

C.D.A.A. Newsletter

GUIDELINES

No: 38 – JANUARY 1991



CAVE DIVERS ASSOCIATION OF AUSTRALIA
(Incorporated in South Australia)

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Cave Divers Association of Australia
P.O. Box 290, North Adelaide, 5006

Front Cover: Unnamed Fissure.
Photo by the late Mike Vize.

GUIDELINES is the newsletter of the Cave Divers Association of Australia, published four times a year – January, April, July and October. All articles for the following issue are to be sent to the Editor, P.O. Box 290, North Adelaide, SA 5006, prior to 10th March, 1991. Articles and information may be reproduced without prior permission provided reprints are credited to the authors and GUIDELINES. Private ads for caving and diving equipment may be advertised free. Opinions expressed in GUIDELINES are those of the individual authors and are not necessarily those of the C.D.A.A.

DIRECTORY

The following is a list of people that can be contacted for C.D.A.A. matters. Please contact the most relevant person or, if unsure, write to our P.O. Box in Adelaide and your enquiry will be passed on.

National Director	John Vanderleest	(03) 416 9370 (h)	
National Standards Director	Alan Jolliffe	(03) 874 7669	
Business Director	Andrew Cox	(03) 391 3935 (h)	(03) 619 9111 (w)
Records Officer	Peter Girdler	(08) 380 5205 (h)	
Training Manager	Tony Richardson	(03) 754 6163 (h)	
Secretary/Treasurer	Noel Dillon	(03) 363 6745 (h)	
Mapping & Research Manager	Andrew Cox	(03) 391 3935 (h)	(03) 619 9111 (w)
C.D.A.A. Publications	Tony Davis	(03) 781 3820 (h)	
"Guidelines"	Tony Davis	(03) 781 3820 (h)	
S.E. Representative	Andrew Kirk	(087) 23 0349 (h)	
QLD Representative	Syd Bale	(070) 55 7993	
NSW Representative	Neil Vincent		
Promotions	Geoff Riddle	(03) 740 1828 (h)	

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EDITORIAL

G'day all! I trust you all had a safe and enjoyable Christmas and New Year, and hopefully you did some cave diving as well.

On my last trip to the Mount, whilst diving The Shaft, we were lucky enough, with the help of a few strategically placed mirrors, to have not one, but three shafts of light spearing down through the crystal clear water – a sign not easily forgotten, and very hard to beat anywhere, I'm sure.

With the opening of 5L250, a completely new site, some of the hard work done by the Site Access Committee has finally paid off. Although a Penetration Level dive and thus only open to a small percentage of the membership, the work the committee is doing will, in the future, benefit all levels of the Association.

Elsewhere in this issue, we have published the winners of both the "Get Wet" and Photographic Competitions. Congratulations to both winners. We had a good number of entries for both competitions, and I expect more for the upcoming competitions we have planned, and the prizes are just sensational! More details will appear in the next issue.

Until then, safe cave diving,
Tony Davis,
Editor.



A MESSAGE FROM THE NATIONAL DIRECTOR

How time flies! It seems like only weeks since I took over as National Director yet it's already been a quarter of a year. I trust you all had a safe and pleasant festive season.

One of the implications of living in the 90's is legal responsibilities. As the regulating body of our sport, we hold an obligation to ensure that we not only protect members through training and standards, but also protect landowners and individuals who do the work that keeps us diving. As the number of legal inquiries grow, so does the pressure on David Bird (our solicitor). To help produce a better system which will cater towards our National Restructure, we will be establishing a group of legal professionals to assist the Association with its ever increasing legal needs. It will be much easier and cheaper to use people who already understand the complexities of cave diving, consequently we hope to develop this pool from within our membership. If you believe that you or your firm are in a position to assist, please contact me.

Apart from an increase in legal demands of

the Association, we are now getting new sites in various states identified as general access or training sites. In the past, access has been the responsibility of the President or National Director. Access involves far more than simply asking permission. Items we need to consider for each new site include indemnities, mapping, environmental impact and landowners wishes. An integrated approach for access requires not just one person but a team. As a consequence, access committees will be established for each region. These will comprise of the local representative, a research representative, a site representative and the National Director. The South East Site Access Committee so far comprises of myself, Andy Kirk (SE Rep.) and Peter Horne (Research Rep.).

One of the greatest pleasures in working for the Association is in the discovery and opening of new dive sites. IDDLBIDDY (5L250), discovered in the forest near the Pines Cave is now ready for general access. To date, only members who have been involved

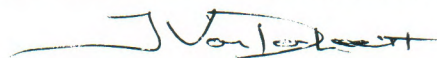
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with its classification and research have been permitted to enter. The cave has been rated as a Penetration Dive due to its length, and the use of a fixed line in this site is not yet confirmed by the Site Access Committee.

Due to the delicate nature of the cave, Iddlebidy will not be opened for random access, and the environmental impact of general entry will be under study for the first six months. Only one party per month will be allowed to enter the cave during this time. Each party will be limited to one weekend and have a maximum of four divers. It is not expected that during this time any individual will have the opportunity to revisit the site.

If you wish to gain access, please write to Site Access Committee stating your group members and the month(s) (February to July) that you would prefer. Parties will be randomly selected for each month. All members must be Penetration Divers at the time of application, and if a fixed line is place in the cave, be required to attend a Penetration Diver Education Program (Phase II) before the trip.

