THE PRIVATE EXCLUSIVE GUIDE FOR SERIOUS DIVERS

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Club Akumal, Quintana, Roo, Mexico

All The Presidents' Men

Eleven years ago, the tip of the Yucatan peninsula on which the city of Cancun, Mexico, now sits was untamed jungle. I wish it still were. It's not that I'm opposed to new cities springing from the soil (though I do feel a loss when the wilderness gives way to developers), it's just that I don't derive much pleasure from beaches lined with brand-spanking new high-rise hotels, restaurant chains featuring American-style Mexican food, and boutiques selling replicas of Mayan art. It might as well be Mismi Beach. And from what I understand, the development is not doing all that much for the well-being of the Mexican poor. The once clean and tidy culture of the Indians who lived in the area now seems in shambles. Many of their new neighborhoods, built not even ten years ago, already have all the features of a decaying urban slum.

So it seems appropriate that Mexican President Lopez Portillo selected Cancun for his late October summit meeting attended by the Presidents of twenty-two nations, including our own. Here leaders discussed means to close the widening gap between the rich and the poor, the developed and undeveloped nations. Perhaps no place on earth is that gap more real than in the two worlds of Cancun.

Just as striking was the military security for that meeting. Enroute from my resort to the airport the day before the conference was to commence, my taxi was stopped at two separate roadblocks. My driver was questioned, I was scrutinized, the glove compartment and the trunk was checked. Curbside at the airport my luggage was inspected and, upon the discovery of my dive knife, ten soldiers appeared and encircled me until the security chief decided I was a legitimate diver. My knife was removed from my luggage and checked through to Houston. While boarding the bus on the tarmac for a short ride to the plane, I stopped to photograph a military marching band. Immediately a pinche pendejo (read: police official) rushed up to demand my film. I resisted, explaining that I had 30 other shots on the roll. Other officials appeared,

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and I continued my protest. "Senor, no film, no plane." I heard the bus driver turn the ignition. I handed over the film, feeling as if I had been accused of espionage. When I returned home, I sent a word of protest to the Mayor of Cancun, whom I have no doubt will seek out the <u>pinche pendejo</u> and severely discipline him for infringing upon my rights.

With all my complaints, I'm pleased to report that Cancun was not my primary destination. Rather, I had the foresight to select a secluded resort 60 miles to the south. There, on a splendid soft-sand beach lined with productive coconut palms is Club Akumal, 100 pleasant rooms in four two-story buildings once, according to one brochure, called the "Diving Capital of the World," by Diving magazine. (Another brochure says Skin Diver made the claim.) Twenty-some beach cottages located adjacent to this hotel were once the original Club Akumal, but now these cottages are named the "Hotel Villas Maya."

My five traveling companions and I arrived well after sunset, only to find that we had no reservations (thanks to me and my travel agent who had mistaken the Villa Maya for Club Akumal). Desk clerk Rene Marcos was quick to help and see that rooms were prepared. While we waited, complimentary rums washed away our anxieties. The \$75/day double (which jumps to a somewhat excessive \$130/day in high season) housed two double beds in fairly tight quarters (a small dressing area was adjacent to the bath and shower, where the water was warm but not abundant). An overhead fan kept sea breezes moving through the louvered screened windows, enough to cool the room for easy sleeping on all but one humid night. Most lanais provided ocean views, though a few face opposite a building or the tops of palm trees. Daily the maid would sweep the tile floor, change sheets, tidy the room and provide bottled water (even with precautions, four of the six had a bout with montezuma for one or two days). Nearby, a small store sells Lomotil over-thecounter (and also has basic supplies for people who live in condos down the beach and do light cooking.) Five hundred yards from the hotel is the dive shop, a small boutique and the hotel restaurant. Though I first felt annoyed to learn of the hike to meals, each stroll down the lovely beach, especially in the moonlight, was magic.

And it is this marvelous beach that makes Akumal. The water is calm, well-protected by the barrier reef which runs 500 yards off-shore. The coconut palms create the perfect tropical image. At night, the moon illuminates the beach, creating a most remarkable romantic landscape. If the moon has yet to rise, the black sky above is punctuated with a million stars and a thousand galaxies. The only sounds are the gentle lapping of the waves.

Now with all this beauty, can Akumal possibly be the diving capital of the world? Well, given the criticism divers frequently level at Mexican operations, the shop is not bad at all. Arturo Orozco began the business ten years ago, left last year, then returned to work for an American manager, Dick Blanchard, a pleasant and accommodating fellow. They pump their 3000 psi tanks to 2600+ (my buddy's tank once had 2100, so it's wise to check the fill with the gauge kept near the tanks). A few regulators and BC's are available for rental and minor repairs can be made by the shop. To dive, one must tote his tank 50 yards down the beach to the boats, but the boat will motor to the hotel to pick up gear bags (as the bags can be left in the shop). I dived from two boats, both lifeguard style, one about 20 feet, the other a bit less, each powered by an outboard. Other boats, including an inboard with a cabin, are available for fishing, trips up the beach or, presumably, diving. Departure time is arranged the day before the dive, usually between 9 and 10 (add a half hour for what Arturo calls "Mexican time") for the morning, one tank dive, Though I took only single-tank morning trips (\$23, which includes a 10 percent tax) one can schedule afternoon trips. Two tank trips can be arranged if the other divers agree. Blanchard gave me every indication of accommodating divers' needs, including sending the boat out when I was the only diver. "One's good enough for us," he said.

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Once on board, the guides or boatman provided no assistance with dressing, at least not for the men. A female buddy accompanying me, however, received very close attention from guide Beto, who adjusted her straps on the surface, and twice on the bottom between dives. She believed, she told me, that his hands had other purposes, and she did not appreciate the personal attention. While we dived, the boatman circled above, keeping his eye on our bubbles.

So, the diving capital of the world? Only, perhaps, of a museum on the premises which displays archeological relics (never open during my stay). Underwater, it is not the diving capital of the world, though my first dive--which

turned out to be the best--gave me some hope. I had requested a shallow dive--about 40 feet--for my inexperienced buddy who had been out of the water for sometime, but when we stopped (about 25 minutes from departure) and I entered the water, the bottom was not in sight. My buddy opted not to dive, so I joined the guide, Beto, and one other paying customer, both of whom sported arbaletes.

The coral bottom, which ranged from 70 to 90 feet deep, was sliced with canyons and cuts and overhanging ledges, providing marvelous passages to swim

through. Plates of sheet coral here-and-there created somewhat of a fairyland atmosphere and most other types of hard coral-leaf, brain, ribbon-were apparent. Some soft corals such as sea rods and corky sea fingers added a pleasant effect and though there were a few sea fans and sponges, they were somewhat small. I observed a fair array of tropical fish-grunts, damsels, blue tangs, small snappers and parrots-and also saw a French angel, a grey angel, and a couple of good sized hogfish. All-in-all the terrain was pleasant—the narrow canyons especially—and though the colors were a bit drab and the fish life common, I presumed things would be better.

