

GUIDELINES

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CAVE DIVERS ASSOCIATION OF AUSTRALIA
(Incorporated in South Australia)

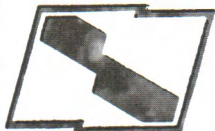
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CONTENTS

EDITORIAL

- Editor's Report** 2
by John Vanderleest
- Letters to the Editor** 2-3
- Next Issue's Debate** 3

CDAA REPORTS

- National Director's Report** 8
by Lisa Bernasconi
- Business Report** 12
by Warrick McDonald

ARTICLES

- A Moment's Lapse**
by Brad Clifton, Reprinted from Sydney Telegraph 2/6/95 4
- Coroner's Inquest**
by Pat Bowring 4
- Easter '95 Penetration Course**
by Ken Wallace 5
- Exploration**
- Goulden's Dreaming** 16
by Pat Bowring

NOTICE

- Engelbrechts Cave Site** 13
by Allan Skinner

OVERSEAS

- Oman Dave Diving** 6-7
by John Vanderleest
- The Sinkhole or Deeper, Darker, Longer, Better!** 10
Reprinted from RAHSAC June 1994

EQUIPMENT

- A Versatile Shotline for Cavern & Sinkhole Diving** 11
by Stan Bugg and Brian Cornell
- Phibian Rebreather** 14-15
by Russell Kit

- Drager Atlantis 1** 15
- Trading Post** 11

VALE

- Mrs Betty Jean Ashby** 17
by Peter Horne

LETTERS

- South Australia Police — Water Response Section** 9

- CDAA/Landowner Liaison Committee** 9

INSERT

- CDAA Site Access**
- CDAA Instructors**
- Products Order Form**

CDAA DIRECTORY

The following is a list of people that can be contacted for CDAA matters. Please contact the most relevant person or, if unsure, write to:

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and your enquiry will be passed on.

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FRONT COVER

Victor Kostiuk.

Photo taken by Ian Gandell

ATTENTION CONTRIBUTORS TO GUIDELINES

Could authors please submit articles on disk in IBM ASCII format, if possible.

CAVE DIVERS' ASSOCIATION OF AUSTRALIA

P.O. BOX 290, NORTH ADELAIDE, S.A. 5006

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EDITORIAL

Often we think of cave diving only in Australia and America. Usually not much thought is given to other countries and there is the general belief that there is not a lot of serious cave diving in other parts of the world. Nothing could be further from the truth. Australia and the United States have extremely well developed co-ordinating and training bodies involved with cave diving. These bodies are dedicated to training and regulation, considering cave diving as a sport in its own right. However, this is an exception to the rule, with most countries viewing cave diving as an extension of dry caving. In this situation, people who become involved with the sport usually start dry caving first and then progress to cave diving. When asked to think of where in the world you can go cave diving, several regions come to mind. Obviously, there is the well known regions of Australia and USA. However there are many sites outside of these areas. Books such as "The Darkness Beckons" by Martin Farr, have highlighted the extent of cave diving that exists in the UK. The French cave diving team who made the record dive in Cocklebidy just weeks before losing it to an Australian team, let us know that there are world class cave divers floating around Europe. Logically that means that there must be caves. Our own John Dalla-Zuanna has dived some very interesting sites in Italy. Rob Palmer's book on the Blue Holes of the Bahamas, brought to our attention the existence of some excellent sinkholes which make the Shaft pale by comparison. And then a couple of years ago, our intrepid explorer and film makers Andrew and Liz Wight brought us stories of extensive unexplored passages in Mexico. Add to this the exploration trips of Jane Bowman from AB Ocean Divers into Asia

