

When scuba diving we submit ourselves to depending on compressed gas. In return we enter a marvellous world of colour and movement.

In the 18 years that I have been a member of the South Pacific Underwater Medicine Society the thrust of the Society has been safety in sports diving.

I encourage the members to continue to try to make exposure to compressed air as safe as possible. Individually

we should be careful to prevent injury to ourselves and others.

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## SPUMS ANNUAL SCIENTIFIC MEETING 2001

### THE HISTORY AND DEVELOPMENT OF THE SOUTH PACIFIC UNDERWATER MEDICINE SOCIETY JOURNAL

John Knight

#### Key Words

General, history, underwater medicine.

#### Introduction

This paper presents the history of the South Pacific Underwater Medicine Society Journal from 1971 to 2001, covering not so much the content of the publication as the processes by which the Journals have been produced and the behind-the-scenes work of those involved in the production of the 31 volumes published so far. A great deal of work is involved in transforming papers written by doctors from their original form to a final format, understandable by non-medical associate members. This is then printed in the Journal and posted to members around the world. The major reason for presenting this paper is to find someone to replace me as Editor at the 2002 Annual General Meeting (AGM) when I will not be available for appointment.

For the past six years SPUMS has paid the Editor a honorarium and in return has required the Editor's attendance at the Annual Scientific Meeting (ASM). The Editor negotiates annually with Committee the amount of the honorarium.

#### The early years

The South Pacific Underwater Medicine Society (SPUMS) was founded on Monday, March 3rd 1971, in the Wardroom at HMAS PENGUIN. The foundation members were Carl Edmonds, the first President of SPUMS, Bob Thomas, who succeeded Carl as Editor of the Newsletter in

1973, Douglas Walker who was Editor from 1974 to 1990, Ian Unsworth and Cedric Deal. The first issue of the "South Pacific Underwater Medicine Society Newsletter" appeared in May 1971, so within three months of the foundation of the Society educational material was on its way to the members. This emphasis on membership education through the Journal has continued without a break. The first Newsletter was produced using a Roneo machine, probably the one at the Royal Australian Navy Diving School at HMAS PENGUIN. The cartoon on the cover started a tradition which carried on for seventeen years until untimely death of the Resident Cartoonist, Peter Harrigan. Each cartoon dealt with some aspect of underwater medicine, physiology or safety.

SOUTH PACIFIC UNDERWATER MEDICINE SOCIETY  
NEWSLETTER



As early as 1972 the Society was concentrating on medical standards for divers, an issue that still appears at every scientific meeting of the Society. The newsletter was again Roneoed. This meant that the Editor only had to choose what to put in, write quite a lot of it, and then have a typist cut the stencils. As the Acronym became better known the name was changed to "SPUMS Newsletter" on Volume 2 No 4.

By March 1974 (Volume 4 No 1) the Newsletter had developed into a booklet of 16 A4 pages, printed on both sides. This issue contained the first photograph to appear in a SPUMS publication, the first of my papers to appear in the Journal and the Sub-Committee Report on the Diploma of Diving and Hyperbaric Medicine.

Pure economics drove Volume 4 No 2 back to the previous single page format but with a slide-on binder. It contained a 6 page article on Medical Standards, written by Carl Edmonds, which eventually led to the medicals in current Australian Standards. This form of binding continued until 1979. However the contents were printed typescript rather than being Roneoed.

With the July-September issue in 1976 the Newsletter transformed in the Journal/Newsletter.

**The middle years**

In 1979, when the Journal/Newsletter was regularly appearing well behind schedule, I took over the job of assembling the Journal for publication and assumed the title of Assistant Editor.

Preparing articles for printing had changed from 1952 and 1953 when, as a medical student, I was involved in producing the St Bartholomew's Hospital Journal. In those days the typewritten texts were sent to the printer who set the type and returned galley proofs for correcting. By 1979 short runs of printing, like the Journal, was all done from photographic plates, which were made by photographing camera-ready copy.

Camera-ready copy must be as near perfect as possible. It is the intended pages, including their numbers, without errors. For folded publications like the Journal the printer sets up, on double sized paper, the pairs of pages which will appear on the folded sheet. This is not as easy as it sounds as pages 1 and 60 are printed side by side, and on the back of that sheet are pages 2 and 59. This sequence works its way to the middle sheet. It is a job that I always left to the printer, who usually made up a set of smaller folded pages and numbered them to make sure that he got the large sheets in the right order.