It didn't happen. As it was, this was the best dive, though fairly typical. The second dive in 40 feet of water (my buddy now joined me) proved quite similar, with a few canyons and a friendly french angel. On this dive Beto shot at and missed a larger grouper (as the rubbers of the arbalete snapped, two barracuda appeared; when Beto reeled in an empty spear the barracuda disappeared) but bagged an 8-1b hogfish. The colors remained brown and grey, never contrasted with the brightness of colorful sponges found at other dive destinations. Generally, reef fish remained common, though on my half-dozen other dives I spotted a large sting ray in the sand, one highhat, occasional cleaner wrasses and fairy basslets, a few pairs of butterflies, a few more angels, and a school of ocean triggers. I saw no eagle rays, sharks (Arturo says they see them "once-in-a-while") or other pelagics. Not once did I see an eel. With my macro lens posed on two dives, I found a few topics -- e.g., a couple of tiny purple shrimp -- but subjects were generally difficult to find. I saw but one tube worm. In some areas, there were large racks of elkhorn coral rising near the surface, but there were also wide areas covered with broken antler coral, remnants of the frequent hurricanes which hit the Yucatan shoreline.

One day we took a delightful Robinson Crusoe cruise (\$27.50/person, plus \$9 for diving) 35 minutes up the coast to a beautiful little coconut palm covered beach, guarded by a small six-foot square and six-foot high Mayan temple. On our journey to the beach we trolled and landed a 4-foot barracuda then, after depositing our nondiving passengers on the beach, took a pleasant dive among

the canyons. Beto collected a dozen conch (with my untrained eyes I was only able to find one) and speared a snapper. Our hosts prepared a tangy ceviche, then served grilled fish, tomato and onion salad, and plenty of cold cerveza and cola-cola. Though the nearby water was a bit too stirred up for pleasant snorkeling, I dived with thousands of sardines which schooled but fifteen yards offshore. Though the nearby water was a bit too stirred up for pleasant snorkeling, I dived with thousands of sardines which schooled but fifteen yards off shore. And, while writing of snorkeling, I should note that off the hotel beach there's plenty of coral, some live and some dead from the storms, in which beginning snorkelers will find quite a bit to keep them busy: I spotted, other than the average reef fish, a large puffer, a couple of small barracuda, and an occasional shell. Experienced snorkelers run out of fun in a couple of days.

Overall, I rate the diving quite average. Though I dislike—in fact, deplore—spearfishing, I should indicate this is one resort where people who spearfish would be welcome—and the hotel chef will prepare a day's catch for the dinner table. Arturo and Beto spearfish for their own consumption or for sale to the restaurant. They also fish with lines at night and go on special spearfishing trips to provide seafood for the hotel. Arturo admitted that spearing has hurt the reef. "When I came here ten years ago, I could go right out in front of the hotel and get all the fish we needed. Now we have to go 20 minutes past Ak (about 45 minutes by boat) to find fish like we used to." I asked for a trip to see what it used to be like. But national hero, Fernando Valenzuela, happened to be pitching against Montreal, and the long trip, I surmised, conflicted with the radio broadcast. We dived at a nearby reef.

The food at Club Akumal was sometimes quite good, sometimes quite average. but always with surprises. Breakfast french toast and huevos rancheros were excellent. Sometimes the rolls would be hot, sometimes toasted, sometimes accompanied by almond cookies, and whether there would be butter was a toss up. The fruit plate might be only watermelon, or it might be papaya, pineapple and watermelon. Lunches were broiled fish, chicken, the ever-famous paillard or small salads, but if one begged for a club sandwich or a steak sandwich (neither was on the menu) it would generally be prepared. Dinners were steak (usually tough), fresh fish, shrimp, or chicken (\$6-\$9) but if one asked for lobster (again, not on the menu) it was likely to be available (\$15) and prepared differently each night. Dishes could also be prepared en flambe at the table. Mexican food, at least as we Americans recognize it, was noticeably absent. We requested tacos and enchiladas for dinner a day ahead and, sure enough, that's what we got. The service was generally good (on one day 19 waiters stood by to serve eleven diners) and the staff was indeed pleasant. Occasionally, lunches were served in the small, covered beach bar, alongside the swimming pool.

Club Akumal is a lovely and pleasant get-away spot, just right for people who want absolutely nothing to do-there are no phones, no newspapers, no entertainment. A tennis court is planned and a new restaurant closer to the hotel is being constructed. The staff was especially gracious and helpful. Much of my good feelings, however, might be related to the quietude; the hotel was barely occupied. I suspect the beach might become a miniature Coney Island when all 100 rooms are filled. And let me emphasize this is no destination for a diver hell-bent on three tanks a day, expecting to view plenty of fish and virgin coral. The diving is pleasant, though average. If one is content with taking half-adozen leisurely dives, then the Club has much to offer.

Side-trips: The Yucatan is rife with Mayan ruins. Twenty minutes south of Club Akumal are the coastal ruins of Tulum, and other ruins are just as close. The hotel can arrange transportation. We took an all-day trip to Chichen Itza

(4 hours one-way, \$200 with a guide), an extraordinary sight, and well worth the muggy drive. One can also arrange a side-trip to Cancun for shopping, about \$30-40, taxi, one-way. Since guides are available at the ruins, one might save a substantial sum by renting a car at the airport and doing all the driving. The roads are flat, straight, and paved.

Reservations: Call your travel agent or 800/231-0228 (in Texas, 800/392-6357). In addition to 92 double rooms, eight suites are available at \$200/day, winter rates. Beach cottages-the Hotel Villa Maya-may be rented for \$65/day, by calling 915/584-3552. (Dive packages are also available.) These units, now undergoing conversion to time-share, are pleasant, but have no beach chairs, no pool, and are (at least until January when federal power is supposed to be coming in) immersed in the 24-hour hum of the generator. Two-bedroom condos (refrigerator but no stove) for up to five people may be rented for \$110/day; write Las Casitas Akumal, PO Box 714, Cancun, Quintana Roo, Mexico.

Divers' Compass: The rainy season runs from mid May to late September. . . . On quiet nights, mosquitoes and no-see-'ems were around, sometimes in force; most of the time a healthy breeze kept them away; the store sells repellant, but not much help after-the-fact. . . . There is a 10 percent tax added to everything, but the hotel adds no additional service charge; tip waiters, maids and dive guides separately. Visibility ran between 50 and 90 feet, depending upon te area and the weather.

Reports From Our Readers' Travels: Part I

Each year we update our travel information by publishing comments received from our readers. We synthesize the information we receive from letters and questionnaires we include in a couple of issues a year, and combine it with impressions we receive from traveling divers we meet or who call us to chew the fat. None of the following comments reflect first-hand staff or correspondent visits. They are readers' comments, selected because they seem to give useful impressions and provide valuable insights to divers planning future trips. And we also hope they're read by the resorts we write about. The good ones need to get a well-deserved stroke or two and the ones that don't measure up-well, perhaps when they see their faults in print they'll make the necessary improvements. And we should add that we'll be introducing the "star" terminology to our ratings. (See the rating chart on Club Akumal). Five stars is tops, four stars quite good, three stars average or a little better than average diving, two stars means there's little redeeming value, and one star means stay home.

ARUBA: E. O'Dell (Bloomfield, NJ) writes that Aruba "is my favorite island. People are great and so is the food and beaches. But the diving, compared to Cozumel, is poor." He found a few decent reefs, but he complained that the guides operating out the <u>Aruba Sheraton</u> herded divers around in groups and showed no respect for the serious diver.

