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Undercurrent

The Private, Exclusive Guide for Serious Divers

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Bay Islands Aggressor, Honduras —And a Jim Church Photography Course

Dear Reader,

It was ten years ago that I began my experiment with underwater photography. The results were recognizably marine - but hazy, very hazy, and often little more than surrealistic panoramas of light, color and shade. Over the years, my images improved sporadically, but I seldom achieved much precision and clarity, to say nothing of artistic flair. So, in August, I enrolled in a week long underwater photography course with Jim Church, aboard the <u>Bay Islands Aggressor</u> - home berth, Romeo's resort, the isle of Roatan.

Simon, the <u>Aggressor's</u> jovial divemaster, met us at the airport, and guided us to the bus and the boat, where we met captain Dan and his glamorous lady, Jason. <u>The Aggressor chain is like a Hyatt or Westin Hotel</u>. If you like them in <u>New York</u>, you'll like them in Los Angeles. The seamless pattern is eminently maintained. On this craft, it's a comfortable galley and kitchen, equipped with

a TV and VCR, two tables each seating eight people, bookcases and a potpourri of photo equipment. A carpeted table for photographic paraphernalia is on the main deck, where an island and the deck's perimeter are devoted to benches and individual dive lockers. Jason regularly processes film in the darkroom, near the combination charging station/changing room. Diving is done from a platform on the stern. The cabins, with two or four bunks each, are snug but pleasant, with washbasins, mirrors, and a closet and shelf space for belongings. There are two heads with showers and sufficient hot water. With the air-conditioning on, the cabins were freezing; off, they were airless.

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The first night, Dan briefed us on boat and diving procedures and Jason reviewed the care and maintenance of cameras and strobes. Computers, Nikonos cameras, strobes, 15 and 20 mm lenses, macro sets, and video lights were available for rental or for free trials. <u>If your own</u> <u>gear flooded</u>, <u>replacements were gratis</u>.

Next morning, Jim Church's delayed plane (not unusual in Roatan) finally arrived. While the full <u>Aggressor</u> complement is 16 passengers, there were only six of us on this trip! Normally, Jim brings his assistant with him, but Jim alone was sufficient for us; the individual attention he provided permited us to hone and develop our photographic skills.

Before our initial dive at Connie's Dream, Jim instructed us in how to remain motionless underwater with arms folded and fins crossed while leaning forward in a three-guarter dive position. "Even Ansel Adams couldn't take good pictures if he were constantly falling down," Jim said.

Jim tried to cram his lectures into the first few days so people could spend more time in the water during the latter portion of the week. He demonstrated focussing, strobes, distance, etc., then had us concentrate on ambient light photography for our first assignment. ("All underwater photography beyond four or five feet is ambient light photography anyway".) We moved the boat to the Eel Garden and jumped in to experiment with shots and silhouettes of divers and the boat, preferably with sunlight directly behind our subjects. The emphasis was on metering the light for appropriate f-stops, so those without electronic Nikonos V's needed auxiliary light meters.

Before the trip, Jim had sent us several pages of Nikonos Cue Cards with step-by-step instructions on all kinds of exposures and lenses. His lectures

	OGRAPHY COURSE/ DS AGGRESSOR
Diving	****
Boat	****
Food	****
Instruction	*****
Money's worth	****
* poor, ** fair, ** * aver	age, **** good, ***** escelless

were generally amplifications and demonstrations of the points summarized in the cards. I appreciated the opportunity to ask detailed questions about things I had never really understood - without worrying about sounding stupid! Jim tested our individual strobes to determine exactly which f-stops were appropriate at set distances. In the water, he helpod us find artistic panoramas, correcting distance, angles, etc.

Our next assignment was to explore wide-angle subjects. Neither a turtle nor a large barracuda was willing to pose, so I settled for inanimate but artistic mounds of coral and gorgonians. Jim was frequently at my side, leading me to possible vistas and helping me position myself appropriately.

As Jason developed our films, Jim went over each shot with us, praising, encouraging and criticizing us. (His previous career as a school teacher was positively evident here.) A night dive allowed us to continue wide-angle experimentation or to switch to macro. I checked my gear with Jim again and returned to the water in the dark.

One lesson my buddy and I learned was never to dive at night without a crew member. On our own, we could find little to photograph at night. But, the experts guided us to multitudes of sleeping fish, octopus, lobsters, crabs, nudibranchs, tiny decorator crabs, blennies peeping out of their holes, and a fascinating range of miniature versions of adult fish. Dan's personal specialty is the study of the most diminutive nocturnal creatures, and he delights in sharing this world with his diving guests.

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A Shoot with Chris Newbert

As a long time travel reviewer for Undercurrent, I'd like to say that I avoid booking liveaboard trips with "big name shooters." It never made sense to me to pay top dollar to take a trip on a fully booked boat loaded with photographers, all their gear, and then having to fight with a few prima donnas to get to the best dive sites — usually reserved for the "big name shooter" to get more shots for his portfolio.

Not long ago, I spent two weeks with Chris Newbert and his wife, Brigitte Wilms, on the *Bilikiki*. I can understand how Chris has developed a loyal following willing to pay premium prices to join him and Brigitte on their "Rainbowed Sea Tours" trips to the Red Sea, Cocos, Galapagos and the Solomons.

Chris and Brigitte work from the minute they wake up till the minute they turn in late at night to keep the trip on an even keel and constantly work with the ship managers to ensure the diving is at the best possible sites considering the weather, currents and tides.

