THE PRIVATE, EXCLUSIVE GUIDE FOR SERIOUS DIVERS

P.O. Box 1658, Sausalito, California 94965. Cable Address: Gooddiving

Vol. III, No. 10

September 1978

Negril, Jamaica, B.W.I.

Not Bad for Openers

In 1973 Jamaica was in turmoil. The economic situation was bad and the political situation was worse -- and plunging downward. The lyrics of reggae were stoking resentment against white exploitation, and tourists, particularly in the Kingston area, often faced more hostility than goodwill. We tried unsuccessfully in 1973 to dive Port Royal, the pirate city which slipped into Kingston Harbor during the 1692 earthquake, but government regulations and the spreading animosity sent us hurriedly to the airport. It would be a cold day in Kingston, I said, before I would return to Jamaica.

I returned this June, on a warm day in Montego Bay -- on the opposite corner of the island from Kingston -- and am pleased to report that greetings were friendly and my entire land trip was a delight. From the free rum punch at the Montego Bay Airport to the free side trips on the bus ride back to the airport I never met a local who didn't seem genuinely pleased to see me and my traveling companion. Indeed, the hospitality we received was a surprise. Everywhere I felt welcome.

My destination was Negril, selected after consultation with my editor because of the developing promotion program sponsored by the Jamaican government and many American dive-tour operators to get divers to the famous seven-mile Negril beach. And, indeed, the seven-mile beach deserves fame, for its waters are serene, its sand is sparkling, its palms are from postcards, and the developments, which have sprung up in the last five years, have so far left a tranquil and under-populated tourist retreat. The seven-mile beach of Cayman is like Coney Island compared to this stretch.

I housed myself at the Sundowner Hotel, which until 1976 was the only hotel along the beach. All rooms face the sea and in June only 26 guests, half its capacity, were registered. The rooms were large, comfortable, clean and air-conditioned. The food was varied

The rooms were large, comfortable, clean and air-conditioned. The food was varied and the menu always offered fresh fish and local fruits and vegetables. Jamaican cuisine is among the best in the Caribbean and, although I would not rate the meals here with the best Montego Bay restaurants, I would certainly rate them among the best in hotel food. Not a single meal was less than gratifying. Each night my

An Unusual Lady. An Unusual Book.p.7 The Aging Diver Do the Bolder Become Older?p.8 Freeflowp.9 its capacity, were registered. aditioned. The food was varied aits and vegetables. Jamaican hough I would not rate the meals certainly rate them among the

INSIDE UNDERGUR

And Some Tips for Your First

Samantha

Taking Up Underwater Photography

Buy a Nikonos or House Your SLR?. , p.4

And Some Tips on Purchasing p.6

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companion and I dined outdoors, 25 feet from water's edge. Before dinner I enjoyed a superlative rum cocktail or two at the beachside bar, conversing with the interesting range of guests who have discovered the Sundowner. With fine food, relaxing accommodations, sunny days, warm nights and an easy swimming beach, my days passed ever so fast. I would still be there ... if it were not for the average diving.

No protecting reef circles Jamaica. Fragile corals have not developed as well as they have on many other Caribbean isles. The natives fish to eat. Some use lines. It is rumored that a few dynamite the reefs. Most use traps, which I would see on all but the most shallow dives. As a diver, I was always tempted to free the imprisoned snappers and groupers and squirrel fish. As a visitor to a country where most of the residents struggle to survive, I left the fishermen's cache alone.

No dive was spectacular, but most were pleasant. On my first dive I discovered a coral-encrusted cannon. I was delighted with my find, but later wondered how many divers before me had too discovered my cannon at this popular site. On another day we toured the Throne Room, where we swam under ledges and through arches lined with colorful sponges and filled with clusters of squirrel fish. The Throne Room begins in 45' and, after a diver swims downward through a narrow crevice, he finds the conclusion at a sandy bottom in 70' of water. There an eagle ray flew by, of course just out of range of my camera. A free-swimming ramora took a liking to my leg and fin and hovered around me as if I were his usual taxi. For the rest of the dive I had eyes in the back of my head, but no taxi appeared for they are rare in Jamaican waters.

The prettiest dive was at the Coral Garden, where this well-protected reef is only ten feet deep. Here, with my extension tube poised, I photographed tiny burgundy tube sponges, blue and white nudibranchs, feather dusters and Christmas tree tube worms, while my buddy chased lobster around the reef.

The dive shop, Aquaworld, is adjacent to the Sundowner. However small, it is well-equipped with rental gear and the folks provide honest fills. No one asked my buddy or me for "C" cards, but we were required to fill out a form simply asking about our certification. I asked Mike, our Jamaican dive guide, about the inconsistency.