On a final note, I stated in the last issue of Guidelines that I would clarify a couple of issues arising from the AGM. Indexing fees to CPI is possible, however, these fees must be ratified at each AGM. This effectively means that we cannot automatically raise fees. The second issue raised was that of an external audit. The Association has no legal nor constitutional requirement to be externally audited, however, it still remains the right of any members to inspect all financial transactions conducted by the Association.



JOHN VANDERLEEST

WANTED

LEGAL PROFESSIONALS
to act as advisers/representatives
for the CDAA.

Please contact John Vanderleest.

CDAA NEWS

BARNOOLUT INDEMNITY AGREEMENTS

The correct procedure for obtaining the diving agreement for Barnoolut is as follows: Send a request stating name, address and CDAA Membership Number to our post office box in Adelaide, along with a cheque or money order ONLY (definitely no coins or notes) for \$3. The agreement will be posted back to you for signing. Once done, return it to our post office box in Adelaide where it will be forwarded to the manager of Barnoolut (do not send directly to Barnoolut) for signing. When it is then returned to the CDAA, you can apply for diving using the Booking Form in Guidelines issue No. 36. Note: Allow minimum of 2 weeks for paperwork to be completed before applying to Barnoolut manager for diving.

CLOTHING ORDERS

I feel an explanation and apology is needed to those people who have recently ordered our CDAA clothing. We have almost run out of all items in size 18-22, but do keep ordering as we have arranged with the supplier to purchase small numbers to cover orders only until money is available to increase stock holding again. Sorry for the hold up to those who ordered but rest assured, you will receive your order – it just takes a little time. 4-6 weeks from order should see your items returned.

OLD STYLE CLOTHING

We have decided to clear out remaining stocks of the old style t-shirts and wind-cheaters at well below our cost price of 3 years ago. But there are limited colours and sizes – mostly small ones.

Please specify size and TWO colour choices if possible to enable us to fill your orders.

T-shirts – kids sizes 12-16. Gold, red, green, blue.

W'cheaters – kids sizes 12 & 14 only. Blue, navy, red, gold, grey.

Prices: T-shirts – \$6 incl. return postage.

W'cheaters – \$12 incl. return postage.

CDAA EXAMINERS

The following examiners are available for any Category test. Training courses, advice on Training Techniques and Equipment, and for any comments you may have on the CDAA operations. The Training Manager is Tony Richardson.

NAME	PHONE	NAME	PHONE
New South Wales		Victoria	
Ron Allum	(02) 534 6615	Bill Bernhardt	(03) 725 9716
Des Walters	(060) 25 3506	Stan Bugg	(03) 379 8791
Andrew Wight	(02) 428 2176	Scott Carpenter	(056) 25 2508
South Australia		John Dalla-Zuanna	(03) 370 1093
Chris Brown	(08) 79 1445	Barry Heard	(056) 27 5511
Glen Harrison	(08) 386 3237	Alan Joliffe	(03) 874 7669
Ian Lewis	(087) 35 6100	Phil Mann*	(03) 689 7791
Richard Megaw	(08) 263 3337	John McCormick	(03) 569 6948
Tim Miles*	(08) 289 2030	Tony Richardson	(03) 754 6163
Western Australia		Bob Wealthy	(03) 789 6389
Gary Kaal*	-	Frank Ziegler	(055) 26 5288
Hugh Morrison	(09) 409 9807	*Trainee	



BARNOOLUT DIVING TIMES

Please note the amended diving times to book your dives on Barnoolut Estate. Weekends are now ONLY: 1 p.m. Saturday, 9 a.m. and 1 p.m. Sunday. Weekdays remain at 8 a.m. only.

MONEY MATTERS

It has been noted that a number of people are still sending cash for books, membership renewal, etc. to us in Adelaide. This is totally unacceptable!!! You must ONLY use a cheque or money order – even if it is only a small amount of money. Please understand that there is no record or payment or loss if the money doesn't reach us – and it is also illegal. So please, only cheques or money orders for all payments.

OLD MELBOURNE ADDRESS

There is still a small amount of mail coming through Australia Post to our old Melbourne address. This address has been non-operational for 12 months now, so if you wish to get information, or whatever, you must use our Adelaide address ONLY.



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STANDARDS DIRECTOR'S REPORT

The new courses are now operating but, as is to be expected, there are minor teething problems. These are mainly administrative in nature and the Standards Directorate are attempting to overcome them. There will be no more category tests or training conducted in 1991. The new cavern, sinkhole, cave and penetration courses will be fully implemented in 1991.

CDAI INSTRUCTORS

We have received a lot of interest from CDAI members wanting to become CDAI instructors. Potential instructors should contact John McCormick (ph: 03 579 0570) and obtain an instructor application form. Instructors application will not be considered until this form is completed.

The requirements to become a CDAI Cavern Diver Instructor are:

1. Provide proof of being an active insured scuba instructor with PADI, FAUI, NAUI or SSI.
2. Provide proof of having taught a minimum of 25 students.

