

We all make mistakes

I was not new to rebreathers when I got my KISS, OK I had a Draeger and some would argue it's not a real rebreather. However I was pleased to move on to closed circuit and the KISS came available just at the time I was looking for one. Having taken possession I sat it proudly on the table outside on the deck. I thought I would give it a go, and see what my o₂ metabolism was like. Turning both gas sources on and watching the three meters in the handset I began to breathe. This was really nice, it was different to the Draeger and all seemed quite well. I could hear the hiss of the KISS valve working, and I added o₂ to see if the sensors all moved together. Sure enough they all did. It was at this point I felt a little odd. So I stopped breathing the unit and looked over it, all seemed OK. So back on the unit I went, and again I felt a little strange, looking at the handset all seemed fine, so I added some more oxygen, and that was a little better. But very soon I felt a bit breathless and came off the unit. Once again I looked at the handset, I had oxygen alright, and when I added more the numbers went up. Strange I thought! So I thought I would give it a last go, and the same happened, I was quite breathless. I decided to give it up for today and put the unit away. It was about a week later that the penny dropped, NO SCRUBBER! How stupid, I had not filled the scrubber at all, CO₂ was building up, and I was unable to resolve the problem. Lucky I was not underwater!

Eugene Farrell
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LEARNING LESSONS

Rebreather and Technical divers may already be aware the HSE Website has been making available online a copy of the video relating to an Incident experienced by a Sky TV cameraman who suffered from CO₂ toxicity as a result of incorrect training. The online video can be seen at <http://www.hse.gov.uk/diving/video/co2video.htm> Although it relates to a specific incident this video also highlights some important points that are relevant to all divers.

Pushing Limits

Attempts to push or exceed limits, such as exceeding experience or skills, attempting to stretch out gas supplies or as in this case limitations of equipment are one of the most common factors in the Annual Diving Incident Report. The video provides an illustration of what can happen when a relatively simple action of trying to reuse the scrubber material to make full use of it very nearly cost someone their life. Additionally most of us would expect to recover quickly from a CO₂ hit once we return to breathing surface air. The reality is that in this and Eugene's experience above is that full recovery takes days if not weeks.

Gas supplies

During initial training we tend to calculate gas consumption based on simple estimates (e.g. 25 ltr min). For the majority of our diving when things are going right such estimates may be perfectly adequate. What this incident illustrates is that when things start to go wrong very high levels of breathing rates, and therefore gas consumption, can be achieved. Any properly planned dive should therefore take account of this potential.

Buddy Awareness

The Buddy system is designed so that divers can provide mutual support to each other. Even in situations where one buddy is much more experienced than the other (e.g. Instructor & Student) if there is an obvious problem differences in experience should not prevent you taking control. No matter how experienced we may be none of us are immune from problems, for example to heart attack or stroke, and a competent though less experienced buddy should be capable, willing and be encouraged to provide assistance. Some instructors may take the view that when teaching entry level students they are effectively diving alone. The reality is that even with an Ocean Diver Trainee on their first open water dive their student has the proven ability, albeit in sheltered water, to recover them to the surface should the instructor have a problem.

Think SAFE – Dive SAFE

Jim Watson

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For more detail and information please visit www.bsac.org/page/45/diving-safety.htm