

# undercurrent

*The Private, Exclusive Guide for Serious Divers*

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## *Belize Aggressor IV, Belize*

*Easy concierge diving, with sharks galore*

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I'm not a morning person but at 5:54 a.m. I was awake. After all, it's was a dive day! My large cabin window on the Belize Aggressor IV looked out on a calm sea and fluffy clouds in early-morning hues of blue-grays and whites. A morning Diet Coke had been delivered to my door for me, and there was steaming hot coffee for my assigned roommate. And then off to a Continental breakfast, a dive, then a full breakfast.

I arrived as a single diver, and during our checkout dive, I found myself diving with an experienced group. During the week, everyone's situational awareness was outstanding. There were few buoyancy incidents, no drama around sharing photographic subjects, and I got bumped only a few times during night dives. Most divers went at a leisurely pace and chose to stick between 50 and 80 feet. (The Aggressor crew asked that we keep most dives under 100 feet.) Best of all, my roommate turned out to be an excellent buddy, and we asked another single diver to join us.

A few weeks before the trip began, the coronavirus Delta variant had reached the U.S., and I seriously considered canceling. The Aggressor folks thought they could resell my cabin and offer me a different date. However, I soon decided I'd over-reacted and even booked a second consecutive week! And am I glad I did.

I made 20 dives in September's 86° water



**Belize Aggressor IV**

the first week, with my favorites at Tarpon Cave. On the first, after a swim over turtle grass at 45 feet, we headed along the wall. At 75-feet, friendly four to five-foot blacktip reef sharks mingled with the divers, and eagle rays came by at close range. I spotted a pair of French angels to shoot but got photobombed by a prima donna Nassau grouper, which took off as I adjusted to take his photo. Horse-eye jacks spun like a tornado and stuck around with some divers for the entire dive. As I surveyed the shallow part of the reef, approximately 80% of common sea fans seemed to have damage. The health of the corals and sponges seemed to be better on the walls than in the shallows. There were plenty of barrel sponges, tube sponges, and strawberry and azure vase sponges. Yellow crinoids peeked out from ledges along with club tip anemones and pretty branching anemones. I saw a variety of corals, including cactus, brain, leaf, sheet, boulder, black, and cup coral.



On our second dive here, blacktip reef sharks checked out every diver so many times that getting a good photo was as easy as hitting a barn door with a bass fiddle. As I was making my safety stop, I looked down to see two sharks circling ever tighter around one diver carrying a GoPro on a fully extended stick. Oddly, each shark chomped on it, ripping off her light and dome and yanking a red filter off her housing. No nic there. She casually descended to retrieve the dome and light. Speculation was that the sharks perceived the GoPro as a lionfish on the end of a spear.

I flew in early and stayed at the Radisson Ft. George, where the Aggressor moored on the dock right out front. When I boarded the next day at 3 p.m., the crew had already retrieved my luggage and arranged it in my cabin, which had two single beds (not bunks), a bathroom, under-bed storage for suitcases, a bedside table with two drawers, and a closet. I noticed water damage and black mold on the ceiling tiles (it was in other cabins as well)

-- not an uncommon tropical scourge, but a bit unnerving. Without floor mats to absorb puddles from wet bathing suits, I used one of the waffle-fabric Aggressor robes to mop up water.

Ninety minutes after boarding, Captain Dennis Gautreau, a fun, communicative guy, briefed us divers (17 divers and two snorkelers, including Canadians and two Brits). Dennis introduced the crew, including our dedicated night watchman, Zander. He would make rounds every 20 minutes throughout the night; at midnight, unplug all equipment on the dive deck, then plug it back in at 5 a.m., a safety measure apparently installed after the Conception tragedy. (No camera equipment was to be charged in cabins; laptops or phones were to be unplugged when we left our cabins.) It was a thorough PowerPoint briefing, leaving me with only one question: where were microwave and popcorn located? The following morning, we received

### *Belize Aggressor IV*

- Diving, Experienced.....★★★★
- Diving, Beginning.....★★★★
- Marine Life .....★★★★
- Snorkeling .....★★★★
- Accommodations .....★★★★
- Food.....★★★★
- Services and attitude .....★★★★
- Money's Worth .....★★★★

★ = poor ★★★★★ = excellent

*Caribbean scale*

a detailed dive briefing before we hit the water.

With five dives most days, we were to limit our dives to 60 minutes (including the safety stop) and be back on the boat with 500 psi. Because of two back injuries and a bum knee, I asked instructor Roque Queme, who hailed from Belize City, if I could don my gear at the dive platform and doff it in the water. Not a problem, and he reviewed the process for a seated entry. Once in the water, the crew handed me my camera. After the dive, I handed it up, and they rinsed it before returning it to the camera table. (I ensured their good service was reflected in my tip.)



*Roque Queme explaining the Blue Hole dive*

The Aggressor has two camera tables with compressed air to dry off cameras, ample shelving for rechargeable gear, and many outlets. Since many divers had compact cameras, I shared a table with Roque, our video pro. Each diver chose a station where their tank was kept; each had a basket to store their bits and bobs under the bench. Fins were kept on the dive platform -- no fin-walking across the deck while geared up -- and after the dive, the crew helped remove everyone's fins in the water.

On the first day, winds up to 30 knots produced murky, pea-soup-green water, and forced the boat to make wide swings on its mooring. While a T-bar (with a spare regulator) hung at 15 feet, they advised us to take our safety stops in midwater that day unless we wanted to take a wild ride since it might take up to three minutes for the boat to swing away and return. But at 15 feet, the current pushed me in a longer radius, so when the boat came back, I needed to grab a rope connected to a chase boat. For the remainder of two day's dives, I either grabbed the bar or off-gassed midwater, depending on the boat's movement.

### ***Be Concerned About the Guy Across the Aisle***

While a lot of vaccinated divers are off for diving excursions, the bad news, says Christopher Elliot, a diver, and publisher of *Elliott Confidential*, a newsletter for travelers, is that "more than half of adult U.S. travelers (58 percent) remain unvaccinated.

"So where are these unvaxed travelers going? Internationally, the most common destinations are Mexico (37 percent), Greece (19 percent), Dominican Republic (12 percent), Bahamas (11 percent), Aruba (13 percent), and Costa Rica (8 percent)."

Countries with warm weather and outdoor activity are attracting tourists, so exercise special caution on the plane, at airports, and in passenger vans.

That first "rodeo" used a lot of energy, so I looked forward to the generally excellent meals (aside from lackluster turkey sandwiches one day for lunch). Chef Jerry Lee Camano and Sous Chef Carlos Soler prepared chicken that was so fork-tender I thought it might be fish. Daily, we were served delicious soups for lunch, including a lentil soup so good that people who didn't like lentil soup changed their minds. A lunch of shrimp curry fell short because the shrimp quality didn't measure up to other shrimp meals. Fish in a banana salsa was excellent. "Cheeseburgers in Paradise" and "Reef and Beef" (shrimp and steak) were perfectly cooked. I did a happy dance for Jerry on the day macaroni and cheese was served! A popular local Banoffee pie was made from a blend of toffee, banana, and coffee cream, and I brought the recipe home for Jerry's plum cake. The complimentary house



*Belize Aggressor Twin Cabin*

red and house white wines were also quite good.

All but one stateroom are on the dive deck level; the remaining (large) stateroom is on the lower deck alongside crew quarters. A restaurant, open-air lounge, and the helm are on the lido deck. The top deck, a sun deck, has a drink station with soft drinks, kegs of complimentary local beer, and bar seating. Stewardess Elia Daniels remembered passengers' preferences on drinks, delivered beverages to our room each morning, and minded our rooms twice daily. She was pleasant at every turn.