"You," he said, "look like a diver. Those who don't we ask for a card."

I said no one had asked my buddy and she had no beard. "Not many ladies carry
two tanks at a time to the boat, either," he said.

As long as there were two divers, guided trips left at 10 a.m. and 2 p.m. The morning dive was "deep" (60-70 feet, about the deepest possible) and the afternoon dive was shallow (10-30 feet). On three trips we were the only divers; on the others resort-course divers joined. Single-tank dives are \$15, with tanks and weights, and \$17.50 with all gear provided. A six-tank package, which includes all gear, is \$75. Although we were offered no night dives, we were told they are available if enough divers with lights request them. We were told of distant shipwrecks, but no one offered to take us, even when we requested it.

A 36-foot cruiser is advertised, but we learned that over a year ago it dropped into the briney deep and, although it has since been raised, the parts

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required to get it running have not been obtained. So we employed the 18-foot banana boat -- it is not much wider than a banana -- outfitted with an outrigger for stability and easy entry and exit, and shower baths for boat passengers. Boat trips are essential for diving because from the hotel front there is nearly a mile of sand and eel grass before you reach the reef.

Banana-boat trips to the sites take 15-25 minutes. Mike was a considerate leader, helping us with the tanks and leading the underwater tours in any way we suggested. On one drift dive in a moderate current we traveled along joyfully as the boatman followed our bubbles. On another unplanned drift dive the boatman lost us. While we floated and waited we could see him, but the waves prevented him from seeing us. Had our guide and his resort-course divers been diving with snorkles, all of us could have easily paddled to the boat.

A stay at the Sundowner is one of the last Caribbean bargains. Our beachfront room, with breakfast and dinner for both of us, was \$55/day. Lunches were moderately priced and the delectable Red Stripe beer was but 80c a bottle.

About a quarter mile from the Sundowner is the Negril Beach Village, where the tab per person, double-occupancy, runs from \$280-\$350 for six nights, depending upon the season. Here, swinging singles and couples indulge in the Club Med approach to vacationing; everything -- all meals, wine, tennis, midnight sailing, Las Vegas-style floor shows, disco -- is "free," except drinks, which are paid for with shark teeth stored on necklaces. The Village offers diving at \$75 for a six-tank package, apparently under the same close supervision one finds at a Club Med. Non-guests may partake in Village activities when there is space available, and may boogie at the disco even when there is no space available. Next door to the Sundowner, the Coconut Cove, a new hotel, has less-frenetic dancing.

Negril, and especially the Sundowner, is a superb destination for lovers and loungers who care to lie back and not be bothered. It's hard to beat for a lovely setting and leisurely vacation. For the experienced diver, the underwater panorama will be disappointing compared to Cayman or Bonaire, places that many well-traveled divers use as Caribbean benchmarks. Avid snorkelers will not find interesting snorkeling unless they join the boat trips. A first-time diver, however, will find a stay at the Sundowner a decent introduction to tropical boat diving and a great place to build confidence for future over-the-wall dives. If you have not been to the Caribbean before, the Sundowner is as good a place as any for openers.

Diver's Compass: Write the Jamaican Tourist Board (2 Dag Hammerskjold Plaza, New York, NY 10017) for information about \$50/day beach cottages complete with private Jamaican cooks -- you pay for the food ... Each day, when the 20-minute afternoon tropical downpour stops, mosquitoes and sandfleas stage a safari; Cutter's spray for the most part keeps them away, and the few that broke through the barrier left bumps we treated successfully with the anti-sting medication from our Pelican First Aid Kit ... Those summer squalls kept the visibility at 50-60 feet, but it can get better in the winter ... Most Negril Hotel packages include roundtrip transportation from the airport; if yours doesn't, the one-way tab is roughly \$20/person for the hour-and-a-half scenic trip along the winding coastline ... Car rentals begin at \$16/day and 16¢/mile, plus \$2/gallon for gas ... Greenbacks and travelers' checks are expected everywhere; the Sundowner reluctantly accepts Master Charge and Visa, but you'll need cash to buy liquor at the airport and pay the \$5.50 departure tax ... Ganja is peddled on the beach and, although there are excessive penalties for its use, it is as much a part of the Jamaican culture as coffee is part of the American culture; regardless, non-native tokers are taking a risk.

(C.N., 6/78)

Taking Up Underwater Photography

— Buy a Nikonos or House Your SLR?

