



How Many Ways Are There to Skin A Cat?

I receive numerous email questions from students past and present and while sometimes they are the threads that forms the canvas that I paint on, this time they but in this case I will be answering directly a couple of these questions addressed to Dear Gib. No names, just replies.

Dear Gib: why do you not post on rebreather forums?

Answer: well its quite simple. Years ago I used to encourage my students and all divers to share their knowledge on forums. Unfortunately the forums were crude and run by a Limy bastard who did not patrol or censor some of the arrogant Europeans who by default feel superior even though they live in tiny little shit hole countries with the combined GDP of Iowa? So it would go that a new ccr diver would ask a newbie but important question like where to get best deal on batteries. The reply was nothing short of "F'OFF YOU IDIOT! This question has been answered 500 times already...." Then the forum "RBW" was improved slightly? And at that time I was keen on organizing trips to Cocos and Truk Lagoon to gather ccr divers from around the world to enjoy some of the best diving available. But the site owner (Stuart) censored and refused to post my trip as it was a commercial venture and I could piss off? It didn't matter a bit if the trip forums were bloated with his buddies from Sheepcrap Upon the Isle who were running trips on commercial charter boats? I was a capitalist dive store owner and somehow making evil profits.... I tried to explain the real truth that trips were a ton of work, stress and if you broke even you were lucky. It fell on deaf ears? So Stuart decides to run a trip to the Red Sea. Hah I think, good luck. And as it typical 300 people reply that they want to go and weeks before the trip is to run, nobody wants to hack up any money? The first day of the trip a key instructor dies. Bummer! Well I don't know if Stuart retired with all the profits from this trip or ran and tucked his tail between his legs, but the site was sold. The next owner was smart, not because he was an American, but he censored the site with a heavy hand and organized the threads. He censored it to the point where nobody could say a bad thing about a paid advertiser, but it was his site and he needed the advertising money. So time passes and forums grow, then they split, and they go stale, or they are patrolled by trolls who hide until some newby burps or farts about a rebreather. These trolls are the marketing division of XYZ instructor incorporated and they latch on to the new divers.

But the reason that I got bored with the forums is that the very few times that I had any free time to look at the forum, the post went from asking "What Neckseal should I put in my drysuit" to 20 pages of drysuit sales pitch 101, to one or two articulate replies that were informational, and one post from a very articulate individual who while beating his chest to proclaim that his neoprene neckseal had lasted 20 years, over 10,000 dives and went on to list the exact rubber trees in Malaysia that the rubber manufacture derived the materials. No exaggeration, that was a post? Of course you always have Don pulling one of 6 regular form monkeys dicks so he could get a fight started. Phuk Off!

I simply got sick of the forum monkeys who spent hours daily, everyday, to play shenanigans or start flaming threads? And the articulate experts who could spout out oxygen Mv on planet venus, or count molecules of gas in a flush when NONE of it really mattered except to pat the monkey on the back and give him his daily banana! Yes there are a "few" intelligent people on the forums, but some of the most intelligent do not have enough common sense to tie their shoes without a NASA diagram..... they really don't dive or they would not have time to post.

So my advice is "Have at it" enjoy, but don't get sucked into the politics and everybody is selling something.

Dear Gib: why do I see divers standing in front of their rebreather and breathing from it while you taught us to get into the ccr and breather it just prior to diving?

Great question and please read how to skin a cat below

One of my favorite phrases to use in teaching technical diving has been "There is more than one way to skin a cat" in reference to there is more than one way to do a skill or technique to achieve a positive result. And while this concept will totally fail in the cult or diving religion of DIR, I completely understand and accept that that is exactly my point. It is not that I disagree with a philosophy of doing something consistently so it becomes muscle memory or even brain memory to evoke the correct reaction...it is that I despise the fact that people cannot think of more than one way of doing something. Think for yourself and above all question "conventional wisdom" as things change and we learn, or should learn over time. What we thought was correct behavior in past with rebreathers has not always proven to be correct and dumping used scrubber into a Ziplock to re-use later was one simple example of a convention that was totally wrong.

So to tackle a subject such as how to pre breathe a rebreather, I do accept that there may be more than one way to achieve this goal. But to start writing about the subject and using a common phrase, I had to double check that the meaning of the phrase that i have so long held close is that it really means what i think it means.

The origin of the phrase "There is more than one way to skin a cat" is to scholars not totally clear, but there is historical references to suggest that it has been in uses since the late 1600's in English proverbs, referring to a number of animals other than cats such as dogs, to 1850's old English used in southern states referring to skinning a catfish. Well the last reference is a great relief to cat owners as the intent of the proverb has always been to say there is more than one way to do something, but if the something refers to killing, choking, or skinning a dog/cat/horse then it tends to leave the animal lovers in despair. And seriously what do people do with cat skins assuming we are not talking about large African cats and we are referring to the common household cat???

Now to say that there is more than one way to "Pre Breath" a rebreather is very likely to leave some of the audience in favor of saying "go ahead and skin Bill the cat, just don't phuck with my ccr protocols" or something to that nature. All the while Bill the cat is thinking I should stay on track with the catfish as they are rather ugly yet tasty once they have been skinned, dipped in batter and fried in enough fat to make them crispy with a hint of lemon and dill.... So let us consider the options of Pre Breathing a rebreather as an essential part of diving and consider that there may be more than one way to achieve this goal.

