

# undercurrent®

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THE PRIVATE, EXCLUSIVE GUIDE FOR SERIOUS DIVERS

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## The *Tristar*, Sulu Sea, The Philippines

-- *Before It's Too Late*

Dear Reader,

Two major boats ply the waters of the Philippines: the *Tristar* and the *Lady of the Sea*. By August, we had a review of each in hand ready for publication. Serious problems were reported with the *Lady*, so before carrying the story we made a few calls. More about that later. First, the *Tristar*:

\* \* \* \*

"How 'bout the Philippines?" I asked. "Update your will," she responded. She was not the only one concerned. Close friends presumed my desire to head to the Philippines for an extended dive vacation to be little more than a thinly veiled death wish.

The Philippines is far more calm than the U.S. public seems to believe. For sure, there is political unrest. But the threat to tourists seems minimal if reasonable precautions are observed. The Philippines is a fascinating country with a beautiful landscape, friendly people, incredible historical landmarks ... and tremendous diving. But the only way I could get my spouse to come alone was to agree to a stopover in Hong Kong.

Having never been disappointed on a See and Sea-sponsored trip, I selected the *Tristar* as my floating home. Arriving in Manila after a stopover in Hong Kong, we were promptly met by personnel from Sharp Tours, our See and Sea-arranged host while in the Philippines. Sharp did a smooth job coordinating all travel, transfers and hotels. After a day of touring and an overnight stay at the Manila Hotel, once home to General Douglas MacArthur, we flew to Puerto Princess and were soon aboard the *Tristar* sailing for the famed Sulu Sea.

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The 12-hour crossing proved painless. A 130-foot motor yacht, the *Tristar*

handled the overnight trip with ease and in relative comfort. First stop: Caluso Island for a couple of warm-up dives. While I thought the dives were good -- a variety of nudibranchs, clowns and tridacha clams -- I quickly downgraded them when I sampled the spectacular waters of the next spot, Cagayan Island. Endless vertical walls were encrusted with everything imaginable, including many varieties of tunicates and huge colorful soft corals, providing for great macro and close-up photography. Fish life was abundant: clown triggers, moorish idols, various angels and butterflies, several varieties of puffers and clownfish, and a few sharks for fun.

It was during these first dives that the crew of the Tristar showed its colors. Divers never needed to lift a finger; the crew learned each individual's gear, always saw that it was ready, and loaded it aboard the skiffs used to reach dive sites. Leaders Karina, Jet and Norman were each skilled and knowledgeable about the dive locations. They carefully logged each diver in and out of the water and were always ready to dive if anyone wanted a buddy or a guide. And catch this: for 19 passengers the full crew, including deck hands, skiff tenders, cooks and food servers, numbered 20.

We next moved to Manukan Island for two dives, then to Cavili Island, a small mass surrounded by a tremendous wall, for the best diving of the trip ... and my first serious encounter with the much-advertised pelagics of the Sulu Sea. On every dive, I encountered sharks, mantas, schools of barracuda, and turtles. One particular dive began as a rather normal wall dive until dusk approached, when an unusual frenzy began. Of the hundreds, perhaps thousands, of fish present, each one was either chasing or being chased. I watched as schools of jacks, unicorn and barracuda pursued one another at great speeds. Dozens of sharks crazily crisscrossed through the area and well over a hundred barracuda literally encircled one diver. Could I ever imagine more thrilling diving?

Our next stop was the North end of Tubbataha Reef and a sheer wall swept by moderate to heavy current and lots of sharks and mantas. On one dive, among rich soft corals and a wide variety of tropicals, three mantas feeding near the surface ignored our flashing strobes. I was disappointed that this single location was our only exposure to the widely proclaimed Tubbataha reef. I was told by our dive masters that the other locations we were visiting were superior to Tubbataha. Then why all the advertising, publicity and build up for Tubbataha? Makes no sense to me.

Each day I logged up to 6 dives and needed plenty of personal fuel. The excellent meals, served buffet style, consisted of chicken, beef or fish with unique sauces and was always accompanied by the national food of the Philippines -- rice, plain or garlic. Feasts were bountiful, always accompanied by salads, fresh mangoes and papayas, and deserts. In the late afternoons, after a couple of post-lunch dives, I sat at the outdoor bar with a tall cold one, and an array of snacks provided by the kitchen. Such luxury.

Our last stop was Basterra Island, where the lush wall started as shallow as 10 feet. At 90 feet, I was greeted by the now common clouds of tropicals and

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brilliant walls of soft coral. Then the parade began. First came the gray tipped reef sharks. After an unsuccessful effort to jockey into position for photos I continued along the wall to meet several playful mantas, which I could easily photograph. Happy enough to die right there, along came a school of black durgon, followed immediately by a school of barracuda. I had a couple of frames left for shots of a sizeable turtle which swam by upon when I ascended.

Such super diving is tempting to all of us, but I must emphasize more that only experienced divers should venture aboard liveboard diving -- and let me arbitrarily define experience as a minimum of 50 open water dives. Here's why.

Halfway through an easy afternoon dive at Basterra, the current suddenly increased, sweeping divers in every direction. So dramatic was the change that it seemed at first as if some science fiction horror had been created (I was to learn later it was an unpredicted tidal chance, exaggerated by a full moon).

One diver was pulled down in a whirlpool to 160 feet before he was able to extract himself! At the surface, divers were being whipped

around like leaves. The Tristar crew reacted immediately. Skiffs were quickly dispatched to pull divers from the water, while one crew member stood on top of the boat to direct the skiffs to the floundering divers. I enjoy current rides. This was no fun, at all. As for the diver pulled to 160 feet, the combination of the experience and his EDGE got him out of the water safely.

Indeed, Basterra provided excellent diving. But, we dove this location for the last two days of the trip. My idea of a liveboard is to keep moving and explore new underwater frontiers. Yes, one may have to trade bottom time for commute time. A couple of times I would have made that trade.

Night dive locations were selected for convenience and safety of overnight mooring. They never measured up to the lush walls we encountered during the day.

No matter how many dives the most ardent diver makes, he will still spend 75% of his day topside. A dog of a boat can ruin a trip. No need to worry about that with the spacious and well organized Tristar. Cabins were decent-sized, with more storage room than I've found on other liveboards. Two staterooms, normally reserved for the captain and the owner, if he is aboard, are made available to couples -- reason enough to bring a lover or spouse. (The captain did a fine job manning the vessel, but kept pretty much to himself). A large salon equipped with a stereo and VCR/TV, became headquarters for camera repair and maintenance. Each day divers had problems -- including flooding -- and one guest aboard, a divemaster at Grand Cayman, graciously helped each diver until he had so much work he barely had time to dive. He then gave those who needed it brief instruction on how to take their camera underwater without flooding it -- it's amazing how many people can spend so much for photography gear and not know the first thing about caring for it.

The Tristar was originally built as a Japanese ferry -- which seems to explain the low overhangs throughout the boat. With most of the divers present over 6'2" tall, the overhangs provided as many headaches as did the bartender's Wing Wang cocktail. For those having to recover from a headache, the air conditioning worked the entire trip -- a welcome relief from the tropical heat.