BAHAMAS: If there's good diving out of Nassau, the locals are keeping it to themselves. Joyce Burek (Houston) found a few better than average sites with the Sun divers at RCI-Condo Guanahani Village, but was disappointed with the dive operation--"it was not very professional. It was geared to novice divers and the boat pilot often had trouble locating sites and wrecks--or promised one location then went to another". . . She also tried Bahamas Divers in Nassau and found them more professional, but geared toward "novice divers and people off cruise ships."

. . . Clyde Alderman (Danville, Virginia) took an Omork Tours trip to South Ocean Beach and writes: "The place is terrible, the diving terrible. I wouldn't go back for free."

Small Hope Bay on Andros, according to Inga and Don Mahler (Newton, Mass) is an "unusually friendly place, the same as on our previous visit. Staff, guests, and owners all one big family." The over-the-wall dive to 185 feet is terrific and most other dives are rated about 3+ stars by our readers. The rustic lodge is comfortable, the food hearty....On North Eleuthera the Current Club has a wonderful drift dive with speeds up to 7 knots, but the surrounding reefs don't show much to experienced divers. Here in September, Carl Mintz (Washington, D.C.), complained that the dive guides needed more than friendly persuasion to take him out....Earlier Mintz had visited the Remora Bay Club on Eleuthera and reported that "diving was generally superb with no restrictions for experienced divers. Other readers reported fine food and accommodations. Mintz said, "Delicious five-" course dinners every night.

We reviewed the Guana Harbor Club in Abaco in April and though our not too ecstatic impressions concerned Ted Blau (Tampa), he still continued with his plans to stay at the nearby Abaco Inn and issued a fine report. "The food was stunning (Cold beet sour or crab mousse, brandied quail, fresh whole wheat pasta, and "cream" lime pie a typical dinner) and the service elegant -- in a casual setting. On water's edge are ten comfortable rooms in five small cottages. Dave Gale operates a dive operation at the Island Marina, 5 minutes by boat from the hotel, and though I couldn't dive with him his assistant introduced me to the reefs, then I rented a Boston Whaler and explored with my buddies." Blau found fine reefs, a good number of large fish and abundant healthy coral and made a interesting dive on the USS Adirondack, which sank in 1862.... Also on Abaco, Stewart Kirkpatrick stayed in a very nice rental house (write R. Pingeon, 401 E 56, NYC 10021, for details) and drove 10 minutes to dive with Dan Wiltfang at the Chambered Nautilius. Diving was less than 75 feet, but the reefs were "full of life.... And Wiltfang was a fine guy," though perhaps a little restrictive for experienced divers. With a rental house the prices are low.

With one exception, divers found diving with Neal Watson on Bimini consistent with our September, 1979 review, about 3-4 stars. Hank Trisler (San Jose, CA) said the diving "while not spectacular was good and very interesting.... I'd go back." Margaret Maxell (Tucson) said she and other divers thought they got their moneys-worth. The exception? Chap Hodges of Birmington, Alabama, who said the whole experience was "the pits." Others didn't agree with him, but would surely share that opinion of the dumper Brown's Hotel (where divers on the package get put up), although the price is right.

According to Sam Broyles (Boulder Colorado), who visited Exuma, dinner at the Out Island Inn "was excellent, breakfast and lunch so-so.... the main dive boat of the Exuma Divers is a houseboat with plenty of equipment and a large dive platform. Shallow reefs have spectacular variety of tropical fish, corals and sponges." Other divers seem to like it as well. Stella Maris continues to get mixed reviews. Shark Reef is "electrifying," writes one reader, but others indicate they tire of the average patch reef diving. Food's good, the staff genial, the dive guides work hard to please their guests, but underwater the scenery grows old after a few days.

P.S. on Bahamas diving: Winter water temperatures is in low 70's and for many people even a wet suit top is insufficient for two dives. And the weather too can be nippy; several islands are north of Miami.

Does Diver Training Produce Competent Divers?

Results Of An Undercurrent Survey

Just how well are American divers trained? Is a person who takes a NAUI course in Nebraska certain to be taught the same skills as one who takes a NAUI course in Oregon? Are divers confident once they receive certification, that is, confident enough to dive with another buddy without the presence of a guide or instructor? Are there significant differences in what a PADI-trained diver learns when compared to an NASDS-trained diver? Does a YMCA diver learn the same skills as divers trained through dive shops?

These are a few of the questions which interested us, so several months ago we included a questionnaire in *Undercurrent* to gather data regarding diver training. We received 452 responses, 295 from divers certified between 1976 and 1980, and 157 from divers certified between 1970 and 1975. The agencies about which we received sufficient data to report on are NASDS, NAUI, PADI and the YMCA.

The results of our study produced a great deal of information about training programs, but the reader should be aware that our findings may not be statistically representative of the entire population. The sample was drawn only from our readers, who, because they are readers, are more interested in keeping current about the state-of-the-art in diving and, we presume, more active in diving than the average diver. However, we believe the data does provide a useful overall picture of training activities and the quality of divers being produced. The serious students of the diving industry should no doubt find much to mull over.

The findings of our study indicated that in some ways the agency training programs do differ from one another, although those differences are much less than the agencies might have the diving public believe as they try to advertise the advantages of their program over the others. Divers responding to our survey, regardless of the program in which they were certified, indicate substantial similarities in what they were taught.

"...the basic certification course content—and the quality of the diver who graduates from the course—is determined by and large by the competency of instructor, not by the policy of the certifying agency."

More striking, perhaps, are the differences within each agency's program. There is little consistency from course to course, from instructor to instructor. What one diver is taught in one NAUI course (in Nebraska, for example) may not be taught in that same course in Oregon, just as it may or may not be taught in any PADI, NASDS or YMCA course. It's the internal variances that clearly suggest that the basic certification course content—and the quality of the diver who graduates from the course—is determined by and large by the competency of the instructor, not by the policy of the certifying agency. If there are agency philosophies—and accompanying skills they expect all their certified divers to have—the results of our survey don't clearly show it.

Students, Instructors and Courses

Of the respondents to our questionnaire who were certified between 1970 and 1975, 13 percent were female. That figure nearly doubled for the 1976-1980 period, for which 25 percent of the respondents were female, which suggests a marked increase in female participation in diving. If we look at respondents who were certified in the last two years of our survey, 1979 and 1980, 38 percent were women.

Although there are some differences between agencies in the structure of their training, the differences are not remarkable. NASDS has the highest student/instructor-aide ratio (one instructor-aide to 5.6 students) and YMCA the lowest (one instructor-aide to 3.6 students.) The YMCA trainees had fewer tank dives in open water than did the other agencies (for example, 2.2 tank dives compared to 4.4 for PADI trainees), but they had more pool hours (18 pool hours compared to 13.4 for PADI trainees.)

No doubt it would be useful to make a comparison of trainees in the most current year (1980) to determine if there were significant changes in training programs over the five-year period, but we had an insufficient number of respondents from a single year to make the comparison. However, a look at the data suggests, if anything, that the number of dives, the hours of pool work and so forth, did not differ significantly in 1980 from the five-year averages. Following is the chart comparing the structures of agency training programs between 1976-1980.