Pre Breathe - The concept of testing the rebreather to ensure that it is fully functional. The act of breathing upon a ccr at the end of the divers build check list is not a Pre Breath, but it is a build check or validation that the proceeding steps worked. Ironically i have never taught this as I was never originally introduced to this at the end of a build. My routine and consistency had proven itself over two decades that if you build it by an organized check list, that it will work? So i have always left this as an "Option" if I have ever included it on a build check list. I make the choice to wait until I am ready to enter the water to pre breathe. The rebreather is shut down in Stand By, Ready To Pre Dive, or Off Mode if you choose but it is built correctly and still requires that I pre breathe it before I dive. So why breath it twice if I build it correctly and i know i must pre breath it before i dive it? What then is the benefit of breathing it twice? Will i catch something that is missing from the build check list??? If so, then the build check list is not adequate? A Pre Breath is the act of firing up the unit just prior to entry to validate that you have the switches, levers, knobs, fuel tanks at the proper setting.

If the unit is built correctly and waiting in stand by mode, then a diver must Pre Breath is prior to entry. The diver must wake up the unit, then don the unit while breathing it in an active mode of prepping to enter the water, and not sitting quietly meditating. The pre breath should be a part of surface preparation to enter the water. I think of this when I travel on airplanes and the few lucky upgrades to first class when I can see the pilots warming up the plane as they complete their check list. Once completed, the pilot gets out of the seat and perhaps goes to the lavatory, or gets a cup of coffee while fraternizing with the flight attendants, or to the lounge for one last cocktail.... NO, the pilot is in the seat and ready to taxi the airplane and take off. The pilot does not get up and walk away from the pre flight? Just as the diver should be in active dive mode ready to taxi to the waters edge and fly their rebreathers to their destination.

I will see divers at dive sites or dive charter boats that will stand in front of the rebreather and "pre breathe" the rebreather as it sits on the bench, or seat for 2-3 minutes before they put the unit on. It is at this time that I evoke the phrase of skinning cats not that it is positive, but more along the lines of ok that is one way of doing something....I guess if this is helpful to do before you put the unit on, then keep skinning cats. I myself have always tried to find the Prudent Minimum technique that gives the best results with the minimum waste of gas or energy that will ensure that the rebreather in return gives the most enjoyment.

Again, my cat to choose to skin is to have the ccr built by the checklist and sitting at waters edge be it a quarry dive or charter boat, with the unit in Stand By mode. I will first address the unit by organizing the straps or harness, wake up the electronics, turn on the gasses and checking for adequate pressures, don the unit and attach the Po2 display and start breathing the unit. I was taught to go from Diluent to Oxygen and while doing so; Look, Listen, Feel. If for example you tap the bcd power inflator you will not see a change in Po2 on display as you are listening and feeling the whish of gas and confirming that the bcd inflator is mounted correctly and attached. But when you tap the Dil mav, or suck blow out nose to activate the ADV you will hear, feel and see a change on Po2 display. Now switch to oxygen side and you will hear, feel, and see the MAV O2 as well as the Solenoid. If you have a manual you should sense a flow or slight creep of oxygen from the orifice. And if like me you are deaf on one side you may not hear the solenoid but you can tell that it is firing. Now if by donning your ccr unit, you are going through each of these steps as you are getting ready to walk to the waters edge you can be prepping your stages, dry gloves, fins, mask, etc and if you can get into the water in less than a solid five minutes of Pre Breathe than you are going to fast.

Speed of entry is not our concern here as we want to stress the efficiency of the technique as rebreathers are supposed to be efficient. And it is not about cutting steps, but taking the prudent amount of steps rather than going back and forth to accomplish the same goal. One step in the right direction,

All too often i have seen divers diving rebreathers and scratch my head at the inefficiency of operation. It was perhaps the use of rebreathers in remote area dive sites that instilled in me the desire to use the least amount of resources so I was able to maximize the rebreather to its full potential. It is at this time that I would look at a ccr building check list and see that the designer asked the diver

- Turn on Diluent ____ BAR - Turn off wait two minutes record pressure
- Turn on Oxygen ____BAR - Turn off wait two minutes (if orifice pressure drop or not)
- Suck Negative, close loop and watch for two minutes
- Inflate Loop for Positive and watch for two minutes
- Calibrate

So I ponder, why do the negative first then positive as it does not make sense of logical order to build. If you have gas pressurized into the system you cannot do a negative with an ADV to fire, or an orifice to leak? Do the positive first by closing DSV and dumping both gasses into the loop, or wing if you do a leak test. Whatever checklist you have, you should be doing things such as checking batteries before you close the lid or seal the unit for pos / neg just as well as you should not be turning gas on/off more than once. Don't waste resources or your time as you will get frustrated and toss the check list away and that is the first mistake.

The end objective is to have fun and use the rebreather to take us to places either deep, or far away while conserving gasses in as safe of a manner as possible. And in the end it is your cat to skin, and my choice is to leave the feline out of the equation and go for the crispy catfish fritters. A little bowl of dip with dill and lemon with a pint of crisp hoppy ale to wash it all down. We all make choices, and all I ask is that you consider that conventions can change and be open to changes.

Safe Diving

Gib