During the trip, Chris presented five comprehensive photographic seminars, the cost of which is included in the price of the trip. He fit these 90 minute sessions between the morning dives and expanded on the theories with several nighttime slide shows.

My dive philosophy on liveaboard trips is "DIVE, SLEEP, EAT, REPEAT", so I take my hat off to Chris for keeping up his energy level to make all the dives, present the photo seminar, answer the many questions asked by the photographers on technique, equipment, lighting, exposure, etc. Chris joined in some of the predive briefings to ensure that the shooters understood where to go to maximize their chances of getting the best shots the site could provide. The shooters indicated that they felt the seminars were valuable, worth the money, and proved their worth in the quality of the slides presented at the slide show on the final evening.

One thing that impressed me on this particular side trip was when our tinny got hung up several times in the shallow channel, Chris jumped out and pulled the boat and guests over the shallow spots. Not the act of a swell headed guy whose popular book is going into yet another printing by any means. Also noticeable was that Chris and Brigitte were not necessarily in the first tinny for each and every dive. They took their turns like the rest of us.

Chris functioned as a trip leader in addition to his duties as photography instructor. While the *Bilikiki* holds twenty passengers, Chris held the number to fourteen. In coordination with the ship managers, Jim Light and Kay Levin, he organized trips to villages at several of the islands. He also organized a trip through a backwater lagoon channel to a "secret" dive site at Kapachanga Cut that was a real hit.

From the initial meeting at the airport, to the final cocktail just before the *Bilikiki* set off for the next voyage, Chris and Brigitte worked hard to ensure that their guests got their money's worth. I'd travel with them again, any day.

I should add that these are not hands on teaching sessions, like those offered by Jim Church. It's more a "shoot and analyse" trip, suited to underwater photographers with some experience.

For a brochure, contact Chris Newbert, Rainbowed Sea Tours, Phone 1-800-762-6827, Fax 1-800-329-8000. J.G.

Next day, we moved to Kripto Caper, a splendid dive with a dramatic dropoff and some long, irregular sand chutes, offering a variety of sub-sites for exploring different shots. Jim asked us to concentrate on "things sticking out from the wall," and to continue working on computing proper combinations of strobes and sunlight. Often a particularly rich dive site is less photographically desirable than one offering more isolated clumps of stuff. The post dive seminar featured our previous slides in highlighting photographic tips, shortcuts and techniques Jim had discovered and developed over the years.

If we weren't shooting slides, we were eating. Chef Mark prepared fresh fish, potatoes, salad and cake for the first night. Subsequent nights brought us more fresh fish, shrimp, pork chops, chicken or turkey, served with lots of pasta or beans or other carbohydrates. One night featured a Mexican medley of tacos with a multitude of fillings, black beans, chips and salsa. Lunches usually included hot soup, sandwiches of fish or meat, salads and fruits. Breakfasts offered eggs, pancakes, French toast or similar main courses with fresh bananas, mangoes, papayas, pineapples and dry cereals. Mark often baked cookies for between dive snacks, then served freshly baked cake, pie or pudding after the nightly night dive. We ate well!

Jim was forthcoming with divers interested in underwater video, making

available a proof copy of the underwater video section of his new book. He equipped his own video with powerful underwater lights, and he lent them to whoever asked. Given the student-to-teacher ratio, Jim was able to make several complete dives with each aspiring video photographer for genuine hands-on lessons. All of us got to watch the results after the dive.

By the time we moved to Half Moon Bay for more diving, we were experimenting with the full range of our equipment. Night diving brought us a somnambulant boxfish, a stonefish, hunting jacks and barracudas, besides the usually colorful lobsters, octopuses, etc. Another diver tried out the video outfit and produced a very exciting panorama on the first try!

Overnight, the <u>Aggressor</u> plowed through open seas to the island of Cayos

Jim Church Photo Courses on Aggressor Boats 1993 Schedule

Belize : Jan. 23 to 30, Oct. 9 to 16. Grand Cayman: August 21 to 28. Palau: April 5 to 11, August 19 to 26. Truk: March 28 to April 4, Sept. 21 to Oct. 3. Turks and Caicos: May 1 to 8, July 17 to 24.

Cochinos; those who took seasick medication were glad they did. We anchored at Toon Town, next to an irregular wall with a sandy bottom at 100 feet. The coral head on top of the reef, which Jason described as the "most perfect coral head in the world." offered coral, tunicates, like exotic bunches of purple grapes, invertebrates in appropriate macro sizes and enough variety, it was said, to provide for an entire dive trip. (Jim was quite willing to spend days at a single site, but others felt compelled to keep moving, even when the photographic opportunities seemed unending.) I indulged in macro work and was able, for the first time, to capture tube worm images that lived up to my expectations. (Jim explained that "if you looked hard enough, you can find tube worms that won't disappear at the mere firing of a strobe.") I experimented with a closeup kit, with gratifying results on the night dive; the kit kept me in the proper proximity to the sleepy fish Simon found for me.

Check's in the Mail, Matey

Alby Ziebell, the owner of the *Coralita*, had to cancel trips after his craft sunk in the Cairns, Australia, harbor. We reported that he was sitting on a bundle of deposit money and for several months had not answered requests for refunds.

Two weeks after our story appeared, one of our readers received a fax from Ziebell dated October 27th saying that the insurance company has "finalized on the loss" and that deposits "will be mailed out within the next 21 days." Our reader's check arrived. The next morning: seahorses! We moved to End of the Wall, domain of two seahorses: "Pete," who is orange, and "Mr. Ed" who is pink. Simon, with his unerring underwater radar, located them; we all took turns photographing them with extreme care so as not to disturb them. (It was grimly ironic when, on a visit to the Roatan town of Coxen's Hole, we saw a dozen dried seahorses on sale in a store.)

