *Republic* we were after. A day on the island listening to weather reports left us quite discouraged — would we see the *Republic* on this trip?

At the crack of dawn, the next day, through overcast skies and rain we left Block Island. Nine hours later we made it out to the site; Captain Janet located the wreck within minutes. Earlier viewing of an ROV videotape indicated depths in the 240-250 fsw range. Gary Gentile and Barb Lander would be the first on the wreck to tie us in. "We want to be able to get to the pantry area. When you get to the bottom, if you are 230 or shallower head north (stern) on the port (east) side. If you are deeper than 240 head south (bow)," I said.

We waited for their return almost ninety minutes later before the next teams went in. They returned, indicating that we were tied in at 255 fsw and it was dark and they couldn't travel. "We'll have to make the best of it." remarked Gary.

## THE INTERNATIONAL ASSOCIATION OF NITROX & TECHNICAL DIVERS

- The first certification program for breathing gases other than air.
- Diver and instructor certif ication in EAN
  Nitrox; Nitrox Technical, Trimix; Technical Deep
  Air; Gas Mixing; EAN Overhead Environment Diving,
  EAN Cave and EAN Wreck Penetration.
- International representation by IANTD Australia, IANTD United Kingdom, IANTD Austria and IANTD Venezuela.

To insure SUPERIOR EAN & MIXED GAS DIVING EDUCATION from the most experienced professionals worldwide, call, fax or write today for a listing of facilities and instructors near you (international listings available).

Phone/Fax (305) 751-4873

1545 N.E. 104 Street • Miami Shores, FL 33138 founded 1985 by Dick Rutkowski, pioneer of recreational EAN diving



Hank Garvin and I would be in next; our goal was to move the secondary anchor line as shallow as possible. Having only 15 minutes of bottom time, we aborted the task at the bottom and opted to just look around. The water was clear with visibility reaching almost 30 feet. She was beautiful. Back on the Wahoo we pieced together what we each had seen and determined we were at the stern of the wreck. If the weather held out we would get another look tomorrow.

As morning came we knew that the good weather wouldn't last - we dove early. Each team was to cover as much ground as possible and learn as much as possible for use on our next trip. As I reached the bottom I was astounded by the conditions. I was met with 45 degree crystal clear blue water. There was no discernable current and although I started out at 255 feet I took that compass heading and travelled south. I swam about 150 feet and could still see the strobe light on the anchor line. I was thankful for the mixed gas I was using; I could see everything without the mind-numbing cloudiness of nitrogen narcosis. As I traveled towards the bow I passed over portholes still in their



hull plates, some just lying on the deck.

Large pieces of twisted steel that had been peeled back by the IUC divers made an interesting new reef system; soft corals and sea anemones had grown upon them. The shallower I got the more light was available. Windows, brass fittings, and steel girders were easy landmarks to remember.

Swimming over the wreckage I was joined by the local inhabitants — sea bass, pollack, cod and even some non-geographical grouper that must have lost their way by a few thousand miles. The dive was nothing like it had been previously described — cold, dark, current-laden with razor sharp edges everywhere. It was nothing like that at all. All I knew was the environment I was in — no longer alien—

it was comforting. I was up to amidships (230 fsw) when it was time to turn back. The return swim was swift. I made mental notes of spots to explore next time. Back at the anchor line I had a few minutes left—one quick swim off the stern before going up and I was able to see the huge propeller embedded in the sand, just as it was described—this was the Republic

We chose not to recover any artifacts on this expedition. We were taken by the mysteries of this deep wreck. We accomplished our goal — to see the *Republic* and return home safely. Home to dream of the gold...so much gold that when *The Republic* steamed out of New York in 1909...she left all the bank vaults empty...







SUB AQUA JOURNAL • SEPT/OCT 1993 • 16

## DEANS ON DEEP

an interview by Joel Silverstein



We corralled Captain Bill Deans aboard his dive platform, Key West Diver IV after a dive on the Wilkes Barre. Bill is sought out by divers, salvors and military special operations specialists from around the world for his deep expertise. Bill, why do you like to dive deep?

Depth is a relative term. I like the idea of a dive site that hasn't been frequented by human encroachment regardless of depth.

What do you look for when you dive? I truly enjoy the marine life. Every day I get to see new and different things.... During certain times of the year different species will spawn and congregate on the Wilkes and the other deep wrecks out here. The neat thing is that they are not really approached by man that often, if ever. As a result the bigger fish come in and that's what I like.

When you travel north it seems like you are always on the deep wrecks. Do you like those wrecks so much or are you brought up for your operational expertise? I would have to say yes to both parts of that question. I get to the north so infrequently that I usually end up on the special projects. ...one of the best dives that I do when I have time is the San Diego. I don't consider that deep but I find it a challenge, and one of the premiere dive sites in the country.

