

You will note that the paper goes into more detail than the excerpts that Undercurrent ran and includes a sampling of some case histories we treated. Due to time constraints of my ship sailing (I am the captain) I simply do not have more time right now to expand my offering to you. However, I would be happy to in the future when I get back. But for now I would suggest using what I sent.

As you have noted, we were firmly convinced that slow ascents and long safety and/or decompression stops played a major role in our low incidence of DCS. This was accomplished by careful orientation and tactful correction after in field observations. I have found that sport divers react best to such methods as opposed to confrontation or scolding. For learning to be effective, both the teacher and the student have to respect each other. We made every effort to win our diver's confidence and trust to make them a willing partner in safe diving. Foremost in accomplishing this was not to lecture them on supposed depth limits. We have also found that attempting to enforce depth limits on experienced divers promotes hostility and rarely discourages such actions.

Instead we recommended 130 fsw (39 m) as a guideline and then left the decision to the divers. We never had any accidents associated with depth.

We also made it clear that there would be no stigma attached to reporting symptoms. Denial of DCS is the biggest problem in divers and has been fostered unintentionally by so-called diving industry leaders who have branded DCS cases as examples of how a diver "screwed up". We offered the premise that DCS is a statistical inevitability and even a diver who did everything "by the book" could still get hit. As our one year survey shows, 5 of the 7 cases we treated were "undeserved" hits (within table limits).

I credit dive computers primarily with helping divers to keep better records of their repetitive schedules and eliminating the errors generally associated with such computations. Significantly, over 50% of our survey group used computers and we registered zero DCS hits in that group. Computers also tended to make divers observe the 30 fpm ascent rates since they were programmed to warn the diver of fast ascents if that rate was exceeded.

In the case of our staff, we all used computers and had no problems. In my case, I did as many as 12 to 15 dives in one day routinely on the third day of diving due to the location of our best dive sites. It was necessary to place the anchor by hand and retrieve it by hand for environmental protection reasons and this obviously required the dive leader to make three times as many dives as the core group. (1 dive to set the anchor, a second dive to lead the group on their tour, and a third dive to retrieve the anchor). Our schedule typically included 4-5 dives on this day. None of the staff or myself ever had any problems. In the one year period, I logged at least 623 dives and probably missed

counting another 100 or so because they were short or involved routine work setting permanent moorings etc.

To my knowledge, my survey is the largest ever recorded. Hopefully, similar record keeping may be accomplished in the future.

Bret C. Gilliam  
President, Ocean Tech

*We will be printing the article referred to above in a later issue of the Journal.*

#### NITROX DIVING

Fun Dive Centre  
255-257 Stanmore Road  
Stanmore, N.S.W. 2048  
1 November, 1991

Sir,

I read with interest your comments in the editorial of the July-September 1991 edition of the Journal, that it was only a matter of time before enriched air (nitrox) recreational diving arrived in the South Pacific. Once again your crystal ball has proved highly accurate.

Early last month, the first recreational enriched air (nitrox) diving course was held at the Fun Dive Centre, Sydney. The six (6) successful students were certified by the International Association of Nitrox Divers, a nitrox certification agency formed in the USA by Mr Dick Rutkowski.

Dick Rutkowski, you will recall, in conjunction with Dr J Morgan Wells, introduced enriched air (nitrox) diving into the US Government agency, the National Oceanic and Atmospheric Administration (NOAA), in the late 1970's. Under Dick's fatherly eye, the International Association of Nitrox Divers (Australia) has been recently formed in Australia with Dick in the chair as Director of Training.

To meet the expected demand for enriched air (nitrox), the Fun Dive Centre recently installed the first mixing and filling panel for recreational diving in Australia. The panel was designed and manufactured for the Centre by High Tech Divers, a Sydney group specializing in enriched air (nitrox) and "special mix" recreational diving. Enriched air (nitrox) is only first step in the imminent recreational diving revolution.

As you stated in your editorial, "the diving medical and instructor communities must be prepared to cope with its arrival".

Rob Cason