3. Current financial CDAI member – sinkhole, cave, or penetration level.
4. Provide proof of a total of 50 cavern, cave, sinkhole or penetration dives, 20 of which must be cavern dives.
5. Be sponsored by an active CDAI instructor.
6. Attend and assist in at least two cavern diver training programs conducted by a CDAI Instructor or attend a CDAI cavern diving instructor training program conducted by at least two CDAI instructors.
7. Candidates must be familiar with all current literature and standards of the CDAI and adhere to them.
8. Own and use the required equipment.
9. Some of the above may be waived in exceptional circumstances by the directorate. Eg. establishment of new regions.

OBJECTIVES OF STANDARDS DIRECTORATE FOR 1990/91

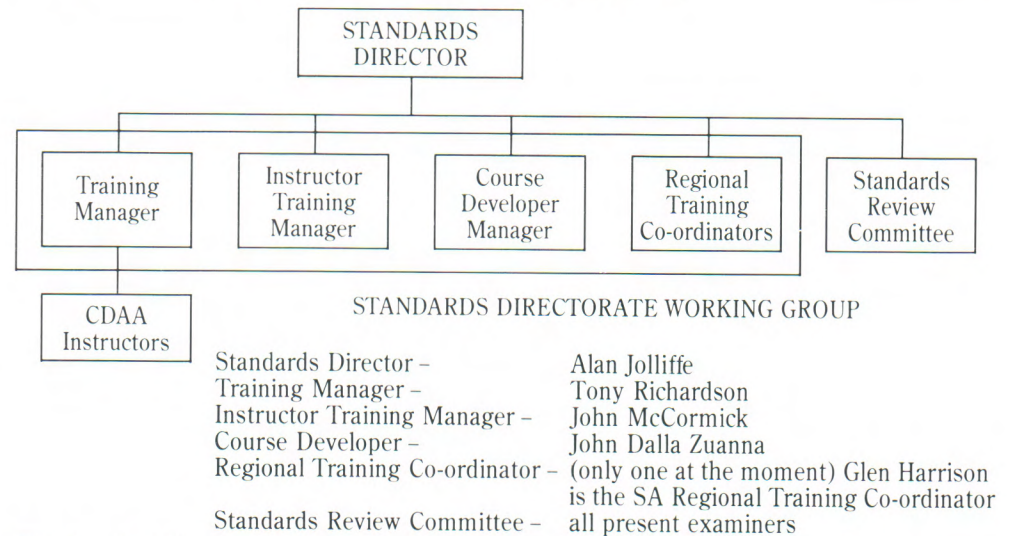
The objectives of the Standards

Directorate for 90/91 are:

- a) Re-structure the Standards Directorate for more efficient and effective operation.
- b) Develop final drafts of all courses.
- c) Produce print based training materials to support all courses.
- d) Monitor and evaluate all courses.
- e) To produce all necessary administration forms to support all courses.
- f) Produce detailed course outlines for all courses.
- g) Conduct further cross-over programs.
- h) Conduct penetration diver education programs, formally known as the phase two cross-over program.
- i) Establish more regional training co-ordinators.
- j) Develop a sound educational philosophy on which the CDAI training system is developed.
- k) Negotiate for the production of a CDAI student text book and instructor's manual.
- m) Train new instructors in the training philosophy of the CDAI.

RESTRUCTURE OF THE STANDARDS DIRECTORATE

The Standards Directorate has been restructured as follows:



The Standard Directorate Working Group consists of the Standards Director, Training Manager, Instructor Training Manager, Course Developer Manager and the Regional Training Co-ordinator. This group will act as an advisory group to the Standards Director and will be the operational group of the Standards Directorate.

Continued overleaf



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Ph: (03) 571 6215

Continued from previous page

EXAMINERS

There are no longer any CDAA examiners. All present examiners will now become cave diver instructors and members of the standards review committee.

INSTRUCTOR TRAINING PROGRAM

Well known CDAA instructor, Andrew Wight, conducted a Cave Diving course (category 3) and a CDAA instructor training program in Mt. Gambier. Candidates were from the PADI College in Sydney. The group consisted of Terry Cummins, Director of PADI Australia, David Ogilvie and Frank Garfield, PADI course directors.

Assisting Andrew in this course was myself and Ian Lewis. Also assisting with the course was Andrew's wife, the delightful Liz Wight. Liz is a very capable cave diver and has recently become a PADI instructor.

The candidates conducted over forty dives in a five day period. All candidates passed to Cave Diver level. I congratulate the candidates on passing and Andrew for his excellent training and his initiative in conducting this course. I hope this course will aid our expansion into NSW.

Good Cave Diving!

Merry Christmas and Happy New Year!

ALAN JOLLIFFE,

Standards Director



AIR FILLS

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MERRY CHRISTMAS & HAPPY NEW YEAR FROM THE C.D.A.A.



Drive safely and enjoy!

CAVE DIVING & SCOOTERS

by Andrew & Liz Wight

Australian cave divers have always shown a great deal of innovation in developing new equipment and techniques for cave diving to overcome or prevent a given problem. The tank and gear "sled" designed by Ron Allum initially for the 1983 Cocklebidy expedition, is such an example. A cave diver was always limited by what could be hung from a single human body. The physical impossibility of carrying the gear and air required to achieve the underwater distances involved in the Cocklebidy expedition, led to the development of this simple yet effective means for underwater transport.