Has it gotten easier for you to dive up north? It's a challenge to dive in the cold water, yet with all the technology applied to a dive like extended no-decompression times and accelerated decompression with nitrox, longer more productive dives can now be done without the long, cold, decompressions. So in that respect it has gotten easier. ...if a diver can do it all up north, he can dive just about anywhere as long as he's got a good head about him.

Describe the perfect dive site. A virgin wreck in about 250 to 270 feet of water. You've got some depth which keeps most divers off of it. That's why I like diving the Kendrick (320 fsw) so much. Very few people go there, and I get to see some very special things.

Has the notion of "DEEP" changed over the years? What used to be a big deal (200 - 250 fsw) a few years ago has now become our playground. The current technology and our logistic support is so advanced from what it was before that it makes these dives within reach. We have worked out the cylinder sizes and the decompression tables to a point where going to 250 is a regular dive for us. It's when we start going below 250 — that's when it becomes a different animal. It takes a lot more discipline, there's no room for errors there.

Why do people seek you out for training? When they show up here in Key West, 99% of the time they have been doing deep dives on air, they have seen and experienced the inadequacies of air at depth. Now it's time to improve their safety through technology. These divers already have the majority of their skills down pat. We teach them how to do it better and safer. Many times they come here so they can accomplish certain dives up north. The warmer water allows them to comfortably master the new skills and allows them a less stressful environment while learning. These people have what I call a "healthy respect" for depth.

What do you see as the future of deep diving technology and training? I see a lot more advanced divers taking advantage of the technology and I see more people diving in the 130 - 190 foot zone. That's the next logical progressive step. What they said was crazy just a few years ago is now commonplace. ...we have been able to make these deeper dives more reliable and safer than before. Not absolutely totally safe, because we know there are always risks in every dive regardless of depth, but we have been able to minimize the hazards.

Create a technology that would allow you to go anywhere. I would make a one atmosphere dive suit with Batman like body armor that was flexible. It would have a closed circuit rebreathing system that would allow me to swim in the 400 - 500 foot range.

Propulsion? On the back. That would be the dream. But on a more practical sense I would like a nitrox rebreather that could produce a constant PO2 for decompression, about the size of an aluminum 80. This way you could carry open circuit scuba on your back for the bottom mix and then have a real efficient decompression with the rebreather.

Where would you use it? I would get to explore some of the wrecks in the colder waters. ...it's not the dive that stops most people, it's the decompression obligation.

Give us one message to divers on the edge of going deep. First, ... read everything you can get your hands on about deep diving and second, you need to understand and accept the liability ... any time you enter an alien environment, there is always the possibility of injury or fatality. The third thing is I would encourage education. Seek out the people who do the training. With the advanced programs in place at IANTD and ANDI there are sufficient standards and procedures to help any diver who feels responsible enough to want to go deep.... Build your experience on those three areas and move slowly.

Over the years you have witnessed many of the deaths from deep diving, how has it changed you? ...in any operation, you're going to have fatalities. You're going to have equipment breakdowns, and diver failure. It's unfortunate that we have to learn from fatalities how to make it safer. It's funny how some things change your life. When John [Ormsby] was killed I was very upset for quite a while. Till I knew what I was supposed to do — that was to learn from every accident how not to make it happen again.

Are most of the accidents human error or equipment error? In each incident except for Parker's [Turner] death it has been diver error. The accidents happened long before the diver even got in the water. It was divers using inappropriate technology, or not talking about their plan before doing it. If they continue to keep this stuff in the closet we ain't going to learn a damn thing and the deaths will happen again and again. I think we need to talk and write more about the risks as well as the rewards.

What keeps you coming back to the group dives? I like diving on the trips up north. ... everyone is sharing their experience, they talk about what they want to do and they tell you what's right and what's wrong with the plan — it's like a big family out there. I like to get out there and share, that's what makes it safer and more fun and enjoyable. I think it's the only way to do it.

## Wo Warm Wind

The "WARMER" parka keeps you TOASTY-WARM, DRY & COMFORTABLE REDUCES ENERGY LOSS - diving is more fun in summer & winter!





Our NEW dry suit liner keeps you TOASTY-WARM & COMFORTABLE while "wicking" the water off of your body. Low bulk & weight gives freedom of movement. Ideal for moderate water or add our VEST for colder water. Visit your Authorized Scuba Store or call WARM WIND (800) 288-WARM



### Getting Wet? - New Products

### OS SYSTEMS FRONT ENTRY SUIT

We had the opportunity to dive with an OS Systems Front Entry Suit recently. We were quite surprised at the ease involved in donning this horizontal front entry dry suit. Everything went together easily. The suit is available in a 420 denier or 210 HC (high count) denier that offers a tighter thread count for more abrasion resistance (great for wreck diving) at half the thickness of its 420 counterpart. The suits are available in rear entry as well as front entry. We dove it with their new DV Boot, which features a flexible treaded sole and a full rubber upper. The boot fit very much like a wet-suit boot soft and comfortable. The suit also comes equipped with high quality SI Tech valves.