Divers take up underwater photography in a variety of ways. Many, after making scores of dives, decide it's time to become a photographer and, after having witnessed many others employ their camera gear, have a basis for choosing their own equipment. Many others, however, when getting ready for their first tropical vacation, panic at the thought of not having photos to prove they indeed journeyed beneath the sea, so they gear up without giving much thought to their options.

Not long ago most divers began simply. They housed their Brownie in a plastic bag with a faceplate — often effective in shallow water. Then, molded plastic cases appeared for inexpensive cameras. Today, divers can buy housings for just about any camera on the market, or buy a camera designed mainly for underwater photography — the Nikonos III. And there resides the dilemma. Spend \$100 to house your old viewfinder camera, spend \$350 on a Nikonos, or spend \$200 — or even \$600 — to house your SLR? Most people probably make the wrong first decision. Here are some tips to help decide what's best for you.

First, one must recognize that the pictures in magazines are accomplished by experienced photographers using quality equipment. Magazine-quality photos — and, in fact, all photos worthy of being hung on your wall — cannot be obtained with a housed Instamatic or other snapshot cameras. Most divers who return home with rolls of snapshot film are disappointed to find few shots, if any, that resemble what it was they thought they were photographing.

The next step up is to house a simple and relatively inexpensive viewfinder camera. These cameras, in the hands of skilled users, produce decent photos in available light, some of which — silhouettes for example — can grace the front of your Christmas cards or hang proudly in your den.

Today, American spending habits being what they are, many divers begin with the best — a Nikonos system or a housed single-lens reflex. And many divers make their purchases without understanding the strengths and weaknesses of either system. These points should help you understand how and where to invest your hard-earned dollars.

Leaks, Case Maintenance, Durability

The Nikonos, manufactured by Nikon, is the only camera on the market designed to be taken to 160 feet without a housing. Several lenses are available. The Nikonos III is the latest model, and offers some minor improvements over the Nikonos II, which can often be purchased used at a reduced price. The Nikonos is a strong camera and can take the inadvertent abuse it might get in tough diving conditions or in the hands of careless divers.

Housings are manufactured for just about every SLR camera sold in America. Although an SLR takes less abuse than a Nikonos, the housing protects the camera from direct hits.

As for reliability, because the SLR camera is more complex than the Nikonos more can go wrong. Since the SLR needs a housing, further problems are possible. Metal and plexiglass housings are tough and withstand substantial abuse, but there have been instances in which excessive tightening of various nuts and bolts on the plexiglass housings have caused stress cracks. Levers on either housing are potential places for leaks if not properly maintained or if broken or cracked from a direct blow, but neither problem should concern a careful diver. The quality of the control system in metal housings is considered by most divers to be better than the controls in the plexiglass housings. Professional photographers tend to prefer the metal housings at double or even triple the price of the plexiglass housings.

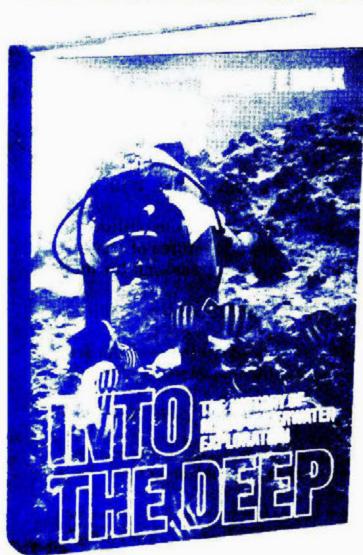
To load a Nikonos, two o-rings must be unsealed; plexiglass and aluminum housings generally require one seal to be broken, although the ring is much larger than the combined Nikonos rings. Just about all camera leaks are attributable to dirty, dry, aged, pinched or improperly seated o-rings. If a Nikonos floods in seawater, it might be saved if the diver immerses it first in fresh water and then in alcohol, and gets it to a dive shop from where it can be forwarded to a competent repair person. If an SLR floods, kiss it goodbye.

The SLR lens is protected from abuse by the housing; the Nikonos lens may be protected with either a shield or a lens. Since a diver can get bounced around while photographing, it's easy to scratch the SLR case or the unprotected Nikonos lens. Underwater, minor scratches will have no effect on the photography because water "fills in" the scratch. On surface, however, the scratched Nikonos lens will mar the camera's usefulness.

The Nikonos is a decent land camera and, although it has the liability of any viewfinder, it produces excellent photographs. It is particularly useful for photography from a boat or in any situation in which the camera is likely to get wet or damp. Of course the housed SLR can be used under the same circumstances, but it is cumbersome. It's 3-4 times the size and weight of a Nikonos.