Original plans had called for a visit and dive at Guanaja, but the weather was uncooperative and the seas

too rough. So, we moved to Pelican Point where we could watch flocks of gliding birds punctuating their precipitous dives for fish. After the night dive, we celebrated everyone's work, amplified by boat and underwater "candid camera" shots by Jason. There was general rejoicing and lavish praise by everyone for everyone else's work. <u>Indeed</u>, each of us seemed genuinely surprised and pleased by our results.

We made our final dive on the south side of Roatan the next morning. Lobo guided us to several large morays and a spectacular school of spadefish cruising along just below the surface. And, I got great shots. Then back to Romeo's for the inevitable ordeal of washing and packing. I made a brief tour of the local town, then back to the boat for a wine-cheese celebration and presentation of diplomas from the Jim Church U/W Photography Course. Ta Da!

Overall, diving the Bay islands is better from a liveaboard, since you can visit more pristine sites. While I saw no sharks nor sizable pelagics, for a photographer, the critters were terrific and the coral and sponges quite colorful. Worth a good four stars. The <u>Aggressor</u>, too, is a good four plus star craft, and the food four stars as well.

And the photography instruction? The tops. My pictures were clearly superior to anything I had ever achieved underwater before. There is, of course,

Ambergris, we hardly knew ye.

U.S. developer Donald McKenzie was arrested in August for blowing a 50-foot hole in a coral reef to allow easier boat access to his island resort off the coast of Belize.

Angry Belizeans called McKenzie an "ecoterrorist" and suggested punishments ranging from life in prison to lynching. He was eventually fined \$2,000 for "dynamiting without a permit" and fled the country. (Remember Ross Perot? He did the same thing in Bermuda and got away with it.)

The outrage reflects growing concern among Belizeans about foreign developers and the environmental risks that unchecked tourism pose for the nation of 200,000. The debate intensified in recent months after the government announced a joint venture with a Mississippi businessman to build a \$1 billion resort covering two-thirds of Ambergris Caye.

"We are on the verge of a major development of the country and it is giving many people pause to rethink their positions," said Emory King, real estate agent in Belize City. "A lot of people are saying we don't want any more Ramada Inns."

Tourism generates about \$50 million annually and ranks second behind agricultural exports in economic importance.

But thus far, it has been a low-key affair. Cameraladen hikers stalk the rain forests in search of toucans and howling monkeys, and divers explore the massive barrier reef that runs parallel to Ambergris Caye. Large hotels have sprung up in Belize City and on San Pedro. But, on Ambergris Caye, many visitors prefer small guest houses and eat stew beans and rice at family-run Creole restaurants.

The government now wants to turn Ambergris Caye into a Caribbean hot spot that will attract the highdollar tourists. Paul Broadhead, the Mississippi entrepreneur who has a 30-year concession to develop the resort, talks of luxury hotels, condominiums, dutyfree shopping, golf courses and polo fields. It will all be environmentally friendly, he adds.

"Eighty percent of the development will remain in its ecologically pristine condition," Broadhead said. "This is basically an environmental project." But some observers warn the development will spoil the island's laid-back atmosphere.

"Belize has always operated on the 'small is beautiful' concept. Why let one of the country's greatest natural assets be turned into a playground for foreigners," said Lou Nicolait, managing director of the Belize Center for Environmental Studies.

"Belize is not desperate for new development since the economy is growing at a healthy 4 percent annually. No one is dying of malnutrition. Everyone who wants to wear them has shoes," King said.

As the smallest country in the region with just 200,000 people, Belizeans have long felt that too many outsiders could alter their unique mix of Creoles, mestizos and Mayan Indians.

When the former government of Manuel Esquivel made foreign investment a top priority in the mid-1980s, critics charged that the country had been put up for auction. Prime Minister George Price defeated Esquivel in the 1989 election by stressing the theme "Belizeans first."

When the Price government acquired the Ambergris Caye property two years ago, it made a high-profile commitment to develop the land on behalf of Belizeans. But, the deal with Broadhead was cut behind closed doors with almost no public notice, charged Fidel Ramos, an adviser to the San Pedro Town Board.

Ismael el Fabro, an official with the Ministry of Tourism and Natural Resources, said Broadhead's master plan — to be presented next year — will have to address local environmental concerns or it will be rejected by the government. "We don't want to stifle development ...but there are certain things that we will not sacrifice," Fabro said.

Others doubt the resort will prove to be that much of a shock. San Pedro is already home to scores of foreign-run hotels and restaurants, mainly because land prices on Ambergris Caye have soared and Belizeans have sold their lots. "There is a latent resentment of foreign ownership," said one Belize-based diplomat. "But Belizeans made a devil's bargain. They sold the place."

John Otis, United Press International

any number of excellent books and articles telling you more than you could ever absorb about underwater photography, but there is nothing like a hands-on course with a master teacher. Those unanticipated and/or unpredictable questions (some of which seem just too plain silly to research) only arise in hands-on practice.

Besides, we all had a great time!

S.W.