Overall, I had two shark-tastic weeks, with plenty of Caribbean reef sharks and nurse sharks to go with the blacktips. (This trip would be tremendous for newbies who want to see sharks.) Most afternoons, a couple of dozen huge tarpon showed up for our late afternoon dives and stuck around to hunt for food with the aid of our lights during night dives. I spotted beautiful blue indigo hamlets on every dive. Once, my buddy showed me a tiny eel, his head only a centimeter wide! I saw plenty of neck crabs, green morays, spotted drums in all development phases, and gray, French, and queen angels. Occasionally, queen triggers drifted by.

The Elbow is one of Belize's premier drift dives. The first week I asked Captain Dennis if we could dive it -- nope -- and the second week asked Captain Shea Markwell, who said he'd never done the dive from the IV. Later, the first mate told me the 128-foot Aggressor IV was too big to make that dive. Aggressor H.Q.: please take it off your dive list instead of ginning up expectations.

I brought a new Nikon z6ii and a new Isotta housing on this trip and had a problem with the housing flash trigger mechanism. Roque came up with a workaround that allowed me to take some photos. At the end of the trip, when we returned to the dock and acquired internet access, I arranged a video call with the owners of Isotta directly from Italy! They guided me through changing the housing's factory settings to solve the problem.

Having dived Belize's famous Blue Hole a couple of times -- it's a one-time thrill to drop to 130 feet in dim light to swim through large stalactite caverns -- I decided this time to stay in the shallows, about 20 feet deep, enjoying the ambient light on the reefs. With three other divers, I meandered among abundant fans, spotted a small blacktip reef shark, blue parrotfish, a beautiful (and sizeable) midnight parrotfish, and an abundance of the usual reef fish, and found a freckled sea hare. (I wished we could have done a second dive here with a guide helping us spot the teeny tiny stuff.) The snorkelers got up close and personal with a blacktip.

I was disappointed that the dive staff didn't put more effort into pointing out critters during our dives. If there were a single highlight on a dive site -- seahorse, mantis shrimp, snapping shrimp -- the guide showed every diver. Other than that, I would have had to follow Roque and peek at what he was filming. As a paying guest, I think a dive crew is there to point out critters and help guests get shots rather than spend most of a dive doing their own photography. On a night dive with Roque as my buddy, he neither checked in on me nor pointed out critters, but instead, flitted from here to there randomly and rapidly. As the Aggressor "video pro," he was immersed in his own work. While it's "against my religion" to

end a dive with time left on the clock, I gave up at 48 minutes, anticipating the hot chocolate spiked with Belizean Craboo Cream liquor the crew always had waiting for me.

I enjoyed diving with divemaster John, a calm, playful person with a deep knowledge of fish. He went at my snail's pace, kept an eye on us, and checked in to show me such things as a two-inch lettuce leaf sea slug and a stunning wall of corallimorphs. He even modeled in photos. Before one dive, I asked if he would point out Belize's painted tunicates, and he immediately showed them to me after descending.

During many of my past Caribbean night dives, bloodworms ("gnats of the sea") chaotically swarmed around lights and bounced off divers. On this trip, there were few, so I entertained myself by bringing my light to corals, which would then eat the swarming bloodworms. "Sorry, not sorry," bloodworms! On a couple of night dives, I spotted an octopus. Slowly approaching, I would tap my fingers on the sand or the rubble in front of it, and it would often wrap its arms around my fingers. I had my own personal Octopus Teacher (see the film, if you haven't.)

At Long Caye Wall, Simon pointed out a swim-thru running from 50- to 90 feet that was full of silversides, a thrilling experience. However, I was disappointed on another dive when Simon took off with half the group to find a white-spotted toadfish. It was only at the end of the dive that he took my buddy and me to the hidden toadfish, but he was too low on air to hang around, and I only caught a glimpse of its tail. Oh well.

But, my complaints are minor. The first week, I made 20 of the 24 dives offered, thanks to the helpful staff. The second week I became an "Iron Diver," completing all 24 dives offered. Without the staff's significant help in hauling around my gear and camera, I would not have been able to do all the dives I did. That assistance was far more important than having them show me critters or even accommodate my dive objectives. So, on the whole, I'm "thumbs up" on the entire staff. It was a great two weeks.

— — E.T.S.

*Our undercover author's diving obsession was sparked at age eight when her parents got a fresh water fish tank. She became a D.M. after diving for 17 years, and has talked her adult daughter into diving and convinced her husband to carry her gear. She's a plus-sized woman who believes diving can be done by people of all ages and sizes, and even those with no athletic prowess whatsoever – making it the perfect sport for her. She reached her 500th dive during this trip, and has been spending her daughter's inheritance while spreading her dive travel fairly equally among the Hawaiian Islands, the Caribbean, and Indonesia.*



**Divers Compass:** Seven-night cruises run \$3200-\$3400/person, double occupancy; a couple of months before departure deals may show up ([www.aggessor.com](http://www.aggessor.com)) . . . No internet when the boat is at sea . . . Nitrox fills ran about 32%; at the Blue Hole, 26% to accommodate the 130-foot depth . . . Candies or chocolate left in room every day; Sea2Stream sunscreen provided; shampoo, conditioner, and body wash were in cabin showers . . . Because of COVID, no common rinse buckets, but use the deck shower to rinse and clean whatever you desire . . . . Max of 20 divers . . . . Aggressor will loan you any standard equipment if yours stops working . . . The website says Nautilus diver location systems would be provided for divers; they weren't, and in these calm waters, they are not necessary . . . .If you exceed your computer's deco requirements and it locks, you must stay out of the water until it resets, 24-48 hours. . . . No solo diving . . . Up to 5 dives per day: 8 a.m., 10:30 a.m., 2 p.m., 4:30 p.m., 7 p.m. . . . COVID test required to entire Belize. COVID masks required on land; only need mask on board during COVID testing at end of trip.

# South Caicos, Jupiter, St. Vincent, Cozumel

## Undercurrent *subscribers are traveling again*

While many divers are reluctant to travel, despite being double or even treble vaccinated against COVID, many more intrepid *Undercurrent* subscribers are the vanguard of traveling divers, taking sensible precautions but enjoying trips to those dive destinations that will have us. Their Reader's

*Had an encounter with a pod of dolphins that engaged us, vocalized to us and hung vertical inviting us to rub their bellies*

Reports make encouraging reading, indicating that we are gradually getting used to the new normal. Here are a few abridged excerpts from some of the latest:

Anne Warburton (Yorba Linda, CA) was especially adventurous for an American when she decided to join European divers aboard for a Red Sea liveaboard trip on *MY Blue Force*, based in Hurghada, Egypt, in September. A bureaucratic issue led to that vessel failing to get permission to sail, but the agent, Seasick Productions, procured another, *MY Odyssey*, crewed by those from *Blue Force* and saved the day. "Good diving in 84-degree water. Corals were incredible, very healthy, fish abundant; eels were enormous with heads the size of football players' thighs. The boat was very comfortable, and we were lucky to be on it. Things ran very smoothly, and the staff was wonderful. DMs, headed by Natalie, were very good. Staff aided us with set-ups every day." [www.blueforcefleet.com](http://www.blueforcefleet.com)

Canadian-run Nautilus liveaboards have an enviable reputation, and Randy Kettering (Evanston, IL) was not disappointed with the *Nautilus Belle Amie* in May when he traveled to Mexico's Revillagigedo Islands. And while Kettering says this was "Trip of a Lifetime" . . . Had an encounter with a pod of dolphins that engaged us, vocalized to us and hung vertical inviting us to rub their bellies. Also had a very close encounter with a manta that I was filming who continued to advance, so I just laid back and let it glide over me." Keep in mind this is a destination only for experienced and confident divers. "When low on air, my DM directed me to dive in a vector, and I dove solo to eventually encounter the pickup boat. He had asked earlier

if I was comfortable doing so, and I was proud of myself going solo in the middle of the freakin' ocean." [www.nautilusbelleamie.com](http://www.nautilusbelleamie.com)