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Perhaps this urge was even greater than his wish to fly. The waters provided a physical place to house his monsters and his gods. It could bring instant food and instant death. The waters could be touched with a toe, walked into, swum in and finally—dived into!

And the plans for the future sound like science fiction: undersea cities being built: porpoises and dolphins being trained in undersea warfare; scientists claiming that membranes and gills can be attached to the human body, thus enabling people to breathe underwater; mining companies preparing to harvest minerals from the deepest parts of the ocean. IT'S ALMOST AS EXCITING AND HEROIC AS THE SPACE RACE!!

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Focusing

Focusing is the major difference between the Nikonos and the housed SLR, just as it is between any SLR and any viewfinder. When you look through the viewfinder on an SLR you see exactly what you are photographing because you are looking directly through the camera lens. By adjusting the lens you can bring your subject matter into sharp focus. Some divers have difficulty focusing an SLR underwater because they cannot press their eye against the viewer as they can on land; between the diver and the camera are both a housing and a mask. Divers who wear glasses on land but don't wear them underwater may also face problems.

The Nikonos viewfinder is separate from the lens, so the photographer does not see the subject exactly as he photographs it. He must estimate the distance to the subject, then adjust the camera according to his estimate. Where there is plenty of light, many divers have no difficulty. But in low-light situations, the depth of field can be so limited that sharp focusing becomes tricky.

Viewfinder cameras also have an inherent parallax problem. When the subject is three feet or less from the camera, there is a substantial difference between what the diver sees and what the camera sees. The photographer will have to compensate for the difference by framing his subject in one of the corners of the viewfinder. If he doesn't, then the subject in his closer shots will not be centered and will in fact be cut off.

Parallax can be corrected with a viewer sold by both Aquacraft and Dacor. The price is approximately \$50.00.

Close-up Photography

The least difficult aspect of underwater photography is close-up photography. After a few rolls, most divers with a good eye will have shots that will awe their neighbors. Extension tubes and lenses are available for both the Nikonos and SLR cameras, which, in the hands of the same photographers, will produce comparable results.

There is one drawback to the housed SLR. Once it is fitted for close-ups, the diver can perform only close-up photography during a dive. Should he all of a sudden be faced with the shot of a lifetime one foot away, five feet away or fifteen feet away, he can only lament his lens selection.

That is a problem too if one has fitted his Nikonos with extension tubes, because they cannot be interchanged during a dive. However, if you use a diopter lens, which attaches *over* the Nikonos lens, then you may interchange different lenses during the dive, while at all times having a regular 35-mm. lens ready for other shots. With these interchangeable lenses you won't miss the shot of the hammerhead who was

behind you while you ambled up concentrating on tube worms.

Rather than use these external diopter lenses, professional photographers prefer to carry two cameras for the different situations. The diopter lenses, made by Green Things, Aquacraft, Macrolens, etc., have some optical imprecisions and therefore may not provide the sharpness of image required by a National Geographic photographer or for large reproductions. Yet for all but the most demanding amateur photographer, they produce fine results and often are used in winning underwater photography shots. Regardless, purists prefer extension tubes.

Close-up photography, because of parallax, poses special problems to the Nikonos user in centering and focusing the subject. You must either eyeball the target, or use a framer or measuring rod extending from the top of the camera. Framers extend from the extension tube to the proper distance for placing the subject. In macrophotography, if you are an inch or perhaps 1/2 inch off in estimating distance, your subject will be out of focus. Using an extension tube makes it easy to capture beautiful close-ups of inanimate objects, but it poses problems for snapping swimmers. A fairy basslet, for example, is so shy it's almost impossible to get one to swim into your framer, but you can capture one with an SLR because you can stay several inches away. The vibrations from the framer can be enough to chase a tube worm back into its tube and you may have to wait longer than your air lasts for the creature to return for your shot.

SLR close-ups, because framers are not required for either centering or for focusing, provide the best close-up opportunities.

Other Lenses

Nikon manufactures an 80-mm. lens for the Nikonos. Of course all SLR cameras have a variety of long lenses for bringing distant subjects closer. These lenses are not commonly used in underwater photography except in the clearest of water. Just as the subject is magnified, so are the plankton, pollution and other particles. In your long-lens photos, fish can appear to be swimming through a snowstorm if the water is not clear. Unless you're a professional photographer demanding versatility, considering the role of telephoto in your camera system is probably unnecessary.