Course Profile by Agency

Averages: 1976-1980	NASDS	NAUI	PADI	YMCA
Number of Students	10.6	11.8	11.4	14.8
Number of Instructors & aides	1.9	2.8	3.1	4.1
Student/Instructor Ratio	5.6:1	4.2:1	3.7:1	3.6:1
Classroom Hours	16.4	18.2	16.0	19.6
Pool Hours	13.6	14.0	13.4	18.0
Free Dives-Open Water	1.4	1.6	1.5	.9
Tank Dives-Open Water	3.2	3.9	4.4	2.2

Open Water Training

Of the divers certified between 1976 and 1980 who responded to our survey, 55 percent received some training in the ocean; 35 percent didn't. Prior to 1976 only 46 percent had received any ocean training, indicating an improvement in the ability of the student

"Of the divers certified between 1976 and 1980 who responded to our survey, 55 percent received some training in the ocean; 35 percent didn't."

diver to get to the ocean. Divers receiving training in quarries, the next highest mention of open water training, has held steady at roughly 30 percent through 1970-1980.

In looking at individual training agencies since 1975, perhaps the most interesting figure is that 80 percent of PADI trainees received ocean experience as compared to 59 percent of NAUI trainees, 40 percent of NASDS trainees and 27 percent of YMCA trainees. However, one must be careful about drawing conclusions from this data because, for example, if NASDS had more inland divers trained than did PADI (e.g., training more divers in Nebraska, while PADI is training them in Florida) one would expect NASDS to have fewer mentions of ocean training.

The data indicates that most open water training is conducted in fairly easy conditions and with very few environmental factors to overcome or learn about. For example, only 22 percent experienced any current in their open water training, 15 percent had deep dives (below 80 feet), 36 percent received some training in underwater navigation, 12 percent dived at night, and 48 percent had some boat diving experience.

Buddy Changes

Among divers trained since 1976, 61 percent had more than one buddy during their training and 39 percent stayed with a single buddy. This is a slight change from those trained in the 1970-1975 period where 55 percent changed and 45 percent did not. By agency we see that: 68 percent of NAUI divers had more than one buddy; 60 percent of PADI; 55 percent of NASDS and 52 percent of YMCA.

Buddy Breathing in Open Water

Of those divers certified since 1976, 21 percent were not required to practice buddy breathing in open-water training. Among the balance, 33 percent had only one experience; 25 percent had two and 19 percent practiced three or more times. By agency, 26 percent of the NAUI trainees had no open-water buddy breathing lessons; 15 percent of the PADI and 18 percent of the NASDS (there may be some error in

interpretation here because NASDS teaches breathing with an auxillary second stage, not buddy breathing with one shared regulator.) Nearly half of the YMCA-trained divers—42 percent—had no openwater buddy breathing training. There was little difference in the statistical results of divers trained between 1970-1975 and those trained after that period.

We asked our subscribers, "Upon completion of your course, did you feel that you had mastered buddy breathing?" The results indicated that more than 20 percent of those certified in the last five years got their C-card without mastering the skill. (We are not reporting NASDS results here because NASDS policy is to teach the use of the auxillary second stage regulator rather than two divers sharing one regulator.)

Buddy Breathing Training In Open Water

		1970-1975	1976-1980
NAUI:	Yes	60%	80%
	No	40%	20%
PADI:	Yes	61%	85%
	No	39%	15%
YMCA:	Yes	74%	75%
	No	26%	25%

Ascent Training

Ascent training remains controversial because of the possibility of an embolism occurring should an untrained diver perform the ascent incorrectly and fail to exhale continuously.

Buddy Breathing Ascents

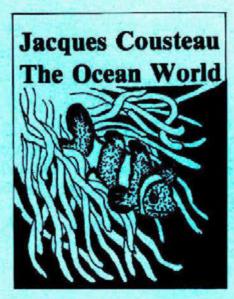
Of the divers trained since 1976 who responded to our survey, 41 percent did not perform buddy breathing ascents in open water. Looking at the individual agencies we see that: 69 percent of YMCA, 48 percent of NASDS, 47 percent of NAUI, and 28 percent of PADI-trained divers had not experienced buddy breathing ascents in open water. (Again, the NASDS data must be treated cautiously.)

Our readers report very little change during the decade in this type of training. From 1970-1975, 23 percent had no open-water buddy breathing (compared to 21 percent from 1976-1980) and 43 percent had no open-water buddy breathing ascent training (compared to 42 percent for the following period.)

Free Ascents With Weights

During this free ascent training, divers ascend to the surface without using any air from the tank. In the '76-'80 period, 41 percent of the respondents indicated they had practiced at least one free ascent in open-water training with their weight belts on. This is a change over previous years when 55 percent had not undertaken a free-ascent with weights on. Apparent-

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Man's ancient dream of unlocking the secrets of the sea has been brought closer to reality by Captain Cousteau, who has written of his involvement with the sea: "We want to explore the themes of the ocean's existence—how it moves and breathes, how it experiences dramas and seasons, how it nourishes its hosts of living things, how it harmonizes the physical and biological rhythms of the whole earth, what hurts it and what feeds it—not least of all, what are its stories."

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Ranging far and wide, Captain Cousteau tells of the male salmon returning to his spawning ground to breed before he dies, his body degenerating as much in his last two weeks as a man's would in forty years. He describes the "labor pains" of the male seahorse, who fertilizes and incubates his mate's eggs in his brood pouch, and "gives birth" to the offspring. And among myriad fascinating facts we learn that an oyster has the incredible ability to produce up to 500 million eggs in a year.

THE OCEAN WORLD also includes information on new developments in oceanography, accounts of those adventurers who have challenged the sea, firsthand descriptions of the dangers that divers face, and an entire chapter devoted to the myths and legends by which an ancient peoples have tried to provide answers to such eternal questions as Why does the sea roar? Why is the sea salty? Why do fish not speak?

The glorious full-page and double-spread color photographs, chosen from the Cousteau archives and marine libraries around the world, the tremendous breadth of the material so vividly presented, and most important, the gently engaging narrative voice of Captain Cousteau make this stunning volume a welcome addition to any home library.

For old salts as well as landlubbers, every page of THE OCEAN WORLD is an experience in discovery of the secrets of the deep.

Order yours now.