**Star Chart:  
Rating The Tristar**

Accommodations	★ ★ ★ ★ ★
Food	★ ★ ★ ★
Diving for Experienced	★ ★ ★ ★ ★
Diving for Beginners	don't go
Money's Worth	★ ★ ★ ★ ★

★ poor, ★★ fair, ★★★ average, ★★★★ good, ★★★★★ excellent

I must comment on the devastation of the reefs by destructive Filipino fishing practices. While dynamite fishing is in fact outlawed by the government, it is regularly practiced. Many of the reefs we dove had been scarred by dynamite explosions. If the government wants to maintain the tremendous underwater resource they have, they must take more stringent action to curb the dynamiting which is demolishing the reefs of the Sulu Sea.

So forget your concerns about the Philippines' politics. Worry instead about the destruction of the reefs. If you want to see those remaining in their pristine state, you had better get there sooner -- rather than later.

Divers Compass: A trip on the Tristar is \$1600; figure another \$1400 for airfare from the West Coast, with stopovers in Tokyo, Singapore or Hong easily arranged. . . . See and Sea only travels during the best weather (March, April and May) and space is available. . . . Bring all the film and gear you need; there are no boutiques at sea. . . . E-6 processing is not available. . . . give yourself a couple of days at the beginning of the trip to tour the beautiful countryside and mitigate the jet lag. See and Sea (800/DIV-XPRT; 415/434-3400).

-- J.V.

P.S. On our trip on the Lady of the Sea, our reviewer found that the diving and the crew of the Lady remained super -- as it was when we first reviewed her in 1983. But the boat need serious maintenance and seemed unsafe. Here's what our correspondent reported from two separate trips: "Last year after our reviewer returned, the Lady went into drydock for six weeks. By telefax this is what the owners report: "In 1986 the two props fell off (we were told they had been loosened by 'sea pirates' who planned to recover them later) so we lost two days of diving at Tubbataha Reef. This year the generators gave out (thankfully, on the last day), so we had no air conditioning, lights, or water for showers. Only one 20-person emergency inflatable life raft was on board for 20 guests and 12 crew members. The two skiffs leaked badly. The fire hoses and axes had been removed, along with the valve handles on the fire lines. There were no navigational aids, not even a sextant. (In 1986 we actually got lost at sea for two days cruising aimlessly!) Broken sinks and toilet seats were amateurishly patched with epoxy. The heads were difficult to flush without assistance from extra pails of water. During infrequent rains, water would drip from cabin roofs. There were no washcloths or bars of soap. The air conditioning for the cabins was only on at night and for the dining rooms, only during meals. The lower deck cabins have no ventilation -- the portholes cannot be opened."

After our reviewer returned, the Lady went into drydock for six weeks. By telefax this is what the owners report: "Aside from the requirements of the Philippine Coast Guard for hull and underwater inspection, she has undergone extensive renovations such as complete port hole changes, wall paneling changes, mattress and china changes, new carpeting in all cabins, new compressors and outboard engines. Last year's passengers may have concluded that since the Lady was not properly painted in the exterior and did not have new mattresses and linens, she was run down. Since we were expecting a drop in tourists, the vessel had not been applied proper cosmetic maintenance, although safety measures have always been the priority. To prove this, we were the only dive vessel which did not encounter an accident. We would rather have a not so good looking vessel than a vessel that has undergone cosmetic maintenance, but has very bad hulls and recruited employees on board to cause unsafe diving expeditions."

Our reviewer had no complaints with the diving and the crew, so hopefully the Lady is now ship shape. We'll report when we hear from our readers.

C.C., travel editor

## Cheez Whiz Binds Journalists' Intestines

A story admonishing divers who feed Cheez Whiz to fish has appeared in at least three dive publications in the past sixty days.

The story arrived through the mail on a dive shop letterhead. While in Bonaire, the sender claimed, "Captain Don and other divemasters" urged people not to feed fish Cheez Whiz (it's processed cheese under pressure in a can), because it "is too concentrated and binds in the fishes stomach and intestines preventing normal body functions and subsequent slow death."

Good environmentalists that we are, we were ready to publish the story, but not before following our normal procedure to verify it by calling the sources.

Captain Don Stewart told us that he had never issued such a proclamation. "I've noticed Cheez Whiz in divers bags, but couldn't figure out what it was for. I never paid much attention to it."

Knowing that the good captain might pull a leg if he could reach it, we contacted Al Jardine, the Diving Operations Manager at Flamingo Beach. Jardine didn't know how the story got started. "The first time I heard of a problem on Bonaire with Cheez Whiz was when I read it in a magazine." Peter Hughes told us the same thing.

If no one knows about it on Bonaire, is it a problem? The logic of us backroom naturalists would make us want to believe that feeding such processed crap to fish could only be unhealthy for our finny friends.

However, Bob Lea, marine biologist with the

California Department of Fish and Game, could not see what harm Cheez Whiz would cause. To determine that, he said, it would require laboratory testing. "Of all the things that pass through the fish, it is unlikely that Cheez Whiz would do any real damage."

Another marine biologist, Harry Ward, who is now diving operations manager of Divi Nassau (previously assigned to Bonaire), told us that he couldn't see the potential harm to specific fish, "but there might be some long term effect on the eco system. Since fish prey on each other in their search for food, the ease of getting food from divers may change the feeding habits of the fish and create a dependency upon food provided by divers."

We've never supported the esthetics of feeding Cheez Whiz to fish and don't even like seeing fish fed by divers. It distorts their natural behavior and creates a Sea World-like setting. Furthermore, as fish become more used to the food divers provide, they can become aggressive in their demands. Ward said, "this has led to a few instances where divers have been bitten while feeding their friendly moray."

If there is evidence that Cheez Whiz is harmful to fish, let it come forth. In the meantime, let us implore our fellow journalists to check out the "scientific facts" that come in brown envelopes and get slipped under their doors. Once in print, such notions take on a truth all their own.

## Reports From The Readers: Part IV

**JAMAICA:** It will be awhile before we have complete information about the affect of Gilbert on Jamaica. It's visited infrequently by serious divers since the diving isn't particularly good -- but the island itself is beautiful, and, we understand, regenerating rapidly. Roy Palinkas (Ardsley, NY) says of a trip last year to the Club Caribbean (which was damaged seriously by Gilbert): "Marine life not as sparse as I had heard. Decent wall dive -- plenty black coral, sponges, etc. Definitely worth a couple of days of diving. Three out of four dives were coincidentally right on top of fish traps; one contained a beautiful queen angel. It broke my heart." (809/973-3509) . . . Bob Wilbur (D.C.) says of the Trelawny Beach Hotel: "No large fish and even the small aquarium fish are less frequent, but Trelawny is a wide bay with coral-covered volcanic fore and reefs of adequate variety with good and varied sponges. Under ledges and tunnels in only 25 feet of water 5- to 6-foot nurse sharks are frequently seen. The dives are carefully controlled by cautious but good dive masters; more adventuresome divers would be frustrated." . . . William Dee (Lake Ariel, PA) and Al Pfitzmayer checked out several shops including Seaworld. "They gave us something that was missing on the last visit to Jamaica -- "fish life" -- in fact, they were the only dive operation that made sure we saw an abundance,