Wide-angle lenses are an important tool for the professional or serious amateur. Nikonos has both a 28-mm. and a 15-mm. lens and, of course, a range of wide angles is available for all SLR's. The SLR focusing advantage is critical because you can see what your wide-angle lens sees. To see what your wide-angle lens sees with the Nikonos 15-mm. lens, you must buy the special viewer, which, discounted, adds about \$300 to the price. But the 15-mm. itself

costs roughly \$1,000 discounted — about the same as the Nikkon SLR 15-mm., but close-to-comparable 15-mm. lenses for other SLR's are substantially less expensive.

Picture Quality

Nikonos lens and camera quality is as high as most SLR's.' The only technical difference that would affect picture quality is that the standard Nikonos 3.5 lens is a little slower than, say, the standard 1.8 SLR lens. This means that you'll be able to operate the SLR with slightly lower light levels, but since most underwater photography employs a strobe, the difference is not significant in determining which underwater photography system is best for you — unless, of course, you believe you must be ready for every photographic opportunity.

Natural and Artificial Lights

Nearly all SLR's have automatic metering, with the indicator visible in the viewer. While many professionals prefer a hand-held meter, most photographers find the meter works just fine. But some divers have difficulty reading the SLR meter through the case and mask.

Since the Nikonos has no built-in meter, a separate purchase is required to shoot in sunlight. An inexpensive Sekonic meter with housing can be purchased for less than \$30, or you may purchase the professional Sekonic Marine at about \$100, discounted. A bracket for mounting the meter on your camera tray is \$16.50. Dacor has put its moniker on the Sekonic Marine and, together with the bracket, it lists it at \$144.

All strobes on the market work equally well with a Nikonos and with an SLR. Nikon manufactures a flash-bulb system for the Nikonos, but it is used only by a few diehards.

Motor Drive

Professionals who need motor-driven cameras for rapid shooting house their SLR's in metal housings

Because of the burgeoning interest in underwater photography, most divers now live within commuting distance of a dive shop employing people who have some underwater-photography expertise. Those shops are the best place to head to get help in assembling your system and in learning about underwater photography.

Nearly everyone also lives within commuting distance of a discount camera store, where some manufactured specifically for motor-driven cameras. The Nikonos does not have a motor drive.

Prices

If one is putting together a system and does not already own an SLR, then the Nikonos system is less expensive. A Nikonos III is discounted to about \$350. A good SLR at \$300 or so, together with an Ikelite housing at \$170, means a \$100-plus difference for the economy-minded diver. Aluminum housings run close to \$600 for the SLR's. Extension tubes and ground-glass lenses for the two outfits cost approximately the same. Slip-on lenses for the Nikonos, however, are considerably less, although one does give up something in quality.

Conclusion

Before you make your decision about underwater camera systems, consider some questions about yourself.

Have you been diving long enough to be certain that you'll stay with it? Too many divers, the summer after certification, not only believe they'll be divers the rest of their lives but also fantasize about making a living at it. About three out of four certified divers never dive again within a year after they are certified. A lot of those dropouts have once-used camera systems up for sale.

Do you like photography? If you don't care for land photography you might still develop as an underwater photographer, but don't count on it. A number of divers don't like underwater photography because they prefer to enjoy the scenery and the dive, rather than to spend their time fiddling with dials and worrying about getting good shots.

What are your photographic objectives? Slide shows for friends? Pictures for your wall? Entering contests? Magazine photography?

Most divers find that a Nikonos with a strobe and an extension tube provide them with all the good shots they need — unless they decide to move into serious photography. Get your own objectives clear before you invest in photographic equipment.

And Some Tips On Purchasing

underwater equipment may be found. Recognize, however, that personnel in these stores probably know little about underwater photography and might not give you the tips you need. Many divers are willing to pay more for their equipment from dive shops to cash in on the expertise.

A few mail-order houses sell underwater camera gear. You may get a free 20-page catalog of underwater gear by writing: Helix, 325 West Huron St., Chicago, II. 60610. A complete photo catalog for \$1.50 is available from 47th St. Photo, 36 East 19th St., New York, NY 10003. They're currently selling

the Nikonos III, with the 35-mm. lens, for under \$350, plus shipping.

And Some Tips for Your First Photo Trip

Most tyros, after having spent hundreds of dollars on equipment and a thousand or more on their tropical vacation, shed tears when they review the three-hundred slides from their trip. They'll be lucky if they have a dozen good shots and luckier if they have but one or two excellent shots.

Experienced land photographers will face technical difficulties in the underwater environment; inexperienced land photographers will be overwhelmed. Reduce potential errors by practicing with your equipment in a swimming pool. Learn to estimate distance. Learn your exposures by bracketing your shots. Keep a log of the shots and, when the film is developed, check the results against the log.