and your bedraggled editor's exploits in the Middle East and we are starting to get a picture that we are not unique with our cave systems. And so the exploration continues. Germany, South Africa, Oman, Egypt, Greece and Yugoslavia have thrown their hat into the ring with individuals and new cave diving associations beginning to become known. With all this cave diving going on around the world, why aren't we hearing about it? Well, we are now. Thanks to the internet and specialist magazines such as Aqua Corps, Guidelines etc, stories are beginning to spread. The internet alone is beginning to provide us with tippets of recent events (many thanks to the members who keep a watch on this and send me the information for publication). What we are seeing is a new breed of cave divers beginning to emerge. Not the same old people who tell stories about the same old sites, but explorers who seek out caves, whether they be in their own backyard on the other side of the world. And as they travel, so do their stories. And what about those of us who want to travel but thought it was beyond our grasp. How do we find out about these caves and who do we contact? Well, for a start, the next few issues will contain articles on some of the better sites around the world. I have kept a series of contacts from my travels, including track notes on how to get to some of the caves in Florida and Mexico. I will publish these for all, over the coming issues. Given time and peoples' willingness to share information we will get to see other contacts and sites listed giving us a good collection. The sites are out there, access is possible. If you want them, then go for it. Remember, the only person stopping you is you.

John Vanderleest

LETTERS TO THE EDITOR

Dear John

It was great to see you and Ian Lewis at the Climbing Workshop at Rockworks Indoor Climbing Gym in Thomastown.

Graeme Porter excelled himself by taking 12 "Ocean Divers", CDAA members through a introductory climbing evening. With able assistance from Adam and Shane we progressed quickly through a number of demonstrations. The night has now whetted the appetite of the 12 "pupils" and some are now enrolling into full courses with Rockworks.

The 12 "victims" consisted of 9 males and 3 females (is this a politically correct description?) who literally had a ball. I am amazed at how those rock climbers manage to cling to little fake rocks and move about the walls as if they were stepping stones. In fact I previously asked "Why would you want to?". I think I now know the attraction, the guys get to look like ballet dancers with huge cod pieces, but I can't see the attraction for the girls who complained of "wedgies". Perhaps it's in the eyes of the beholder. Watching women scramble up walls, abseil down and climb wire rope ladders while the "men" wheezed and groaned just wore me out. The fun went on well after the allotted time, the only problem was finding a pub that's open at 11pm in Thomastown.

I would like to thank Rockworks for the learning experience they provided me personally.

It is not until you are shown the "correct" way to do things that you realise the number of flaws in your own teaching methods. Having observed other Sinkhole Instructors teach entry and exit skills and watched divers enter numerous "holes" over the last 25 years I can only say that from my own experience and from these observations our Sinkhole Training Course has a few flaws. The sooner we start a workshop of our own to council the current Instructors and implement a training

scheme for new Instructors the better.

The safety record of the CDAA speaks for itself and the implementation of standards and rules has protected the members. This subject has been discussed previously and I'm sure the Directorate are considering the future skills that will be required by members for access to certain "holes".

Yours faithfully,
WARRICK McDONALD



LETTERS TO THE EDITOR

Dear John,

I am writing to suggest that the CDAA Products section include more posters in its catalogue. That Tank Cave Poster by Peter Rogers is excellent.

It would be great to have a poster of Piccaninnie Ponds, Pines or Bullocks for example. I am sure that you could think of many other sites at various levels of certification. I have seen a number of excellent photos taken by CDAA members which, with their permission, could be made into posters.

Do you think that my poster idea is a reasonable and feasible one? If not, why not? Would it be appropriate to raise this small matter with the CDAA sales person?

I would appreciate a response to my correspondence (I was irritated that I received no reply to a letter about another cave diving matter sent to a past Editor of "Guidelines" — assuming it got there).

John, I would like to say thanks for the job you are doing with the new format of "Guidelines. It is an interesting, informative and topical read.

Yours in Diving,

JASON ENCEL, CDAA 2593

Mr John Vanderleest (Guidelines Editor),

My name is German Yanez Mendoza and I teach cavern and cave diving through NACD in Akumal Q.Roo Mexico, the reason why I write to you is because we have a small group of Mexicans cave explorers and instructors, who are interested in getting information about your cave diving organization in Australia.

Three months ago I was talking with a cave diver from Australia and he gave me a great magazine called CDAA Guidelines and I was thinking about writing a short article for your CDAA journal. Also if you can send me information about the possibility to be an instructor member in the CDAA.