To achieve camera-ready copy in pre-computer days someone had to type all the texts selected by the Editor,

**SPUMS**

SOUTH PACIFIC UNDERWATER MEDICINE SOCIETY

NEWSLETTER

Vol. 4, No. 1, MARCH 1974

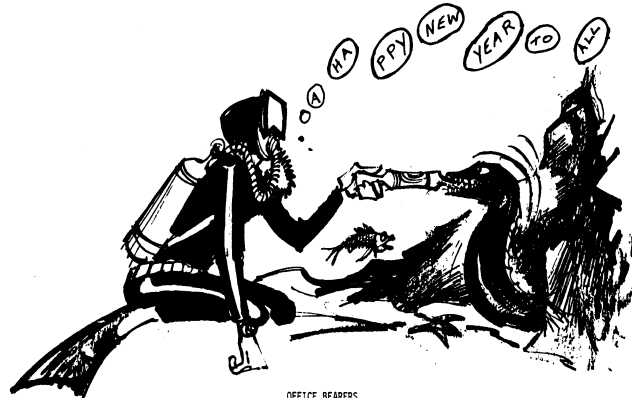
CONTENTS

1. Editorial	Page 2
2. Correspondence	Page 2
3. Personality Profiles - Robert Thomas	Page 4
4. ECG Changes and Myocardial Damage Following Decompression Sickness	Page 4
5. Management of Chlorine Gas Poisoning, R. Tuck	Page 6
6. Labyrinthine Dysfunction during Diving (Symposium Report)	Page 7
7. Diploma of Diving & Hyperbaric Medicine	Page 10
8. Sharks in San Diego	Page 14
9. Bubbles	Page 14
10. A SPUMS Presidential Trip Report	Page 15

**SPUMS JOURNAL**

South Pacific Underwater Medicine Society

OCTOBER TO DECEMBER 1979



OFFICE BEARERS

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Committee:	Dr. Victor Brand Dr. Bill Reifsch Dr. Daryl Wellner	Melbourne Frankston Canberra
Hon. Auditor:	Mr. R. G. Goddard	Hon. Cartoonist: Mr. Peter Harrigan.

CONTENTS

Editorial	2	Reports from SPUMS Scientific Conference	5
Minutes of AGM 1979	3	Decompression Sickness	7
Financial Statement 1979	3	Hyperbaric Oxygen	9
Report on Villa Meeting	4	Pulmonary Overpressure Accidents	9
Notices	3, 28	Drowning	9
Meetings	28	Floatation Devices	10
Courses	28	Physical Standards	10
Constitutional Amendment	24	Inner Ear Barotrauma	11
Diving Safety Memo No. 11	27	Health Services in the New Hebrides	12
"Fatal Crab Nip"	10	Fish Poisoning	12
Cautionary Tale	11	General Practice in the New Hebrides	13
"Dukevase is watching"	28	Saturation Diving	14
Idle Talk	23	Diver Protection from Cold	14
		Visit to USN EDU	15

continued on page 28

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Douglas Walker, onto A4 paper with wide margins. Each article started on a new piece of paper. When all pieces were typed the fun or, more properly, the cutting and pasting, started, getting text and illustrations to fit the space available. It needed all of the dining table, scissors and non-wrinkling paste. The most useful gadget was an Adgauge, a large

transparent set-square engraved with a multitude of parallel lines. Besides being essential for getting the lines of type positioned exactly horizontally on the A3 sheets it was useful for working out how much an illustration had to be reduced to suit the column width. The sheets had to have their margins trimmed so that the text was about 12 cm wide. Two of these pieces fitted nicely across width of a numbered A3 page, giving two columns of text. Each column was longer than could be typed onto an A4 page so more cutting and pasting was needed to fill the page properly.

At this stage proof reading had to be done. This was time consuming as every typo (typographical error) had to be detected and then be corrected by getting the typist to retype the entire line on a new piece of paper which was then cut out and pasted over the faulty line. The typing was contracted out. A steady hand was needed for the scissors and for positioning!

With all that done the A3 sheets were then taken to the printer who reduced the A3 pages to A4 size when making the photographic printing plates.