Even if you have developed some control over technical problems, underwater composition errors will mar the first shots of most beginners. It's likely that all those beautiful fish shots you thought you were taking will appear to be nothing other than shots of a coral reef at a distance. To bring home decent fish shots, remember two things:

First, get as close to the creature as the limitations of your camera and the fish size will let you. A yellow butterfly fish at six feet will look like a yellow spot on a 35-mm. slide. At 3 feet or less you might have a good shot. So carefully stalk your fish for the best results.

Second, isolate the fish against a plain background of white sand or blue water, not against the multihued, many-textured reef. Bring the reef or its corals into part of the frame, but keep the fish against plain backgrounds. If you're using a strobe, learn to illuminate the fish but not the background by adjusting f-stops.

Finally, don't invite your friends over for a slide show until you have carefully sorted out the best shots. And when you have, never show them more than 60 or 80 at a time, unless, of course, you don't mind snoring as your soundtrack.

Samantha

An Unusual Lady, An Unusual Book

After reviewing Carl Roessler's Underwater Wilderness (September, 1977), we presumed it would be some time before we would again review an underwater photography book. But then we didn't anticipate Samantha.

Samantha is unique. Samantha is a fantasy. Samantha is an exercise in creative photography. You see, Samantha is an attractive Australian lady who models beneath the surface of the Red Sea for Israeli photographer David Pilsof. Samantha models in the buff. Her poses are tasteful, graceful and sensitive. Her hues blend with the colors of the reef. Her form seems to fit with the forms of life surrounding her. She belongs.

Samantha is photographed wearing only three pounds of weight around her ankle. The weights are often not visible or not worn. She is photographed without a regulator, with her eyes open and observant. In the photographs, no escaping bubbles are visible. Samantha is just another creature of the reef.

In most photographs Samantha is alone in the Red Sea with gorgonia, or sergeant majors, or the ubiquitous gold fish, which decorate her every pose. In some photos she is swirling in her own bubbles from a dive through the surface, in a few she is rising toward the surface. The book concludes with six ballet-like poses with a male companion, equally undecorated. Because the couple floats free, surrounded only by shimmering blue and silvery bubbles, these shots work nicely.

Samantha is not lewd, lascivious, lecherous, or licentious, which is why some of you will not choose to read the book. She is always sensuous, but never sensual, which is what photographer Pilsof intended. To quote:

I need to compose a symphony from the soul, a pure fusion of form with technique in a medium which would utilize my profession and my avocational skills. The themes were familiar: the unimaginably beautiful world which exists under the surface of tropical seas, and the God-given loveliness of the perfect human body. To connect the element of shape and motion, color and ethereality ... to display the nude female form in a medium that most of the world will never experience ... I found everything I was looking for in Samantha.

Interspersed through the 110 pages of color

photographs are photos of reef creatures. Most are interesting, a few are special, but they could have been excluded. The interest here is Samantha. In limited text accompanying the photographs Samantha describes her feelings. Her words occasionally add to the sensuousness of the book but not often. She is not profound. She is sometimes trite. Her ghost writer failed her.

Samantha posed after a toke or two on her assistant's octopus regulator. A few shots show the set-up or show Samantha with other divers to illustrate the technical side of the photographic expedition. Pilsof provides a short discussion of the problems of shooting Samantha, from training her to dive, to training her to pose underwater, to shoring up her courage, to keeping away the dirty old men wanting to ogle. Most useful, however, is a section one wishes would appear in all photography books. It includes the technical data for each photograph: the camera used, the lens, the film, the exposure, the lighting and the depth. It's a fine opportunity to understand what the photographer did to capture the moment. More books ought to share that information.

Samantha sells for \$30, U.S. Had I not bought it for this review, I would not have bought it for my collection, even though I am a bibliophile. Somehow the book doesn't quite work — not at this price. It would be a better buy at \$15, with the fish photos left out. They may add something for the nondiver, but for the diver they're just more of the same. Still, it is a unique book, and some photos are fascinating.

unique book, and some photos are for

The Aging Diver:

Not much is known about the medical, physiological, psychological and performance effects of aging among U.S. Navy divers. The possibility has been raised that several medical consequences of diving, especially decompression sickness and osteonecrosis (a condition resulting in bone lesions and "bone death," generally attributed to working in a pressurized environment), may be complications of the aging process. It is often believed that older divers develop medical conditions because they make deeper, longer dives than younger divers. Such dives result in a higher incidence of decompression sickness, which in turn may lead to other medical complications such as osteonecrosis.