With more Australian and international cave divers seeking new challenges and frontiers, there has been a gradual increase in the amount of cross pollination of ideas between cave divers from different parts of the world. Keeping in mind Australia's unique cave diving environments, our cave divers have either adopted or rejected new ideas, the ultimate result being a continual modification and improvement of our cave diving equipment and techniques.

The use of scooters in caves had not seriously been considered worthwhile in Australia until a few years ago. In fact, apart from the occasional recreational use in Ewens Ponds, scooters were not used for exploration until the French expedition to Cocklebidy in September, 1983. Interestingly, American cave divers in Florida have been using them for some years, the power of the scooter allowing further penetration and less decompression time during dives in their often outflowing cave systems.

Australian cave divers, however were always a bit wary of scooters with doubts held as to the reliability and suitability of their battery life and their ability to be used safely during long penetration dives. Without doubt, the expense and availability of scooters were also limiting factors!

A basic comparison of the 1983 Australian and French Cocklebidy expeditions gave rise to early speculation on the possible advantages of scooter use in Australian penetration cave diving.

Given a total cave length of over 6 kilometres, the Australian push team, who were planning to swim the distance, had to carry a large amount of air for the outward and return journeys, maintain a one third reserve for safety and be sufficiently fit to complete the long and laden underwater swims. The entire team spent days ferrying gear into the air chamber base camps. The push team spent many days underground and many hours underwater to achieve their objective.

A month earlier, the much smaller French

Continued on following page

CDAA BOOKSHELF

Two titles currently available:

"South Australian Diving Fatalities 1950 - 1985"

by Peter Horne

Despite the ominous title, this book is a great addition as a manual of what NOT to do in both sea and cave diving.

\$15

(inc. return postage)

"S.R.T. - Single Rope Techniques"

The definitive work on all aspects of vertical travel in caves. Published by Sydney Speleological Society, this book should give all the answers regarding rope work for cavers, climbers, and of course, cave divers.

\$23

(inc. return postage)

To order, send a cheque to
"CDAA Books", P.O. Box 290,
North Adelaide, 5006, including your
name, address and CDAA number.

team, using scooters whipped out to the far reaches of Cocklebidy and back in 48 hours or so.

So much for the sceptics, the scooter would superficially appear to be the obvious solution. It propels the diver faster than he or she can swim and as a consequence, less air is required and decompression times are reduced. Sounds perfect but in fact, this inherent advantage of the scooter is also its main logistical problem. Scooters, because they can propel a diver further on less air create a potentially large hazard.

As cave divers, we are taught to use the one third rule – a third in, a third out, and a third for reserve. Now apply this rule to scooter diving and explore the possible opportunities for disaster.

Consider a diver riding a scooter such as an Aqua Zepp, (capable of 6 kilometres per hour underwater), along a straight tunnel such as Cocklebidy. (We are assuming that the diver has trained with the scooter and knows its specifications and capabilities.) The diver could cover the distance to the end in just one hour. Applying the one third rule, the diver would need the equivalent of about 3 x 88 cubic foot tanks, to safely complete the journey. (Assuming an average depth of 10 metres and a surface breathing rate of about 0.75 cubic foot per minute, 3 x 88 c.f. tanks would just about do it.)

What would happen to our diver when he or she reaches the end of the cave and the scooter breaks down? It is quite obvious that the diver would not have sufficient air to swim back safely. Just like all equipment used in cave diving, a redundancy factor must be taken into account when scooters are used. Unlike tanks, regulators, and torches, a backup scooter system is not possible (remembering that we are considering cave divers as individual divers with their own independent redundancy and not as a buddy unit) so the factor must be built in to the dive plan in the form of air consumption calculations.

The US cave divers usually adopt a one sixth rule when using scooters to allow for the possibility of scooter failure on the maximum penetration point of a dive. This is to allow



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sufficient air to safely swim back should there be a scooter breakdown.

There is however, the further complicating factor of decompression. A scooter penetration cave dive may easily exceed decompression limits. During a long, deep penetration dive such as were involved in the Pannikin Plains cave diving expeditions, a scooter failure during the dive would have dangerously increased the amount of exposure at depth and the subsequent decompression schedule. In some cases, the final decompression scenario would have been outside the table limits – a fairly nasty situation.

When planning to use scooters for exploration, a diver has to be extremely careful in planning to compensate for a scooter malfunction in their air consumption and decompression calculations.

The scooter can contribute substantially to the exploration and enjoyment of a cave system but it is necessary, as it is for all cave diving equipment, to take into consideration the "worst case" scenarios and plan the cave dive to safely cater for such an event. **G**

DCIEM SPORT DIVING DECOMPRESSION TABLES

by David Doolette
Department of Anaesthesia and Intensive Care
Royal Adelaide Hospital

The DCIEM sport diving decompression tables have just become available in Australia. The DCIEM tables are based on a model developed at the Defence and Civil Institute of Environmental Medicine in Totonto, Canada. The new sport diving tables are adapted from the more comprehensive Canadian Forces tables released in 1983. The main objective of these tables was to replace the U.S. Navy tables, published in 1956, which are among the most widely used tables by navies and sport divers. The DCIEM tables are conservative, and safer than most tables.