including large crab, lobster and spotted eel. They showed us a great night dive and a cave dive and several wall dives during which we saw several large groupers." (809/973-2346) . . . Douglas R. Howard (Melrose, MA) stayed in Ocho Rios at the Boscobel Beach Hotel, the old Playboy Club, untouched by Gilbert. "Now a family all-inclusive resort designed for small children through adults. The hotel, meals and accommodations were excellent, superior to most in the Caribbean. Diving catered to resort course divers; we were constantly supervised. Dive master and boat operators were competent, knowledgeable, and friendly. There was no need to carry any gear. Morning dive limited to certified divers and the afternoon dive involved the resort course divers. Fifteen years ago I saw large Elkhorn and Staghorn coral with large number of tropical fish. The dive master explained that 5 years ago, a severe hurricane had damaged the reef heavily. Consequently little Elkhorn and Staghorn remain. However, there were large plate coral formations and coral heads leading to many gullies and small cave-like cuts. Soft corals and gorgonia were colorful and plentiful and the wall dive spectacular. We did encounter small schools of 8- to 10-inch variety. Majority of the dives had only small tropicals, the natives having fished the area quite heavily and spearfishing being abundant in Jamaica. We watched several young Jamaicans spearfish small squirrel fish no more than 4 to 5 inches in length, if that."

JORDAN: Gena K. Gorrell, Toronto, says of the Hotel Aquamarine, Aqaba and her trip last November: "Two shore dives a day (the hotel has a dive boat on order) and access was easy. Great deal of coral, particularly soft coral, though not as colorful as in the Caribbean; abundant fish life, including angels and parrotfish, but fewer large fish than in the Caribbean; quantities of lionfish, a number of stonefish, and occasional turtles, barracuda, small jellyfish, and moray. Full suit is a good idea -- water temperature is 20U winter and summer, and there are plenty of urchins in the shallows. King Hussein (a diver himself) is working hard to push Aqaba as a resort, and when boat-diving and night-diving are standard, it will be even more appealing."

PAPUA NEW GUINEA: PNG is the chichi destination for divers these days, not only because of the extraordinary diving, but also because of incredible land tours among the PNG tribes (see Undercurrent, August, 1987). The Telita, Bob and Dinah Halstead's 65-foot, all-wood, air-conditioned, 10-passenger liveaboard is the creme de la creme of PNG diving, and probably is already booked well into 1990. Says J.D. Lakin (Oklahoma City): "Incredible WWII wreck diving; great for shark watching. Definitely not for beginning divers. The Halsteads are wonderful hosts, providing a number of fascinating excursions into the native villages and jungles." (See and Sea/800-DIV-XPRT) . . . James A. Pearre (Pontiac, IL) visited the Madang Resort Hotel. "Australian dive concession operators, Garry Rowland and Nina Packer, are excellent. (Hotel is jumping off place for cruises of PNG's fabled Sepik River.)" But Americans and Canadians traveling this far, you would be disappointed by only diving here. . . C.W. Cassidy (Dallas) took the Australian boat Reef Explorer: "Diving magnificent, lots to see. Rained every day and cloudy, therefore visibility down. Lots of sharks. Boat sadly in need of repair. Food not good. Heads smelly. Captain didn't know dive spots and crew not well trained."

PHILIPPINES: Jim and Ann Falk (Chagrin Falls, OH) visited the Bohol Beach Club and reported: "Good spot for experienced divers and photographers. Dive boats far above average for that part of the world, accommodating 8-10 divers tops. Had 14 dives in 7 days, only 2 or 3 marginal. Excellent for sea snakes and morays, but not many pelagics. Fortunate in having good weather for July which is in typhoon season."

PUERTO RICO: Steve Handelsman (Bethesda) went with Dive Cuda on Culebra: "Sleepy island accessible from San Juan and St. Thomas via air. Great shallow (40 feet or less) reefs. No walls or exciting topography. Few public accommodations." . . . At La Parguera Lajas, Handelsman stayed at the Parador Villa Parguera and dived with the Parguera Divers Training Center, "Dove wall 5 miles south of La Parguera. Area on windward side with 5-8 foot swells the day I dove. Wild ride in 17-foot whaler! Once in, 91U water with no current. Sheer wall at 85 feet with black coral & blacktip sharks. Very nice dive. Hairy exit from water and hairy ride back. Great stories from this one!" (809/899-3975; 800/223-6530) . . . Sandie Tillotson (Sandy, UT) tried "The Reserve" at Playa Del Mar. "Only one tank dives (\$38). Lots of juvenile fish. Got bumped from a dive reserved one month in advance due to the appearance of the 'Sea Fans' video crew. I guess we'll see the dive we missed 'in the movies'."

Reader Emiliano H. Ruiz (Hato Rey, PR) writes that "Most divers visiting Puerto Rico are unaware of the Island's best diving location: Mano Island, a 'piece of rock' located in the middle of the passage between the Dominican Republic and Puerto Rico. An uninhabited small island, it's the 'Galapagos of the Caribbean.' Many unusual plants and animals are found here (e.g., pre-historic iguanas) and wild pigs and goats can be hunted during a short season. The diving is superb, with walls that rival those of the Cayman Islands. Marine life is abundant and, unfortunately for some of us, spearfishing is allowed. The walls are so close to the shore that you can see dolphins, big sharks and an occasional whale while diving. There are no hotels nor inhabitants. Only a transient group of Rangers from the local Natural Resources Department. The only way to dive this very primitive location is by joining the occasional excursions organized by a local dive shop: Scubacentro. The low fee only includes transportation, water and ice; the rest is provided by the participants just as in any typical camping. Little Cayman looks like a metropolis in relation with lovely Mona." (809/781-8086)

Cozumel Update: Regardless of the pleas by operators to come visit and the claims that everything is up to snuff, it just ain't so says a couple of our readers who have been there. This is what Tom Brownell of Arlington, Texas reports after a three day pre-Thanksgiving visit. "Our first dive was in the area of La Ceiba/Casa del Mar beach. Entry is difficult because many of the concrete piers were severely damaged and the entry points are cluttered with far more rocks than before. The plane has moved and isn't clearly marked. Closer to the pier the bottom is noticeably different with much more debris and few fish. . . . What a change at Columbia Reef! There is sand everywhere with a mossy green algae growing in unlikely places. It looks like a poorly cleaned swimming pool. The bottom profiles differ due to the build up of sand. Most of the sponges are gone and in total it doesn't represent the old Columbia. Still good diving with a great wall and dramatic contrasts, but the storms have clearly left their mark. . . . Responsible operations now hesitate to dive the shallow reefs. For those just practicing skills and liking to float along above the sand and rock over what used to be a reef, welcome to shallow diving in Cozumel. But for the more experienced diver, especially one using a computer, the NEW Cozumel may be better than ever since you have to go deeper on the second dive. So on our second dive, it was off to La Perla, with a profile of sort coral and sand, much like underdeveloped Roatan. Santa Rosa Wall has always been a classic and we're were not let down. The big groupers, jacks, lobsters and others were there. The wall was still awesome and immense. Some sand damage was evident and the strong current damaged some coral. But when you dive Santa Rosa it's for the kick of contrasts and that still played well. Storm damage was moderately evident to about 120-130 feet as was seen on most dives. . . . One of my favorite shallow dives used to be the reef just inland from the north end of Santa Rosa -- called

Paso el Cedral. It's incredible how much sand damage was there. The caverns and ledges were covered with sand. The coral was gone. It look like an area full of rocks and sand, reminding me of some underwater Hawaii scenery. The barracuda and sharks were there, but there was a confused air to it. As I drifted by I realized the incredible power of Gilbert, a storm that could do all this to a reef well off shore and at least 50 feet below the surface. . . . The main road was still storm-damaged with holes where the waves had ripped through the sea wall and torn away chunks of road. Concrete piers were gone. There was still a lot of construction and repair work underway. Many restaurants were closed. And there still weren't many visitors. It seemed like a deserted island. Indeed, conditions have changed and they are not being reported to us in other publications."