To understand the effects of diving and aging, the diving histories of eighteen "young" divers (between 19 and 25) were compared with seventeen "old" divers (between 33 and 40). The research showed that young divers don't necessarily become old divers, and that the two groups engage in different types of

Perhaps in a weak moment when I'm shopping for something special for a diving buddy, I might spend \$30 on Samantha. After all, none of my buddies would buy it for himself.

Samantha may be ordered from Supreme Divers, 170 King Street East, Toronto, Ont., Canada. M5A 1J3. The price of \$30.00 U.S. includes shipping.

From time to time our readers send us excellent ideas for articles. We pay a small sum just for the ideas, and raise the ante if we ask them to handle the writing.

We don't need travel reviews, but we do need articles on other topics of interest to Undercurrent readers, and we have a particular interest in equipment articles. Whether you have a tip on faulty gear, a discovery of a new item, or ideas for general articles, send them along. You will not become rich, but you will be rewarded.

Write to: Ben Davison

Undercurrent P.O. Box 1658 Sausalito, CA 94965

Do the bolder become older?

diving.

Contrary to previous assumptions, the study found that older divers do not make more hazardous or arduous dives than younger divers. Younger divers make substantially more dives than older divers, and also do more diving to deeper depths. The only exception is night diving, which is more frequent for older divers than for younger divers. Furthermore,

"There are old divers and there are bold divers, but there aren't many old, bold divers."

younger divers were more frequently involved in accidents, a fact attributable to their more frequent and deeper diving and also to their inexperience.

Decompression sickness was rare in both groups. The findings seem to suggest that the incidence of decompression sickness and osteonecrosis among older divers does not appear to be related to more frequent exposure to deeper, longer dives. Rather it appears to be related to some biochemical or physiological effect of the aging process, but more exhaustive research is required to validate this conclusion.

Younger divers appear to join the diving ranks earlier (perhaps on impulse), volunteer for or are assigned to the more difficult diving situations, and drop out more quickly than the older divers. The older divers seem to be more cautious about becoming divers and, once qualified, they seem to adopt a slower, more conservative diving pace than the younger. As a result, older divers are more durable and suffer fewer ill effects from diving than younger divers.

Yet, questions remain why some divers remain healthy and continue to dive, while others drop out voluntarily or for medical reasons. Perhaps the difference in divers lies in some combination of luck and psychology. Until more information is forthcoming, these results seem to be best described as:

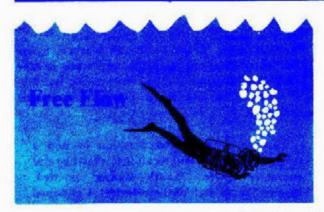
There are old divers and there are bold divers, but there aren't many old, bold divers.

A complete version of this study appeared in a recent issue of FACEPLATE, the official magazine for U.S. Navy divers. Although Navy divers use a variety of breathing apparatus, including open-circuit scuba, the study seems to be not irrelevant for sports scuba divers. The authors of the study are LCDR R. J. Biersner (Naval Submarine Medical Research Laboratory), LT M. L. Dembert (USS GRAYBACK), and ENS Mark D. Browning (National Naval Medical Center).

AUTOMATIC INFLATORS

If you use, or have used, an automatic inflator with your horsecollar, backmounted, or vest-style buoyancy compensator, please complete the questionnaire included in the August issue of *Undercurrent*. If you do not have the questionnaire, please write for a copy (P.O. Box 1658, Sausalito, CA 94965).

If you know anyone who has had a problem with his automatic inflator, please send us his name and address so that we may get in touch.



A new diving documentary is being filmed about a search for \$100 million in treasure lost with the sinking of the Nuestra Señora de la Concepcion, a Spanish vessel purportedly swamped off the Dominican Republic coast in 1614. Although Cousteau has searched for the vessel, Dennis Standifer, leader of this hunt, claims to have information Cousteau was without. A topnotch film crew, including Al Giddings (The Deep), will cover the adventure. Thirty-two-yearold Standifer is no treasure hunting novice. In the last thirteen years he claims to have brought in about \$3 million in treasure from twenty sunken vessels. He financed this venture by selling \$500,000 in shares to investors, which for most of us would be sufficient reason

to scrub the Dominican Republic trip and head for Brazil.

John Everhingham took ten Australian months to plan his latest single-tank dive and he was damn glad he followed the maxim: plan vour dive, dive your plan. Everhingham strapped on his gear, which included an octopus and a compass attached inside his faceplate, and stepped from the Thai-side of the Mekong River for an underwater swim to the Communist-Laotian side. He battled currents, whirlpools and mud bottom, then surfaced a couple of hundred yards offshore and downstream from his target - his girlfriend Keo, who waited with a fishing pole so as not to attract the attention of Laotian militia. Everhingham returned to his starting point, then failed on a second effort, but on his third trip landed at his lover's feet. She followed him into the murky river and using the octopus emerged safely from the chilly waters on the other side. Had this happened in the Florida Keys, Everhingham probably would not have been given air for his noncertified friend.