For divers with less experience, one option is the *Bahamas Aggressor*, which visits the Exumas and Eleuthera. Craig Freundlich (Madison, WI), onboard in August, notes "it's an old boat with small cabins," and Bahamas reefs aren't doing well, with "a lot of algae cover." Doesn't sound so good, does it? But Craig says, "there were a lot of fish . . . the staff was great and the food exceptional," and says he would make the trip again. [www.aggressor.com](http://www.aggressor.com)

A step up both in diving and boat quality is the *Turks and Caicos Aggressor*, which Sean Brady (Pearl River, NY) boarded for a week in June. "The ship was immaculate. The dive deck is set up well; a large dry camera table accommodated everyone's set-up without compromise . . . Five dives a day. Sharks at almost every spot we hit, and we had a visit from JoJo the dolphin and a large pod of dolphins that the captain took us to on the tender to attempt to swim with, and [saw critters like] the smallest sea slug, nudibranchs, and baby trunkfish (pea). The marine life and diversity at West Caicos and North West point were perfect." And he loved the food. [www.aggressor.com](http://www.aggressor.com)

And a caution from Randy for any tropical traveler: "I foolishly spent too much time on one surface interval on the open-top deck in the sun; don't be like me, use the readily available sunscreen on the deck often."

### *Resorts Worth Considering or Maybe Not*

Liveaboards aren't for everyone, so one of the more popular spots for land-based diving is Mexico's Cozumel, with good Caribbean drift diving and day trips to the nearby Yucatan peninsula to experience diving in the cenotes (freshwater cave systems). On Cozumel, **Aldora Divers** is consistently top-rated by *Undercurrent* readers.

John E. Keith (Logan, UT) was there in September, stayed at **Villa Aldora**, and says, "as always it is welcoming and ready to help with any need . . . Aldora Divers always provides an outstanding experience . . . I had contracted COVID with some mild long-haul symptoms (including lung problems), so my doctor was not thrilled with me

## *Your Reader Reports Have Never Been More Important.*

Now that we're starting to travel again, your reports are more crucial than ever. They reflect your own experiences and because they tell both the good and bad, your reports help make Undercurrent a unique source for serious divers.

For example, Lynda Durfee (Alexandria, VA) writes she only made one dive trip this year but strongly urges all reporters to include COVID precautions and safety in their reader's reports. Recent reviewers for *Aqua Cat* reported divers with symptoms were allowed to board, no except crew wore masks, and in one case, a diver was the last to surface and no crew was on deck to assist.

Regarding the two tragic boat fires in 2019, the *Conception* and the *Red Sea Aggressor I*, a reader tells how she traveled on the *Red Sea Aggressor I* in April & Dec.

2018 and suspects the fire started in the area just inside the salon from the dive deck where multiple devices were being recharged on two power strips. Maybe she's right.

Contribute your own reports. They join more than 10,000 others in our online database (and our annual *Travelin Divers' Chapbook*), which is easily searchable by any other subscriber. You can even add photos if you wish. We're also asking subscribers to report on the use of single-use plastic at dive resorts and liveboards they visit – this information we'll use to contact those dive travel operators and compel them to change their ways (and keep those giant garbage patches in the oceans from getting larger). File your report at [www.undercurrent.org/SubRR](http://www.undercurrent.org/SubRR)

diving and suggested caution. We were on boats with other divers with similar characteristics, and the divemasters (Paloma and Miguel) were both watchful and helpful. They didn't over-manage our dives, but they made sure we were doing OK. We both struggled a bit with the current since our buoyancy control wasn't as good as it could have been after a couple of years' layoff . . . As usual, Cozumel has some very nice reefs with several turtles, a couple of sharks, quite a few Southern stingrays, crabs and lobsters galore, and abundant varieties of fish."

*The manatee found us and made itself a fifth member of our dive group for about five minutes.*

Pierre Hurter (San Francisco, CA), who has been going to Cozumel for 30 years, dived with Aldora Divers in September. "As far as COVID, locals wear masks; before you enter a shop, they spritz your hands with sanitizer and take your temperature. The only people ignoring mask mandates are, you guessed it, Americans." Considerate people, we Americans.

Another popular destination is Belize, a two-hour flight from Houston. Divers who don't know better — or want to hang out in a town with bars and restaurants — go to Ambergris Caye, but our readers prefer better diving. Turneffe Atoll has some of the best, and the resorts pick you up in Belize City and motor you out on either Saturday

or Wednesday. J.E. Anderson (Little Rock, AR) stayed at the **Blackbird Caye Resort** on Turneffe Island in August, "a small, friendly resort, owned by Belizeans. The carefully prepared native recipes are based on Belizean meats, fruits, and vegetables. The villa rooms are large, spotlessly clean, and the beds were so comfortable that I am kicking myself for not figuring out their manufacturer so I could buy one for home. I have never stayed in a nicer room on a dive trip. After 10 days, I decided to stay on . . . The divemasters were a jolly engaging bunch full of stories. We saw pipefish, toadfish, squid, sharks, tiny newborn flounders, free-swimming morays, hamlets, turtles, etc. Lionfish were culled by the DMs and some guests. The reef is in good shape, and the diversity is high . . . Not having Advanced Open Water certification, we were not allowed to dive the Blue Hole because the resort follows the PADI recommendations. So we snorkeled . . . COVID protocols were straightforward. Since everyone must be vaxxed and proven disease-free, it was a relief not to worry." [www.blackbirdresort.com](http://www.blackbirdresort.com)

Another well-regarded choice is **Turneffe Island Resort**, which Jeffrey Hubbard (Glenmont, NY) has visited five times, the latest in March. Jeff, with more than 1000 dives under his belt, says, "Diving is scheduled, two or three a day (one night dive), and the boats return to the resort for surface intervals, rarely more than a 15-minute run. Divemaster Brad, of limitless knowledge and love of the sea and its animals, always finds something of interest, from marlin to the smallest arrow blenny, to the largest manatee. Well, the manatee found us and made itself a fifth member of our dive group for

## *Guidelines for Divers to Avoid Spreading Coral Disease*

Stony Coral Tissue Loss Disease is decimating coral throughout the Caribbean and Florida, as we reported last month. Scientists studying the disease believe divers may transport the pathogens on their gear and transfer the infection to reefs on subsequent dives. The Cayman Islands has issued rules for divers anywhere in the Caymans. We urge dive operators throughout the Caribbean and Atlantic to enforce them with their divers.

Begin diving at the least diseased site first, moving to the more diseased sites as the day progresses. Between dives, inspect your gear and remove anything that may have been caught on it. Leave your gear on the boat. If possible, decontaminate your equipment between dives, but certainly at the end of the day, following these procedures:

1. **Non-sensitive dive gear** like weight belts, slates, etc.: Soak for 10 minutes in a one percent bleach solution, allowing them to air dry thoroughly.
2. **Sensitive gear**, like wetsuits, masks, fins, and BCs: Soak for 10 minutes in quaternary ammonium disinfectant such as 0.5 percent RelyOn, one percent Virkon or 6.6 percent Lysol, and then soak the gear in fresh water for 10 minutes, properly disposing of both disinfectant and rinse water. BC internal bladders should be treated with a quart of ammonium disinfectant via the mouthpiece.
3. **Fragile equipment**, like regulators, flashlights, and underwater camera kit: Soak for 20 minutes in antibacterial dish soap or clean with isopropyl alcohol wipes.
4. **Properly dispose of disinfectant and rinse waste** by standing it in the sunshine for a day before releasing it into the ground well away from the shore. *Don't dispose of the disinfectant and rinse water into the ocean or storm drain.*

about five minutes. Dives are guided, not herded, with no arbitrary limits or nagging . . . The Belizean cook makes Belizean recipes, natch, and our server, kind and friendly Reynalda, advised us on choices of entrées and gave other assistance in minimizing the spicy . . . Turneffe Island Resort is special

*“We both struggled a bit with the current since our buoyancy control wasn't as good as it could have been.”*

— dive operation and hospitality side are equally excellent.”