One thing that most divers find annoying are uncomfortable neck seals. Not with this suit. Specially formulated latex neck and wrist seals kept us perfectly dry. All seals have thin o-rings along the inside to keep water out. The latex was flexible yet quite strong.

I was warm and dry throughout the dive and was extremely surprised at just how affordable this system was. OS is based in Scappoose, Oregon, where Paul Gunderson and his staff strive to build the best nylon "shell" suit available.

This suit is loaded with lots of extra value It comes in attractive colors and many sizes to fit divers who are petite to huge.

### DUI DRY5 Dive Gloves

Looking for warm hands on cold dives? Check out DUI's new Dry5 insulated gloves. The Dry5 insulated glove can be used in combination with a wetsuit, dry suit, or in "just wet" applications where dry hands are desired. They are perfect for many cold water applications.

Dry5 gloves maintain dry hands by means of a latex wrist seal installed on the cuff of the glove. They are the same type of latex seal found on dry suits.

The Dry5 dip molded and mated coated shells provide excellent abrasion resistance, grip, and dexterity. The shell can be easily repaired with Aqua Seal. For dives where high abrasion is a factor, there is the protective Kev5 Kevlar over gloves.



The inside of the shell is what keeps you warm. A comfortable loop pile lining provides the insulation. Plus there is enough room for additional insulation.

The Dry5 is available in three sizes, small medium and large.

## KEY WEST DIVER

"The Formost Authority in Scuba"
Friendly Training For Alien Environments

September 15 - 30
September 16 - 18 Cayman - Curb - Wilkes Barre
September 26 - 28 Cayman - Curb - Wilkes Barre
October 1 - 17 Dive - Dive - Dive
October 18 - 22 Special Mix
October 23 - 31 Dive - Dive - Dive
November 1 - 3 Cayman - Curb - Wilkes Barre
November 6 - 7 Nitrox
November 8 - 10 Technical Nitrox
November 11 - 14
November 15 - 30 Dive - Dive - Dive
December 1 - 17 Dive - Dive - Dive
December 18 - 23 Special Gas
December 26 - 31 Dive - Dive - Dive

(305) 294-7177 MM 4.5 Stock Island • Key West, Florida

## BIG WHEELS ON THE OIL WRECK

by Barb Lander

In the dark, gloomy waters off New Jersey that east coast divers know as the mudhole, a massive pair of helm wheels hide in the canopy formed by the gun tub of the Ayuruoca. From their protected nest 160 feet below the surface the spokes of the six-foot wooden wheels create a majestic silhouette viewed against the green glow of the water.

Forty-eight years after a war-time collision sent the Brazilian freighter Ayuruoca, also known as the "Oil Wreck" to the bottom — a broken pile of hacksaw blades below the wheels bears silent testimony to the fact that divers dare dream.

The June 12, 1993 recovery effort was the brainchild of John Chatterton and John Yurga. Their dream materialized into a plan when they noticed the paint that had preserved the wood of the massive helms for nearly five decades was peeling badly. Its protective coating gone, teredos and other organisms would rapidly destroy the twin wheels.

They recorded the location and attachment points of the wheels on video and spent endless hours analyzing the results. A Broco torch, an underwater cutting apparatus, would be essential to separate the helm from its steel shaft. The gunpit overhead complicated the recovery effort, making the lift difficult and allowing the explosive

gases produced by the Broco to accumulate. If a piece of molten slag comes in contact with the accumulated gases (oxygen, hydrogen and carbon gases) an explosion results. Because of this danger they decided to use hardhat, a commercial-type surface-supply rig, for the cutting

Chatterton, a professional diver and experienced with the use of the Broco, would make the cut. Surface-supplied tri-mix 25/25 was his breathing gas of choice. Eleven K cylinders, industrial size gas bottles, of trimix, nitrox, and oxygen were on hand for breathing and operation of the torch.

With their operation planned and the dive team assembled, they set out to recover the wheels. Captain

Bill Nagle was the first team member up to bat as he maneuvered the Seeker over the Ayuruoca until he determined the location of the stern. Carefully calculating the wind and the current he pulled forward and called for the sand anchor to be dropped.

Scope was adjusted until the depth finder recorded the wreck beneath the boat. John Yurga and Per Karlsen had the task of establishing a descent line to the gun platform. Chatterton advised the pair before they splashed over the side: "If you don't see it [the wreck] you need to swim south. But, just follow the north needle on your compass." In response to the raised eyebrows this contradictory advice generated, he explained, "You're going to be real close; with a big chunk of metal like that it doesn't matter where south is—the north needle is going to point at the wreck."

Sure enough, the tie-in team landed in the mud with the wreck nowhere in sight. They followed their north needle to the wreck less than 30 feet away. Mark McMahon, an experienced hardhat diver, supervised Chatterton's life support systems and operated the controls of "the bug," the manufacturer's name for the Broco machine, in response to Chatterton's helium distorted orders: "Make it hot" or "Make it cold."