STATE

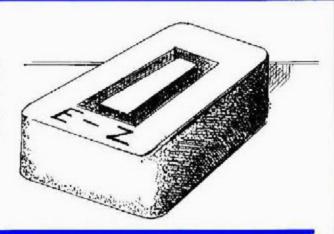
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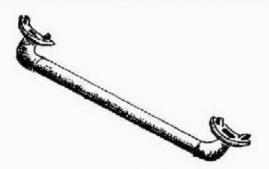
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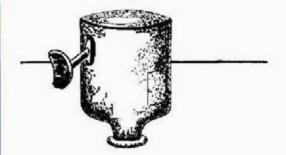
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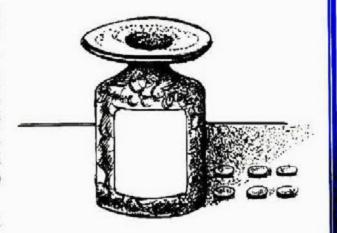
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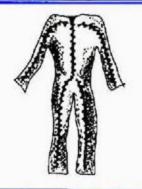
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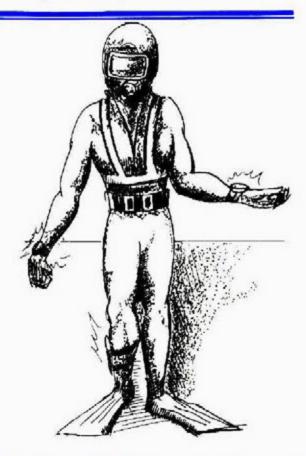
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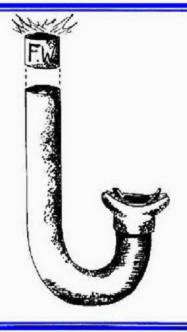
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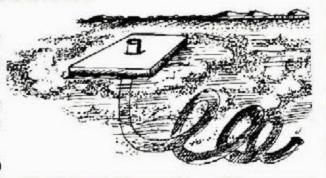
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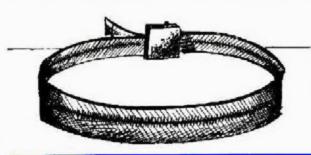
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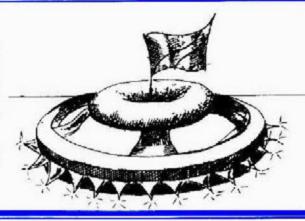
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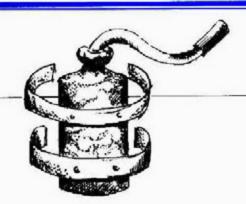
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Thanks to David G. Thomas and Carl Muldner for the creation and design of our first gift catalogue. ly, PADI courses, compared to other agency courses, have more free ascent training with weights. Only 28 percent of PADI divers say they did not make a free ascent in open-water: the figure for NASDS was 46 percent; for NAUI, 48 percent; and for the YMCA, 72 percent did not make an open-water free ascent with weights.

Free Ascents Without Weights

In this exercise, the weight belt is dropped before the trainee swims to the surface.

Comparing free ascent experiences for the two time periods, we find that overall there has been no change. In total, 66 percent of the respondents did not make a free ascent in the open-water training without their weights. The data indicates that the agencies, with the exception of NASDS, have decreased their teaching of this technique.

BC Ascents

The use of BC-assisted ascents has increased dramatically in the '76-'80 period (of course, BCs did not come into widespread use until the early '70s.) Despite the increase, 36 percent of divers certified since 1976 did not perform a BC ascent in the open water during training. The leader in BC ascent training is NASDS with 75 percent of their divers taking one or more ascents in open water compared to 71 percent for PADI; 58 percent for YMCA and 50 percent for NAUI.

The Agencies and Ascent Training: Summary

YMCA: Since 1976, 28 percent of YMCA divers in training took one or more free ascents wearing their weight belts; and 13 percent had one or more ascents without a weight belt. Fifty-eight percent took BC ascents. In looking at the most current year, 1980, only one out of ten divers had experience in any of these categories. YMCA ascent training appears to be ending, and this is reflected in the responses.

NAUI: Among NAUI divers trained since 1976, 53 percent received at least one free ascent training experience wearing their weight belt. Twenty-seven percent had one or more ascents without weights, while 50 percent have had one or more experiences with BC ascents. The data would suggest that NAUI is also reducing their free ascent training since a lower percentage of our respondents received that training in 1980 than did in 1976. Still, 32 percent of their divers had at least one type of free ascent training during their course.

PADI: From our data, PADI has more ascent training than the other agencies. Seventy-four percent received free ascent experiences in the open water with a weight belt, 39 percent without weights and 73 percent had at least one training experience using a BC.

NASDS: Since 1976, 54 percent of NASDS divers in training had one or more free ascent experiences with the weight belt, 50 percent without the weight belt and 75 percent took one or more BC ascents.

Obviously, a high percentage of divers complete certification courses without even a single exercise in the basic skill of getting out of trouble underwater. Assuming that 200,000 divers are trained annually, 40,000 to 120,000 are getting partial or no training at all in surviving an out-of-air situation. Furthermore, most of the divers who had made a free ascent (with or without weights) or a BC-assisted ascent made only one or two in their training.

In summary, the results are:

No Open-Water Ascent Experience

	1970-75	1976-80
Buddy Breathing ascent	43%	41%
Free Ascent with Weights	55%	41%
Free Ascent without Weights	66%	66%
BC Ascent	63%	36%

Mastering the Skills

We asked our subscribers "Upon completion of the course did you feel that you had mastered swimming/free ascents?" In the last five years, 54 percent of the divers graduating believed they had mastered free ascent at graduation, while 46 percent answered they had not. The results by agency are:

Master Swimming/Free Ascent

		1970-1975	1976-1980
NASDS	S: Yes	35%	84%
	No	65%	36%
NAUI:	Yes	47%	50%
	No	53%	50%
PADI:	Yes	48%	62%
	No	52%	38%
YMCA:	Yes	40%	24%
	No	60%	76%

As the data indicates that nearly half the respondents trained since 1976 did not believe that they had mastered the free ascent when they received their C-card. The reason is clear. The data shows those techniques are not being taught.

Rescue Training

Teaching divers skills to rescue other divers is not a significant part of diver training according to our readers; since 1976, 43 percent received no training whatsoever. In the 1970-1975 period, 57 percent had no rescue training. Among the agencies, NASDS seems to put the most emphasis on rescue: 78 percent of their 1976-1980 trainees said they had received an hour or more of rescue training. NAUI followed with

68 percent of their trainees, PADI with 55 percent and YMCA, 40 percent.

Navy Tables

Among the 295 divers certified since 1976, 2 percent indicated they had not spent any time (zero hours) working on the Navy dive tables. Of the 157 certified prior to 1976, 8 percent said that they had not spent any time with the Navy dive tables. The balance of those certified since 1976 is scattered: 14 percent had one hour, 25 percent two hours, 25 percent three hours, 12 percent four hours and 22 percent five hours with the Navy tables.

There seems to be no correlation between the agency under which one is trained and the amount of time spent on the tables. Thus it must reflect either the emphasis of the particular instructor or the intelligence level of the class. (The faster they learn the tables the less time they spend studying them.)

Perhaps more revealing are the responses to the question, "After you were certified, how confident were you that you could work the Navy dive tables?" Over half (58 percent) said they were very confident and 26 percent were somewhat confident. A full 16 percent of the divers certified did not feel that they could work the Navy tables with confidence when they were certified; 13 percent said that they had to check their work with a buddy while 3 percent believed they had to let their buddy do the work. There has been some improvement from the previous half decade where the data indicates that 26 percent of the divers did not believe they could do the tables by themselves.

The results by agency:

Confidence Working Navy Tables

	1970-1975	1976-1980
Very Confident	50%	58%
Somewhat Confident	24%	26%
Check with others	18%	13%
Let others compute for me	8%	3%

Diving Confidence

Regardless of what is taught in a diving course, the bottom line is the confidence a newly certified diver has in his ability to take care of himself underwater. The final product of an effective course, we believe, should be a confident diver.

Overall the data indicates that divers certified since 1976 are slightly more confident on their first few dives with another recently certified diver than were those certified prior to 1976. We asked divers whether they were "very confident," "somewhat confident:" "nervous," or "very nervous." Looking just at those certified since 1976 we find that 70 percent of the divers were confident to some degree (very confident or somewhat confident) on their first few

dives. That means, however, that 30 percent were not confident: they were "nervous" or "very nervous." Since one must be confident to be a safe diver, the data suggests that 30 percent of the divers certified have a ways to go before they are safe divers.