**Anthony's Key Resort** on Honduras' Roatan Island was once a go-to resort for divers, but the diving has dropped below Roatan's standards and is best viewed as a family resort, a good place to get kids wet. Frances Lewis (Waterford, MI) and a buddy went there last June and reports: “After seeing such glowing reviews for diving in Roatan, I was extremely disappointed in the diseased coral and definite lack of fish and marine life. In our general briefing, we were told that stony coral disease had arrived there four years ago, and we would see damaged coral. The fish life seemed rather sparse compared to other places in the Caribbean, but the highlights included an eagleray and some turtles and queen angelfish on almost every dive. The

accommodations were very nice, with all having ocean views . . . The food was good, although they seemed to think Americans all want French fries. The sand fleas drove my buddy crazy but didn't bother me until I returned home and they started to itch.” [www.anthonyskey.com](http://www.anthonyskey.com)

Bill Tewes, the man who made **St. Vincent** the critter capital of the Caribbean three decades ago, has passed on, but his dive center continues. Ray Haberman (China Spring, TX), who often helped out Bill, has been going there for 18 years, so we guess he likes it, his latest visit being in September. Ray noted, “The dive shop is an extremely old building that was not built for a dive shop, so all camera work needs to be done in your hotel room.” Ray has seen but one shark in all the time he spent there, but he goes for critters, and you can see whether your macro wishes will be granted by checking his photos. <https://raymondhaberman.smugmug.com> He says, “Come in the rainy season, and you are going to get lots of rain and sun and wind and clouds and dry spells, maybe some current. Come in the dry season, and you will get the same conditions but less rain.” [www.divestvincent.com](http://www.divestvincent.com)

Looking for something new? Grand Cayman's **Reef Divers** moved boats and staff to South Caicos in the Turks and Caicos Islands and opened **East Bay Resort**. Robert Hales (Milford, OH) went there in September and reports, “The resort was great!

There was a small washer and dryer in the room, which was wonderful to have. The room was really nice — lots of room. The bed was really comfortable. We were on the 3rd floor and had a beautiful view. The food was fantastic. This was their first real recreational diving at South Caicos in years.

*“The black water dive was impressive. The guide placed a lighted buoy in the water. We all entered and drifted in the Gulf Stream at about 40 feet for over an hour.”*

The valet diving they provided was great. They had beautiful walls and some really pretty shallow dives. We saw reef sharks, nurse sharks, eagle rays, big stingrays, turtles, squid, and all the usual fish. The reefs looked good. Saw huge elkhorn coral. Some surge on most dive sites. The wall is accessible from many dive sites, with the lip being around 60 to 80 feet. Shuttles that take you to the dock — only about a five-minute drive. The only downside: there was a lot of sargassum seaweed coming in.”  
[www.eastbayresort.com](http://www.eastbayresort.com)

### *Prefer to Stay at Home?*

If you don't want to leave the U.S. mainland, Florida is the first choice for divers, and those in the know dive north of Miami. Mary Adams (Rockville, MD) did 12 dives in June with **Jupiter Scuba Diving**, 90 miles north of Miami, plus a Wednesday black water dive with **Walker's Dive Charters** in Riviera Beach. “I got seasick on the first trip. We saw loggerhead turtles, a few sharks, angelfish, Atlantic spadefish, goliaths, parrotfish, a hawksbill, and porcupinefish. The underwater landscape is deep ledges, 70-80 feet, with gorgonians and rock crevices with interesting small creatures. The black water dive was impressive. The guide placed a lighted buoy in the water. We all entered and drifted in the Gulf Stream at about 40 feet for over an hour. The tiny pelagic creatures are beautiful. Excellent, safe, and well-run outfitters.” [www.jupiterscubadiving.com](http://www.jupiterscubadiving.com) and [www.walkersdivecharters.com](http://www.walkersdivecharters.com)

Wherever you choose to go, *Undercurrent* reader's reports offer a wealth of knowledge based on candid reports from fellow *Undercurrent* subscribers. We look forward to receiving yours.

– Ben Davison

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## Did COVID-19 Cost You Money in Lost Reservations? *dive businesses keep money with the weakest excuses*

COVID-19 has been a disaster for the dive travel business. In the spring of 2020, we wondered how any dive resorts and liveaboards in remote parts of the world would survive because running a dive operation is not cheap. Shortly before he died, Max Benjamin told us that his Walindi Plantation Resort in PNG employed 118 people. That was in January 2020, before COVID struck. That's a lot of wages to pay with no foreign visitors arriving.

With no international travel, most dive resorts and liveaboards closed down, if temporarily, pending better times. Many considered their long-term reputations and rolled over reservations for future years; some even issued refunds. But some just kept the deposits, even payments, and a few of these continued to operate for locals, despite divers from other countries prohibited from visiting.

We quickly began hearing tales of woe. A few months ago, we asked our readers if they'd lost any money from canceled bookings either because they could not enter the country or they were reluctant to travel.

Many who wrote us preferred to remain anonymous (and even wished to keep the offending dive operation anonymous). Some still hoped to get their money back one day, and others wanted to remain friends even if they were confident they had been stiffed. So, we'll honor their anonymity as we tell their stories.

### *The Dive Store as Travel Agent*

In the U.S., many dive store operators are part-time travel wholesale booking agents, putting together group trips for their customers; they collect deposits, then forward all or part to their destination, and make all arrangements. And for some divers, that's caused problems when it comes to figuring out where their missing money went.

Sean Brady booked a trip with Deep Stop Scuba (Syracuse, NY) to Chuuk (Truk) Lagoon from Newark at the cost of \$5500 per person. After Truk was closed to foreign visitors, the trip was canceled, and he was able to recover all but the original deposits of \$500 per each of four passengers, but

he's still chasing it. He says his emails, Facebook messages, and phone calls have been ignored, although the U.S. dive store still appears to be in business. Where is that \$2000?

Another reader lost her \$1500 deposit to her dive store booking agent when her trip to Cuba in May 2021 was canceled. Eight others also lost their deposits, with the only explanation being that it was non-refundable. "I felt shocked about losing their money on canceled trips, and I would love to be

*"Many who wrote us preferred to remain anonymous."*

able to get a return for the deposit, but the reality is I have enjoyed trips with this dive shop. I probably will not take any more trips with them again after that one as I still have a bitter taste in my mouth."

Keep in mind, divers, there is often fine print stating a deposit is non-refundable, and the terms may vary. The possibility of getting a disease is never a refundable reason. But, the truth is, most of us don't read the fine print until we need to because we don't expect anything to happen, let alone a pandemic.

To get resolution, being a polite pest may help, as Vonna Roberts (Fort Worth, TX) learned. "I saved up for a surprise trip to the Philippines for my husband and me. I paid the dive shop (Aqua Trek in Fort Worth) in full in November 2019 for a September 2020 trip. I even got trip insurance coverage. COVID canceled everything. I was promised a future trip; however, the dive shop closed, the shop owner disappeared and wouldn't respond, and the insurance company denied my claim. I am out over \$6000. It makes a person wary about taking a dive trip through a local dive shop anymore."