By 1979 SPUMS had developed its logo so I used that to rename the Journal/Newsletter the SPUMS Journal for my first issue, Volume 9 No 3. This was a left side stapled, 2 columns to the page production printed on both sides. Since then all Journals have been folded, except for the 1981 supplement, which reported the joint SPUMS and Republic of Singapore Navy Meeting in Singapore in 1980. This ran to 80 pages, which was too thick for that format.

Technology has made cutting and pasting and the correction of text much easier, as it can all be done on a computer without any scissors or paste. With the right programs and a little experience computers are just wonderful !

### **Modern times**

In 1987 the Assistant Editor bought a Macintosh SE, his second computer and the first with an built-in hard drive, with the then enormous capacity of 20 MB. This allowed the use of the then new program "PageMaker", which electronically cut and pasted electronic documents. This advanced technology cut the time for assembling the Journal to send to the printer from about 30 hours with cutting and pasting to about 20 hours for the first, learning curve affected, effort with PageMaker.

Volume 17 No 2 was the first SPUMS Journal to be desk top published (produced by a computer on the Editor's desk). As the editorial printer was a dot matrix machine I had to take the Journal, in PageMaker format (it fitted on the new larger 800 kbyte floppy discs with space to spare) to a Macintosh bureau with a laser printer to print out what I was to take to the printer.

In those days, before the appearance of MacLink and its translators, the typist needed to have a compatible computer to produce the text. So she (all our typists, except occasionally the Assistant Editor or later the Editor, have been female) was given the old, hard-diskless Mac 512 (the size of its built in RAM). This was not such a problem as modern computer users might think, as in those far off days the Microsoft Word program fitted onto one of the 400 kbyte floppy discs of the time and still left room for the text to be saved onto that disc! An external disc drive allowed for another 400 kbytes, giving plenty of space to save all the text for an issue.

Although physical cutting and pasting of text had been abolished diagrams and photographs still had to be pasted onto the final PageMaker pages before they went to the printer.

One trouble with using a computer to assemble a publication is that an editor is tempted to alter things on the screen and medical editors are seldom fast or accurate touch typists, so the final product often developed typos. Whatever method of producing text one uses everything must be proof read three or four times before printing and even then things can go wrong.

Before using PageMaker, making alterations to the layout was very time consuming and often frustrating. With PageMaker alterations are pretty easy but again consume time. However it is fun and occasionally second thoughts are actually better!

Over the years programs have appeared to enable text written on a Windows machine to be translated for other operating systems. So the Society has not had to provide the typist with a Mac for some years.

During these years a start was made on indexing all the past Journals and allocating key words to each paper. This was a long drawn out process, mostly done by highly educated typists who referred any problems to me for decisions. It was only once the main index had been completed that the Editor started producing an annual index sent out with the December Journal. The main index, electronically updated every year, now covers the entire span from 1971 to 2000.

### **The present**

In August 1996 the Society purchased for the Editor a PowerMac, a scanner and Photoshop, an image manipulating program. The days of pasting were finally over as illustrations could be scanned and adjusted electronically and when acceptable put into PageMaker. This machine is still in use 5 years later which is almost a record for commercial computer longevity.

In 1999 Adobe Acrobat was added to the Journal's armamentarium and various documents were made available to the SPUMS Web Page.

In 2001 the Journal goes to the printer on disc, an Iomega Zip drive of 100 MB as the Journal can be up to 9 MB, ready for printing out so that the A4 pages are arranged in the right order so that when printed on A3 paper and folded the page numbers will run consecutively. Unfortunately I still have to take the disc personally to the printer as sending the Journal as a PageMaker file over the internet would take hours. Actually hand delivery also makes sure that the file does not get corrupted on the way, and allows me to remind the printer's computer person to remember to set the printer at 75 lines per inch and 600 dpi to get the best results for making the plates.

In late 2000 the Journal was accepted by Elsevier Science, which based in The Netherlands, for indexing in EMBASE, their medical database, from January 1st 2001. EMBASE can be accessed over the internet at <[www.embase.com](http://www.embase.com)>.