Confidence after Certification

	1977-75	1976-80
Very Confident	38%	36%
Somewhat Confident	30%	34%
Nervous	23%	22%
Very Nervous	10%	8%

If one looks just at the figures for the most current year of data, 1980, there appears to be no significant difference. 44 percent were very confident, 30 percent somewhat confident, 17 percent nervous, 9 percent very nervous.

Our survey includes only active divers. No doubt a survey of all certified divers would give us a much higher figure of unconfident divers. No doubt thousands of newly certified divers who take a couple of first dives, don't have confidence and stop diving.

Up to 75 percent of the 150,000-200,000 divers certified annually stop diving forever during the first year after certification. Had we surveyed them, no doubt the percentage who indicated they lacked confidence would greatly exceed the 30 percent.

One might say, then, that aside from all the specific shortcomings of diver training uncovered by our survey, the most significant result is that great numbers of divers are awarded a C-card without achieving confidence in their own diving skills.

Diver Confidence Today

Finally, we asked our readers about their current self-confidence. The results indicate that the confidence in their skills has grown since certification, although there are still active divers who lack confidence in their ability. The results, in response to the question, "How confident do you feel that you could free ascend from 60 feet or deeper (with or without a weight belt)?" are:

Free Ascent Confidence

	1970-75	1976-80
Very Confident	48%	38%
Somewhat Confident	41%	48%
Not Confident at all	7%	11%
Don't think I could do It	4%	3%

If one looks just at the students certified in 1980, it becomes even more apparent that within the first year after certification these skills are yet to develop: 29 percent of the 1980 graduates indicated they were very confident they could undertake a free ascent; 54 percent indicated they were somewhat confident, and 17 percent stated they were not confident at all.

We also asked our readers, "How confident do

you feel that you could buddy breathe to the surface from 60 feet or deeper?" The level of confidence is quite high:

Buddy Breathing Confidence

	1970-75	1976-80
Very Confident	70%	70%
Somewhat Confident	26%	24%
Not Confident at all	4%	6%
Don't think I could do it	0%	0%

Forthcoming: What agency executives have to say about our study.

CMAS

We inadvertently omitted the author's name on our September article on "CMAS: The World Underwater Federation; Why the U.S. isn't fully accepted." The article was written by John Fine, a Scarsdale, New York attorney, whose articles have appeared in scores of magazines from Skin Diver to the Saturday Evening Post.

Up Above And Down Below

The Thrills And Risks Of Flying & Diving

To induce people to become divers, the industry proclaims that the sport is safe and we suppose it is, if a diver follows basic rules. But whenever one ventures into an environment without oxygen, there are indeed inherent risks and in the case of diving, not only are there risks of not being able to breathe, but concomitant risks of bends and embolism increase the danger of the sport. Nevertheless, many people treat the sport and its requirements—establishing a plan, keeping well-maintained equipment, and becoming well-trained—without the respect it deserves.

The other alien environment in which humans travel—the air—gets much greater respect. We can't

imagine a pilot flying without an altimeter or failing to carrying a watch. Nor can we imagine a pilot not charting a course ahead of time. Yet many divers break these rules all the time.

Flying and diving are no doubt similar and we were fortunate enough to locate a New York diver (he's asked to remain unnamed) who has logged hundreds of hours diving and thousands piloting the most sophisticated military aircraft in the world. He has enormous respect for the excitement—and the risks—of both activities and it occurred to us that by sharing the similarities he sees, divers might have a little clearer picture of why and how they should take care of themselves beneath the surface of the sea.

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Airplanes have been my all-consuming love as long as I can remember. At age five I was taken by my grandfather to see my first real airplane close-up—a single-engine Taylorcraft which had made a forced landing in a farmer's field. It was beyond my imagination that another human being had actually flown that airplane! My grandfather had to carry me, crying, all the way back to the car because I refused to leave it.

As I grew older, dreaming of someday flying, I developed another love—a love for the water, the marine life, and the sports. Although I was not to see the ocean until I was nearly 18, the creeks, rivers and lakes near my home were sources of great free diving pleasure. My first scuba equipment consisted of a surplus 1800 psi aircraft oxygen bottle, a homemade backpack, and an early Healthways regulator that I had ordered by mail. My first dive was a rather shallow (luckily for me) exploration of a lake, alone, with no depth gauge, and with absolutely no knowledge of diving physics. Needless to say, I survived that dive and a few more before I moved to an area where I found a dive course and enrolled.

My flying education followed a more vigorous routine. I progressed through civilian flight instruction, the Navy flight school, several Marine fighter squadrons, more than 100 combat missions in Korea, almost 300 combat missions in Vietnam, and the Navy Test Pilot School. Now, I am Chief Test Pilot for a major aerospace company.

As an experimental test pilot, I find it essential to know my personal equipment, both normal and emergency, so well that I can find and activate devices on my harness (e.g., radio beacons and flares) in complete darkness or while blinded. without having to fumble for them or consciously remember where they are. On every flight I carry special equipment on my torso harness: radio beacons, strobe lights, flares for both day and night, a reflecting signal mirror, two knives strategically located on my right calf and left rear thigh, a shroud cutter and a flotation device. Although not quite as well-equipped in my scuba uniform, I do have some emergency equipment: a whistle for attracting attention on the surface, my buoyancy compensator which doubles as an emergency flotation device, a snorkel for any required surface swim and a knife for cutting away entangling lines. And I must know how to find and use them in any circumstances.

Preparing for a test flight clearly shows the similarities of flying and diving. First, there is the planning, in almost painful detail, of what is required to reach our objectives. A thorough briefing of the planned flight maneuvers follows, attended by other occupants of the test airplane, the safety chase airplane crew and the flight test engineers. After the briefing, the personal flight equipment is closely inspected and then donned.

I visually inspect the aircraft before I strap myself into the cockpit. A crew chief assists (though I could do it myself) to ensure that all straps are properly secured, the equipment is hooked up correctly and oxygen and communications systems are functioning. As I strap on my oxygen mask before starting the engines, I am reminded of putting the regulator in my

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my mouth before entering the water.

When I am testing a two-seat airplane, my "buddy" is a weapons system operator. We each have our individual jobs to perform but we must closely coordinate our actions and constantly monitor each other. If am flying "single seat," then my "buddy" is my chase pilot.

After takeoff I'm in an alien environment. But what an environment: beautiful fleecy clouds I can now touch, sometimes unlimited visibility, a fantastic view of parts of our wonderful planet from a unique vantage point, complete freedom to loop, roll, turn, and spin. For short periods of zero gravity I have no weight. Climbing at Mach 1.20 (1.20 times the speed of sound) I approach my test altitude of 48,000 feet and level off for an acceleration to Mach 2.40 (1650 m.p.h) At Mach 2.40 I stabilize in Mach and altitude and check all my instruments.

As I begin my turn I flex my stomach muscles to keep my blood in the upper part of my body to avoid blacking out. With the help of my anti-g suit, I pull 8.5 g's without blacking out. I have used an altimeter to determine my altitude and carefully avoid flying above 50,000 feet because there I must have a pressure suit to prevent my blood from "boiling" should I loose pressurization at this altitude. I have height limits, just as a diver has depth limits.