Indeed, John had reason to be thankful he was using hardhat when an explosion shattered his welding shield. Says John, "I really rang my bell on that one." The team





"I was one happy little hard hat diver," Chatterton said. "I was proud of everyone I was diving with, divers that executed a plan flawlessly."

Chatterton is unsure of the future of the helm, he would like to see it on public display, perhaps rotating through various dive shops. In the meantime the restoration process has begun. Chatterton philosophized, "It will have another life on the surface."

providing photo support found their efforts stymied by abysmal visibility. Yet another team took a turn at pounding out the bolts that held the shaft collar in place.

When each team had completed one dive, the helm remained stubbornly on its shaft; two of four bolts remained. Chatterton felt he would have to make another cut. Yurga was sure he could spin the helm off the shaft without the removal of the collar and its bolts. Yurga prevailed. If he could spin the helm off Chatterton would be able to start work on the second helm.

I followed Yurga over the side; my camera left behind. The visibility was fit for nothing but macro. As I entered the canopy under the gunpit Yurga thrust a crowbar into my hands pointing at where to pry. As I struggled for leverage he turned the wheel. Once around, then again, the pry-bar lost its purchase and I shoved it back into place. Around and around went the wheel. Our regulators bubbled furiously and the pry-bar slipped again and again. Then without warning the helm tumbled free. I groped for the lift-bag as Yurga placed the lifting strap. He opened a tank under the lift-bag and we watched it fill nothing happened. Two-hundred and fifty pounds of lift and the helm didn't budge! We attached another small bag and filled it, slowly, reluctantly, the helm came to attention resuming the upright position it had on its shaft.

Our gas supply (nitrox 25) dwindling and our decompression obligation mounting, John and I realized that it would be another team that would see the helm leave the bottom. Indeed, Ginny Moran and Drew Brengal completed the lift with the addition of a second 250-pound lift bag.

Chatterton was still decompressing after a recon dive to the second helm when the first helm reached the surface. From his vantage point under the boat he could see the wheel dangling below the lift bags.





#### TOM MOUNT'S

#### **Quality Diver** Education

International Assoc, of Nitrox Divers, National Assoc. of Cave Divers and NAUI certification

With 33 years of experience, Tom Mount is internationally known and respected as a diver. author, photographer and educator. He has logged 10,000+ dives including 2,000+ cave dives, 2,000+dives below 200 FSW, 800+ wreck dives. with many being sturation dives. This experience insures a comprehensive quality training program.

#### FEATURING DIVER TRAINING IN:

- · Cave Diving
- · Trimix
- · Wreck diving
- Photography
- Video

- · Underwater Modeling by Patti Mount
- · Open Water through Dive Master

#### Join us on exotic dive trips!

IF EXPERIENCE AND **OUALITY TRAINING ARE IMPOR-**TANT TO YOU, CALL 305-754-1027

OR WRITE: 1545 N.E. 104 Street Miami Shores, FL 33138

## Advanced Diver



- **Deep Diving** (Progressive Levels to 220 isw)
- Recompression Chambers
- Dive Accident Management
- Mixed Gas & Nitrox
- Instructor Training

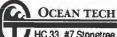
A proven commitment to safety, planning, operations and educational excellence.

Professional training and systems with experienced staff · Fully insured · Our Florida facility offers diverse site conditions on excellent deep wrecks with consistent visibility and warm water • Air conditioned classrooms . State of the art equipment . Chamber dives standard for pre-dive evaluation

Course Director: Bret Gilliam • 22 years experience with military/commercial/scientific/technical diving

training · World depth record holder (452 fsw) · Author (Deep Diving, Mixed Gas Diving) . Member Board of Directors for NAUl and IANTD • Over 12,000 dives logged career.





HC 33, #7 Stonetree Rd. Arrowsic Island

Bath.ME 04530

207-442-0998 fax 442-9042

## STRETCHING

by Stephen J. Lombardo, MD

Imagine that you are on your favorite live-aboard and the sun has just come up. One by one, divers will instinctively demonstrate the kind of stretching that will ready them for the active day ahead. Muscle, tendon, ligament and joint structures are flexible, and can stiffen, limiting range of motion and circulation. Stretching allows a longer range of motion and more flexibility, allowing for the ability to contract additional muscle fiber thereby, being more effective both on land and in the water. Stretching can help prevent sprains and strains.

Since we find ourselves stretching instinctively anyway, let's check out a few stretches that the pros use to make our diving safer and more effective. Stretching requires slow, gentle movements rather than quick, bouncing ones. Each stretch should be held for one minute, remembering that the more time you spend stretching, the more flexible you will become.

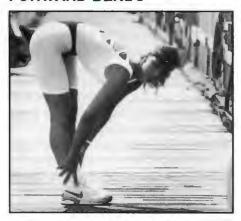
#### SIDE BENDS



Purpose: To stretch the obliques and other muscles at the side of the torso.

Execution: Stand up straight, feet shoulder width apart, and raise right arm over head while bending slowly to the left. Hold this position for 30 seconds, then repeat on opposite side.