Later 2000 the Journal joined the Copyright Agency Ltd, the Australian National Library and RMIT University, in Melbourne, in the Meditext Project, along with many other medical journals. RMIT Publishing will produce an electronic, searchable, downloadable database, accessed through the internet. It will include all papers, as separated indexed items, from all the Medical Journals arriving in the National Library. Journals are usually supplied because all items published in Australia must be supplied to the National Library. This database will electronically record all downloadings and this will allow royalties to be collected on the journals' behalf. The arrangement with the publishers is that most of the royalties will be used to keep the journals afloat but, after a threshold half the royalties must be paid to the author within 60 days. Unfortunately this means that there is more paperwork to complete before a paper can be published in the Journal.

There have also been some changes to copyright laws which make it necessary for a contract to be entered into between the Journal and authors so that their rights to copyright royalties can be preserved.

A project completed in 2001 was to have all the issues of the Journal, in its various incarnations, available on disc as Adobe .pdf, which stands for portable document format, documents which can be read by any computer using Acrobat Reader. The CD ROM disc also has on it the 1971-2000 index as a tab-separated document, and this can be downloaded into your data management program. Write in for your copy and browse the back numbers.

As Assistant Editor and Editor, I have been a Jack of All Trades, selecting what is to go in the Journal, writing items, chasing up authors, getting the tape recordings of the

ASM typed up, as not all authors provide the text and illustrations of their papers, correcting the typescripts of these rescued papers and converting papers from medical jargon into intelligible English, among many other things. Translation is often necessary because about a third of the SPUMS membership is made up of Associate Members, who like to understand what they are reading.

To help everyone to understand the abbreviations used by various authors the Editor has to make sure that they are all spelt out in full the first time they are used with the acronym appearing in brackets after the full name. This is written in the instructions to authors inside the back cover of every Journal but few authors actually follow all the instructions.

When the text has been corrected and rewritten it is printed off and sent, with printouts of the illustrations, back to the author for review. Sometimes I send the text as an e-mail attachment in Adobe .pdf which can be read by any computer using Adobe Acrobat Reader. As always there are unexpected complications, for instance David Elliott found that his not very new printer was unable to print the .pdf file out for him to correct!

Most authors send the corrected text back in a reasonable time frame with their corrections added in longhand. It is then that I wish I had become a pharmacist, with vast training in deciphering medical hand writing! Some authors return the text, so eventually I presume that they are happy to have it printed as it is.

E-mail has made this simple life rather more complicated. It is now so easy to attach a document to an e-mail that authors send me the whole of the text with their changes embedded in it. This actually does not save me time as I then have to reformat the whole thing to SPUMS J house style all over again! I like getting Mike Bennett's corrections as he types them in CAPITALS into the electronic text so that I can find them and use them easily.

Once the printed text and illustrations have been approved by the author and corrected it only has to be reprinted and sent to the Proof Reader, either John Couper-Smartt in Adelaide or David Davies in Perth, whose job is to find the typos, grammatical errors, missing punctuation marks, missing words etc. that the author and I have failed to notice. Like me, they both find spotting mistakes on paper easier than on a computer screen.

At this stage the article is ready for desk top publishing (DTP). This is the process whereby anyone can sit down at a computer and, using clever programs like PageMaker, can turn out beautiful pages full of text and appropriate illustrations. As each "story" has to be placed by a human, things do not always turn out perfectly at first try. Then it is a struggle with the arrangement of the text or with a computer which will not do what I want so that the

## HOW THE JOURNAL IS PRODUCED

### INPUT TO THE JOURNAL

#### Unsolicited input

Papers  
Letters  
sent to the Editor

#### Committee generated input

Committee minutes  
AGM minutes  
Annual reports  
Financial statements

#### Member generated input

Diploma theses  
Diving Doctor's Diary  
The World as it is  
AGM papers

## *EDITOR*

(Definition One)

**supervises or directs the preparation of a newspaper, magazine etc.**

### *EDITOR* SOLICITS

Papers  
Books for review  
Permission to reprint  
Course dates etc.

### *EDITOR* NEEDS

Peer reviewers  
Book reviewers  
Proof readers

### *EDITOR* MAY EMPLOY

Editors

(Definition Two) to collect, prepare and arrange materials for publication

(Definition Three) to revise and correct

Desk top publisher

Indexer

## *EDITOR*

or team

produces

Quarterly Journal and

Annual update of Index.