We contacted Vonna and shared information, so she kept trying to track down the dive shop; finally, after calling the owners' parents, she was able to get their attention. "A trip opened up that someone else was not able to go on. They are transferring most of my funds to that trip. It is now my anniversary/birthday present to my husband. Part of my payment they said they couldn't refund and are using toward a future trip as a deposit. They sent it to the Philippines already." For Vonna, persistence paid.

### ***No Refund, Come Later or Lose Your Money***

Many operators have deferred trips for a year or

more, applying deposits or full payment to them. That works for some people, but not for others.

Amy Hagen from Adventure Scuba Center (Sparks, NV) says they booked Magic Island Resort in the Philippines and were to leave just a couple of days before lockdown in March 2020. "The resort will not give refunds, and it was rebooked for March 2021. The Philippines is still not open, and so now it's moved again to March of 2022. Families and living arrangements and age make it so some are now not able to go. They still are saying no refunds."

Orange Bay Hotel in St. Eustatius refused to refund Pamela Lemerand's money, saying it would roll her forward for just one year – but she could not go for at least a couple of years, so she has lost her money.

She also had a reservation at Little Cayman Beach Resort, which was canceled when the Cayman Islands government barred foreign visitors, and the resort is holding the money against a future booking.

Cayman Reef Divers has taken four dive boats and much of its staff to Turks & Caicos, where COVID-led entry restrictions are less restrictive. The parent business, which has operations on all three Cayman Islands, has expanded its horizons as a survival strategy, buying East Bay Resort on South Caicos. Apparently, those who had deposits at their Cayman Resorts, which included Cayman Brac Beach Resort, Little Cayman Beach Resort, and Cobalt Coast, are being redirected to South Caicos until the Cayman operations become active again.

### ***Aggressor Tales***

Are we surprised that Aggressor features in these tales of woe? It's about the toughest dive business anywhere for consumers to get a fair shake when a problem arises. Kathy Shettler tells how her trip on the *Red Sea Aggressor II* was booked for early 2020 and then rescheduled for July 2021. Due to opaque communications from Aggressor Adventures regarding COVID testing, the risk of traveling in the Middle East, and possibly getting quarantined in Egypt, the group decided to cancel for this summer. "Unfortunately, despite our requests and trying to work with them, the Aggressor company refused to give us refunds of \$5000 plus, or allow us to reschedule, or to give us credits to any other trips/locations." Their response to our concerns was that "European divers are coming in the summer of 2021, so we should be able to as well."

In other words, as the world faces a pandemic that has so far killed 4.55 million people, you

## *Galapagos Migratory Sharks Threatened by Giant Chinese Fishing Fleet*

The 1.4 billion citizens of China have an enormous appetite for seafood, and the water around the Galapagos Islands are a target.

To stop the threat of at least 340 Chinese fishing boats skirting the island, Ecuador has increased its territorial boundaries surrounding the Galapagos islands and dispatched its few gunboats to police them. But the migratory sharks still have to run the gauntlet of a high percentage of China's 17,000-boat fishing fleet armada that stands between them and their Pacific journey from the Galapagos, Costa Rica's Cocos Islands, and Colombia's Malpelo Islands.

Yes, you read that right. As many as 17,000 Chinese vessels create a deadly wall of lines and nets between those diving destinations we divers cherish, plucking out the sharks on their migratory journeys.

They know they're acting illegally. Many intermittently switch off their satellite communications and Automatic Identification System (AIS), breaching international rules for safety at sea and regional fisheries' management organizations.

The western Pacific isn't their only hunting ground, for China has overfished seas far from the world's gaze, from West Africa's Gulf of Guinea to the Korean Peninsula. In East Asia, Chinese fishing vessels act as a vanguard of an aggressive geopolitical strategy aimed at asserting territorial claims. It's terrifying.

China's own latest regulations include harsher penalties for companies and captains involved in illegal, unreported, and unregulated fishing, but it's a question of scale. And whether they enforce it. By contrast, the U.S. distant-water fleet comprises 300 vessels.

Americans are weenies.

Kathy is keen to point out that for all the other trips scheduled by her particular dive shop, Aggressor was the only company to prove difficult.

Regarding the Aggressor fleet, keep in mind that most of their boats are owned by independent operators, so don't expect them to shift a financial burden to another craft; in reality, your deal is with a specific boat, not the fleet.

Owen Poole dealt directly with Aggressor Adventures in Augusta, GA, booking a trip to Cocos Island on the *Okeanos Aggressor II*, departing December 2020. When he and his partner arrived at Punta Arenas, Costa Rica, they were denied boarding because they had not taken the PCR test required. Poole says the requirement had not been mentioned in the Know-Before-You-Go information sent by Aggressor. Unable to get any satisfaction from Aggressor, he spent another \$500 of good money after bad by hiring an attorney in Atlanta when he returned home, but he was unable to get a refund. But, while in Punta Arenas, thanks to the *MV Sea Hunter*, they were able to buy a substitute trip, slightly delayed while they got the required tests.

As a tip to all travelers, COVID testing requirements vary from country to country, business to business, dive operation to dive operation. And, the requirements can change overnight, making international travel chancy. You need to research the requirements thoroughly, even government requirements, right up to the day you depart.

### *Seven Seas Seizes Funds*

Mary Carney, a subscriber from New Zealand, paid a \$2000 deposit to the Indonesian liveaboard *Seven Seas* in July 2019 for a November 2021 trip. Because entry to Indonesia had become prohibited, *Seven Seas* canceled the trip, so she asked for a refund. Mary told us that *Seven Seas* replied, "In regards to request for partial refund, basically our policy requires that we retain half of your money and other half to be rolled over to replacement trip. The next Forgotten Island availability is in 2023 as we are fully booked for 2022." What? Their policy "requires that we retain half the money?"

Unable to make that trip, *Seven Seas* eventually said it would permit her to transfer the remaining half to someone else. She says she is "disappointed in the *Seven Seas* approach as she has been with them several times before . . . I understand it is extremely tough for these boats, and would have been willing to donate some of the deposit. Retaining 50 percent as a penalty and not refunding any money but transferring it to another trip is not a good way to encourage divers."

Another subscriber from Australia, along with three others, was booked onto the *Seven Seas* for back-to-back trips in March/April 2020. Same story: "*Seven Seas* has rescheduled us for 2022 and has provided us with an invoice for 50 percent of the original cost: Our trip was going to be the last hoorah and has left us extremely disappointed. The *Seven Seas* team has not kept us up to date and reimbursed us for the internal flights. To say we

are bitterly disappointed with the *Seven Seas* is an understatement.”

We think she is being very kind regarding an absolutely unreasonable and selfish policy. And there are more examples of guests who *Seven Seas* unilaterally decided should share their pain.

*“In the E.U. travel agents are legally bound to protect a consumer’s money with an ATOL bond.”*

A reader we’ll call George booked three trips in 2020 and 2021 and paid a one-third deposit, and the Indonesian ban on foreign visitors shut down all three. He lost around \$6000 – and he says friends who had chartered the entire boat lost a lot more when *Seven Seas* unilaterally announced that all those who booked on trips that were either canceled or rescheduled would lose half of their deposits. “We would have been glad to ‘donate’ this 50 percent or maybe even 100 percent of our deposits to support the out-of-work hard-working crew members on the boat – however, neither we nor any of our friends were happy having it forced down our throats.”

Remarkably, he still intends to dive with *Seven Seas* again.

### ***You’re Better Off in the E.U.***

Most Americans have little recourse when they get stiffed by an overseas operator. However, travel companies in the European Union selling vacations with more than one element (e.g., flights, accommodation, and diving) are legally bound to protect a consumer’s money with an ATOL bond if the operator cannot provide the services and refund the money.

