

5 B's of Survival

by Tom Rose

WWW.atlimp.com trose@nc.rr.com

B Safe, Be Comfortable, Be Seen, Be Heard, Be Found Alive

What follows is a description of four incidents in my 60 year diving career. The three that involved me ended ok but I took away lessons that probably have prevented my premature death. The fourth event that most divers are aware of ended in tragedy halfway around the world.

The conclusions and solutions to all of these is found at the end of this paper..... my recommendations of the minimum safety equipment for offshore and solitary shore diving. I give my permission for anyone to post this to their website or publish this information in the hopes that it will possibly save a life one day or speed a rescue.

1. Sombrero light, MARATHON FLORIDA In September of 63, Bill Weatherford, Joe Zukoski, and I were diving on Sombrero light off Marathon Florida. We had been enjoying the clear warm water and the abundant lobsters beginning to fill our basket in the boat. Our lack of experience in reef diving almost was our undoing. The anchor line of our little 14 foot fiberglass boat was made of 3/8 inch Polyethylene and was attached directly to the Danforth anchor laying on the bottom. We did not notice the change in wind direction that moved the boat over the reef and the anchor line across the sharp coral. When I popped up from a free dive to the bottom with a nice sized lobster I looked in horror to see the boat heading toward the breakers on the outside of the reef. Way to far for me to swim to the boat and there were no other boats out there that day. I screamed and up jumped Joe who was sleeping soundly in the boat. He simply started the engine, and brought the boat over to where we were diving.

ANALYSIS

What if

Joe had not been in the boat

I had not noticed the boat going toward the breakers

We had properly anchored with a piece of chain to prevent the reef from cutting the rope

We had anchored further away from the reef....

Any of those could have CHANGED this simple event into a tragedy or even a non event.

Lessons I should have learned but needed re-enforcing

No matter how tempting....always have a competent boat operator alert and on the boat

Have a means of communicating with the person on the boat.

Make sure the person on the boat can see you...

2. Tiger Wreck--14 miles off shore Virginia Beach...Change in current direction with depth almost killed us. Butch, John Reynolds and I were off shore to enjoy a little Sand Tiger diving on a usually easy to find wreck off Rudee Inlet. The wreck lies in about 70 feet of water in reasonably clear water when the wind is from the South West. It is marked by a nearby buoy. Our practice was to tie up our anchor line (chain by now) at the 20 or so foot level on the buoy line. We would play out a long line to the buoy line and add a catch line behind our boat, making our boat entry really easy. We would drop down and hit the wreck by swimming upstream with the intent of swimming down stream back to our boat after we took a surface bearing. It usually worked like a charm.

After over thirty minutes of swimming, we had not found the wreck...we decided to surface and start again. When we arrived at the surface, the boat and buoy were a quarter mile up stream from us. It was obvious that the bottom current was in a different direction from the surface current. We were in deep trouble. By taking all but my mask snorkel and fins off and leaving the rest in a raft of diving gear with John and Butch, I was able to swim to the boat and get back to them.

ANALYSIS

What if

We had waited longer to surface

The currents were stronger

We had dragged a hook for the wreck

Made sure that a person was on the boat

Any of those could have CHANGED this simple event into a tragedy or even a non event.

3. Hawaii--Poor decisions to dive on my and the dive companies part almost caused a disaster In 2007 My wife and I decided to go to Hawaii partially to revisit places we went over 24 years before. We also decided to spend a week in Maui for some rest, relaxation, and of course some diving. I made several dives with a local dive operation. On the last dive day it was blowing up and I was not sure that a dive was going to take place. The dive operators assured us that they would take us to a special place in the leeward side of the island so we could make a dive. It was windy and rough on the way out as we made our way to the 'special' dive site. The water was about 60 feet deep as I recall, the water was clear, and the diving was actually superb. About 30 minutes into the dive, I looked up and saw one of our divers going by overhead hanging on to the Danforth anchor from our dive boat. The other divers on the wreck chased after him. Knowing that they had the chance of a snowball in this warm water of catching him, I continued the dive. I also knew that I could actually swim to shore if necessary.

When I finished my dive, I surfaced and saw the boat about a quarter of a mile downwind/downstream. It was too far for my air horn, so I inflated my personal orange safety sausage, both of my camera safety sausages and awaited my pickup. In a little while the boat came up and picked me up. They had no problem seeing me as I looked like a giant orange sea urchin bobbing at the surface. I was amazed that I was the only one using the safety sausage. The dive master was amazed that I had the safety sausages. They were giving oxygen to one guy on the deck of the boat.....

ANALYSIS

What if

I had chased the anchor...would I be sharing the O2 with the other diver?

I did not have the safety sausages or they were not seen?