The hyperbaric oxygen chamber has long been the key link to life in many diving accidents, but now it has use beyond diver injuries. Science Digest recently reported the chamber offers hope for a number of problems, including carbon monoxide and cyanide poisoning, acute burns, certain types of anemia, spinal disease, radiation injury and bone marrow infection. Partially paralyzed stroke victims have walked out after the first treatment, according to Dr. Edgar End of the Medical College of Wisconsin, and the chamber even reverses the appearance of aging by reducing wrinkles and by darkening and thickening the hair (which may be why Jack McKenney looks so young). There is also some evidence that it may improve memory in older people; it certainly improves the memory of divers who get bent, because most who visit the chamber remember next time to leave the water when the time is up.

Not enough remember, however. The U.S. Navy Submarine Training Center in Hawaii treated 61 cases of bends of sport divers in 1976. The average omitted decompression time was 47 minutes. Incredible? Yes. But more incredible is that 85 percent of the bent divers had been diving more than one year.

Let's hear it for Dr. C.G. Daugherty of Bay City, Texas. In June we reported that Cozumel had a decompression chamber, but people there needed instruction from a trained physician. Dr. Daugherty, who first distinguished himself by earning honorable mention in the limerick contest with his fearless verse, has further distinguished himself by volunteering to train people in Cozumel to run the chamber. The good doctor is a medical consultant to three commercial diving companies, was trained in diving medicine by the U.S. Navy, dives himself and even speaks Spanish. Dr. Daugherty — we send our sincere thanks.

At least one diver did not agree with our view that pressure gauges ought to be a mandatory part of diving gear (March, 1978). Reader Dennis Triplett, who returned to scuba diving two years ago after a ten year absence, wrote: "I strongly oppose any move to force me or any diver to purchase any piece of equipment he doesn't feel he needs or wants. I also oppose any shop which tries to force me to become certified in order to have my own personal tanks filled with air. "Big Brother" seems to be constantly watching these days in the diving business. Please cancel my subscription..."

This spring, two California State University scientists were peering at fish in a tropical fish store when they noticed that an angler fish, a camouflaged critter which dangles a lure-like piece of flesh in front of its mouth to attract a meal, had a lure which looked exactly like a tiny swimming fish. They rushed to the library and learned that this species had never been "discovered." Overcoming the urge to describe the habitat of their discovery as "tropical fish stores," they learned this angler came from the Philippines and that the lure replicated many other tiny fish native to the waters. According to Science Magazine, one of the discoverers, T.W. Pietsch, said that the lure is an important energy-saving device for the fish. This angler's lure, because of its near-perfect resemblance to other fish, represents the ultimate evolutionary success.

Pepto-Bismol has been lately touted as the solution to travelers' diarrhea, but many people still prefer the prescription drug Lomotil to remove the symptoms. Recently, Johns Hopkins University Medical staff have determined that an antibiotic called "doxycycline" (sold under the trade name "Vibramycin") may work best of all. Before you head out of the country, you would be wise to stock up on something for the spongey stomach but, if you can't find anything at all, the U.S. Public Health Service recommends the following concoction. Fill an 8-oz. glass with fruit juice and add 1/2 teaspoon of honey and a pinch of salt. Fill another 8-oz. glass with purified water and stir in 1/4 teaspoon of baking soda. Sip from one, then the other, 'til they've gone, and wish yourself luck.

The following observations of science writer Daniel S. Greenberg recently appeared in the Washington Monthly, a fine, muckraking publication which keeps its sharp eye on the federal bureaucracy:

Those who have had occasion to don a military life jacket will recall that a tea-bag size container labeled 'Shark Chaser' is tied, amulet-like, to each of these devices. Contained in the bag is a water-soluble chemical that is supposed to be to sharks what the crucifix is to vampires. Put into service by the U.S. Navy during World War II, Shark Chaser, like defective parachutes, rarely prompted reports from disappointed users. So the Defense Department went on buying it, year after year. From November 1969 to February 1974 it bought 84,450 packets, at a cost of \$345,000, though scientifie doubts about its efficiency were expressed as far back as 1958 and later tests demonstrated that sharks have no aversion to eating Shark Chaser. Three years ago Navy researchers reviewed this disquieting fact and on their recommendation the Navy decided to stop using the stuff - after 30 years of routinely attaching it to life jackets.