Equipment – after a fashion – and how fashions change!

It was always interesting listening to my Dad tell his childhood stories of what it was like in rural England, particularly about fishing and how he used to gear up for it. Curiously, an essential part of his fishing kit was a 12-volt battery powering a crystal radio set for listening to very crackly BBC news broadcasts. After all, the fish weren't biting all the time so fiddling with clever gadgetry like this was a fairly amazing distraction. That wasn't that long ago.

Fast forward to the technology of today, and now, to call and talk with a friend in England from here in the Southern Hemisphere sounds like chatting with the next door neighbour.

Crystal radio set
https://www.google.com.au/?gws_rd=ssl#q=crystal+radio+set

Changes in technology like this have also been evidenced in our industry/pastime in an even shorter time. First we had homemade (almost) everything, like fins made from car inner tubes to the most sophisticated of devices in the form of rebreathers that allow the diver to stay

underwater for hours.

[Leo Ducker, pioneer of diving in NZ who completed his last dive just before his 90th birthday. Picture copyrighted to NZ Herald; Myself with the earliest BC I saw used (an umbrella) and inflating the first ever real BC I bought and used.]

As a further measure of the speed of change, in the first dive shop I worked in we started with (among other products) two choices of fins and three choices of masks.

All black. Within five years we already had multi-coloured everything with bewildering numbers of options in both types of product and ranges - and so it has been since.

It makes one wonder where it will eventually take us. Even so, an ideal way to get a glimpse of what engineering miracles and mutations are available now, and what could eventually be in store for us, can probably best be seen by visiting next years OZTek - far better than just googling –but do that as well!

In the meantime, and presently filtering into more frequent use are products resulting from what is now referred to as technical recreational diving, ranging from solo and side mount diving through to the use of a wide range of other gadgets.

A gang of Full Face Mask divers ready to take the plunge at Lake Barrine on the Cairns' Tablelands

Solo diving, though not encouraged as such by most training agencies is nevertheless an option employed and often considered particularly desirable to those experienced divers who don't wish to dive with "newbies", who offer, (among other concerns), the prospect of finishing the dive too early owing to the "newbie's" faster air use. Training in solo diving, or as PADI likes to call it, "Self-reliant" diving, is no giant leap in technological knowledge for anyone used to standard dive gear. But it clearly introduces the concept of greater reliance on self and equipment integrity. Essentially, solo divers equip themselves with a redundant air supply and the knowledge required to plan *not* to get into strife through either equipment failure or plain old forgetfulness.

Tony Manser (Open Water Instructor) with a "Spare-air" unit for self-reliant (solo) diving.

But for some, going one or two steps further and wishing not only to be able to dive independently but to start

going deeper on either air or mixed gases, side-mount diving definitely offers more gadgets and skills to get used to. Originating from cave diving, side-mount diving is often considered by many to offer more advantages than disadvantages over conventional tanks on the back. One advantage is the feeling of freedom from the lack of weight bearing on a diver's back, another is the ease of attaining stability and buoyancy control. In training for this we are taking a step up in technology and possibly using different styles of BCs and regulator configurations. I have friends that say "When it's not on your back, you'll never go back!" and now when they exclusively dive with side-mount equipment, even on recreational dives.

Masanori Onishi (PADI Course Director) using side-mount cylinders

But then it can start getting really technical and where

the abyss (deep blue) looks like the only limit left - now we're talking rebreathers.

I've had three, still have one, but those models are now considered "old school" and starting to fall into the unpleasantly categorized "widow-maker" variety.

Even so, rebreathers now have become so technically brilliant and safe it makes me wonder when they'll have a coffee machine integrated into them to pass away the time decompressing. Those using them have undergone training that leaves standard diver training at the kindergarten level and there are so many units to choose from that each has its own training course dedicated to it. So if you wish to dive to great depths, or penetrate deeper/longer caves, prepare yourself for rather steeper than regular learning curves about this new gadgetry.

Lance Robb (Owner/operator Closed Circuit Divers –

Cairns) geared up with his Megalodon rebreather.

But even with these considerably more complicated items of equipment, some issues are the same, and not necessarily different, from using the most basic of recreational diving equipment. And I think most of us are in this latter category. So-

Some Basic Rules with using dive gear –especially new stuff --

Get trained by a professional in what you intend to dive with.

With different and probably extra equipment, spend more time mastering your newly acquired buoyancy characteristics.

Keep fit! This is particularly so if you intend participating in more complicated and equipment intensive diving. The equipment helps you do more adventurous things but it is usually more heavy and cumbersome. You are not in the water with it all the time so assuming water will make you neutrally buoyant will be no excuse in avoiding the need to be stronger than you may be now.

Keep all dive gear serviced and functional.

Know where you are going and take the necessary precautions and extra equipment that could assist. Examples could be: a useable surface marker buoy (SMB) for drift diving; spare air/gas; appropriate computer and perhaps a back-up computer; fresh water to

drink; spare parts kit. In other words, plan your diving thoroughly whatever type it is.

Learn from the locals.

In my Dad's day, the scratchiest of radio reception was close to miraculous to him, but today, the telecommunications systems we now use could only have been imagined in the science fiction books he read back then.

With diving, many of us have seen a similar evolution in our technologies and it certainly begs the question "where to from here?" What is obvious, is that the changes in the science of diving equipment is not fiction but once again, pushes the boundaries available for further learning and adventure.