They had to take the guy with the heart problem in and I was left in the water?

I had drifted out of sight?

I had paid closer attention to the potential wind problems and not even gone overboard?

Any of those could have CHANGED this simple event into a tragedy or even a non event.

4. Divers lost in Australia Tony Eggleston and I were at the bar at Utila Lodge in Honduras, on a whale shark trip, eating and chatting with the delightful boatmaster...Willie Waterhouse as we watched the news on TV. The lead story was about the divers who were left on the Great Barrier Reef and who subsequently died...only some of their gear eventually washed up on the beach. We discussed the things we knew about the story all evening and Utila Lodge started a check off system even though the boat was only a six pack. I realized that I could have been one of those victims.

Skip forward to the Dive Equipment Manufacturers Association show where I found a small booth featuring the SEA MARSHALL a radio signaling device for lost seamen called an **EPIB**. Without a second thought I bought one as I saw it as a way to short cut my eventual rescue if I needed it. It simply made sense to have one. My wife was excited when I showed it to her as she was aware of my previous misadventures. It is a half a fist sized device that transmits on 121.5 MH to assist the coast guard and search vessels in finding you if you get separated from your boat. Quite frankly I was not really interested in the fact that oil rig guys use them as well as many others who have the chance to get lost at sea. I simply owe it to myself, family, friends, and my employees to have the assurance that I have taken the steps to stay alive. I spent a number of hours thinking about my offshore and solo diving activities in the light of improving my odds for survival.

I finally decided that there could be an easy to remember and implement 5 B's of safety.

B Safe, Be Comfortable, Be Seen, Be Heard, Be Found Alive

B SAFE

Despite the temptation....do not dive if the conditions are not acceptable....This dive is not as important as the rest of the dives in your life. **It could be the rest of the dives of your life.**

BE COMFORTABLE



Two sausages snapped together at ends

BCs are great for diving, but not that comfortable at the surface for long immersion or surface swims. The following arrangement made from two six foot safety sausages packs in a small package and makes a very comfortable water bed. No need to wear yourself out treading water.

Inflate the waterbed. Inflate the BC, drop the weights, and take the BC off.

Lay back on the waterbed...one section behind your knees and

throw your arms over the other...you can lay back relaxed and await rescue.

B SEEN

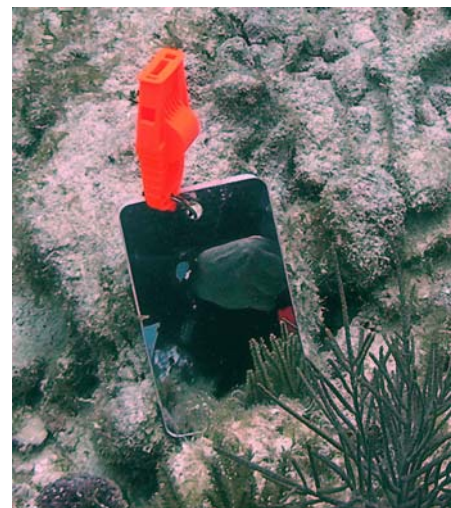
I carry a signal mirror and I know how to use it (on the other side is a piece of white plastic I use to white balance my cameras)

I carry a strobe so if I am in the water after dark, I can easily be found. No light.....no Coast Guard search ability. Attach the strobe to top of the safety sausage bed. Fresh batteries each dive trip also help.

I carry an additional safety sausage with retro reflector material glued on.

I also carry a divers light and know how to signal SOS dit dit dit da da da dit dit dit at night.

My diving buddy Rob also carries a container of dye. Another buddy also carries some small flares.



Mirror, white card, and whistle

BE HEARD

I have a air horn on my safety second regulator attached to my BC inflater and a whistle attached to the signal mirror. I can also make a snorkel sound like a conch horn.

B FOUND ALIVE

I printed cards to give each boat captain that I dive with that has the information necessary to notify potential rescuers that I am equipped with an **SEA MARSHALL** dive alert (PLB or EPIRB) transmitting on 121.5 and that allows me to be found in minutes once the alarm has been sounded and search and rescue has been activated. I also make sure the mate and diving buddy knows this also. **SEA MARSHALL** has adapted the card and gives them with the units. I attach the **Sea Marshall Dive Alert** antenna along the third safety sausage.



This gives you a sense of the size of the unit.

An example of my card follows. I print them on business card stock with a home printer.



Front of card



Back of card

NOTICE

I have no fiscal interest or connection with **SEA MARSHALL** and have written this to assist other divers in preparing for the possible emergencies that could arise. If you republish this unchanged and in its entirety, you can use my name, if you desire to change it, feel free to improve it but do not use my name EXCEPT TO reference the document.