<u>Diver's Compass</u>: Airfare roundtrip from the West Coast, via Houston, was \$724. A week's diving aboard the Bay Islands <u>Augressor</u>, including the Church photography course, was \$1745. Add about \$10 per roll for processing on the boat and your choice of tip for the crew. . . A particularly nice touch was the pile of warm, fresh towels always available when one returned from a dive. . . Any travel agent can book the <u>Augressor</u> or call <u>Augressor Fleet</u>, 800/348 2628; FAX 504/384-0817. . . . The price either way will be the same, although readers have reported calling the <u>Augressor</u> within a couple of weeks of departure time and getting the rate cut by as much as 20 percent.

The Worst of 1992

Divemasters and boat captains destroying the very reefs from which they make their living? Dive operations short changing us on bottom time? Divemaster incompetency?

Blasphemy, indeed. Perish the thoughts. This industry is as pristine as the reefs we protect.

Not. In reviewing reports from you, our readers, for the 1993 Divers Speak Out, I was struck by the furtwangling. Let me call your attention to the problems your fellow divers reported. Here are a few of the "cases" in which our readers found dive operations that disregard their safety — or the safety of the reefs.

After visiting Puerto Vallarta, Seattle's Laura Geselbracht said that Silent World Divers' divemaster "didn't do much of anything except run out of air on one dive. The staff did not use any dive tables. I had to fiddle with my camera to stall for more surface interval."

Some dudes cut surface time so they can get home for the action. Steve and Kathy McCutcheon (Hollywood, Fl) say that while the *Club Cozumel Caribe* is safe, it's the "worst dive operation our club has encountered. Limited surface intervals to 30 minutes, thereby shorting second dive. No computers allowed. Everyone must ascend together. Frequently returned with 1200 psi. Dive crew interested in getting back to shore as soon as possible."

I mean, you pay a grand for a week for this?

> "Dive operator spearguns egg-carrying lobsters, takes undersized conchs, kills nurse sharks for target practice."

There are other tricks. In the Mariana Islands, at the Coconut Village/Pau Pau, Gerry Smith (Orland Park, IL) reports that "the divemaster swam as fast as he could and cut dives to half dive computer time. On a 'reef' dive, we spent half the time swimming to the reef across featureless sand and the rest of the time 30 feet off the reef. When I swam over to photograph some clown fish, I was scolded."

The divemasters at Nassau Scuba

-Reports from our readers

Centre, says John C. Messing (Custer, WI), "insisted on short bottom times (30-45 minutes) regardless of maximum depth —usually back with 1800 psi and got chewed out if five minutes late. Most afternoons limited to 50 feet for 30 minutes or 40 feet for 45 minutes." Stuart Cove, do you lend your name to this practice?

After diving with Sea World in Jamaica, John and Jan Renas (Carson City, NV) report that "Eddie, the divemaster, was more interested in smoking than diving. Short dives — 1200+ pounds of air left when we were told to ascend. No water or oxygen on boat, but two-hour surface interval. Divemaster took conch, queen shell, lobster. Locals net anything, any size for food. Boat anchors on coral."

Hey, smokin' Eddie. Hope it was ganja; it's better for you than tobacco. Let's go to Anguilla, the rich persons port in the Caribbean, where, says correspondent Rich Atkins (Dallas, TX), the locals believe that "the reduced marine life is due to illegal fishing by foreigners." He has a different take after diving last may with the Anguillian Divers Ltd. "Dive operator spearguns eggcarrying lobsters, takes undersized conchs, kills nurse sharks for 'target practice,' anchors on the reef at Scrub Island." Who is this divemaster, Howard Stern?

"If I may make an unpopular suggestion, ban cameras: I didn't see a photographer who didn't damage the reef in his or her need to 'get the shot.'"

Marcia and Alan Ritter (St. Louis, MO) went to the Bora Bora Beach Club last March and say that Club Calypso's crafty Claude has an attitude: surly French. "His site briefings are nonexistent. I had to ask what his planned depth and duration were. Once in the water, he raced around the reef at warp 7 looking for his pet moray eels and feeding them, along with the reef sharks and a pet barracuda which has a belly more like a large-mouth bass. After chasing him around at 70 feet for about 40 minutes, I was under 500 psi, and showed him my pressure gauge to confirm that I was getting low. I surfaced on my own about 100 yards from the boat and snorkeled back to the boat. . . . The reef on Bora Bora has taken a beating, both from a recent cyclone and from careless divers (of which Claude is a prime example) grabbing corals and stepping on them." The Ritters add that at Moorea Underwater Scuba Tahiti, they were "pleased with the fish population, although about the only live corals were Porites Lutea and Porites Stephansoni (blame our Earthwatch trip to Fiji with David Kobluk for the proper names). The branching Acropora were dead and beaten to skeletal remains. I would blame pollution from the hotels, as these branching corals seem to be the most sensitive to algal overgrowth and other environmental stresses."

Hey, smokin' Eddie, there's room for you in Borneo's Sipadan where, says David A. Venanzi (Rancho Palos Verdes, CA), the divers and guides throw their cigarette butts into the water. But, his "big beef is overcrowding. Ignorant or undertrained divers grabbing or kicking corals or marine life." Fred Kolo (New York, NY), there in May, says: "If I may make what will surely be an unpopular suggestion, ban cameras: I didn't see a photographer who didn't damage the reef in his or her need to 'get the shot.' The number of people eating and drinking and brushing and flushing on this tiny island will sooner or later kill the goose that is still laying golden eggs." Echoes Suzanne Palin (San Francisco, CA): "A couple of divers encased from head to toe in 1/4-inch of neoprene were bashing into coral, trying to get that perfect shot."