Decompression tables and electronic decompression computers are based on mathematical models that describe the uptake and elimination of inert gas by the body when it is exposed to variations in ambient pressure. These models only approximate what actually occurs in the body and the only true test of a decompression model is its proven success in open water. Many decompression tables and computers are not adequately tested in open water. Although exhaustive testing of every schedule does not occur before a table is published. DCIEM, United States Navy (USN) and Royal Navy (RN) air decompression tables underwent extensive open water testing during development. The DCIEM tables are the result of 18 years research and 20,000 test dives.

The most commonly used decompression tables are the USN and RN air decompression tables. These tables were published in the late 1950's and were designed for use by the navies where diving operations are usually supported by on site recompression and medical facilities. There is a calculated risk of decompression sickness (DCS) of 1-2% for most of the no-decompression schedules of these tables and higher risks in many of the decompression schedules in normal operational limits 10-20% in some of the longer USN schedules! The DCIEM sport

diving tables compare favourably with these tables with a 1% risk of DCS in all but one no-decompression dive and 0.1% risk associated with most decompression schedules.

A major strength of the DCIEM model is the conservative treatment of repetitive dive schedules. Multiple ascents, repetitive diving and multiday diving increase the risk of DCS. Even dives that do not produce DCS may result in nitrogen bubbles in the blood (silent bubbles). The presence of these silent bubbles slows the elimination of inert gas from the body, such that inert gas elimination following a repetitive dive is not governed by the same rules as for a single dive. Earlier decompression models assumed that, apart from some residual nitrogen debt, decompression is similar for repetitive dives. The DCIEM tables, however, provide more conservative schedules for repetitive dives, a longer surface interval before a dive is considered as a single dive, and limits on multiday diving.

The DCIEM table is the first well tested table that allows multilevel diving for no-decompression dives. On dive profiles with a maximum depth reached early and the remainder of the dive conducted at shallow depths, appropriately lengthened bottom times are easily calculated. Thus while the no-decompression limits appear restrictive, proper multilevel procedures can allow bottom times longer than USN or RN schedules.

Correct use of any decompression table is not a guarantee of avoiding DCS. Most divers treated for DCS at the Hyperbaric Medicine Unit at the Royal Adelaide Hospital adhered to published decompression schedules. However, a recent study at the Royal Adelaide Hospital and one at the Royal New Zealand Navy Hospital show that sport divers who developed DCS following dives inside DCIEM limits responded better to

Continued overleaf



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Continued from previous page

recompression therapy and had no long-term symptoms, while those outside these limits had persistent long-term symptoms.

In summary, the DCIEM sport diving tables are designed specifically for the sport diving community, are based on a model that is well tested under real diving conditions, and provides a set of low risk decompression schedules. There is a need for the diving community to adopt a conservative approach to dive planning. The evidence suggests that the DCIEM sport diving tables are currently best able to subserve this need.

The DCIEM sport diving tables are distributed by the APSF for the Diving and Hyperbaric Research Foundation. The tables cost \$10 and all proceeds are used to fund diving and hyperbaric research. For information call (08) 224 5544 or Fax (08) 232 3283.

G

COMPETITION RESULTS

"GET WET" COMPETITION:

The winner of the competition with both correct answers is

PETER ROBERTSON CDAA 1771

Congratulations Peter!

He will receive a UK 600 torch valued at over \$150

donated by Richard Megaw of U/W Sports Diving Centre.

PHOTOGRAPHIC COMPETITION:

Firstly, thank-you to those who entered this year's competition.