#### FORWARD BENDS



Purpose: To stretch the hamstrings and lower back.

Execution: Stand up straight, feet together. Bend forward and take hold of the backs of your legs as far down as possible. Pull gently with the arms, bringing your head as close as possible to your legs. Hold this position for 60 seconds, then relax.

#### HAMSTRING STRETCHES



Purpose: To stretch the hamstrings.

Execution: Place one foot on a bench or its equivalent. Only the back of the heel should rest on the bench, as illustrated. Keeping the back leg straight, bend forward along the raised leg and grab it as far down as possible. Pull gently to get the maximum stretch in the hamstrings. Hold for 30 seconds, then repeat with the other leg.

#### INNER THIGH STRETCHES



Purpose: To stretch the inner thighs.

Execution: Sit on the deck and draw your feet up toward you so that the soles are touching. Grab feet and pull them as close to the groin as possible. Relaxing the legs, drop the knees towards the deck, pressing down on the knees with your elbows. Hold for 30 to 60 seconds, then relax.

#### **QUAD STRETCHES**



Purpose: To stretch the front of the thighs.

Execution: Kneel on the deck and sit back between your feet. With your hands on the deck behind you, lean as far back as possible, feel the quad stretch. Hold for 30 to 60 seconds, then relax.

#### SPINAL TWISTS

Purpose: To increase rotational range of motion of the torso.

Execution: Sit on the deck, legs extended in front. Bring the right knee up and twist so that the left elbow rests outboard of the upraised knee. Supporting your body with your right hand, continue to twist as far to the right as possible, and hold that position for 30 seconds. Repeat with the other side.

### THE ENCHANTED DIVER INC.

The largest International Association of Nitrox and Technical Divers facility in the northeast.

+100 fsw

- · We train all levels of divers including instructors.
- · We fill nitrox, oxygen, tri-mix, heliox and argon .
- Training for Andrea Doria & other deep wrecks.

-150 fsw

The most complete High-Tech Facility serving the entire northeast.

- 200 fsw

-250 fsw

-??? fsw

#### **Training Programs:**

**Nitrox Diver Course:** 

Starts Sept. 26th & Oct. 17th

**Nitrox Instructor Course:** 

Starts Sept. 19th & Oct. 10th

Tri-Mix Diver Course:

Starts Oct. 27th

How deep is your choice. Getting there and back starts with attitude. Ours is simple. Solo. Whether at 100' or 250', you can only depend on yourself. We get you there and back, solo. Training earned, not bought. How deep is your choice. And so is who trains you.

#### Contact Bob Raimo for more information.

259-19 HILLSIDE AVE. FLORAL PARK, N.Y. 11004 TEL (718)470-6858 FAX (516)378-4233



The entire stretching regimen takes a little over 5 minutes. but can make the difference between a challenging dive and an injury. So invest a little time, and reap the benefits. Keep on pumpin'!

Elena Lombardo was photographed on lacation at the Staten Island Yacht Club. Photos by J. Silverstein

## WRECK READING

#### **Ironclad Legacy – Oregon: Battle of the USS Monitor** by Gary Gentile

Sub Aqua Journal was eager to see Gary's latest book on the USS Monitor. This extensive historical text is the most thorough of its kind on the Monitor. Maritime and war history buffs will find Gary's descriptions of the battle between the Monitor and the Virginia (Merrimack) detailed and exhilarat-



ing. Yet the history of the Monitor does not end with the Civil War of the 1800's. A new Civil war begins in 1984 when Gentile sends his first correspondence to the government seeking permission to dive the Monitor. It seems that NOAA had claimed the Monitor as a marine sanctuary and declared it off limits to the American people.

Gary details his six year court battles with NOAA just to dive and photograph the rapidly decaying shipwreck. He prevailed in 1990, and the Monitor became open to those with a scientific purpose. The interweaving of personalities and bureaucracies will leave you wondering how the government accomplishes anything. With never-ending perseverance Gary won his battle to dive, and completed this historical chronicle.

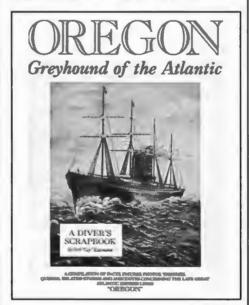
The book contains over 100 color and black and white photographs and illustrations. This 280-page hardcover volume is essential for every diver's library. Available at your local dive store or directly from Gary Gentile Procluctions, P.O. Box 57137, Philadelphia, PA 19111 \$25.00 =

## **Greyhound of the** Atlantic by Herb Kaasmann

"A DIVERS SCRAPBOOK"

Finally. A book about our favorite wreck. "Cap" Kaasmann's "Diver's Scrapbook" is a handsome compendium of the late great Atlantic Express liner is a labor of love that will see many cover-to-cover readings.

Chock full of historical photos, line-cuts, and current diver and artifact shots, "Greyhound of the Atlantic" fills a long-felt need. Kaasmann's narrative descriptions sparkle with enthusiasm and adventure...they are full of the romance we want in our dives.