During the climb the cabin pressure constantly decreases until the pressurization equals half an atmosphere. I equalize during the climb and the subsequent descent in the same way I do when I dive—by squeezing my nose and gently blowing. When I dive I'm constrained in time by the quantity of compressed air, so I am constrained by the quantity of oxygen in the airplane to which I'm securely hooked by special oxygen lines.

After a few more high g structural test maneuvers at altitudes greater than 40,000 feet, I descend to 35,000 feet where I intentionally depart from controlled flight to out-of-control test maneuvers. As the plane yaws and rolls violently and the angle-of-attack increases rapidly, I feel myself being slammed against one side of the cockpit and then the other. If one or both engines fail during this violent maneuver, I must start recovery immediately and simultaneously try to get at least one started. I must be fully familiar with every emergency procedure, so I don't waste time trying to remember each necessary step.

Four more "out-of-control" maneuvers later, my fuel gauge tells me it is time to head for home. I transmit my intentions to the ground station and to my chase pilot. Just as I start my descent at 35,000 feet my oxygen system fails. I activate a 10-minute emergency bottle and again feel the oxygen flowing. I've enough to descend safely below 12,000 feet or to survive the thin air if I had to eject from the airplane, and free fall to 13,000 feet where the parachute would automatically open. Obviously, this is not much different from either a second-stage failure and the transfer to an auxillary first stage (an octopus), or a first-stage failure and the transfer to a pony bottle and regulator.

As I descend I carefully check my altimeter and my airspeed indicator, so that I arrive at the assigned altitude on speed. During the flight, I've carefully monitored all my instruments. As in diving, they tell me where I am and how much longer I can remain there before returning to the place from which I departed.

Soon, my journey ends, and as I reach my destination I feel the weight of my suit and vest, the drops of water on my brow, and the return to my normal environment. I remove the mouthpiece and note the difference in the air. The guide helps me into the boat and we head for shore. It's been quite a flight.

The American Diving Industry

a view from Australia

The following is excerpted from an article in Skindiving in Australia and the South Pacific by the magazine's editor, Barry Anderwartha.

"The growth of sportdiving in Australia has been one of the most spectacular in the world...in fact surpassed only by New Zealand and Norway (based on per-head/population basis). Contributing to this growth has been Australia's (and New Zealand's) position of always having the widest choice of diving gear in the world—the best from Europe, the U.S. and Asia. In sharp comparison, the U.S. now only rates a surprising low 8-10th on the 'penetration per-head/population' basis. In fact, while Australia and New Zealand (and the rest of the world, it seems) are enjoying massive growth rates in sport diving, the U.S. is stagnant. In a recent study in the U.S. of 25 leisure-time sports, sportdiving exhibited the least growth during the past six years!

"While the American diving industry is commissioning research organizations to find out why, that very same industry is just unbelievable in its thoughts on the reasons why! Bill Martin, President of Aqua-Craft stated in a recent newsletter to the industry that they (the Diving Industry) should aim their advertising dollars into the 'high-risk' market—e.g., motor bike magazines! Can you believe that? The fact is that Americans, particularly the instruction agencies, are still believing that diving is a 'danger'/high-risk sport that should be promoted that way."

Still Stirring Up The Silt?

How To Keep The Water Clear

On a recent dive trip to Hawaii, our travel editor had the bad fortune of following another diver through several cuts in the coral and a couple of long tunnels. In those cases where there was silt, the 100-foot visibility dropped to nearly zero. The diver ahead had no cognizance of the needs of the divers behind—and even if he did, he did not have the skills to pass through the passageway without disturbing the silt.

Few divers get any experience in certification courses in passing through narrow passageways in reefs or wrecks, but once off to Cayman, Cozuemel, or a host of other places where one may swim through any number of cuts, caves, or wrecks, he charges right into them without a notion of keeping the slit from stirring. Those who follow at a minimum have a lousy journey and, perhaps, can even have their safety jeopardized.

A diver aware of the appropriate techniques can, with a minimum of experience, exercise them in situations where silt can be stirred up. We asked Michael Wisenbaker, who has served as an underwater archeologist for the State of Florida, in the excavation of Spanish galleons the San Jose and the Nuestra Señora De Atocha, to give our readers a few tips based on his cave diving and archeological experience. Here's what he recommends:

►any diver anticipating swimming through narrow passageways should use large-blade fins (so called "rocket fins" as opposed to "shoe" fins) since they permit slower strokes and, therefore, are less likely to disturb silt. The more efficient larger fins allow modified kicks with a slower back stroke.

►remain constantly aware of your buoyancy, keeping it continuously adjusted to achieve and maintain the position you seek. ► the most common cause of stirring up silt is knee dragging. Keep yours off the bottom. And keep your fin tips up too.

▶in areas of little current or flow, with a low ceiling and deep silt, you may finger walk. First, achieve positive buoyancy, raise your feet and keep them motionless. Then move by gently pulling your fingers along the bottom, perhaps as if you're looking for a number in the Yellow Pages. Should there be a current, achieve the same position and pull yourself along the bottom.

▶in a low-ceilinged area where there is deep silt, a sophisticated technique is flywalking. Here you become positively buoyant and invert yourself so the front of your body is facing the ceiling. Keeping your feet raised off the floor, you move along by grasping the ceiling with your hands.

▶in a high-ceilinged and heavily silted area, with little current, a frog kick may be used but achieving neutral buoyancy, bringing your legs together, then spreading them out and apart to provide thrust.

▶in a low-ceilinged, heavily silted area, you may turn to swim on your side and use a scissors kick.

→if the bottom is not too silted, you may use the drop stop. Slowly become negatively buoyant, then come to rest on the bottom, making use of the tips of your fins and fingers.

▶if there is heavy silt on the bottom and the ceiling is strong—e.g., inside a wreck—you may employ a rising stop by slowly filing your BC and coming to a halt on the roof.

Where excessive silting has caused zero visibility, it's not difficult for an inexperienced diver to panic. Should that happen to you, stop, relax, and wait for the silt to settle and the visibility to open up. It shouldn't take long. Then, employ the appropriate techniques—move to the sunlight.

"Dear Undercurrent"

We've Got Problems With Chronosport

Recently we received letters from two different readers citing problems they've experienced with their Chronosport Dive Watches. First the letters—and then our answer.

Dear Undercurrent,

I received a gold-plated mini-quartz Chronosport Watch (Ludies #3907, priced at \$355) in December, 1980. In June, 1981, I was diving in the British Virgins and from the first dive the bezel began to disintegrate rapidly. The divernaster said other divers had had the same problem and returned their watches to the factory in Connecticut for repair.

Chronosport claims a 48-hour turn around for repairs, but here is my chronology;

6/17 sent watch

6/22 Chronosport received watch

6/29 call to Chronosport to learn watch had not been repaired since it was considered "low priority." I asked them to rush it.

7/6 UPS delivers but since I'm not home they return it.

7/20 Watch arrives a second time.

The cost for my effort: \$11 for roundtrip shipping, \$11 for the second shipment and \$6 in phone calls. A total of \$28.

Now, in order for me to keep my five-year warranty in effect, I must again mail my watch to Chronosport in December, 1981, for a maintenance check. Will I go through this hassle again?

> (Please don't use my name) Houston, Texas

Dear Undercurrent:

My Chronosport Sea Quartz has failed twice at depths under 200 feet since I bought it late in 1977. Both times moisture leaked into it when the stem was securely tightened. On the most recent occasion in Bonaire, after diving to 190 feet, I immediately noticed on surfacing that moisture was inside the crown. Upon return home, I shipped it to Chronosport with \$3 (for their handling) requesting repair.

