ences offered each year, the final figure is probably closer to one million recreational dives made in Queensland each year.

While recognising that the figures in Table 3 are very conservative, a particular concern for the Australian recreational dive industry should be the fact that no information at all is available for five of the ten identified diver categories. Without this information any diving accidents that do occur cannot be placed in their proper perspective. This makes policy negotiations with insurance companies more difficult for divers, and for the industry in general. It also makes marketing of the sport less effective if the total number of safe dives conducted each year is not known.

At the present time, training agencies and government departments are understandably reluctant to breach client confidentiality and risk legal action by releasing details (or numbers) of accidents that have been recorded. However, in the absence of reliable figures the media will continue to perpetuate myths that diving is a dangerous activity. By gathering complete data on the number of recreational dives made each year, and comparing these figures with the relatively small proportion of accidents occurring, some definitive statement could be made about safety.

This initial report suggest that there are 10 diving categories where data should be collected. There are minimal statistics available for five categories and no information about the other five. Cost-effective strategies that guarantee commercial confidentiality, while gaining much needed information about the five unknown categories, are currently being investigated.

### Acknowledgements

Special thanks are extended to the four Australian scuba training agencies (NASDS, NAUI, PADI, SSI) for trusting the author with their confidential certification data. Sincere thanks also to the 111 Queensland companies that supplied confidential information on their numbers of resort and certified social dives during 1991.

#### References

- Walker R. 50 divers with dysbaric illness seen at Townsville General Hospital during 1990. SPUMS J 1992; 22(2): 66-70
- 2 Monaghan R. The risks of sport diving: just how many divers are there? *SPUMS J* 1988; 18(2): 53-60
- 3 How many divers, how safe the sport? *SPUMS J* 1988; 18(4): 148-152
- 4 McCarthy J. Diving dropout dilemma. J *Physical Educ* 1978; 75: 140-141
- 5 Wilks J. Diving dropouts: the Australian experience. *Aust J Sci Med Sport* 1991; 23: 17-20

- 6 Wilks J. Resort scuba courses in Queensland: numbers and costs. *SPUMS J* 1992; 22 (4): 206-207
- 7 Wilks J. Introductory scuba diving on the Great Barrier Reef. *Aust Parks Rec* 1992; 28: 18-23
- 8 Telford H. Project SAFER divers: provisional report. NAUI *News Australia* 1990; 10(6): 5-8
- 9 Queensland Dive Tourism Association. *Dive tourism* accident bulletin number 2. Brisbane: QDTA, 1990

Dr Jeffrey Wilks, PhD, is a psychologist and Senior Research Fellow in Tourism at the Queensland University of Technology (QUT), Brisbane, Queensland, Australia.

His address is School of Marketing, Advertising and Public Relations, QUT, GPO Box 2434, Brisbane, Queensland 4001, Australia.

## WORKSAFE AUSTRALIA CODE OF PRACTICE FOR OCCUPATIONAL DIVING.

## Ian Millar

A draft Code Of Practice for Occupational Diving is under development. The working group meetings have been completed and a document is to be circulated to the reference bodies, including SPUMS, before release for public comment. The following briefly describes the context and progress of this development which is to provide a replacement for Australian Standard AS2299 - 1992

"Worksafe" is a shorthand name for the National Occupational Health and Safety Commission, a tripartite body (employers, governments and unions) established by the Federal Government to develop, facilitate and implement a national approach to occupational health and safety.

Among other roles, it develops "Codes of Practice" for the control of risk associated with specific workplaces and activities. These must then be applied by the States. However, with general agreement upon the principle of national uniformity of Occupational Health and Safety (OH&S) legislation, it is expected that any national codes of practice should be applied in a uniform manner from 1994 onwards.

Modern OH&S legislation now applies in all states, and differs significantly from the prescriptive approach taken previously. In the past, specific laws allowed government bodies to set regulations that were legally binding upon employers. These regulations often set very specific requirements, in some cases by calling up existing standards such as Australian Standards. Breach of any requirement (clauses containing "shall") of a Standard called up by law or regulation was a breach of the law. Under this system, changes in recommended equipment or practice were not legal until the regulation or Standard was changed. Also if the activity of concern was not mentioned in the law or regulations, then there were no requirements upon the employer.

By comparison, modern OH&S legislation primarily creates a "duty of care" upon all involved at a workplace, employers and employees. Standards and Codes of Practice can be set, but are not binding in themselves. "Shall" clauses thus all become recommendations. The onus to provide a safe place of work allows for the use of alternative strategies to those published in Standards and Codes of Practice, provided it can be shown that the resultant level of safety is as least as good as that arising from compliance with the published guidelines.

The ultimate test of this applies in the courts when either a civil suit for damages or a prosecution under the Health and Safety Act will use the published Standards and Codes of Practice as evidence to establish whether a safe place of work has been provided. When considering this question, OH&S legislation allows consideration of "practicability" and the standard of a "reasonable person" although the exact provisions differ slightly between States. It is within this framework that the present Code of Practice for Occupational Diving is being developed.

AS 2299 has applied to various section of occupational diving for some time. It was not, contrary to some beliefs, developed for the offshore oil industry. Rather it initially used the experience of the oil industry and the Navy, among others, to develop a Standard to provide guidance to the coastal and onshore commercial diving sector where a high accident rate appeared to result from inadequate diving equipment, training and practice.