The overall winner was

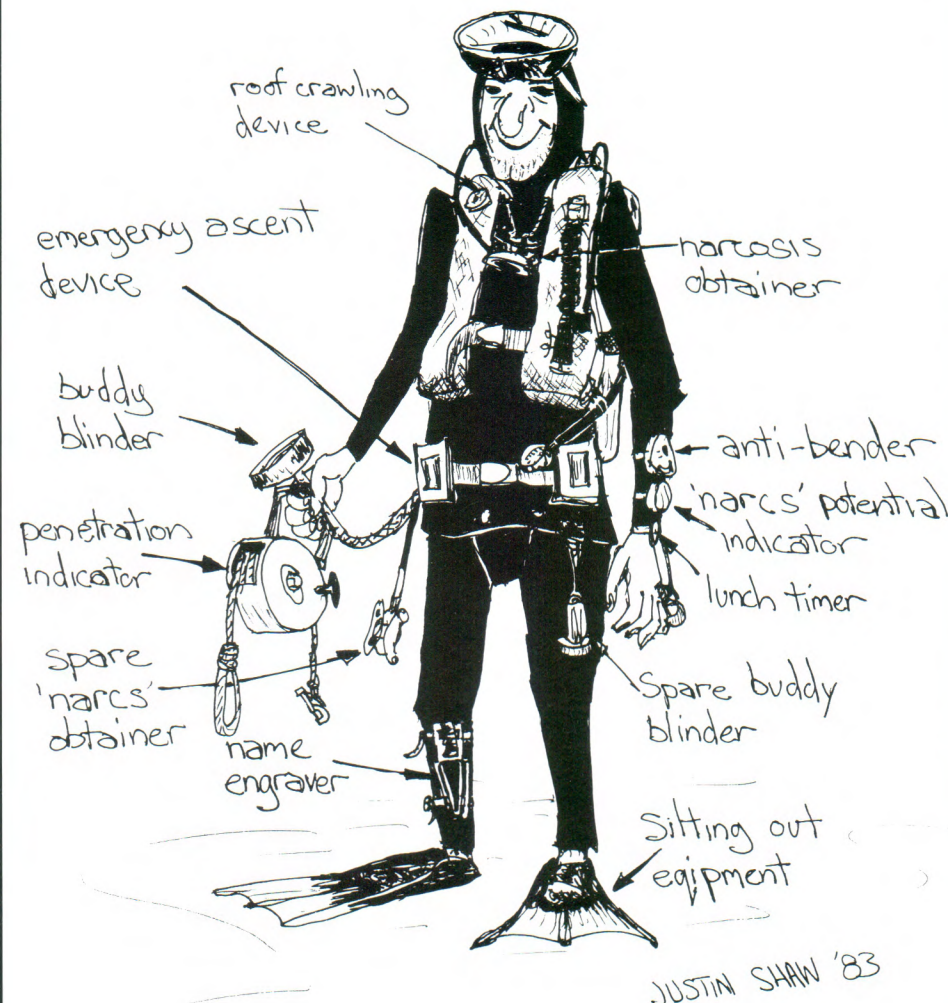
IAN WESTHORPE

with his entry titled

"Cruising the Chasm".

Ian wins a Cressi Faro Torch donated by Outdoor Survival, valued at \$200.

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PAST PUBLICATIONS

Three publications are currently available:

"Cave Diving In Australia"

by Lewis & Stace

A small number of copies have been unearthed – the last in existence – of this classic in cave diving literature.

So if your copy is all dog-eared or water-logged, now's your chance to get hold of a new one.

\$16

(inc. return postage)

CDAА Occasional Paper No.2 September 1981

Again, a small quantity of this much sought-after title are now available.

It covers topics such as Fossil Cave, Belay techniques, and the 1979 Cocklebiddy Expedition.

\$10

(inc. return postage)

"Guidelines" Back Issues

Now available, but for the moment, only the issues listed below. Quantities are low on some, so be quick to complete your collection.

Issues available:

8-14, 16-20, 22-28, 35-37.

\$4 EACH

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To order, send a cheque to "CDAА Books", P.O. Box 290, North Adelaide, 5006, including your name, address and CDAА number.

UNDERWATER PHOTOGRAPHY IN CAVES – Part 2

by Peter Rogers

One of the best ways to learn the techniques necessary to achieve quality photographs is to model your approach on successful photographs taken by others. Once you have "learnt" a particular type of shot, and know the kind of results it will produce, you will be able to use it, confident in the knowledge that it will capture and communicate the image your want.

Patient and photogenic buddies are essential for any successful underwater cave photographer. Your buddies must understand exactly what you are trying to achieve, and if silting is a problem, they have to get it right first time. This will require a thorough pre-dive briefing, and usually needs a solid understanding of each others underwater signals as well. Buddies should be properly equipped to look like cave divers, nothing detracts from a cave diving photo more than a diver that looks like a floating junk yard. If your buddy is to carry a strobe, he will need to understand the principles behind its use. In particular, he will need to know the strobe to subject distance that you need to ensure an even exposure.

I have found that my best results have

been obtained with at least one strobe well away from the camera. This technique gives depth and dimension to the photograph, bringing out the three dimensional appearance of the cave. Even with the most powerful strobes used in crystal clear water, there is a significant colour loss once the underwater light path exceeds 5-6 metres. A wide angle lens (15-20mm) helps to overcome this problem by allowing the camera-to-subject distance to be kept to a minimum. Two methods of firing off-camera strobes are the use of a slave unit (some strobes have these incorporated in them), and the use of a long strobe lead.

The type of film to use is a matter of personal choice and budget. However, it is important to get to know the characteristics of the film you use; some are more contrasty than others, and each brand tends to have its own specific colour tones. My personal choice is Kodachrome 200 ASA. I find this ASA rating gives a good exposure range with my strobes, and Kodachrome gives strong accurate colours that can be copied or enlarged with pleasing results.

And finally ... be prepared to persevere!

PROMOTIONAL PRODUCTS

Support and promote your Association

Clothing & stubbie holders available.

Windcheaters: Navy Blue/White Logo
Red/Black Logo

Sizes: 16, 18, 20, 22, 24 only

Price: \$25 (inc. return postage)

T-shirts: Navy Blue/White Logo
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Polystyrene foam with plastic shell
Price: \$3.50 (inc. return postage)

Send order and cheque/money order made payable to CDAА, specifying sizes and colours to: CDAА, P.O. Box 290, North Adelaide, 5006.

GUIDELINES Advertising Rates 1991

AREA	1 issue	2-3 issues	4 issues
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Inside Rear Cover	\$170	\$150	\$125
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Body of Magazine:

Full Page	\$150	\$125	\$100
½ Page	\$110	\$95	\$80
¼ Page	\$75	\$65	\$50
⅛ Page	\$50	\$40	\$30

ADVERTISEMENT DIMENSIONS

Full Page	186mm (d) x 126mm (w)
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	Horizontal – 92mm (d) x 126mm (w)
¼ Page	92mm (d) x 61mm (w)
⅛ Page	46mm (d) x 61mm (w)

These cost are PER ISSUE and can include logos, diagrams, etc.