1993 has been a particularly good year for Oregon dives. Some wonderful artifacts have been recovered, highlighting the attraction and history of the liner.

This is the book we wish we had when we first encountered this marvelous wreck. We envy those about to discover her mysteries. In fact, let's check the boat schedule, we just might be able to squeeze in another few dives ....

Available from: Old Walrus Productions, P.O. Box 665 Navesink, N.J. 07752 \$19.95 plus \$2.00 postage.





SUBSALVE PROFESSIONAL LIFT BAGS. ENGINEERED FROM THE BOTTOM UP.

The world's best underwater lift bags, available in lift capacities from to 50,000 lbs.

call or write: SUBSAIVE USA, RO. Box 9307,

### TAKE THE CHALLENGE THE HARVEY CHALLENGE

ARE YOU GOOD AT CATCHING LOBSTERS?

Harvey thinks he's better, and is willing to put up \$5,000. call for details

#### HARVEY'S DIVING CENTER

3179 Emmons Avenue Sheepshead Bay, Brooklyn (718) 743-0054 Serving divers for over 30 years.

## **NIGHT HAWKS**

by Kirby Kurkomelis

The boat was alive with electricity, fire in the sky, blazing heat this August evening. Sweat running down foreheads, muscles bulging, pumped by dive bags. Sweat that caresses the bodies of the Nighthawks, determined night divers with a thirst for lobsters and the unknown. Diving into shadows, deep into the bowels of a wreck, in search of crunchy critters, lobsters.

It was Wednesday night, our group motored out of Sheepshead Bay, Brooklyn on the dive boat *Jeanne II*. The temperature, a steamy 89 degrees, the water a cool 62. No dry suit this night for me.

The team was setting up their equipment, checking their gear, back-up lights and light sticks. Divemaster Lou Schreiner gave the dive briefing and layout of the site. The team was scratching notes on their slates. In the corner I sat eating cold lobster tail and eyeing the exit gate.

One by one the Nighthawks opened their wings. Cool water engulfed my body and spirit. Hundreds of small shrimp with red and green florescence guided my bright beam to the wreck. A few souls flicker in the dark, like fire-flies looking for the nest. My friendly light lit up the runway.

The USS Turner was a destroyer sitting at anchor six miles northeast of Sandy Hook, New Jersey in Ambrose Channel. Early in the morning of January 3, 1944, the Turner erupted with a massive explosion that was followed by fire and exploding shells. Smoke and fire everywhere, crewmen injured, fire hoses turned on. The crew fought on, but it was futile. Flames leaped above the deck in a volcanic effect. The fuel ignited; numerous explosions. Two hours later the she capsized and disappeared below only to be visited by fishing boats and scuba divers.

The Turner was 350 feet long by 36 feet wide and is now broken in many pieces due to the explosion and wire dragging by the Army Corp of Engineers. She makes a great home for large lobsters, blackfish, sea bass, small tuna, hake, codfish and many more.

The anchor is tied into the boilers, the highest point of the wreck, about twelve feet off the bottom. The visibility is about 30 fsw. I remembered what Captain Frank Persico told me many years ago. "Search

where the anchor is tied into and you will always find lobsters or artifacts."

On top of the boilers, anemones reached out for my lite beam, probably thinking it was morning. I signaled to

my dive buddy Rafael to search the large boiler ports for lobsters To my surprise there were lobsters in each of the openings. One by one I filled my bug bag with these large critters. In the last port there was a very large lobster who went deep into his labyrinth.

We continued on, passing hundreds of feet of copper wire. Bergalls fed on the heavily encrusted barnacles that embraced the twisted plates. Sharp edges at each turn with a two knot current pushed us into the wreckage.

Above us a school of herring float motionless guarding the *Turner*. Diver lights flicker in the darkness, wolf-head eels look for a few fingers to munch on. Artifacts like portholes and china may be found by the diver who digs around the site. Swimming east to west along a pile of wreckage, my dive buddy points to a colony of sea urchins, always on the alert.

We were 35 minutes into our dive when we headed back to the boilers and that huge lobster. Swimming up without banging my body on the boiler, I signal to my buddy to flash the light back and forth, so I could get close to the hole. Shining a light directly into the bug's eyes will send him back deep in the hole. I could see the lobster's antennas. Being very careful, I moved in.

With a flash of sand behind my hand I reached deep into the den. My hand was on top of the lobster's shell. My dive partner had the light focused on the entrance. The lobster was trying to go deeper into his lair. Suddenly the lobster started pinching my wrist. My arm was in the hole up to my shoulder straps. Finally my hand was behind him, a quick pull, he was mine. Rafael, pulling out his bug bag, realized it was to small for the lobster. The lobster, reaching out his mitts, was looking for some fingers to break. But he fell into my bag.

We started up the anchorline, holding my catch close to my heart. A little voice told me to thank Frank for my nice dinner. Back on board all the Nighthawks returned to the nest.