### PRINT READY JOURNAL

sent to printer

### PRINTER

sends printed Journals to Mailing House

### MAILING HOUSE

posts Journals to members

## *EDITOR*

or nominee

**maintains**

**Journal Archives and electronic Index**

final result looks good and is easy to read. When all is in place in PageMaker the result is printed off and proof read again. It is amazing how many corrections have to be made. In the June 2001 Journal there were only 20 out of 60 pages which did not need attention after the first proof reading, this in spite of Editor, Author and Proof Reader having done their jobs. When those had been dealt with, during proof reading next day, four pages were still found which needed changing. In three this was to kill off either a widow or an orphan, the single line of a paragraph at the bottom or top of a page. The fourth contained a paragraph which was not in italics when it should have been.

I wonder how many of our readers spotted that every page, except the covers, of the June 2001 Journal was headed September 2001? Neither the printernor I did before printing. It was noticed only after the Journals had been posted! Mr Murphy is everywhere.

### The future

The Editor has overall responsibility for producing the South Pacific Underwater Medicine Society Journal. I covered all the jobs myself, except for typing, even transcribing tapes when no one else could understand a Singaporean English accent (It helped that I knew the speaker).

I will not be available for appointment as Editor at the 2002 AGM. Over the last 8 years I have only been able to spend so much time with the Journal because I have retired from medical practice.

The Editor must be a full member as he or she has a place on the Committee.

Besides producing the Journal the Editor is also the custodian of all the previous Journals. History is important and archives must be kept and be available. On my shelves are three copies of every issue of the Journal, of the Constitution and of the SPUMS Diving Medical, almost certainly the only complete collection of SPUMS publications. The Journals (1971-2000) and the 1971 to 2000 index are now on CD ROM, so the next Editor has the choice of keeping records as paper or as a CD.

The Macquarie Dictionary gives many meaning for "edit". The first three, slightly abridged, are

- 1 to supervise or direct the preparation of a newspaper, magazine etc.
2. to collect, prepare and arrange materials for publication.
- 3 to revise and correct.

So the Journal Editor can be a supervisor or director while others collect, prepare and arrange materials for publication and revise and correct. There are many self-

employed people, known as freelance editors, who carry out these functions. They have the skills to transform colloquial conversation into readable English and to carry out all the routine work of preparing a Journal, including the production of text and illustrations. There are also freelance indexers and people who produce magazines or journals on computer from text supplied by editors, with the output being printed by a printing house, using programs like PageMaker and Quark Express.

Page 219 shows, very much in outline, how the Journal is produced. The Editor sits at the centre of a web with various items coming to him or her. These incoming items are redirected to others with the relevant skills, leading eventually to the production of an electronic version to make the hard copy for the printing plates. Already there is the technology available to make printing plates without hard copy first. Then it is over to the printer and to the mailing house which sends the Journals to the members.

Desk top publishing of a magazine like the SPUMS Journal is not difficult for someone, with a few computer skills, to learn. There is lot to be said for a medical person to do the final assembly of the Journal as I often have to remove a few words, without changing the meaning, to fit a sentence on a page properly. Usually this can be achieved by changing inter-paragraph spacing but the results are not always visually pleasing. A good layout helps readers follow the text and whoever succeeds me will, I hope, always remember that the Journal is educational and should be both interesting and easy to read.

The new Editor will want to change things and there are many things that probably need altering. After all I have moulded the SPUMS Journal and then the South Pacific Underwater Medicine Society Journal for nearly 21 years and it is now the literary equivalent of a tram, decorated in just three type faces, Times, Zapf Chancery and, for the title on the front cover, Book Antiqua Bold Italic, running in predestined grooves, and usually arriving on, or close to, time.

*Dr John Knight FANZCA, Dip DHM, who joined SPUMS in 1972, has been a Committee member, Secretary and President of SPUMS as well as Assistant Editor and, since 1990, Editor of the SPUMS Journal. He has been either elected or co-opted to the Committee continuously since 1975. His address is Editor SPUMS Journal, C/o Australian and New Zealand College of Anaesthetists, 630 St Kilda Road, Melbourne, Victoria 3004, Australia. Telephone +61- (0)3-9819-4898. Fax +61-(0)3-9819-5298. E-mail <spumsj@labyrinth.com.au>.*

*The above is an expanded version of a presentation at the 2001 Annual Scientific Meeting entitled SPUMS Journal Editorial.*