Black & White photographs can also be included at an extra cost of **\$15** per photograph.

Booking & Enquiries to:

The Editor
GUIDELINES Magazine
C.D.A.A.
P.O. Box 290,
North Adelaide, SA, 5006

CDAA SITE ACCESS

**Remember: Access is a privilege, not a right.
Please be considerate of landowner wishes.**

SITE	LEVEL	OWNER	ACCESS DETAILS
MOUNT GAMBIER – SOUTH AUSTRALIA			
Ewens Ponds	Nil	Dept. of Lands PMB 124, Mt. Gambier (087) 35 1111	Groups of 6 or more, phone/mail to Dept. of Lands. Smaller groups, no need. Ponds are closed 1 September – 30 November each year.
Horse & Cart Tea Tree	CN	Mr. Don Telford PO Box 2629, Mt Gambier (087) 38 4003	By phone or mail, 1 week prior.
Little Blue (Baby Blue)	S	Port MacDonnell	Little Blue – permission not required – must carry card.
Allendale	C	Port MacDonnell	Obtain key from Mt. Gambier Tourist Information Centre.
Gouldens 2 Sisters Fossil	CN C	Dept. of Lands PMB 124 Mt Gambier (087) 35 1111	Contact Dept. of Lands by phone/mail prior to diving. Stay out of Gouldens when pump is operating.
Ela Elap One Tree	S S	Mr. Peter Norman Private Bag 67, Mt Gambier (087) 38 5287	By phone or drop in before diving. Accommodation also available.
Swim Through	C	Valerie Earl C/- PO Allendale 5291	Currently CLOSED pending new access arrangements.
Piccaninnie Ponds	S	NPWS 11 Helen Street, Mt Gambier (087) 35 1171	Permit holders by phone. Be aware of delicate vegetation.
Hells Hole Pines Mud Hole	S C C	Woods & Forests PO Box 162 Mt Gambier (087) 24 2711	Contact Woods & Forests (Forests Clerk – Barry Phelan) by mail or phone and arrange permit. No diving on total fire ban days.

SITE	LEVEL	OWNER	ACCESS DETAILS
Black Hole Ten Eighty Bullock Hole	S S S	Mr. Colin Traeger, Manager, Barnoolut Estate PO Box 12, Mt Gambier 5290 (087) 26 6215	Contact CDAA Records Officer for diving deed THEN mail Booking Form to Colin Traeger 2 weeks prior, stating names/qual. of all divers, and time slot – 1pm Saturday, 9am or 1pm Sunday, or 8am (weekdays).
Max's Hole	C	Mr. Trevor Edwards PO Box 1319 Mt Gambier (087) 26 8277	Phone or mail 1 week prior to dive.
Shaft	S	Mr & Mrs Ashby	ONLY by contacting designated "guides" who will arrange access. Refer "Guidelines" Issues 36 – July 1990.
Engelbrechts – East – West	C P	Mt Gambier Council	Obtain key from Mt Gambier Tourist Information Centre.
Three Sisters	P	Millicent Council	Currently closed until new access arrangements completed.
Iddlebidy 5L250	P	Woods & Forests P.O. Box 162, Mt. Gambier, 5290 (087) 24 2711	Access ONLY via CDAA Site Access Committee – refer National Director's Report issue 38.

NULLABOR – WESTERN AUSTRALIA

Cocklebidy Murra El Elevyn Tommy Grahams Weebubbie	3 3 3 3 3	Regional Manager C.A.L.M. 44 Serpentine Rd, Albany 6330 Ph: (098) 41 7133	Must apply for permission to dive at least 4 weeks in advance of trip. All the Nullabor sites are awaiting re-classification to the new system.
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NULLABOR – SOUTH AUSTRALIA

Warbla	3	N.P.W.S. Ceduna	Currently CLOSED to all diving subject to draft management policy.
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CN = CAVERN S = SINKHOLE C = CAVE P = PENETRATION

TRADING POST

FOR SALE: 2 x 300-Bar 6-litre steel H.P. cylinders with DIN valves. In test. \$400 pair. 2 x 63 cu.ft. alloy cylinders with CIG valves. In test. \$190 each. Tony Davis (03) 781 3820 CDAA 1187.

FOR SALE: Bauer 2.4 cu.ft. portable compressor. In good condition. Recently serviced \$2500. John McCormick. Ph: (03) 579 0570 (b.h.) CDAA 435

LIGHTING: 2 x Ikelite 100-watt lights and chargers, 2 settings, adjustable arms - \$300 each. Metz auto strobe, 300 BCT 4 - \$400. Housing for Nikon FE2 (housing by John Lloyd) - \$400 (offers considered favourably). P. Ginnaine (08) 382 2729 (h), (08) 226 2590 (w). CDAA 1244.

NIKONOS 4A 35mm with new 28mm lens and optical viewfinder, and Aquastrobe 100 flash. All in mint condition. \$1,500 O.N.O. Will separate. Caving ladders, 2 x 10 mt. with traces. New \$45 each. Syd Johnstone phone (08) 341 5108. CDAA 985.

