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## SOLO DIVER

Bob Halstead

As an active instructor for 18 years I have observed the buddy system in operation on thousands of dives. This also means that I have seen the buddy system fail on thousands of dives. I think that the idea of two divers sharing a dive and caring for each other is a wonderful idea but in practice it is an almost impossible achievement. We know what should happen, but how many times have you seen buddies that are incompatible, either through ability or interest, or where one is dependant on the other, or where the only sign of buddy activity is at the surface under the direction of the dive master, underwater the divers go their own way or are so far apart they are virtually alone? How many dives have you seen where the buddies have spent the

dive looking for each other, yes and alternately coming to the surface (the most hazardous place to be)? How many dives have you seen spoiled because of the buddy system, and how many divers are put off diving because of the buddy system, either because they cannot find a buddy or they think about what the fact of the buddy system tells us about diving? Are we still "braving the deep", is it really dangerous to dive alone?

I used to think I could do something about this and teach people how to buddy dive. It is a bit like marriage guidance. "Now Jane when you saw Jim signal that he was out of air and going to ascend, why did you chase off after the whale shark that was swimming past? What would a good buddy have done? Yes, I know you had plenty of air, but..."

Now I have more than a sneaking suspicion that some of you would have abandoned Jim too, for that swim with the whale shark, for the lobster you have just spotted, for the photo that is just a moment away, sometimes just for the fact that you have still got half a tank of air left and do not want to come up yet. I say this with some authority since for the past two years I have been operating our liveaboard dive boat, "Telita", and entertaining some of the world's most adventurous and experienced divers. To many, if not most, of these divers, the buddy system is a myth. OK, I admit it, after thousands of dives escorting students on training dives, I just love to dive by myself. Some of my most memorable and joyful dives have been with my lifetime buddy, and fellow instructor, my wife Dinah. Sharing underwater adventures together is something that makes our love stronger and our marriage more fulfilling, nevertheless we both enjoy the occasional dip by ourselves. What I am saying is that buddy diving, like marriage, does not work for everyone all the time. People can, will and do solo dive, but are they trained for it?

Instructor organisations have a choice, they can condemn solo diving, and by doing so ignore what I believe to be a distinct trend in diving. Even a recent Skindiver editorial (famous for its conservative views) mentioned a solo diver being "with" someone in the boat. Or they can take a pioneering view and determine under what conditions solo diving could be accepted as a "safe" activity. I believe that for some people in certain conditions solo diving is a safe diving activity in the same way that I believe that some people will never be safe diving no matter how good the conditions, or their buddies, are. I find it easy to accept that it is safer for an instructor to dive by himself or herself than to be leading two students on an early dive.

There is something else here as well that is not so obvious. Teaching the buddy system teaches dependence. I know it should not, but it does. We call that negative incidental learning, and it is something that we are all warned about at Instructor Training Courses. Because so many of our training exercises involve the buddy, we install in the student the subconscious reasoning that they do not have to be as proficient as all that because they will always have their

buddy to bail them out. No matter how much you teach that a good buddy team is made up of two equal partners, the system still says "Depend on your buddy". The danger in this is that when they eventually become separated from their buddy underwater, and they will, no doubt about it, they may be unable to cope. Without labouring this point too much, just imagine how students might perform if they had to perform one solo dive during the course. Pilots have to solo, do they not?

What I would like to see is a certification solo diver to appear somewhere after open water diver, as a regular course. It will have these benefits:

1. It will define those skills necessary, and the conditions necessary, for solo diving.
2. It will legitimise solo diving for those skilled and experienced enough.
3. It will clearly declare to the novice that it is desirable to have the skills of a completely independent diver.
4. It will show the novice diver that there are skills to master and experience to be achieved before they solo dive.
5. It will help to remove the false sense of security that the buddy system provides.
6. It will emphasise that the best buddy teams are made of two divers who are completely capable of looking after both themselves and their buddies.
7. It will concentrate the students learning on self evaluation, monitoring and rescue. (If everybody looked after themselves rescues would decrease significantly).
8. It will attract more people to diving and keep them in the sport longer.
9. It will make buddy diving safer.

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## LETTERS TO THE EDITOR

### DIVING DEATH STATISTICS

PADI Australia Pty. Ltd.  
Unit 1, 1-7 Lyon Park Road,  
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22nd May, 1989.

Dear Sir,

In a recent issue of *SPUMS Journal*, Monaghan<sup>1</sup> made use of statistical data published by PADI Australia<sup>2</sup>. Unfortunately, he has interpreted that data incorrectly.

The data in question — extended and updated — is presented in Table 1. At the time of preparing the data, the staff of PADI Australia were unaware of any reliable estimates of "Active Divers" in Australia, and even now is confident that no such estimate exists. Further, no studies on diver dropout rates had been conducted to enable calculation of such an estimate from certification figures. The other certification agencies were unwilling to share their figures with us. Thus, the only figures available for analysis were PADI's own certification figures.

Entry-level certifications figures were chosen as being indicative of growth in the number of active divers, even though an exact relationship could not be established; use of entry-level figures also avoided inflating the number of divers by double counting as this excluded continuing education figures. Data for the number of sport scuba diving deaths were obtained from *Project Stickybeak*.<sup>3</sup>

Then for each year, the number of deaths was divided by the number of PADI entry-level certifications and the result multiplied by 10,000 to calculate the number of deaths per 10,000 PADI entry-level certifications. The multiplier was chosen as 10,000 to yield results that fell in the range from zero to 10.

We made no attempt at direct comparison between the Australian data and that from the USA and Japan. Trends in each country were of more interest, in particular the downward trend in death rate in each.

Focussing attention on 1987, we see that PADI Australia certified 24,611 entry-level divers and there were 6 recreational scuba deaths — reported not calculated. Thus, we calculated the death rate of 2.4. To take this last figure, as Monaghan<sup>1</sup> does, and factor it by 33,023/10,000 to come up with the result that there were 8 deaths is getting the cart before the horse. (When I studied Chemical Engineering in the early 1960's, one of the basic tenets of model theory was that, if the model did not fit the observed facts, then the model was discarded or altered. To the best of my knowledge, there has been no change in this facet of model theory.)

If we accept that PADI has about 65% of the Australian market for diver training, then we can calculate that the death rate (per 10,000 entry-level certifications) in 1987 is:  

$$6 \times 10,000 \div (24,611 \div 0.65) = 1.58.$$