With the advent of new style OH&S legislation, there was pressure for a Standard which could be applied to a wider range of occupations, resulting in a broadening of the scope and application of the 1990 and 1992 versions of AS 2299 and some changes in requirements to allow for scientific and fisheries diving practices. The resultant 1992 document has suffered significant criticism for failing to meet satisfactorily requirements of some sectors whilst being overly restrictive upon others. As a result, it was determined that Worksafe Australia and Standards Australia should jointly develop a new Occupational Diving Code of Practice to address these matters and to cover all types of occupational diving.

The Standards Australia development process uses committees made up of representatives of interested parties to develop a consensus document. The Worksafe process involves selection of an "expert working group" and a "reference group". For the Code of Practice for Occupational Diving the two groups were selected by both Worksafe and Standards Australia and supported by a joint secretariat. The expert working group consists of sixteen members drawn from a wide variety of backgrounds including myself as a medical representative. In committee the expert group members are supposed to work co-operatively upon solutions to problems.

The reference group members input is to provide written advocacy for the organisations they each represent. Most working group members are drawn from an interest group which results in some individuals having to wear a cooperative, non-partisan "hat" in committee and a interest group advocacy "hat" as a reference group member. My involvement has been as an independent medical member of the working group, not representing any particular body. SPUMS is the only medical organisation on the reference group, represented by Dr John Knight.

As seems all too common in the diving arena, impartiality and consensus have been difficult goals given the broad spectrum of interests that has been brought together. The timetable set has also made the process somewhat hurried.

Nevertheless, a draft document has now been produced in a quite different format from previous Standards, which is hopefully consistent with the required OH&S approach. Lack of awareness of the framework in which the Code is being developed and misunderstandings regarding the working group's deliberations have probably added to the confusion and concern that has been voiced to date.

However the process now requires review of the Draft Code of Practice by the relevant Standards Australia committee and by Worksafe's Standards Development Review Committee, followed by a period of public comment. Much time is still available for further review of proposals.

Some readers may find parts of the Draft Code disappointingly general in nature. This has been a result of the need to provide a document that can be applied to all occupational divers from all "industry" sectors. This has been a source of much discussion inside and outside working group meetings, with the proposition often put forward that "industries" be allowed to develop their own codes which would be suitable to their "industry". There would thus be a "scientific diving" code, a "fisheries diving code" a "construction diving code" and an "occupational divers in the recreational industry code" etc. Unfortunately, it would appear that there are too many potential demarcation disputes between such groups for such an approach to be acceptable to regulatory authorities. Although practices may be varied for different tasks or hazards, subdivision of requirements by "industry" definitions is apparently not to be allowed to form the basis for having a range of different Codes of Practice.

The task of developing hazard / risk based recommendations has been a difficult one, and many will see the result as not serving any group well. Certainly the process has been rushed and it is hoped that the input to come will result in improvements. Many important provisions are included however, and the generic statements of basic responsibilities are a vital element that has been lacking from more technically oriented standards.

Critics of the Expert Working Group and Secretariat should consider the confines within which the document has been produced and hopefully supply useful criticism in context and in the appropriate directions! Readers of the Draft Code should realise that the Code is not intended to be a textbook or a law and that other documents, in particular training and operations manuals, should provide the detail for safe diving practice in any given situation. The Draft will be available from Worksafe Australia, 92 Paramatta Rd, Camperdown, NSW 2050 after an advertisement in the national press. I am prepared to talk to any SPUMS member who reads the draft and wishes to discuss particular matters. Submissions can also be made directly to Worksafe Australia by individuals or through Dr Knight representing SPUMS.

Dr Ian Millar MB BS, Dip DHM, is a visiting Specialist in Hyperbaric Medicine at the Alfred Hospital, Commercial Road, Prahran, Victoria 3181, Australia.

*He is the AMA representative on the Occupational Diving Committee (SF17) of Standards Australia. His address is 53 Coverdale Road, Sale, Victoria 3850. Home phone (051) 44 3813.* 

# **SPUMS NOTICES**

### CONSTITUTIONAL AMENDMENT.

At the 1992 Annual General Meeting it was agreed to change the financial year to January to December.

The Society had been using a Financial year that ended on 30th April. However the Rules of the Society contain the definition *"Financial year" means the year ending 30th June.* 

In order to abide within the Rules this definition will have to be changed.

It is proposed to put the following resolution to the 1993 Annual General Meeting.

That the words "30th June" appearing in rule 2 (a) be changed to "31st December".

Darrell Wallner Secretary of SPUMS

## **SPUMS ANNUAL SCIENTIFIC MEETING 1993**

### will be held at the Palau Pacific Resort SUNDAY 16th to TUESDAY 25th MAY 1993

The guest speaker will be Professor David Elliott, coauthor of The Physiology and Medicine of Diving with Dr Peter Bennett. The theme of the conference will be **THE LONG TERM EFFECTS OF DIVING** A workshop on **FREE ASCENT TRAINING** will be part of the program

Anyone wishing to attend should contact Allways Travel at the address below.

## SPUMS ANNUAL SCIENTIFIC MEETING 1994

will be held at Rabaul, Papua New Guinea Provisional dates MAY 14th to 23rd 1994

The guest speaker will be Dr Peter Bennett, co-author with Professor David Elliott of The Physiology and Medicine of Diving.

For further information contact Allways Travel 168 High Street, Ashburton, Victoria 3147, Australia.

Telep	bhone	
	Australia	03 885 63
	International	61-3-885 8863
	Toll Free (Australia only)	008 338 239
Fax		
	Australia	03-885 1164
	International	61-3-885 1164