FOR SALE: 5mm Moray pro suit size 3 slim \$60. 7mm Vulcan pro suit size 3½ \$180. 5mm ladies pro suit size small \$180. 5mm ladies pro top size small \$60. Ocean pro rechargeable torch with charger and travel case. \$90. Rick Luff, phone: (08) 298 5516 (h), (08) 275 9911 ext. 4510 (wk).

Coming next issue ...

- **Mysteries of the Mount Gambier Sinkholes - Part 2** by Mia Thurgate
- **Barnoolut Access Map**
- **Latest from the U.S.A.**

CDAA YELLOW STICKERS

Available from: CDAA, P.O. Box 290, North Adelaide, 5006.

Quantity	Cost
2	\$1 - 50c each
10	\$4 - 40c each
20	\$7 - 35c each
50	\$17 - 34c each
100	\$32 - 32c each

You **must** send a stamped self-addressed envelope with your order.

CDAA BOOKSHELF

Two titles currently available:

"South Australian Diving Fatalities 1950 - 1985"

by Peter Horne

Despite the ominous title, this book is a great addition as a manual of what NOT to do in both sea and cave diving.

\$15

(inc. return postage)

"S.R.T. -

Single Rope Techniques"

The definitive work on all aspects of vertical travel in caves. Published by Sydney Speleological Society, this book should give all the answers regarding rope work for cavers, climbers, and of course, cave divers.

\$23

(inc. return postage)

To order, send a cheque to "CDAA Books", P.O. Box 290, North Adelaide, 5006, including your name, address and CDAA number.

FARO CRESSI SUB

The light designed by divers for divers. The **Faro Light** is the ultimate dive torch for the diver who needs brightness with a long 10 hour burn time. The **Faro** is powered by 8 "D" cells which run an efficient 8 watt krypton globe. This torch is double "o" ring sealed to ensure its water proofness to 120 metres. It is neutrally buoyant and extremely comfortable to hold. This torch has to be used to appreciate all its features.



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At last a dive computer that performs like a computer.

Easy to use, simple to understand. User friendly!

THE SOLUTION — the most powerful diving computer ever to be offered to recreational divers. Featuring the most sophisticated software available, this powerful 8-bit CMOS microprocessor utilizes a custom LCD screen that offers —

- **Pull down menu** for selection of surface functions:
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- **Computer history**
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- **Built in 4 × speed simulator**
- **PC compatible** easy to use interface with desktop log
- **Computer-generated** dive profile graphs via PC interface.
- **Intelligent display programming:**
- **Digital display of maximum depth** upon surfacing.
- **No DEC Time** available.
- **ASCent Time** total time required to surface from your present depth calculating ascent and stop times combined.
- **Decompression range** when appropriate, describes both the decompression ceiling and the decompression floor.
- **Total desaturation time** representing total time required for the computer to completely "off gas."
- **Current temperature.**
- **Digital dive counter.**
- **Low battery warning.**
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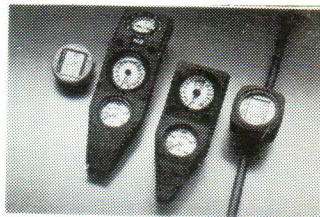
Features for the most demanding divers in the world.

Offering:

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- **Flashing alarms for:** Excessive Ascent Rate, Decompression Ceiling, Decompression Floor, Approaching Depth Limit (99 meters)
- **The most sophisticated memory available**

Based on proven concepts of true multi-level diving performance.

THE SOLUTION's microprocessor instantly calculates the precise amount of time spent at every depth of your dive.



9 compartments with half-times from 2.5 minutes to 480 minutes continuously model the absorption and release of nitrogen during all phases of diving including ascents, surface intervals and repetitive dives.

Interchangeable with existing Sea Quest & Suunto Instrument modules and designed for compatibility with future generations of consoles — Available in wrist,

2 gauge console, 3 gauge console, H.P. hose mount, or in capsule only configurations.

Complemented by the most complete package of dive computer support programs & accessories available in the world. 'Answer the challenge — Find THE SOLUTION.'



PENETRATION DIVERS EDUCATION PROGRAM (Penetration Divers Only)

Adelaide

Thorndon Park Reservoir
Saturday 9th February
Cost: \$30 per head
Full gear required including
twin independent systems.
Contact: Richard Megaw
(08) 263 3337
4.30pm-8.30pm

Mt. Gambier

Gouldens Sinkhole
Saturday 2nd March
Cost: \$30 per head
Full gear required including
twin independent systems.
Contact: Tony Richardson
(03) 754 6163
9pm-10pm only

Melbourne

Oakleigh/Brunswick Pool
Sunday 10th February
Cost: \$30 per head
Full gear required including
twin independent systems.
Contact: Tony Richardson
(03) 754 6163
9pm-10pm only

CROSS-OVER SEMINARS Sinkhole/Cave/Penetration

Adelaide

Clapham Primary School
Sunday 10th February
2pm-5pm
Cost \$1
Contact: Richard Megaw
(08) 263 3337
4.30pm-8pm

Melbourne

Upwey High School
(Admin. Building)
Wednesday 13th February
7pm-10pm
Cost: \$1
Contact: Tony Richardson
(03) 754 6163 9pm-10pm only

NOTE: These are the final cross-overs to be held in Adelaide and Melbourne. In future, private arrangements will have to be made with examiners – at your cost (Country members excepted).