Chronosport replied that the watch leaked through the crown and refused to repair it at their cost, claiming that their advertised "5-year guarantee" does not apply to the Sea Quartz 20 (and if it did I would have to go to the inconvenience of returning it to the factory each year). The price for repair would be \$86. Naturally, I have declined their offer because it is unfair, too costly, and the leaks would probably only happen again.

> Larry Levy Fort Wayne, Indiana

Both letters arrived nearly the same time and, needless to say, piqued our interest. We talked with the people at Chronosport to sort out the issues, so let's see if we can separate fact from fiction.

Most-not all-Chronosport watches carry a fiveyear warranty. But, there is a hitch, which is not explained in the advertising. To keep the five-year warranty active, the Chronosport must be returned annually-at your expense-to the factory. The reason is less a pecuniary ploy than a practical need. The quartz watch battery has an 18-month life. It's located inside the watch case and therefore the watertight seal must be broken to replace the battery. After replacement the gaskets must be checked and the watch pressure tested. The warranty agreement is violated should you or your jeweler make the replacement on the assumption that the gaskets may not be checked and the watch not pressure checked. Chronosport doesn't want to pick up the tab if someone else repairs the watch and it fails to maintain its waterproof integrity.

Shark Attacks on the Upswing?

Writer/Film Maker Bob Marx Gets 125 Stitches

Experts are not immune from shark attacks, as we reported when Valerie Taylor got knicked on the chin. Now it's Bob Marx, author of several books (Into the Deep) and maker of films (NBC's Treasures of the Bermuda Triangle). He required 125 stitches in his right arm after getting hit at Gingerbread Reef, near Bimini, while leading a party of divers. According to the tabloid Star, Marx said, "I didn't have time to be frightened. The shark looked as big as a submarine and was heading straight at me. I was in 20 ft. of totally clear water and somehow I sensed something was wrong. My hair was standing on edge even underwater. I don't know why, but I've always had that feeling—and it's always been right.

It was a 12-foot Mako and although Bob braced himself, the impact hurled him out of the water. "I knew it was a matter of survival. I can't remember the sequence of things," he said. "I was back in the water in a panic. I can remember stiff-arming the shark like some football player in a tackle. Here I am, holding on to the nose of the shark with one arm, pounding on his head with the other hand. He pushed me over on top of the water and then I'm underwater.

"I could feel the teeth closing around my arm and I wrenched it away, leaving two of his teeth in my arm as souvenirs. I curled up in a ball. I was hitting the thing on the head and kicking it in his belly," he said. "All the time I was thinking there was blood in the water—my blood."

Marx survived, needless to say, somehow convincing the Mako to let go and then making a 65-yard swim to the hoat.

Marx went on to say "I've never seen anything like it. I've spent my life in the water and this sort of aggressiveness never happens." But in the waters off Florida and the Bahamas, shark attacks in 1981 are nearly twice the norm. Three people have been hit in the Bahamas' waters and seven have been struck off Florida. According to Eric Sharp of the *Miami Herald*, most of the recent attacks involved spear-fishermen. The only death occurred from an attack on a woman who was dumped from her capsizing catamaran.

Now for Larry Levy. Brian Pennel, president of Chronosport, told *Undercurrent* that his model, the Sea Quartz 20, has never had a five-year warranty. That's reserved for the more pricey models and since we received no supporting documents for your claim, we can only accept Pennel's response.

However, a look at the advertisements Chronosport runs in Skin Diver suggests that they may contribute to the false impression that all their watches have a five-year warranty. In their ads running this past summer (see July, for example) they picture eight watches, indicating two (the 3006 and 3506) have only one-year warranties. In August, their ad changes. It is graphically identical, but the copy is changed and there is no mention of the shorter oneyear warranty for the 3006 and 3506. In our estimation, a trusting consumer could presume that the five-year warranty applied to all pictured watches, regardless of price, and proceed to order through the mail (an order coupon is part of the ad). If that's what happened to you three years ago, we see your point.

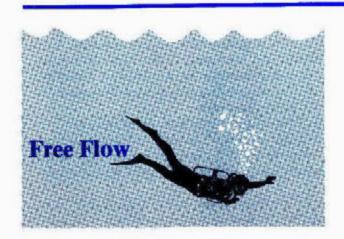
By the way, the less expensive watches have socalled "armoured crystals" and are pressure tested to 20 atmospheres. The more expensive watches, which begin at \$195, have mineral crystals and are pressure tested to 30 atmospheres. Your watch, we suppose, may have been a lemon and without the five-year guarantee, you're stuck with the bill. In the future, consider a cheap watch and a Bottom Timer. They're not fine jewelry but they do the job—and at a much lower price.

And, in response to our Houston diver, Chronosport had an unusual problem with the bezel on all their gold watches, which they claim to have now rectified. The original models had a black anodized aluminum inlay which, when in contact with the sea water, established an electrolytic action with the gold, causing the aluminum to disintegrate. Apparently the land-locked Swiss, who make the watch, didn't understand the potential electrolytical problems.

The bezel has now been changed to stainless steel with a black chrome inlay, but Chronosport did not receive enough replacements from Switzerland to service the watches they sold. In fact, Johan Jorga, who is in charge of Chronosport warranty and repair work, told *Undercurrent* that only the replacement bezels for ladies watches had been received from the manufacturer.

Your delay may be attributed to the high volume of repairs facing Chronosport due to the disintegration of every new watch taken into the ocean on the first dive. We imagine that created quite a log jam. Yet it was only two weeks from the time Chronosport received your watch to the time it was back at your door step, which may not be all that unreasonable in this complex world—the Chronosport promise not withstanding. And as to UPS rules—well, they are a little snotty at times.

The folks at Chronosport, though, might have applied a little positive PR to the problem, to assuage their customers. A letter to the watch owners explaining the problem, asking for their patience, and telling them that they might want to return the watch before taking it into the sea would have been smart business. After all, someone who spends \$400 or even \$500 for a watch deserves a little TLC if the manufacturer and distributor want their repeat business.



Was that Paul Tzimoulis snapping photos of a beautiful bottomless model on the reefs near the Bahamas Rum Cay resort? That it was, and though the lovely derriere was there for all to see, the photo session didn't start out that way. A fearless grouper called "Hot Lips" who, the legend has it, picks on blondes with string bikinis picked on this one and swiped a large hunk of cloth right out of our starlet's bikini bottoms. We don't know whether Tzimoulis kept shooting, but it makes no matter—you won't see the shots on the pages of Skin Diver whether or not he has them. Right Paul?

The NASDS Seal of Excellence, a sticker and a hangtag NASDS put on equipment it sold through its shops, has been banned by the Federal Trade Commission. John Gaffney, writing in his agency's magazine, explained that the FTC asked him to drop the Seal after complaints from a manufacturer who didn't earn the NASDS blessing. The FTC explained that unless NASDS wrote standards for each piece of equipment then tested that equipment in an independent laboratory, the Seal was illegal. Gaffney, not wishing to face the expense of independent testing, agreed to comply. NASDS will no longer send out Seals of Excellence to its shops and the shops are no longer to affix the seal to products they sell.