Since 2014, and before the U.K. pulled out of the E.U., Ladonna Idell, who lives in Montgomery, Alabama, booked many trips through Equator Diving in the U.K. ([www.equatordiving.com](http://www.equatordiving.com)) She says they run a lot of charters, “so I come in contact with people from all over the world.” When Dive Into Ambon closed and said there would be no refunds because they had no money, Equator Diving covered the deposit, as it did for many other dive operators that did not survive the COVID crisis. They recovered and transferred deposits to future trips, of which Ladonna, who is quite a traveler, made or has scheduled – fifteen, in fact.

Her money was always safe. Unfortunately, due to Brexit, the U.K. is no longer under E.U. laws that protect travelers, but most operators are still bound by CAA rules and are still ATOL bonded.

E.U. laws seem to apply to this case, but we must wait to see. Randy (as we will call him) booked a Komodo trip with the Siren/Master Fleet for August 2020, through Liveaboard.com. Dominick Macan at [diveadvice.com](http://diveadvice.com) (based in France) pointed out to him that Liveaboard.com conducts its business from the Netherlands, and under European law it is required to give Randy a 100 percent refund; Liveaboard.com must then turn to the Siren/Master Fleet for a refund or credit.

Angela Nordin of [scubatravel.com](http://scubatravel.com), a busy U.K. dive tour operator, confirmed this. However, Liveaboard.com may argue they sell only one element of a vacation, and so the rules don’t apply.

And so far, Randy has no refund. When COVID hit, Randy asked for a refund, but Liveaboard.com prevaricated, saying they were contacting *Indo Siren*. His only option was to reschedule for 2021, but that trip was canceled. When he rescheduled again, he was shocked to find the price had increased by \$1625 because the original booking had been at a “special price.” Randy is still battling for a refund.

**Note to Subscribers:** Do you have any problems with Liveaboard.com? Here’s a link to the law that requires that they refund your money for COVID cancellations and who to complain to if they haven’t. [www.caa.co.uk/atol-protection](http://www.caa.co.uk/atol-protection)

### ***Will Those Left Standing Survive?***

If you haven’t lost money for a trip canceled by COVID, you still have to sweat it out, says Cindy Caldwell of Harry’s Dive Shop in Metairie, LA. “We booked a trip to Misool, Raja Ampat, Indonesia, for 18 people for October 2020, and the resort promised credit for the future. We rebooked for October 2022.” Because of how her business must plan, she says, “If Indonesia is not open and moving forward, we will need to reschedule another year or two out from 2022. Our fear is whether or not they will be in business when the time comes.”

And that remains the unknown. Many companies remain in dire straits, and let’s hope that they can get back on their feet honorably. Keeping half a trip payment, as did the *Seven Seas*, because COVID arrived is no way to build future business. And to survive, dive operators must rebuild their relationships.

— John Bantin and Ben Davison

# Wearing Fins on Deck Proves Fatal

*and the British boat captain is found liable*

A surprise court ruling has shocked the British scuba diving industry. In a landmark decision, a Scottish judge at the Court of Session in Edinburgh has awarded £290,000 (\$395,000) to the nine-year-old son of a 50-year-old diver who lost his life while diving from *MV Jean Elaine*. The vessel was owned by Orkney charter diving businessman Andy Cuthbertson and Scapa Flow Charters. The boy was a baby when his father died. The case will have far-reaching consequences for the British diving industry.

In 2012, Lex Warner, an experienced technical diver and businessman from near Birmingham, U.K., was diving from the vessel off Cape Wrath in Scotland, an area known for its turbulent seas. The weather was pretty good that day, with winds perhaps 4-8 knots. It was the third day of the trip.

While loaded down with a rebreather and multiple bail-out tanks and wearing his fins, he tripped and fell on the deck before a dive, moving from his seat to the nearby diving exit. He did not use the handrails beside him and chose a different route

## *Put Your Fins On Last and Avoid Taking a Tumble*

I can honestly say that in several decades of being a diving journalist, taking a dozen dive trips each year, and making thousands of dives, I've been around when people suffered injuries underwater, even death, but I haven't seen any get injured before getting in the water. More than 30 years ago, I became a dive guide on the *Lady Jenny V*, which operated off the coasts of the Sudan, Yemen, and Eritrea. In such a remote and possibly hostile location, and without any outside help to call upon, my premier job was to stop anyone from getting injured on their diving vacation. This included stopping divers from doing silly things like putting their fins on before they kitted up.

"Put your fins on immediately before you enter the water," I would tell my charges. "A diver in the water without fins is not safe, but a diver walking about while wearing fins is a hazard to both himself and others."

As divers age, they're not as flexible as they might have been. Deftly slipping on fins at the last moment might be less appealing than putting them on while seated, even if there is a boat crew member there to help, as there will undoubtedly be when you climb back onto the boat after a dive.

I remember one diver, Nigel, morbidly obese at around 420 pounds, who was far too fat to put on his fins once his weight belt and tanks were in place. However, to let him loose on the crowded dive deck wearing his fins would have been akin to that out-of-control boulder in *Raiders of the Lost Ark*. If he had stumbled and fallen, not only would he have risked injuring himself but also taking down other divers around him. I made him walk down to the swim plat-

form, where he gripped the dive ladder handle securely while another crew member slipped on his fins.

We've seen fins advertised that try to address the problem by having a blade that hinges up near the shin for walking. We've even seen fins with soles designed to encourage you to walk around in them. None seems to have caught the buying public's imagination – thankfully.

Spring straps or fins equipped with elastic cords can make pulling fins on easier, but for those divers who dive with double tanks or add a sling tank of richer nitrox to speed up decompression, the extra weight, not to mention the extra weight needed on the belt, can make stooping to pull on fins a trial for many, and it can be tempting to ignore the warnings. After all, many of us have reached an age where if we inadvertently drop something, we'd rather let it lie than stoop to pick it up.

Technical divers, loaded down with up to six tanks or four tanks and a rebreather, commonly put their fins on first, and that can lead to litigation when something bad happens because of it. Thanks to the Lex Warner case, in the adjacent article, boat operators will be looking for novel solutions to avoid diver accidents, just as diver elevators became common for diver recovery on boats and used for technical diving.

If you have trouble putting on your fins, ask for help. Don't be a Nigel and be tempted to put your fins on before you don your tank. It will only end, at best, in an undignified tumble, and at worst, a disaster for you and others.

– John Bantin

without the handrails to walk directly toward the diving exit.

After Warner fell, skipper Andy Cuthbertson assisted him to his feet and asked if he wanted to sit out the dive, to which Warner replied, “No, no, no, let me in the water. Get me in the f\*\*\*ing water.” No one forced Warner to make the dive. It appears he was adamant about doing the dive, fall or no fall, and there was nothing Cuthbertson could do

*So, asserting he was unhurt, Warner made the dive.*

to prevent him from diving, short of physically restraining him.

So, asserting he was unhurt, Warner made the dive, during which the pain of an internal injury he’d received when he fell caused him to ascend hurriedly from a depth of more than 290 feet. He got into difficulty and dropped his rebreather mouthpiece.

Three of his fellow divers attempted to increase his buoyancy and administer breathing gases; however, Warner did not resume breathing. They attached him to a lift bag and raised him to the surface from 213 feet. Despite further medical treatment onboard the *Jean Elaine* and later by the emergency services, he could not be revived and was pronounced dead that evening. The injury sustained in his fall had led directly to his death.