Another diver who was there reports some additional damage to hotels and dive boats from Hurricane Keith, which struck during Thanksgiving week, and a lot of people getting sick on the food and water because of decreased sanitary conditions. Frankly, we'd love to support the people of Cozumel and rush business back, but if I were planning a dive trip in the next few months I'd head elsewhere -- until all the facts get reported.

C.C., travel editor

## The Cry Of Our Critics

### -- Yes, We Get Letters

Dear Editor,

A June article in *Undercurrent* is completely misleading. We cannot speak about 1985 and the incident that you portray of a fatality of a resort course diver. We can only speak of being a resort diver in 1986, and as a passenger of the *Flying Cloud*.

First, the resort course was a three hour course. Second, the basic safety factors of breathing with an air tank; mask clearing; staying with the master at all times was accented. After the initial instruction, if all was satisfactory to the master and the student, you were then permitted to partake in a shallow dive of 30 feet. If all was satisfactory, you were then invited to continue diving under the master's supervision.

The dive which you alluded to as an 80-foot dive is that of the wreck of the R.M.S. Rhone off of Salt Island, B.V.I. Again, if the resort diver did this dive, it would not have been their first dive. Furthermore, the visibility factor in this area is such that you can see the wreck from the surface, it questions us as to why the need of a flashlight, period. Never mind your statement that there was only one flashlight. This is ludicrous. If you had stated that this was a night dive, it still is not comprehensible, as we have done two night dives. At this time each individual was given a flashlight, tested prior to the dive, with the accent being if for any unknown reason your light should go out (length of the dive, 30 minutes), allowing for faulty battery operation in this time period, you stay with your buddy. The ODDS of the number

of lights to malfunction during this time are beyond our comprehension. Not only that, but a resort diver, even with a certified diver member of their family accompanying them (this issue arose in 1988), is not permitted on the night dive. ONLY certified divers.

We strongly object to your blatant innuendos, linking anything that might have been in the past, as if it happened recently. We greatly advocate that you keep posted with the times. Send a reporter to the *Flying Cloud*. Take the cruise and the resort course, then report on it as it is today. Unless, of course, you would prefer to be labeled a "sensational rag" that will publish any crap to arouse the public ire and increase further purchase of your publication.

Nick and Florence George  
Tamaqua, PA

Dear Georges,

We reported on a suit settled out of court in which the deceased resort course diver received \$520,000. We stated that the death occurred in 1985. You took your course in 1986, so you have no grounds whatsoever to presume that the training of the deceased was equivalent to yours. If fact, with that sort of death suit pending in 1986, we have no doubt that the resort course training on the *Flying Cloud* would necessarily be elevated to the standards you describe. It looks like you were the beneficiary of a tragic incident.

Ben Davison

Dear Editor,

I have just received my August edition with your cover story BARBADOS, WEST INDIES -- Don't Follow the Stars. Allow me, please, this opportunity to address "the other side" of some of your criticism.

You always appear quick to criticize the business of others of which you apparently know little or nothing. Indeed, if you were ever to make your living in the Resort Dive Industry experiencing ownership, operation and management of such a business, having to deal with the many and varying regulations throughout the Caribbean, you just might realize how hard the Neal Watsons, Alan & Eva Baskins, Don Fosters, Ron Kipps and Peter Hughes do work to provide our guests with good honest value and good, safe recreational diving.

If you were to try to fill any one of our shoes FOR JUST ONE YEAR, I don't think you would be quite so quick to criticize and ridicule.

In the three years that Peter Hughes Underwater Barbados has been open for business, we have run EXACTLY three 1/3-page advertisements in *Skin Dive Magazine* (where we spend the "majority" of our advertising dollars) as well as having supported the GOVERNMENT-SPONSORED cooperative advertisement in the same publication? This was done at the request of the Government and in support of the Government which has allowed us the privilege of doing business in their country.

After Divi determined that they would invest in Hotel properties on Barbados, I was asked to investigate its potential as a dive destination. I very quickly was able to determine that the location of "our" properties was NOT conducive to a full-fledged dive operation, and Barbados does not offer the quality and/or diversity of dive sites needed for a primary dive destination.

Based on my report, the decision was made to put in a small (but safe and efficient) dive operation that would CATER PRIMARILY TO VACATIONERS STAYING IN OUR HOTEL WHO WANTED TO TRY DIVING FOR THE FIRST TIME (*RESORT COURSE DIVERS*) and to those not on a DIVE VACATION BUT WHO WANTED TO BLOW A FEW BUBBLES ANYWAY. To this end I believe we have been successful.

You mentioned the fine time you had diving with Ram Edhill (a friend of mine who is in the enviable position of being a free-spirited, fun-loving islander enjoying life to its fullest and able to do as he damn well pleases) on his boat the SCOTCH AND SODA. Are you recommending to your readers -- the experienced diver PLUS THE RESORT COURSE/FIRST-TIME DIVER -- of which by your own admission there are many in Barbados -- that it is good, safe operating procedure to OFFER SPEAR GUNS ALL AROUND, do not anchor the boat, jump overboard, head down to the reef 80 or 90 feet below and

take a look -- KNOWING THAT THE BOAT WILL FIND OUR BUBBLES? Are you further recommending as good, safe operating procedure the immediate consumption of ALCOHOL after a dive to 80 or 90 feet where one can only imagine that at least "some of the first-time divers" might not be paying attention to their bottom time as well as "breathing excessively" due to the excitement of the SPEAR FISHING activity taking place around them by the DIVEMASTER and "others"?

#### Oh, Canada

This might qualify for one of those tall tale awards, but it comes directly from a recent issue of *Sports Illustrated*:

Some intrepid scuba divers in the Winnipeg, Canada area are getting ready to begin their underwater ice hockey season. Or is that underwater hockey?

"Whatever, to play the game, divers cut holes in the ice, don their cold water scuba gear and take the plunge, tethered to the surface by safety lines. Once submerged, they inflate their suits so that they rise to the bottom surface of the ice. Then they flip upside down and, using cutoff hockey sticks, try to work around either a sponge-rubber puck or a tennis ball so that it bobs up through a hole in the ice for a goal. Because of the possibility of tangled safety lines, only four divers play at a time.