#### TECH DIVING OUTFITTERS

\*Advanced Class Begins Sept. 23

\*Fullface Communications - Drysuits TechRigs - Scuba - Snorkeling Equipment

\*Enriched Air Nitrox Class Sept.11

\*Extensive Wreck Dive Trip Schedule

Stay Warmer at Depthl Consider our Argon Drysuit Inflation System



island scuba centers, inc.
ANDI Facility #001

74 Woodcleft Ave. *(The Nautical Mile)* Freeport, New York 11520 516-546-2030 fax 546-6010

#### **DIVE BOAT SCHEDULES**

#### CONNECTICUT

#### Orbit Diver II

Capt. Noel Voroba (203) 333-DIVE Bridgeport

#### **FLORIDA**

#### Key West Diver

Capt. Bill Deans "High Tech" Dive Center (800) 873-4837 Dive Year Round Key West

#### Little Fantasy

Capt. Bob Sheridan High Tech Diving & Training Deep Wracks & Reefs (305) 763-DIVE (305) 792-3985 fax Fort Lauderdale

#### **MASSACHUSETTS**

#### Grey Eagle

Capt. Eric Takakijan (508) 362-6501 Bourne Marina Yarmouthport

U-853 2 USS Bass

6-8

3-4 U-853 Suffolk U-853

11 **Aquarius Party** 

12 Wm. Cowin

17 G.K.B. & Pottstown

Pinthis

19 Pinthis

John S. Dwight 24

25 Port Hunter

26 Plane Wreck

2 Wm. Cowin Od

USS Yankee 3

G.B.K. & Pottstown

10

Wm. Cowin

17 USS Yankee

June K. 23

Wm. Cowin

Port Hunter

Wm. Cowin

#### **NEW JERSEY**

#### Blue Fathoms

Capt. Tony Donetz (908) 369-2260 Daily, Weekends & Evenings

#### Deep Adventures III

Capt. John Larsen (908) 270-8888 Weekend & Night Dives 78' A/C and Heat Point Pleasant

#### Notorlous<sup>2</sup>

Capt. Tony Chenko (908) 458-3472 33' Custom 6 Pac Wehrlen Bros. Marina, Brick

> Captain's Choice 5 USN Algol

Captain's Choice

Captain's Choice 12

Benson & Pinta Captain's Choice 18

19 RP Resor

Captain's Choice 25 26 Imaculata

Captain's Choice Oct 2-3 9-10 Captain's Choice

#### Sea Lion

Capt. George Hoffman Capt. Kevin Brennan (908) 528-6298 Weekday Nite & Weekend

#### Venture III

Capt. Paul Hepler (908) 928-4519 Shark River Inlet

#### **NEW YORK**

#### Charioteer -

Capt. Lawrence Davis Capt. Gregg Fishman (718) 263-1215 Lindenhurst, LI 6 Pac

#### Defiance

Capt. Mike Carew (718) 885-1588 Dive the L.I. Sound City Island

#### Eagle's Nest

Capt. Howard Klein (516) 735-2254 Point Lookout / Key West

Sept 4-5 USS San Diego

Virginia

Stolt D'Agali

Lizzie D 12

USS San Diego 18

19 Asfalto & Bald Eagle 25 Lizzie D

Valerie E & Pipe Barge

2 Oregon

Pinta & Bald Eagle

USS San Diego 10 Valerie E

10 lberia

USS San Diego 16 17

Lizzie D RC Mohawk

Fran S & Pipe Barge

USS San Diego

31 Ambrose Lightship

#### Jeanne II

Capt. Bill Reddan (718) 332-9574 Call for afternoon and Nite dives Sheepshead Bay, Brooklyn

Local Lobster

Pipe Barge

Mystery Wreck

Moonlight Cruise

USN Algol

8 Local Lobster

Immaculata

Liberty Ship 15 Local Lobster

18 Lizzia D

19 Pilot Ship

lberia 26 Cindy

Oct 2 No Name Steamship RC Mohowk

10 Keagon Tanker

10 Turner

Lizzie D

17 **Bald Eagle** 

Asfolto

Harvey's Woody

Valerie E

Captain's Choice

Sea Hawk

Capt. Frank Persico (718) 279-1345 Capt. John Lachenmeyer

(516) 499-9107 Wednesday & Weekends Freeport

#### Shearwater II

Capt. Jim McKov Capt. Tom Conlon (516) 242-0529 Fishing & Diving Charters Captree Boat Basin