The judge, Lord Sandison, ruled that the vessel’s captain, Cuthbertson, had not done enough to minimize the recognized risk to divers who carried heavy equipment and walked about on deck while wearing fins. Warner’s fall had caused an abdominal injury that led to the emergency ascent from depth in “an anxious and ultimately panicked state,” during which he became unconscious and lost his mouthpiece. Lord Sandison ruled that had safer fin practices been in place, Mr. Warner would not have been seriously hurt even if he had fallen. The injury he sustained was, therefore, due to the fault and neglect of Scapa Flow Charters.

“Although the skipper was aware of the demands of his working environment, there was no evidence of a formal assessment of the risks for a fully dressed diver moving from his seated preparation area to the point of entry into the water.”

Before the dive, Scapa Flow Charters had not provided a written risk assessment to include the risks of falling while wearing fins on deck or the failure to use the handrails.

The other divers who had been present gave evidence in support of the captain. Paul Mee, 49, a company director, had dived from the *Jean Elaine* since 1995. In his testimony, he said, “Mr. Cuthbertson was a very safe skipper, a genius at what he did, and he had no concerns about the safety of the boat as a dive platform, or about the number or position of the handrails. No boat in the world had handrails guiding you all the way to the exit point, and this boat had more than many others did.”

In an added dimension to the case, another diver, Neil Plant (47), a critical care medic, who was onboard the *MV Jean Elaine* at the time of the incident, contacted the police, alleging Warner’s family had threatened him after he made a statement that he had no safety concerns about the boat or the competency of its skipper, Andy Cuthbertson. He said that before the 2012 accident, he had made dives from Cuthbertson’s boat in four consecutive years and did not have any concerns about safety on the boat. (Plant sold his equipment and never dived again after the incident.)

It was also discovered that Warner had been prescribed antibiotics and advised not to dive by his medical practitioner only a week before the dive trip, but the Court summarily dismissed this fact.

The ramifications of this ruling, and any precedents set, are yet to be felt in the U.K industry. Many suspect an oncoming price hike for operator’s insurance, which will be reflected in an increase in the price of diving charters.

The familiar mantra, “A diver in the water without fins is in danger just as a diver out of the water with fins on is in danger” appears to have been ignored by the judge.

A search of the Marine Accidents Investigation Branch database from 2002 to 2011 revealed eight reported accidents involving falls by divers in or from boats; none were fatal.

Full details of the *MV Jean Elaine* incident can be found at <https://tinyurl.com/5ezjt9f4>. Details of the Court ruling are found here: <https://tinyurl.com/57uj2mdn>

# Why Does Your Regulator Free-flow?

## *understanding how your regulator works*

In our most recent mid-month email, we commented about regulators that were working perfectly when they were put away but go out-of-tune during storage. This usually manifests itself in a gentle hiss of air from the second stage when the regulator has been attached to a full tank. The writer of July's *Undercurrent* travel article encountered this after a long lay-off and assumed it was a problem with his second-stage, which it was not.

Many divers use their regulators without giving a second thought to how they work, or misunderstand what the controls provided on the second-stage actually do. Here's an explanation.

*Regulator designers have created a very clean flow of air, consistently achieving a Venturi-effect*

### ***The Inter-stage Pressure and Why It's Important***

Modern regulators are of a two-stage design. With its pressure-sensing diaphragm or piston, the first stage senses the water pressure and reduces the air pressure from the tank (around 3000 psi at the beginning of a dive) supplied to the second stage to about 120 psi (eight bar) more than ambient pressure. This is the inter-stage pressure. The correct inter-stage pressure is set by your service technician at the surface.

### ***The Breathing Resistance Adjustment Knob***

On many top-of-the-range regulators, an adjustment knob allows a diver to increase the valve spring tension and the inhaling effort to crack open the valve. While it affects the work of breathing, it does not affect the volume of the air supplied. Often dive shops sell them as gas flow adjustments, which is wrong.

When a regulator has been in storage, engraving may occur between the valve seat and the first-stage poppet, requiring servicing. Sometimes, when a regulator has been serviced recently, its new O-rings need time to bed in with use. Both these occurrences can mean that the pressure in the hose

between the two stages can become greater than it should be, or even creep upward once the regulator is attached to a full tank.

When this inter-stage pressure is too great, the second-stage valve spring is not strong enough to close the valve completely, and it weeps air. Tightening down the breathing adjustment knob can bring a temporary solution, but this weeping of air grows less as tank pressure lessens during a dive.

A second-stage weeping air in this way is usually symptomatic of a problem at first-stage, allowing the inter-stage pressure to be too high.

### ***What Does the Venturi minus/plus or Pre-dive/Dive Switch Do?***

The second stage also has a pressure-sensing diaphragm (it doubles as the purge button).

The more the surrounding water pressure compresses it, the more it allows the second-stage valve to open when you inhale, giving effortless breathing.

Today's regulators deliver air with an ease only dreamt about a couple of decades ago. The total work of breathing of less than one joule/liter at a depth of 165 feet is now normal compared to those regulators of the recent past.

To achieve this, regulator designers have created a very clean flow of air, consistently achieving a Venturi effect within the second stage. The Venturi effect means that with constant mechanical energy, as the velocity of air passing through a constricted area increases, its static pressure decreases.

### ***Freak Needlefish Accident***

In a one-in-a-million example of bad luck, a 16-year-old girl jumped from the liveaboard *MV Keana* at Maamigili in Ari Atoll on September 19 – and collided with a needlefish (also called a garfish). She was seriously injured when its needle tip snout penetrated her neck and brain.

The dive guide who jumped into the water simultaneously was stabbed by another. Needle fish tend to cruise in schools close to the surface, and this accident suggests a unique hazard divers need to keep in mind.

The clean flow of air behind the pressure-sensing diaphragm of the second stage is rather like the flow of air over an airplane's wing. The drop in pressure behind the diaphragm allows it to be drawn in more than it should, causing the valve to supply a greater airflow. The effect is exponential. You may have noticed your regulator tends to free-flow if you drop it from your mouth into the water at the surface.

To remedy this annoyance, a small wing-like device is introduced into that air flow within the body of the second-stage to disrupt that otherwise clean airflow. It's activated by that Venturi +/- or Pre-dive/Dive switch.

Some divers leave their regulator in the Venturi-minus or Pre-dive setting and never notice the difference. It takes a scientific ANSTI breathing machine, used for CE certification, to tell the difference!

Mares regulators avoid the Venturi side-effect with a bypass tube that keeps the main airflow away from the back of the second-stage diaphragm. Atomic regulators do it with an automatic ambient-

pressure-sensitive Venturi adjustment, which comes into play once the regulator is immersed.

### ***Know What Your Regulator's Doing***

Like many mechanical things, a frequently used regulator seems to offer fewer problems than one that rarely sees water. If you've just had your regulator serviced, go diving locally before you go away on an expensive dive trip only to find your regulator needs re-adjustment!

As a side note, divers in cold freshwater (less than 50°F) should be aware that a freezing first-stage may jam and allow the inter-stage pressure to increase dramatically, causing a dramatic and life-threatening free-flow at the second-stage any time during a dive. 50°F may seem a long way from freezing, but the cooling effect of air being depressurized as it passes through the first-stage causes a temperature drop often far past the freezing-point of water. Thankfully, the sea rarely gets that cold, but if you are going to dive in Antarctica, you should first be properly trained in cold water techniques.

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## **Coast Guard Sued by 34 Families**

### *legal action from The Conception dive boat disaster victims*

Family members of the 34 people who died in the *Conception* dive boat fire off the Channel Islands in September 2019 are suing the U.S. Coast Guard, alleging it failed to enforce regulations and allowed the vessel to operate with substandard electrical and safety systems that led to the deaths.