"The sport, which has been played for many years around Winnipeg, has not been able to develop a large following elsewhere, perhaps because it's not an easy game to follow. According to one participant, Chris Miller, "When you are under three or four feet of ice, not many people can watch you. All you see are feet and the puck. It looks pretty funny."

"The flip side of ice hockey does have one thing to recommend it. Says Bob Bartmanovich, co-owner of the B&B shop in Winnipeg, "There hasn't been any fighting that I know of. You couldn't be able to get up the momentum for a punch, anyway. And there's no such thing as high sticking." Or is that low sticking?"

In your story, you lament the loss of the "big fish" at the hands of the hunters and then shortly after RECOMMEND TO YOUR READERS that they should dive with an operator who "offers spearguns to his passengers"?

Your tone in the article suggests to me that you as an experienced diver who did not find what you hoped for in Barbados, and who was unable to alter the modus operandi of Peter Hughes Underwater Barbados to suit your own personal requirements,

you found it necessary to drag my staff and me through the mud for doing the job we (and, as you also suggest we do) set out to do -- and do well -- and that is to cater PRIMARILY TO RESORT COURSE/FIRST-TIME DIVERS.

Perhaps you should follow in the footsteps of Colonel Sanders and/or Peter Hughes and sell out to one of the other industry publications who are contributing far more positively than you are, to the promotion of the sport we all love -- RECREATIONAL SCUBA DIVING.

Failing this, perhaps, rather than just sneaking around the islands incognito (failing to realize that your short experience -- GOOD or BAD -- just might not represent the 365-day year-round norm for any particular operation) you might take the time to interview some of the "entrepreneurs-cum celebrities" who know a little about "the other side" of the Resort Diving Industry. This approach might offer the opportunity for more objective reporting and might represent a better service to your readers.

Peter A. Hughes

Dear Peter,

It seems quite natural that after serious divers have good experiences at your operations on Bonaire or Cayman Brac, they assume the same will follow elsewhere. Neither you nor Divi do anything to modify that impression. The entire problem can be remedied if in your advertisements -- and in the articles written in other publications about Peter Hughes Underwater Barbados -- you clearly indicate that your operation was established for resort course divers. And why advertise in Skin Diver if you are not seeking experienced divers? Do you believe that *non diving* potential resort course divers are their primary subscribers?

Tell the certified divers the purpose of your Barbados operation so they don't have to fly there to find out. Include in your advertising, as you admit in your letter, that it is not a primary dive destination. That your operation is for people who do not want an exclusive dive vacation, but only want to "blow a few bubbles."

Then, who's to complain? Not *Undercurrent*. Our market is the serious, experienced diver and our article tells that diver to steer clear.

Ram's operation is certainly not suitable for beginners, but it can be handled easily by the serious, experienced diver. What's wrong with drift diving, with the boat overhead? As for spearfishing, nothing I say about Ram will stop him. I only write to point out the inconsistencies of someone who relies on good diving for his business, but then spears the fish people come to see. It's unlikely that the *Undercurrent* reader will accept his invitation to pack a weapon.

As for beer, whether you're offered one on the boat after a dive or go to the Divi bar for one seems inconsequential. Most of the divers settled for coke

anyhow. I drank a beer, had lunch, took a nap, then toured the countryside.

Sorry you were offended. You know we have consistently spoken well of your other operations. In this article we spoke genuinely well of you -- pinning the blame, if you look closely, on corporate mentality influencing a personalized operation.

Since our article, you have indicated to one of our staff members that Peter Hughes Underwater Barbados was up for sale. Makes sense. We experienced divers would like to keep your superb talents concentrated on diving areas where we can go home satisfied with the diving. There are plenty of other Caribbean operations -- too many, from my point of view -- serving the novice and forgetting the rest of us.

And, by the way, the last thing *Undercurrent* intends to do is to "promote" scuba diving or the industry. It's our primary intent to provide certified divers with information -- good or bad -- about the industry and dive travel they can't get elsewhere. We don't promote -- we comment and evaluate.

C.C., travel editor

Dear C.C.,

Just got the August issue. "Don't Follow The Stars," scream the headlines, and then you give a list of stars *not to follow*. 'Lo and behold, Alan and Eva Baskin are listed (along with some superluminaries) as one of the "stars" dive operations *not to follow*.

NOT FAIR! Either you folks don't know what a tremendous impact you have on the dive travel market, or you are getting sloppy about your journalistic responsibilities.

You might re-read your July 1983 issue when Baskin in the Sun was visited by your travel editor and found to be one of the best-run dive operations anywhere! We were in Haiti then, and to run a business in Haiti was like taking a post grad course in Business Survival. Maybe Bangladesh is more difficult, but Haiti certainly wasn't easy to have a pre-eminent operation going.

We have a loyal following. We can go almost anywhere, and our friends trusted us enough to follow. So we had to be careful where we next set up shop. We chose Tortola, British Virgin Islands, because we honestly believe that it is the best place OVERALL in the Caribbean. The diving is excellent, the hotels are excellent, our facilities are excellent, and just because we run a photo of Alan and Eva in our ads ... we are still the same people of whom you said in 1983, "our readers have written glowing comments about the proprietors; and, sure enough, I found Alan and Eva to be excellent managers of their dive business."

When you make a flat statement about the "entrepreneurs-cum-celebrities" including a dive operator who hasn't dove with clients in at least three years, you do the rest of us guys who do "bust butt" to give the best dive on a daily basis a terrible in-

justice. Especially when you tell your readers to "Don't Follow The Stars" when you haven't even been here to judge how we do our job.

I think the thing that bothers me most is my disappointment in *Undercurrent* as being the only dive industry spokesman that I could count on for being accurate and honest in its reporting.

*Alan M. Baskin  
Tortola, B.V.I.*

Dear Alan,

My apologies to you and the other superluminaries who believed I dragged them through the mud. It was absolutely unintended, but upon rereading my

missive I can see how you -- or a few readers -- might have misread my intent. I guess the article should have been "Don't Follow The Star to Barbados." Yes, we did write about your super operation in Haiti and find that our readers generally sing your praises in the Tortola. Since we'd like to experience that first hand we will come visit before too many more suns sink into the distant ocean.

*C.C., travel editor*

Dear Editor:

I would like to take exception to some of the points raised by Dr. Carl Edmond's "Bendomatic Decom-

## Store My Tank Full Or Empty? Bad Advice From Two Dive Shops

Dear *Undercurrent*:

Personnel and two dive shops in my area offer conflicting opinions about cylinder storage and I thought you might settle it.

At both shops the people agree that tanks should be stored full of air, but one advises that stored air should be dumped and the tank refilled before using it. The other claims air cannot go bad. Have you done any research in this area?

*Del Preston  
Nine Mile Falls, Washington*

Neither shop is right.

Several years ago, we reported on the unusual death of a diver who was asphyxiated in ten feet of water. He had stored his tank full for several months, but he was unaware the tank had corroded internally. The tank continued to oxidize, depleting the oxygen in the air. Even in this very shallow dive, unaware of the lack of oxygen, he passed out, and bought the farm.

It's unlikely that sort of thing would happen to today's savvy diver, with the general awareness of the need for an annual visual inspection. It's also less likely with aluminum than steel tanks. Nonetheless, there's nothing like fresh air -- even at ten feet.