Even the highly regarded *Bilikiki* isn't immune from criticism. Stephen Silk and Jane Bishop (Del Mar, CA) comment that it's a first-rate trip for experienced divers, but the laissez faire liveaboard attitude goes too far: "The dive captains said nothing to abusive photographers who cared more about getting great shots than the coral being trod upon, said nothing to check on the well-being of one who made uncontrolled ascent within her observation, nor sought to limit excessive diving of someone else who later got bent on the plane."

Some places aren't so laissez faire. They plainly say, "Hands Off the Reef!" Trouble is, the rules are for the tourists only. Rene Bissonnette (Ottawa, Ontario), who went to the *Club Cozumel Caribe* last January, reports: "Had to rescue divemaster at 100 feet three minutes into dive — out of air! Their 'don't touch the reef' all talk, no action guides unnecessarily touch and harass fish."

And what about these no touch policies? Charles A. DiCicco (Brookhave, PA), diving with *Bimini Undersea Adventures* about a year ago said : "First dive was to the famous Rainbow Reef. Told it was a national park and to observe no-touch regulations. This sounded good until we got to the reef, threw the anchor in and dragged it till we caught on some coral."

Then, other places tell you to grab what you can and hang on for dear life. In the Maldives, Peter Louwerse (Kusnacht, Switzerland) noted that Helengeli (about a foot above sea level, half a mile long, an eighth of a mile across) is surrounded by a lagoon and an outside reef. "From a small jetty we were transferred by dinghy to the dhoni that was anchored outside the reef. When the outboards of both dinghies broke down the divers had to swim to the dhoni. Dive gear was transferred by dinghy, pulled by a rope between dhoni and shore. Because of wind, the dhoni could not get near the main

Five Boats Sink at Cozumel

On Friday November 27th, five of Cozumel's "fast boats" or Long Banana boats were swamped and sank in unexpected high winds while on diving trips. According to Bill Horn of Cozumel's Aqua Safaris, "most of the passengers were picked up by other boats, but some were close to shore and swam in. Thankfully, no one was lost and all the gear was recovered."

Horn did not know if all the vessels had been recovered but at least some of them had been raised and are being worked on.

Horn said that "nothing like this was in the weather forecast and five of the less seaworthy boats went down. Mexico needs better weather forecasting, but divers also need to take a look at the boats they are going to go out in.

"If gas is in a jerry can and not a gas tank; if there is only one outboard; if it doesn't have oxygen or a radio, then divers should ask themselves if this boat is seaworthy.

"We get this sort of wind every year or two and no one can predict it. So, use good sense when selecting the boat you go out in." jetty and divers had to swim ashore to a sand spit. . . . Tidal currents are strong - divers are swept along with little possibility of a controlled dive - comparable to flying a Piper Cub through air pockets. Dive briefing was: 'if current becomes too strong, pull yourself along on the rocks.' As a consequence, divers left piles of broken corals. . . . Prize for shortest dive briefing ever: 'I haven't been here for 1-1/2 years, but there is a channel to your left. Find your own way!' Divers came to the surface spread over an area a mile in diameter, in a rough sea."

Phoenix Marine Sports, in Ponape, says Lori Schultz (Seymour, WI), caters to rock climbers as well. She says their practice "leaves much to be desired. Little respect for the coral. On one dive, we were instructed to crawl over the reef." G.W. Saber (American Embassy-Tokyo) says that for a two-tank dive, there were three certified divers. "Phoenix added many of their staff who were described as 'trainees.' They attached themselves to each of the divers, making it difficult to see what little was available. It appeared that their sole goal was to get the paying customers back into the boat as soon as possible."

> "Sunset Divers infantilized the experienced diver"

Last August, Mick and Toni Tingle (Dagsboro, DE) visited the Nassau Scuba Centre: "Our last trip to Nassau was two years ago. To witness the damage to the reefs is depressing. The dive boat anchored in the coral, divers sat and stood on the coral, one diver filled his collection bag with soft and hard coral.

Night Dive to Nowhere

Even our reviewers have experiences like our readers. Here's what happened to P.E., who reviewed the *M.V. Oceanus* in the last issue.

"Six of us went on a night dive at Cayo Centro. The captain told us to swim just under the boat to the bowline, then follow it down to the 50-ft bottom. But the strong current pushed us off course, and the shifting boat overhead threw our bearings off. After a few minutes of adjusting my BC, finding my gauges, and looking for the boat hull, I found myself at 84 feet with no bottom or buddies in sight.

"I decided to surface, listening to the ominous boat motor the whole slow trip up. There were no lights on the hull, and I stretched both arms overhead, praying I wouldn't hit a motor. I popped up next to the dive platform and got smacked with a faceful of fishing line. The captain's son was fishing from the side of the boat, but wasn't watching the dive and evidently didn't see me. Nobody else was on deck, and the blaring radio drowned out my calls.

"I pulled myself out and yelled for Carlos. As I told him the story, he and the captain stood on deck, watching the slowly surfacing dive lights wander farther from the boat. Neither of them suggested going after the divers.

"Several minutes later the divers surfaced about 200 yards from the boat, calling for the smaller boat to pick them up. Carlos and the captain stood on deck, waiting for another crew member to drive the boat. When I told Carlos he should drive the boat out, he said, "Don't get so upset! They have air in their BCs. They have to learn this!"

"After about five minutes, Chris and his buddy finally swam for the boat, while Michael towed the other two divers in. Only Michael had found the recf. The rest had hit bottom at about 110 feet before aborting. Luckily, they had all managed to find each other on the way up.