The National Transportation Safety Board

*“Had the Coast Guard properly inspected the Conception, it never would have been certified.”*

(NTSB) has previously cited the failure by *Conception* Captain Jerry Boylan and the *Conception's* owner, Truth Aquatics, to comply with Coast Guard requirements to run a roving watch person whenever passengers were sleeping below deck, as well as other safety procedures. Boylan is facing 34 counts of seaman's manslaughter for his failure to have a required roving watch person who might have detected the fire sooner, possibly in time to save the

34 who were sleeping below decks. He has pleaded not guilty and is awaiting trial.

But the wrongful-death lawsuit portrays the Coast Guard as the enabler that helped send the 33 passengers and one crew member to their deaths off Santa Cruz Island with failed oversight.

Less than a year before the fire, the Coast Guard certified the boat to carry 40 passengers overnight “even though her electrical wiring systems, her fire detection and suppression systems, and passenger accommodation escape hatch were in open and obvious violation of federal regulations,” according to the lawsuit.

After the fire, the Coast Guard inspected the *Conception's* sister vessel, the *Vision*, also owned by Truth Aquatics, and “discovered numerous glaring deficiencies” in its wiring and electrical systems, fire detection and suppression systems, and its escape hatch, according to the suit.

“Had the Coast Guard properly inspected the *Conception*, it never would have been certified, never set sail, and these 34 victims would not have

lost their lives,” said Jeffrey P. Goodman, who represents several of the families. “The time has come for the Coast Guard to be held accountable for its failures to protect those victims and prevent future maritime disasters on America’s waterways.”

The lawsuit notes that an examination of the *Vision* revealed homemade repairs done with the kind of wiring available at Home Depot and not of the quality used in maritime vessels. The boat’s electrical system was so stressed that it could not run when the galley stove was on.

The suit notes that in 2013, the Coast Guard started publishing safety alerts about the danger of circuit overloads and shipboard fires caused by power strips and rechargeable devices aboard vessels.

The suit alleges the Coast Guard knew or should have known that Truth Aquatics added “undocumented and ill-designed electrical outlets throughout the vessel for the purpose of battery charging” and encouraged passengers and crew to charge video cameras, smartphones, underwater scooter power packs, and other lithium-ion battery equipment.

Eleven months before the deadly *Conception* fire, those on a dive trip on the *Vision* saw a battery being charged spark flames; the flames were smothered with a dry chemical fire extinguisher and the battery tossed in a bucket.

The *Conception* consisted of three decks: the pilot house and crew quarters on top; a middle deck, where the fire ignited; and sleeping quarters in the belly of the vessel. The NTSB determined the fire



*The permanent memorial at the Conception dive boat’s home dock in Santa Barbara Harbor*

began in the middle deck salon, where lithium-ion batteries were being charged. But the agency could not say whether it was the source that ignited the blaze.

Those sleeping below deck were trapped beneath the fire. There were signs that some were awake with their shoes on before they were killed by smoke inhalation.

The families are already suing Truth Aquatics for wrongful death and negligence in the operation of the *Conception*.

*This article originally appeared in the Los Angeles Times and was written by Richard Winton. We have shortened it and take all responsibility for editorial errors.*

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## Flotsam & Jetsam

**Sand Tigers, Grey Nurse Sharks, or Ragged Tooth Sharks** are essentially the same species with names differing worldwide. In Eastern Australia, their numbers are increasing, despite being endangered. This year at Wolf Rock off Queensland’s Rainbow Beach, between 70 and 100 pregnant grey nurse sharks were spotted, the most in the past 13 years. While grey nurse sharks hold up to 80 embryos in two uteruses; only the fittest embryos survive because of intrauterine cannibalism. There’s some serious sibling rivalry going on inside there. *ABC Australia*

**A Hazard of COVID for Travelers.** Operators of an Undersea Hunter Fleet vessel, during a 36-hour crossing to Cocos Island last month, discovered one of its crew was infected with COVID. They returned to port, and further testing revealed two more crew members were infected. No passengers were infected, but they lost their long-awaited trip as well as valuable vacation time. The operator offered them full refunds, or they could reschedule to a future trip and covered expenses for rescheduling as well.

### What Worries You Most About Foreign Travel?

Travelers appear to be less worried about catching COVID than the risk of being quarantined for an extended stay in some developing country. Mandatory quarantine can be both uncomfortable and expensive and extend vacation time beyond what was planned for and add the costs of rescheduling flights. But, keep in mind: even vaccinated travelers are not fully immune to the virus so mask up when you need to.

**Fire in Guanaja.** A fire roared through the quaint stilt town of Bonacca in Guanaja, Honduras, October 2nd. Many of the residents – including the staff of dive resorts Clark’s Cay and Dunbar Rock – lost everything. Homes are gone, clothing gone, personal effects gone, everything burned. The people are hurting, and a GoFundMe account has opened if you would like to contribute.

<https://tinyurl.com/4aee9p4y>

**The Joys of a Scottish Summer.** The crew of a dive boat operating out of the Scottish island of Orkney, home to the iconic Scapa Flow wreck site, lost sight of 11 divers and their surface marker buoys when engulfed in thick fog in mid-September. They called for help from the Royal National Lifeboat Institution, and searchers located all the divers when they surfaced and returned them to the safety of their dive boat. *The Press and Journal*

**Adopt a Manatee?** No, you can’t take it home with you, but for a \$25 tax-deductible donation, the Save the Manatee Club will allow a symbolic adoption of a real living animal, which helps support efforts to rescue the sick and injured. You’ll receive an adoption certificate with a color photo and biography of your Florida manatee. The manatees need help, and every dollar counts.

<https://tinyurl.com/e34jb7xa>

**Want to Dive with a Purpose?** Terra Sub Aqua operates a for-profit coral farm five miles off the Florida Keys in the Atlantic Ocean. The live corals it grows are sold to compete with the unsustainable reef harvesters of the Pacific and Caribbean who

serve the aquarium trade. It offers opportunities for volunteer divers. Should you be interested, go to [www.terrasubaqua.com](http://www.terrasubaqua.com)

**Amateur Divers Strike Gold.** Two free divers off the coast of Portitxol, Costa Brava, Spain, stumbled across eight gold coins and alerted local archaeologists who later discovered another 45. One of the largest collections of Roman coins discovered, they were in such good condition that the inscriptions were legible. It turns out, they were from the reigns of six different emperors. Jaime Vidal, a professor at the University of Alicante, said they were probably hidden by a wealthy local landowner to protect them from invading barbarians.

**Two DANs on Diving and the Vaccine.** We recently reported that DAN recommends avoiding diving for seven days after being vaccinated, but that’s DAN Europe’s recommendation, not DAN U.S., says Brian Harper, Director of Communications. DAN U.S. says: because many people tend to feel unwell . . . for a few days after receiving a COVID-19 vaccine, it . . . would be wise to avoid planning dives for those days.” As for the side effects of the vaccine on freediving and scuba, “we at DAN U.S. would . . . be concerned about the possibility of fatigue, discomfort, or mental foggi-ness contributing to a dangerous mishap underwater. It’s possible that soreness or other side effects of the vaccine may mimic (or mask) symptoms of DCS after a dive, leading to diagnostic confusion.”

**If You Didn’t Think It Was Expensive Enough.** The Atomic T3 all-titanium regulator is a top performer. Some say it’s the world’s best. For most divers, \$1900 or so puts it out of their league, but it’s evidently not expensive enough for others. Atomic Aquatics has upped the ante with its Atomic T25 Limited Edition, celebrating its 25<sup>th</sup> anniversary. It’s based on the T3, with a burnt titanium finish provided by a diamond-like coating with a unique, radiant iridescent color sheen. It will set you back about \$2800.

## undercurrent

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