But, there's more to storing tanks. A main reason people have urged storing a cylinder at full pressure is that if a fire occurs, the heat will build up the internal pressure and quickly blow the safety plug out of the valve. During a fire, the structural integrity of the tank is destroyed and the walls weaken. The air in a partially filled tank, say 500 psi, will expand, but without sufficient force to blow the safety plug. As the fire weakens the tank and the internal pressure increases the whole tank blows, dangerously spewing shrapnel which

could seriously injure or kill anyone trying to put out the fire. In fact, firemen working any fire where tanks under pressure are present, take great pains to steer clear of such potential danger.

For years, it seemed that many people accepted the notion that tanks should be stored completely filled. No more. We discussed the matter with Terry Albert of Catalina, Inc., an aluminum tank manufacturer, and John Canna, of the Sherwood Group. Both have arrived at the same conclusion.

Albert says a tank should be stored with 40-50 lbs. of pressure; that's enough to keep moisture out and, in case of a fire, insufficient to build up enough pressure to explode the tank. Canna says he thinks the tanks can be taken down as low as 10 psi, or with just enough air so that the internal pressure is greater than the external pressure -- which keeps moisture out. Regarding his personal tank, Albert says he may empty it and tape a disc over the valve to prevent moisture from entering. Prior to his next fill, he'll have it visually inspected just to play safe.

Tanks out-of-service should be stored upright. The butt of the tank is thicker than the walls, so if there happens to be moisture inside, it's better that the thicker part of your cylinder be oxidized to lessen the risk of destroying the structural integrity.

Dive shops ought to know all this by now. Those that tell you to fill your cylinder before storing it may be simply trying to make an extra buck.

*Ben Davison*

PS: Albert also told us that if you strike a metal tank with a wooden mallet, it ought to give off a clear ring. If it's a thud, most likely there's rust inside.

pression Computers" in the May issue. The author seems to accept it as axiomatic that any dive profile which violates the U.S. Navy Dive Tables in their strictest interpretation is a bad idea.

I am not convinced that this must necessarily be so. As our understanding of diving physiology and the accuracy of our instruments grows, we may find that a twenty-year-old model using large steps in both depth and timing is inadequate, and perhaps even wrong.

I think the author has taken the wrong approach. It seems to me that a direct critique of the physiological model the Edge is based on, and its specific implementation, would be appropriate, rather than criticizing it for differing from existing models.

The author comments that manufacturers should "incorporate ... a safety margin in the model equivalent to the 'rounding up' of depths ... a 64-foot depth should be read by the computer as 70 feet." This particular implementation seems exactly counter to common sense. One of the greatest strengths of improved instrumentation is increased accuracy. This approach would eliminate that. Adequate safety margins must be built in, true, but not in this particular fashion.

*Rod Van Meter  
Los Angeles, CA*

Dear Sirs:

Concerning spearfishing and your travel article in the June issue, I don't have a problem with skindiving with a speargun, but spearfishing with scuba is simply not sport. The description of skewering the black grouper in its hole tells it all. The self-styled "hunter" who wrote the article is as much a hunter as the people who shoot buffalo from the corral fence. Spare us any more articles like this one.

*I. Tatnall Starr II  
Lafayette Hill, PA*

Dear *Undercurrent*:

The brave hunter of your June 1988 issue may have been responsible for more than the deaths of several dozen fish. As a result of several spearfishing expeditions to the Dry Tortugas in April, one of which may have included your correspondent, at least 60 people got ciguatera. While spearfishing for food is understandable, spearfishing in ignorance of the possible consequences verges on the criminal.

The consequences to human health of the hunter's ignorance were clearly as serious.

It is the large fish that excite the hunter, and it is the large groupers and snappers that tend to carry ciguatera. A large (26-pound) black grouper, from a reef area, has a strong likelihood of being toxic, and the spearfishermen should have been aware of that possibility.

Since ciguatera poisoning is a complicated phenomenon, involving not only the type and size of fish, but area as well, it is usually recommended that no one fish in tropical reef areas without consulting local fishermen or health authorities. Commercial fishermen are usually aware of which fish are safe to eat and from which reefs. Some fish, such as black, Nassau, and yellow-fin groupers, which are the pride of the hunter, are frequently toxic, and many fish markets will not deal in them. Some areas, such as parts of the Dry Tortugas, are also known for the presence of toxic fish.

Your correspondent's naive conclusion, in light of the tragedy suffered by those who bought the tainted fish, is certainly more chilling than the Chardonnay he mentioned.

*Mark Gottfried, Ph.D.  
Miami, FL*

Dear Editor:

The article in the June 1988 issue about the Stella Maris Shark Reef dive has got to be one of the most unsafe diving adventures ever described. So what happens when you have a reef full of hungry sharks and the food is gone? Do you think all 14 of the divers can get safely to the surface? Or suppose someone needs to surface before the feeding frenzy ends? Is this macho demonstration necessary?

*Barbara Bradburn  
Jacksonville, FL*

Gentlemen:

I am an instructor, but not dependent on it for income. I teach out of love of sport. I am concerned about safety, especially my students', and teach a modular course.

Like the Mr. Durio (*Undercurrent*, June) I was trained before the days of the modular SCUBA course. While living abroad, I took a BSAC course (reputed then to be toughest) taught by an active duty commando. I thought it was great and couldn't understand why so many dropped out and why so many who finished never dove again. But, under the abusive training techniques of the past, the "young men who seemed to have something to prove" were the primary source of students. The raw material is not poorer, just different.

Mr. Durio states that "particularly in the last ten years, I have noticed a steady degradation of diver quality." Durio implies that a good diver dived "whenever and wherever they could, under some truly awful conditions."

My course teaches that a good diver is one who knows his or her ability and limitations and dives within them. New divers are taught to dive within their limits and encouraged to take additional training. Courses are available for those who want to achieve higher levels of skill and knowledge or

assume a leadership role.

Mr. Durio seems to assume that everyone must be trained to at least his level to be safe. However, most diving by new divers is done in warm, clear conditions with a dive master supervising activities, not in "truly awful conditions."

I don't understand statements concerning equipment dependency. With the exception of buoyancy control devices and octopus regulators, I can think of no piece of equipment with a function materially different from 20 years ago. Does Mr. Durio dive without a B.C., and is he sufficiently comfortable in his buddy's ability to share air that he sees no need for an octopus? I don't believe that their use is creating equipment dependency. Decompression computers are omitted because I know of no course that teaches their use instead of tables in some form.

His implications about women learning to dive

under partner pressure hit a soft spot. My greatest satisfaction is taking pressured students, not really motivated and at least partially afraid, and building their confidence and skills to the point that they enjoy the sport. About half the time the woman becomes the better diver of the couple. The fact that my wife is a dive master and assists in my classes gives me a head start at overcoming their fear. And yes, except where physical strength gives me an advantage, she is the better diver.

He states that he feels safer diving alone than buddied up with certain divers. I am sure he is safer alone that helping a newer diver, sharing his knowledge with someone less experienced than he. I wonder if anyone ever spent the time to develop his skill and knowledge in any of his areas of obvious expertise, or was he born so wonderfully superior to the rest of us?