"None of the crew had been watching our lights, nobody thought to light the boat, and nobody listened or watched for us to return. I was exhausted, even though my computer logged only an 8-minute dive." Without reef protection and reef ecology, the reefs are doomed."

And finally, let us report on the Sunset House in Grand Cayman, loved by some, deplored by others. Along with Anthony's Key, discussed last issue, Sunset House gets the reader's award for inconsistency.

Right off the bat, I should say the problem is not with Cathy Church and her photo operation. Says Shelley Voelkel (New Orleans, LA), I "highly recommend Cathy Church's photography course. For never having taken an underwater photo, I have a couple that are of professional quality. Cathy and her assistant, Steve Barnett, are wonderful." Loyal correspondents Stuart Goldberg and Corinne Apostle (Monsey, NY) add: "Cathy Church is ready to help anyone who has questions." And Steve Hollander (So. Windsor, CT) says "Sunset Photo is pricey but top-notch."

The problems are elsewhere. Michael Shernoff (New York, NY), there a year ago, says "the dive operation is set up more for the convenience of the dive shop than for divers. On the day we arrived, we were put off for over an hour-and-ahalf before anyone would stop what they were doing to arrange for us to dive. Our 'all-inclusive' dive package did not include an extra \$22 for Sting Ray City or \$65 for a three-tank day of diving on board the Manta. . . . This operation infantilized the experienced diver. They would not let you go on the Manta unless you were 'checked out' on one of their two-tank dive boats - even when shown AOW cards and log books with over 200 dives that included recent diving from the Okeanos Aggressor. On the twotank boats, they would not permit divers with computers to dive their own no-decompression profiles. . . . The people staffing the dive operation at Eden Rock were a contrast to Sunset Divers. They couldn't have been friendlier."

Bob Grove (Oakland, CA) says of the divemasters: "three Canadians were excellent, three Americans crude, sexist and too interested in hustling women divers. They were technically good, but unprofessional." David L. Orr (Pipersville, PA) says: "Dives that came with package were bad — short, restricted, dying reef. Divers abused reef. Not advertised extra cost for three-tank dive on boat that goes to North Wall."

Not everyone objects. Katesel Strimackt and Bill Dillon (White River Jct., VT) say the "dive personnel are great — friendly, attentive, polite, and fun. Safety-conscious, which may irritate experienced divers." And S. Warm (New York, NY), there last February, says "Manta takes divers to pristine locations on North Wall. Dive staff is as accommodating as ever. Top-rated dive instructors like Terry, Allan and Fiona make the Manta a must for every experienced diver." My take? There are plenty of other options on Grand Cayman. Why risk it. Well, that does it for this year. If you're a new or renewed subscriber, your 200+ page copy of *Diver's Speak Out* is in the mail. I hope you're a contributor to it, but if not, tell me about your next trip. I want your report.

C.C., travel editor

DCS Masquerading As Psychiatric Illness

Decompression sickness is among the most difficult of all medical conditions to diagnose. The problem arises from the protean manifestations of the disease and the inability to adequately image the pathology resulting from bubble formation in tissue.

Essentially, wherever bubbles form determines the location of the pathology. It has been elusive to MRI, CT scanning and, for the most part, electrophysiological testing.

Recently, the Jo Ellen Smith Hyperbaric Medicine and Diving Unit treated a 34 year old man who had gone on a scuba diving trip to Lake Powell, Arizona. He experienced a regulator malfunction at 30 feet, panicked and came to the surface rapidly, after taking a deep breath and holding it.

On the surface, he felt extremely fatigued. Over the course of the following week, his neurologic impairment became progressively worse; he had difficulty walking, talking, writing, and suffered a loss of memory and fine motor control to the extent that he could not play the piano after 24 years of piano playing. The patient saw a number of physicians who were unable to pinpoint the cause of his problems until he happened upon a friend of mine who was a practicing Ear, Nose and Throat physician in New Mexico.

During a phone call, it was ascertained that the patient had central nervous system DCS until proven otherwise and he needed treatment. He was treated three times in a monoplace chamber in Albuquerque; however, no change was noted. Upon subsequent referral for neuropsychological testing, the results of which were grossly abnormal, the patient was told that his problem was psychiatric.

After considering suicide, he was admitted to a psychiatric hospital, and through a bizarre twist of events, taken to jail and eventually committed for 30 days to a second psychiatric institution. At this point, the patient's parents contacted me and the patient was transferred to Jo Ellen Smith for further testing.

After evaluating the patient, central nervous system decompression sickness was diagnosed. The patient's final test consisted of a nuclear medicine brain scan that showed multiple areas of decreased blood supply to the patient's frontal lobes. The patient was placed in a hyperbaric oxygen chamber for a single hyperbaric dive. A new scan showed a filling in of all of these damaged areas. The conclusion was that the patient's brain cells were living but just in need of blood supply and adequate oxygen to work.

A series of hyperbaric oxygen treatments was initiated. During the next six weeks, he steadily regained all of his neurological functioning. His repeat and final scan was normal. All of his abnormal tests reverted to normal and a repeat of his neuropsychological exam showed him to have risen 20 IQ points on the test. This was a startling result.

The patient has subsequently returned to his normal job, junior high school teaching, is once again playing the piano, has recorded an album, and has formed his own band.

Triage; R. Paul Hard, M.D.

Why Divers Get Bent:

In 1990, 1044 diving injuries were reported, ranging from decompression sickness to a broken foot caused by a dropped tank.

