



In

the summer of 2002, a merchant marine took a day off and went scuba diving in the beautiful waters surrounding Guam. He left the ship early in the morning and rented gear from a local dive shop for a trip to a popular spot known as the Blue Hole, a natural shaft that descends into a coral reef.

The upper reef is about 60 feet below the surface, and, from there, the Blue Hole drops more than 300 feet. The reef's shallower depths provide abundant sea life. Conditions are perfect to lure divers of all experience levels; however, because of its depth, the Blue Hole is rated only for advanced divers. *[A rating of "advanced" is assigned to dives in which the likelihood and severity of an accident is increased, usually because of greater depth, lack of visibility, turbulence, water temperature, or the possibility of entrapment.—Ed.]*

By 10 a.m., the group of six divers had divided into three pairs and headed to the bottom. When they reached the reef, the teams separated. One stayed on the reef at about 60 feet and slowly drifted, with the ocean current carrying them along the reef. Another team entered the shaft. Meanwhile, as his buddy investigated the seawall, the merchant marine

created a loose alliance with the team entering the shaft and descended with them. It was here the merchant marine abandoned a primary diving safeguard (and broke a cardinal rule) against catastrophe: He left his dive buddy. It also became clear he had entered the water without another safeguard: a good dive plan.

When the paired divers in the shaft reached 127 feet, they exited the shaft and began their ascent. As they ascended the seawall toward the reef, they could see the merchant marine still descending below. One diver estimated he was at 150 feet and going deeper.

No one is sure what happened next, but the dive-boat captain sighted the merchant marine on the surface before any of the other divers had surfaced. The captain immediately sped over to pick him up and gave the OK sign, which the diver returned. When the captain asked how he felt, the diver said fine.

Once aboard the dive boat, the merchant marine reported his depth gauge didn't work. He also said when his scuba tank reached 1,500 psi, it started losing air rapidly, presumably because the O-ring leaked or the regulator was faulty. The captain went below to check the gear and found it appeared to be in good order. Before he could return topside, a non-diving passenger came down and said the merchant marine was feeling poorly.

The victim stated he was having trouble breathing and had pain in his arm. The crew tried to move him below but couldn't. At this point, the victim was unable to stand or to

Tragedy at the **Blue**

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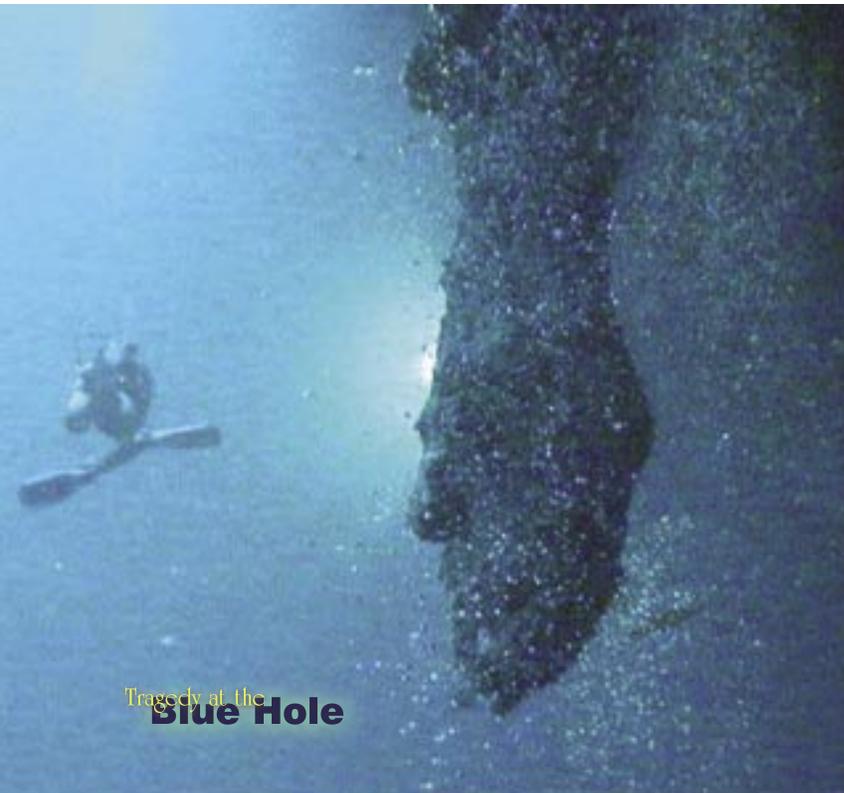


walk—a clear symptom of a diving-related illness—and, because of its early onset, one of grave consequence.

The crew immediately took emergency procedures for a stricken diver, which included placing him on oxygen, recalling all divers, providing first aid, contacting the nearest recompression chamber, and getting the patient there as quickly as possible. Despite the speed and expertise with which these steps were carried out and the heroic efforts shown at the recompression chamber, the

victim could not be saved. He died of severe decompression sickness (DCS) and arterial gas embolism (AGE). *[With DCS, excess nitrogen bubbles form in a diver's blood; they are caused by coming up so quickly that the excess nitrogen can't diffuse. Arterial gas embolism is the most serious complication of diving and occurs when a diver holds his breath, creating excess pressure inside the lungs. As a result, your lungs over-expand, and air bubbles are forced into the bloodstream.—Ed.]*

Hole



Tragedy at the
Blue Hole

When tested, the victim's gear was found fully operational. His scuba tank had about 100 psi of air.

While we'll never know for sure what happened to the victim that day, his condition upon arrival at the recompression chamber suggests he probably went too deep and ran out of air. He then probably made an emergency ascent directly to the surface, without making any decompression stops.

In this mishap, the victim was assigned a dive partner before entering the water, but, when confronted with deciding whether to follow the seawall or to go deep, the two of them separated. It would appear neither one considered their partnership binding. It also appears they didn't have a dive plan.

The importance of using the buddy system cannot be overstated. Your dive buddy is your first and last line of defense. He helps you plan your dive, he helps ensure you follow your plan, and he is there to cover your backside in the event an emergency occurs.

Never make a recreational dive alone, and, if you lose your partner, return to the surface as soon as you've made a quick search. If all goes well, you and your buddy will reach

the surface at the same time, and you both can resume your dive as soon as you're sure everything is OK. If your buddy doesn't show up, immediately initiate emergency procedures for a lost diver, which makes it more likely he will survive an accident.

I have been in group recreational dives where buddies weren't even within sight of each other. Imagine exhaling, only to find your regulator no longer is providing you air, and you turn to see your dive buddy 20 yards away, swimming in the opposite direction to catch a lobster.

Your dive plan is a crucial part of your dive. It defines your objectives, establishes depth and time limits, and ensures you have the right equipment and will have enough air. It also clarifies what steps you should take in an emergency. Dive buddies make and agree upon the plan before they enter the water and, once in the water, avoid deviating from the plan if at all possible.

It's easy to get scuba-qualified. Most dive shops in the United States offer National Association of Underwater Instructors (NAUI)- or Professional Association of Diving Instructors (PADI)-sponsored courses that take only a few weeks to complete. If you're going to dive, plan ahead and take a course, and, if you can, take it with a friend.

The Navy provides a great opportunity for Sailors to see the world and to dive some of the world's best dive destinations. Be careful, though, how far you push the envelope, and remember ORM is a tool you should use both on and off duty. Ensure your dive location is not off-limits. Test the gear, and taste the air before you leave the dock. If you go on a dive and question its safety or think it may exceed your experience level, sit it out. Plan your dive, and dive your plan, and never dive without a buddy. You always can dive another day. ■