*George Stateham  
Leucadia, CA*

## Divemasters Of The Future

### *-- Fact Or Fiction*

According to a recent report in another dive magazine, psychiatric wards nationwide are filling rapidly with exhausted divemasters who have metaphorically blown their "O" rings under the cumulative pressures of trying to cope with the underwater antics of undisciplined or undertrained customers. Psychiatrists' couches are becoming strewn with unnerved resort guides, mumbling incoherently in the final throes of FDS, a shrink trade acronym for Flooded Divemaster Syndrome.

FDS is caused by its victims' customers who persist in involuntary efforts to drown themselves despite their pre-dive flamboyance and flourishing of certification cards; by clients who ignore instructions and flap blithely off in all directions, abandoning their guide and heaving him to froth furiously with frustration into his mouthpiece; by chronic plunderers who disregard all pleas for conservation and rip off corals and sea fans as souvenirs; by hi-tech freaks who overload themselves with superfluous gadgets and become virtually hamstrung underwater by a plethora of dangling things; and by the inevitable patrons who are afflicted with advanced BO (bull ordure). The only cure for FDS is complete bed rest ... preferably with a nubile nurse.

To fill the void left by burned-out divemasters comes DEBAUCH DIVERS, Inc., a company already well-known for its innovative designs of underwater equipment. Among these, of course, are the famous Gagmaster "Force-Feed" twelve stage regulators whose automatic easy breathing valves inhibit exhalation and keep the diver fully inflated at all times, the Rupturelung "Instant Surface" BC, a

patented styrofoam weightbelt for newly certified divers, a Floodproof Mask which is pre-filled at the factory with colorless Jell-O (in assorted flavors), "Two-Way-Stench" wetsuit material (made from recycled motor tires), and the latest state-of-the-art depth warning alarm. This consists of an old ping-pong ball which implodes with a sharp "PLAP!" at 120 feet and alerts the diver. For maximum attention-getting effect, the ball is carried deep in the operator's swimming trunks. And now, the divemaster of the future may well be DEBAUCH's customer-proof submersible machine which is already available at your local dive shop, arc welding or embroidery center.

DEBAUCH DIVERS, Inc. proudly presents its Gyrostabilized Underwater Robot Guardian of Law and Enforcement, or GURGLE. In the absence of a human divemaster, errant customers can now be retrieved with laser-guided harpoons armed with rubber suction cups or barbed points, depending upon the degree of stubbornness of the client. A special pruning scanner can lop off extraneous dangling things not needed for that particular dive, and customers with advanced BO can be gagged at the outset with GURGLE's body orifice plugs (expandable). There were a few unfortunate incidents when it was discovered that these plugs had no provision for the insertion of a mouthpiece, but GURGLE has since been modified.

Conservationists will applaud GURGLE's reef preservation feature. This was designed by one of DEBAUCH DIVERS' top technicians, a strict Islamic fundamentalist by the name of Ayatollah

Ptomainely, who calls his invention the CPR (Chronic Plunderer Rebuke) System. This instrument homes GURGLE in on a Chronic Reef Plunderer and amputates his or her hand at the wrist. So sensitive is the device that it can even detect impure thoughts and excise, before it is used, whatever appendage is appropriate. Because of this, some panic-stricken politicians and public figures have given up water sports activities (including boating lest they accidentally fall overboard) in GURGLE-patrolled areas.

GURGLE can also be used for the grim job of body recovery. It found an unfortunate navy sky diver whose mask, fins and snorkel failed to open, and two weekend yachtsmen who drowned while trying to push-start their motorboat.

GURGLE's ever-increasing use around the world has produced several side effects, however. In addition to its normal duties, GURGLE has also retrieved a collection of junked tires, old boots, beer cans, miscellaneous sets of false teeth (some with innocent

swimmers still attached), three live torpedoes, one supertanker and a Russian submarine. The latter almost caused an international incident because the sub was caught red-handed in a TV evangelist's swimming pool.

All GURGLES have had to be recalled for further modifications followings an occurrence of ultimate embarrassment to DEBAUCH DIVERS, Inc. An overzealous GURGLE shot and retrieved an item revered by those who enjoy undersea and exploration programs on TV. The article was a red knitted woolen cap of the type traditionally worn by veteran divers. On the cap was embroidered: JACQUES Y.C.

But why all the fuss? Whoever heard of the Jacques Yacht Club?

*The author, Nigel Froome, who spent 23 years as the resident divemaster at the Grand Bahama Hotel, longs for the good old days of diving.*

## **Doubling Your Bottom Time**

### **-- New Air Mixture Can Do It!**

Some say it increases safety and is the future of recreational diving. Others classify it as a high-hazard specialty, and say sport divers should stay away from it. While the debate continues, Dick Rutkowski goes on teaching sport divers in Key Largo about diving with nitrox.

NOAA Nitrox I refers to an air mixture for scuba with an increased level of oxygen. While natural air is approximately 21 percent oxygen, nitrox is 32 percent oxygen. When inhaled, however, it tastes like regular air.

Rutkowski terms the mixture "oxygen-enriched air." He calls the air we breathe "God's nitrox," since only the percentages of oxygen are different.

Under an ideal situation, the use of nitrox can significantly extend a diver's allowable bottom time, slash the surface interval, decrease the risk of decompression sickness, and lessen the effect of nitrogen narcosis. However, critics charge that an increased danger of oxygen toxicity outweighs the benefits.

Nitrox decreases the amount of nitrogen a diver absorbs under pressure. At 50 feet, a diver's no decompression time on nitrox doubles from 100 to 200 minutes. At other depths the time also increases, but not as dramatically.

Rutkowski says this is particularly useful to commercial divers, wreck divers, and scientific divers who have to maximize the economics of their activity. In fact, other mixes of nitrox have been developed for professionals which can even quadruple bottom time.

Nitrox is not for dives below 130 feet, Rutkowski

explains. That's where oxygen toxicity can begin because of the increased amount of oxygen being inhaled under greater pressures. "With nitrox you dive shallower, not deeper, than with air. Everything that you learned about diving with compressed air applies to diving with nitrox, but we only go to shallower depths."

Rutkowski, founder of Hyperbarics International at the Ocean Divers complex in Key Largo, is a leading advocate of nitrox for recreational diving. Ocean Divers is, in fact, the only dive operation in the country where divers can obtain nitrox, at \$6 a fill, for recreational use. But only after being trained by Rutkowski.

Nearly 200 divers now hold his Hyperbarics International certification cards, including a number of instructors and divemasters. The minimum experience level for enrollment is an Advanced Open Water certification. "This is an advanced course and it's not for everybody," he acknowledges. "But used properly, nitrox is much safer than compressed air."

Rutkowski's nitrox course includes four hours of classroom work and an afternoon dive on one of the two Coast Guard cutters sunk off Key Largo.

While some officials of national training agencies do not agree with what Rutkowski is doing, no one can fault his credentials. He spent three decades with the National Oceanic and Atmospheric Administration (NOAA) and served as its deputy director of diving, and as director of diver training. He literally wrote the NOAA book on dive-accident management, and is one of the nation's leading authorities

on hyperbaric treatment of dive-accident victims.