Of course, the injuries we divers are most concerned with are the bends (DCS) and embolisms (Arterial Gas Embolisms, or AGE, to be more precise). Of 738 reported

- Data from DAN

DCS cases, The Diver's Alert Network analyzed 459.

We have condensed DAN's report, pulling out the most cogent facts to help you to dive safely. We take all responsibility for editing errors or omissions.

Diver Inexperience:

Lack of experience plays a role in injuries. Of the injured male divers, 23 percent had been active for only one year compared to 41 percent of the injured female divers. Most had dived 20 times or less. Roughly 80 percent were diving within the limits of the repetitive dive tables they were using. Injuries to new divers were often among the more severe.

Illness, Exercise and Fatigue:

Eighty four divers were diving with illnesses such as gastro-intestinal problems, back problems, muscular skeletal problems, asthma, etc. These, however, may be unrelated to getting DCS and there is no specific correlation between any particular illness and the severity of the DCS. However, any illness or injury that limits an individual's ability to perform physical activity, or inhibits gas exchange, may contribute to DCS.

Good physical conditioning does not necessarily prevent DCS. A high percentage of divers felt they were physically fit at the time they had decompression illness; Seventy five percent stated they exercised 3-4 times/ week.

Exercise to the point of muscle fatigue contributes to decompression illness. More than one third performed strenuous activity — jogging or lifting and carrying numerous tanks — prior to or after their dive. Some conducted an exceptionally strenuous dive.

Fatigue may affect nitrogen offgassing. Twenty percent of the injured divers began the dive day fatigued or with less than an adequate amount of sleep. Forty percent of those had dived on the previous day. The fatigue could have been a sign of decompression illness from the day before.

Nausea, diarrhea and alcohol consumption contribute directly to diver dehydration and fatigue. Without appropriate rehydration fluids, dehydration may lessen the body's ability to offgas nitrogen accumulated during scuba diving.

"Twenty percent of the injured divers began the dive day fatigued."

Dive Profile

A record number of DCS cases involved repetitive diving to depths 80 feet or greater, or multilevel profiles. The deeper depth, longer duration and multilevel diving may reflect the growing use of dive computers. Of the DCS cases, 77 percent dove to 80 feet or more. Rapid ascent contributed in only 22 percent of the DCS cases.

Death in Mexico

Dear Undercurrent,

"We lost the best heart doctor in Rochester, NY to a diving accident a few weeks ago.

He was somewhere near Cozumel and the dive boat operator failed to take a head count even after one of the other divers tried in vain to alert the Captain one person was still down.

The Captain left the area and by the time they came back to search the scene the sharks had gotten to him and killed him.

His body was found floating with his BC inflated.

This represents operators who grossly disrespect safety and are only looking for the great American dollar."

R. Fagner, Clifton Springs, NY

Dear Richard,

We heard more than one version of this story and checked it out as best we could, learning that the death occurred in Cancun, not Cozumel.

An account in a Mexican newspaper and the obituary that appeared in a Rochester newspaper listed the cause of death as drowning, complicated by a heart condition. There was no mention of any shark attack. Further, Joel Doverbarger of DAN told us that "he wasn't left. There were other divers in the water at the time."

Whether his death could have been prevented by guides we can't ascertain. But we do know that undetected heart disease is present in a number of deceased divers. So to all our readers -- take care of your heart.

Ben Davison

Equipment:

Thirteen percent of the 1044 accidents involved equipment failure or improper equipment use. Improper buoyancy control and running out of air most generally were associated with AGE. Other problems involved gauges, a leaking mask, leaking octopus hose, failure to turn on computer, and assisting another diver with an equipment problem.

Symptoms:

The most common initial symptom was pain. Computer users had almost twice as many pain-only limbs bends (DCS I) than table users. Because many computer users are more experienced divers, we can assume that they are less likely to run out of air or make a rapid ascent leading to an accident. But, multilevel profiles allow for longer bottom times at shallower depths; this decreases the partial pressure of nitrogen in the faster neural tissues but not necessarily slower peripheral tissue groups which, we believe, is where DCS I occurs.

More than 15 percent of divers with decompression illness continued to dive after developing the first symptom of decompression illness. They either failed to recognize the symptoms, denied them, or were reluctant to mention their symptoms to a group of their peers.

DCS pain can be mistaken for normal aches and pains common to exertion. Some individuals may prefer not to seek evaluation due to remote locations or do not feel their symptoms are serious enough to seek treatment. The delay in seeking assistance may decrease the possibility of immediate and complete resolution.

The cure:

Fifty-three percent of all decompression illness cases who received hyperbaric treatment stated there was com-

Getting Down and Dirty

Who'd a thunk that the notion that divers can dive more safely by using Nitrox — a gas with 32 percent oxygen and 68 percent nitrogen — would have started a mud wrestling match in the diving industry that's on the verge of busting into a bare-knuckled fist fight.

In one corner, we have Skin Diver magazine, the Cayman Dive Operators Association, and PADI, among others.

They argue that, for recreational divers, Nitrox is not safe — that it leads to deeper and more risky diving. The motive for the promotion of Nitrox, they believe, is the almighty buck, since it's being promoted by those who expect to make money from the training, sales of equipment and Nitrox, itself.

> "Orca is reprogramming their Phoenix for Nitrox and will introduce it this month."

In the other corner are 100 Nitrox stations, two Nitrox training agencies, NAUI and NASDS, and a bunch of technical divers who argue that the safety record of Nitrox is nearly perfect and that the conservative, knee jerk reaction by the opposition is designed to protect their own turf. plete resolution of symptoms. Resolution may have occurred after a single treatment or after multiple hyperbaric exposures.