#### Southern Cross

Capt. Phil Galletta (516) 587-3625 Babylon Village Dock

> USS San Diego Reggie

USS Son Diego

USS San Diego Kenosha

Reggie

USS San Diego

Hylton Castle USS San Diego

3 USS San Diego

10 Hylton Castle

USS San Diego

USS San Diego 24 USS San Diego

31 USS San Diego

#### Wahoo

Capt. Steve Bielenda Capt. Janet Bieser (516) 928-3849 Captree Boat Basin

1 Pinacles & Lightburn

2-3 U-853 USS Bass & U-853

USS San Diego USS San Diego

Lakeland Scuba

USS San Diego USS San Diego

USS San Diego USS San Diego

USS San Diego 25 USS San Diego

USS San Diego USS San Diego

USS San Diego

10 USS San Diego

USS San Diego

Oregon

USS San Diego

USS San Diego USS San Diego

USS San Diego

#### NORTH CAROLINA

#### Margie II

Capt. Art Kirchner (201) 361-3018 Cape Hatteras

#### Scuba South I & II

Capt. Wayne Strickland (919) 457-5201 Year Round Diving Southport

#### RHODE ISLAND

#### Thunderfish

Capt. Bill Palmer (203) 269-0619 U-853 & More Rhode Island & Conn.

#### **VIRGINIA**

#### Sundowner

Capt. Nike Seamans Capt. Trueman Seamans (804) 481-7136 Chesapeake Bay Diving Virginia Beach

> **Call For Reservations** Certification Cards Required

## Subscribe to the SUB AQUA JOURNAL

Enter my subscription for □ 1 YR. \$21.95 or □ 2 YRS. \$34.95 Send check or money order to:

Name		Phone( )	
Address	City	State	Zip

Sub Aqua Journal 750 West Broadway, Long Beach, NY 11561

## LOCAL HEROES - SUMMER 1993



Captain Phil Galletta and friends dive the USS San Diego.



Captain Steve Bielenda places a commemorative wreath on the USS San Diego in honor of those who lost their lives during her sinking.



Friends spend a night on the Oregon.



Jim Cleary and Doug Kitchen dive the Oregon.



Aqua Woman 1993 aboard the Eagle's Nest.

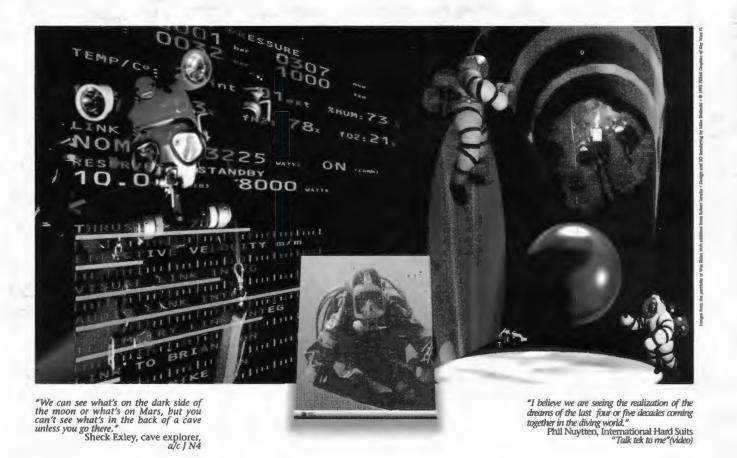


Chris Murray aboard the Jeanne II.



on the Moyer Doria Project.

Local Heroes is where you get to see your friends and make new ones too. Send in your photographs and join in on all the fun! Rhode Island's Billy Campbell



Whether you're a diving professional, serious amateur or just interested in the exposure, the 1994 tek Conference will take you to places you've never been before. From some of the most intriguing underwater projects on the planet to the latest diving methods and technology, tek will take you where you want to go.

Organized by aquaCorps: the journal for technical diving, conference session tracks will explore the specific needs and interests of the mission-oriented dive communities. Conducted by individuals at the forefront of their fields, tracks will include; Exploration, Imaging & Photography, Rescue and Law enforcement diving, Technical training and operations, and Commercial and military diving. There's even a track for individuals just getting started in technical diving who want to know more. And that's just the beginning.

Go Where No One Has Gone Before





The Emerging Dive Technologies Conference

NEW ORLEANS USA 9-11 JAN, 1994

SPONSORED BY

Dive Rite Mfrg • Scuba Times Underwater Tech • Viking Hruska & Lessor Fasten your harness. tek hands-on technology clinics and exhibits will take you fro'n today's tools to the cutting edge of diving technology and beyond. Next generation closed and semi-closed circuit systems, trimix and enriched air nitrox workshops, portable chambers, full face masks, communications, active thermal systems, dive computing, imaging & mapping technology, one atmosphere diving systems, heads up displays, wearables, and a virtual reality swim-through that will leave you reeling for more.

Receive a free subscription to Scuba Times and Underwater Tech. Special conference rates at the Marriott Hotel. To register by credit card: call 301.571.1817, fax: 301.571.1815, or write: 9650 Rockville Pike, Bethesda, MD USA 20814. For other orders and information: aquaCorps, PO Box 4243, Key West, FL USA 33041, p: 1.800.365.2655, f: 305.293.0729. For vendor exhibit space contact The Tech 1.800.926.8045, f. 407.288.0220, 3415 SW Canoe PL, Palm City, FL USA 34990-1830. International inquiries: contact your country aquaCorps dealer-see a/c Journal for listings. Make it so.