Nitrox was first used by NOAA to give scientists at depths up to 130 feet as much time underwater as possible. "People were telling us back then that we'd run into trouble," says Rutkowski. "But now divers have a legal recourse against NOAA if they don't use nitrox."

Now, he says, people in the sport diving industry tell him, "You can't have sport divers using mixed gas, you're gonna kill 'em."

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*"We've been using nitrox for 20 years, and we don't know of anybody who's been hit with the bends using nitrox."*

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"I tell them we've been using nitrox for 20 years, and we don't know of anybody who's been hit with the bends using nitrox."

But many agency officials remain unconvinced. The Council of Underwater Educators, a coalition of certifying agencies which includes the YMCA, recently issued a statement which contends, "Diving with mixed gases other than compressed air poses increased hazards, is highly specialized and is beyond the scope of recreational diving."

While admitting that nitrox diving is "feasible" with proper training and controls, the council concluded that it is "not endorsed." NASDS, not a member of the council, is studying nitrox.

Sam Jackson, Executive Director of NAUI told *Undercurrent*: "We have enough problems teaching the use of regular air. Right now there are not very many facilities that can fill a tank with a correct Nitrox mixture and it is not one of the techniques that the average diver needs for diving."

Rutkowski shrugs off such criticisms, suggesting many of those opposed to his training are not up to date on the topic. "They can say whatever they want, it doesn't bother me. They're in the business of training basic divers and I never said this is for basic students."

He adds, "A lot of these people don't know the

nitrox tables have been peer-reviewed and published by NOAA for 10 years."

Rutkowski teaches his students how to convert standard air tables to nitrox use, but some divers using nitrox adhere to the standard tables, relying on nitrox to provide an additional safety factor. During his class, he emphasizes the danger that nitrox poses -- oxygen toxicity below 130 feet. (Using compressed air, oxygen toxicity is a problem only at depths greater than 220 feet).

The nitrox mixture also must be very close to precise, or it throws off the tables. That is a hazard particularly when divers foolishly attempt to mix their own nitrox. Nitrox-certified divers at Ocean Divers are required to use an oxygen analyzer to confirm that their tank's nitrox is exactly 32 percent oxygen.

Rutkowski contends that "normal compressed air is the worst gas you can buy. It penalizes you too much." He maintains that as long as the nitrox diver follows the rules, he is safe. "I can give a tank of nitrox to anybody without them knowing it," he says. "As long as the maximum depth is 130 feet, there's no problem."

"Within a year," he says, "I hope to have developed a national nitrox certification program so that more divers can be trained and certified to use nitrox."

Hyperbaric International offers a one-day course covering the physics and physiology of nitrox diving, safety factors to consider, analysis of the gas and hazards of mixing the gas. Included in the \$150 course is a nitrox dive on a local wreck. Interested divers should contact Hyperbaric International, Key Largo, FL 33037 or call Dick Rutkowski at 305/451-2551.

For companies that want to develop nitrox facilities, Rutkowski will train and sell the equipment necessary for mixing. There are no government regulations affecting the sale of nitrox to sport divers.

*This story is based on a piece by Keven Wadlow, which appeared in the Marathon, Florida, Keynote, (reprint permission granted) plus our own interviews.*



The US Consumer Product Safety Commission finally got around this summer to issuing a formal recall of the Diving Unlimited International dry suit because the air control valve malfunctions. Although DUI itself issued a recall last November, it seemed to drag its heels and inadequately publicized the problem: at least eleven accidental inflations, some apparently causing injuries through embolisms, were reported. We exposed the problem in our January issue -- thanks to communication and help from reader Edward Suarez who sent us a first hand account of a serious accident he had -- citing experiences of readers and interviews with government

officials. We exhorted them to act, as did Suarez who operated with all the tenacity of Ralph Nader, and Andrew and Ellen Whitehouse of Whitehouse Industries, a firm which repairs dry suits. The Commission finally issued a formal recall of the suit with a faulty valve, months after the problem was sufficiently clear. If you want further information, call DUI at 800/327-8439.

In July, scuba diver Phil Marquardt and his traveling companion were going through Houston customs after a trip to Cozumel. While in line, Marquardt began fumbling through his jeans. That kind of "suspicious" behavior led to a frisking by customs officials who found less than a gram of marijuana on Marquardt, and a rolling machine in the handbag of his companion. Marquardt claimed that a strange American in a crowded bar had stuck an unknown substance in his pocket and he had forgotten about it. The judge didn't think so and sentenced him to six days in jail -- he had to serve only one -- and fined him \$500. Marquardt then returned home and went back to work -- as a judge of the Superior Court, Maricopa County, Arizona.

Before you rush off to buy your dream house on a tropical island, consider what Australian scientists Peter Roy and John Connell have to say: rising sea levels caused by the world's warming -- that is, the Greenhouse effect -- may cause many small Pacific islands to vanish underwater. The build-up of man-made gases will cause sea levels to rise about one meter within a century (other scientists are now saying seven feet within 50 years), swamping many low-lying coral atolls such as Kiribati -- formerly the Gilbert Islands -- and Tuvalu. The two nations have a combined population of about 68,000. Also at risk are the Maldives in the Indian Ocean as well as the Marshall Islands and Tokelau in the Pacific Ocean. Not only would there be very little higher ground for the population to retreat to, but also fresh water on the islands would likely dry up, destroying the ecology. Low lying Caribbean islands, particularly in the Bahamas, would also be at risk. If you're con-

sidering a dream island, mountainous Saba in the Caribbean looks better all the time -- if you should live so long.

**Tax deductible diving?** How about this item from the *Wall Street Journal*: "Randy R. Reed III of Nederland, Texas, a professional scuba diver, taught five treasure hunters who found millions. So, he turned lone hunter himself. He bought a boat, learned to fly so he could take aerial infrared photos, and did extensive research. He found some artifacts of small value in 1983, had no income, and deducted costs of \$11,651. But the IRS denied the deductions, claiming Reed lacked the profit motive required for a business. Tax Court Judge Parr found: While treasure hunts are risky, the rewards may be huge. Reed kept limited records -- partly because valuable maps were stolen from him, and he believed secrecy was vital -- but the records were adequate. He developed specialized knowledge and searched systematically. His activities and gear, otherwise, weren't recreational. The judge upheld Reed's deductions."

As a seasoned scuba diver, you're probably well versed about what critters can bother you in the salty water of the Caribbean. But if you've cooled off in a fresh water stream, have you considered what might be lurking there? The biggest threat is schistosomiasis, a parasite that inhabits fresh water snails. Not many travelers are infected, but those who are may find serious trouble ahead. The symptoms range from general aches and pains, to coughs and fevers, to infections in the urinary tract, to fatal liver or kidney diseases. There is no preventive medicine. It's a difficult problem to diagnose, but once it is the drug praziquantel has some success against it. But, the parasite can remain in one's system for up to twenty years. Though the disease is rare in the Caribbean, before jumping into pools, ponds or streams on any island, you'd be well advised to ask advice from reputable people who know the area.

*Undercurrent welcomes comments, suggestions, resort/travel reports and manuscripts from readers. Send material to our editorial office:  
Undercurrent, P.O. Box 1658, Sausalito, CA 94965*

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