> "More than 15 percent of divers with decompression illness continued to dive after developing the first symptom."

Post treatment residual symptoms are present in approximately 40 percent of all injured divers. Divers with neurological symptoms of decompression illness were the most likely to still have symptoms.

- Mud wrestling over Nitrox

Letters and faxes and editorials are flying about, and claims from both sides suffer from hyperbole. One claim is that Nitrox has been banned in the Caribbean, which isn't true. The Cayman Dive Operators Association has banned Nitrox — which means your not going to use it on a Bob Soto boat (God forbid you should be able to extend your bottom time by 30 minutes). But, it is available to Nitrox trained divers from a Cayman gas supply house.

The Cayman Association, speaking through the voice of the Cayman hyperbaric chamber, has stated that they would not treat a diver who was using Nitrox when he was bent. That's pretty ridiculous. No reputable or ethical medical facility could refuse treatment. Dr. Bill Hamilton, President of Hamilton Research and noted physiologist told us, "I hate lawsuits, but if treatment is refused to any injured diver using Nitrox, I'll be an expert witness if asked."

The Coming Nitrox Computers:

Dive computers designed for air can be used for no decompression Nitrox diving. But, Orca and Dive Rite Manufacturing are introducing Nitrox computers. And the US Navy has completed the testing of a Nitrox computer algorithm and has contacted many dive computer manufacturers about the possibility of producing a wrist unit for the Navy on a licensing arrangement.

Orca is reprogramming their Phoenix for Nitrox and will introduce it at the Diving Equipment Manufacturers trade show this month. For more than a year, they have been programming old Delphi's on special order. New is the Bridge, a wrist computer that is userprogrammable for varying levels of oxygen from 21% to 50% and also programmable for altitudes above 2500 feet. It also features an oxygen clock to monitor oxygen absorptions as well as the ability to store 8 dives and download the profiles to a computer. The Bridge is also a full decompression meter, handling decompression stops to as deep as 90 feet.

Sources tell us that Seiko is manufacturing the Bridge, but Dive Rite Manufacturing, the distributor, will not confirm that. Dive Rite anticipates having product to ship in May of '93 and will have the software available for demonstration at DEMA.

The earliest player in mixed gas computers, Quatek, has gone out of business. Their computer, the ACE, had a package that could be purchased to analyze each tank of gas. Neither the Nitrox Phoenix nor the Bridge has gas analysis capabilities.

Using Nitrox

Nitrox, like compressed air, requires training in its use. And, the gas needs to be analyzed to determine the correct mixture.

Neither compressed air nor Nitrox is a perfect diving gas. It is possible to be bent on both. It is possible to embolize on both. In July alone, eleven American divers died. Eight were using air. Three were using a mixed gas of some sort, but only one was trained and certified in its use.

Using compressed air, narcosis is a problem. Using Nitrox, oxygen toxicity is a problem, so depths must be limited to 130 fsw. Nitrox, however, within the constraints of 130 fsw is safer than compressed air because it reduces the amount of nitrogen absorbed into the diver's body.

Nitrox may not be a gas that everyone either wants to use or may need. But it is a new option which can be considered for use by a trained diver to depths not to exceed 130 fsw.

While the mud wrestling continues, Nitrox diving will expand, computers will be sold, and more and more divers will get into it. In the long run, divers are going to do what they want to do, anyhow.

Ben Davison

A Pitcher of Warm Spit

Last issue, we reported that Dan Quayle spent a bundle of taxpayers' money learning to scuba dive.

This issue, we can report that before Thanksgiving, Vice President-elect Al Gore and his family took a resort course and explored Florida's Looe Key, while based on Little Palm Island, a resort about 28 miles northeast of Key West.

Joe Roth, a general partner of Little Palm Island, told UPI that Gore "told me the whole idea behind the vacation was to be able to spend some quality time with (wife) Tipper and the children. He seems quite impressed with the seclusion we've been able to provide."

No word as to whether he borrowed the Quayle's gear or whether we the people bought him a new set of monogrammed warmup suits.

And while we're at it, one of our readers took exception to our comment about the retiring Vice President. Here is the scolding we took from Louis R. Carrillo of Fort Lauderdale:

"Along with the thousands of divers that read Undercurrent, there are probably more than you may think who believe that 'Danny' would have made a much greater leader than the 'ozone man'. At least with Dan in the oval office we could have slept peacefully knowing that millions of unborn children would not have been aborted, that the tissue of those aborted would not have been used for 'experiments,' that women would have remained women and men remained men, that the fanatic environmentalist would have been controlled (one of the various threats to my sport)....

"Aren't you proud to have favored the 'uninhaler' and the fanatic ozone environmentalist? May God forgive us for our ignorance. I pray for people like you. May you get understanding. Who cares about a \$1529 dive watch. How about sane policies?"

Well, according to John Nance Garner, FDR's Vice President in his first term, "the vice presidency ain't worth a pitcher of warm spit" anyhow.

Ben Davison

HAPPY NEW YEAR !!

On behalf of all of us at <u>UNDERCURRENT</u>, I'd like to wish you and your family a happy and healthy new year, filled with enchanting diving experiences.

Our new year's resolution is to work harder than ever to provide you with the objective, uncensored dive travel and equipment information you deserve.

We've got some exciting new programs planned for 1993. So, stay tuned. The best is yet to come!!