THE NEW FRONTIER

All who enter this special world are amazed by the warm, crystal clear water and the incredible, colorful limestone formations which decorate our

caves, and caverns in Yucatan.

Our caverns and caves were formed millions of years ago during the last two glacial eras. As the glacial ice caps grew, the water level lowered dramatically about 100 metres. During these periods, fabulous formations of stalactites, stalagmites and columns formed within the limestone caves. These caves are now underwater. The Yucatan's underwater rivers flow gently through these cave systems. Over many thousands of years, thin areas on the roofs of these caves have collapsed. Where this has occurred, beautiful cenotes (in Maya is Dzonot). The Mayan name for these shallow fresh water ponds, have been formed. These ponds in the Yucatan jungle are favourite swimming holes for locals, and also for snorkellers and cavern and cave divers.

The cenotes are filled with warm, fresh water tropical fish. Water from the underground rivers flows through the cenotes which helps support the incredible abundance of life found in every cenote.

I am proud to tell in Mexico we have the best and unexplored caves in the world, this is what we call "The New Frontier".

(Note: cavern and cave diving required special equipment and training)

I hope you publish my article in your magazine.

Thanks for your support

GERMAN YANEZ MENDOZA

NACD Instructor

Dear John,

I would like to thank all CDAA members for their understanding who may have tried to obtain permits to dive the Pines on the weekend of July 8 & 9 and found that it was closed. On that particular weekend the South Australian Underwater Speleological Society (SAUSS), a group dedicated to the scientific study of water filled caves, were undertaking an extensive surveying project at that site. After consultation with the Dept. of Primary Industries I felt that it was in the best interests of all concerned to arrange exclusive access for our activities, some ten divers with associated survey lines in place, for the two day period. All CDAA members can look forward to the end result from our project which will include an accurate and detailed map of this fascinating site. Once again thanks for your cooperation.

ADRIAN RICHARDS

NEXT ISSUE

**Should we be
allowed to use
manifold tanks?**

**Why are independent tanks
better than manifolded
tanks?**

**Are there situations where
manifolds are safer than
twin independent tanks?**

**If manifolds are so
dangerous, then why are
they so popular in the USA?**

**Taking into consideration
narcosis, is changing regs
at depth dangerous?**

**What happens if the
isolation valve in a manifold
gets damaged? Where is
the redundancy then?**

**Are some isolation valves
better than others?
If so, why? And are they
better than independent
tanks?**

**Please send your letters
and articles to:
'The Editor'
Guidelines
P.O. Box 290,
North Adelaide, S.A. 5006**

STOP PRESS COCKLEBIDDY RECORD BROKEN

**The long standing distance
record held by**

**Hugh Morrison of WA
has finally been broken by
Chris Brown of SA.**

**Chris broke the record by
just 20 metres, claiming he
would have gone on a diet
to further the record.**

**The Directors, on behalf of
the Association, would like to
congratulate Chris on his
outstanding efforts.**

GUIDELINES TEAM WANTED

We are looking at expanding Guidelines but can only do so with a dedicated team. We need people to manage:

- ◆ New products reviews
- ◆ The internet news
- ◆ Trip reports
- ◆ Overseas Magazines
- ◆ Commercial Sales
- ◆ Articles

Remember, Guidelines is your magazine. It is as good as the energy behind those that produce it. If you have ideas or would like to contribute, then please give me a call — Editor

A MOMENT'S LAPSE

A moment of carelessness cost television executive Paul Cavanagh his life when he drowned during a deep water dive on March 20 last year.

NSW Coroner Derrick Hand yesterday rules the Channel 7 station manager had died from his own "carelessness" after diving companions had warned him about the danger of a home-made improvisation to his SCUBA equipment.

Mr Hand said he could not determine whether it was a faulty valve or Mr Cavanagh's own confusion with his borrowed air tanks that led to his death off Long Reef, in Sydney's north.

"I cannot come to any other conclusion other than it was a moment of carelessness by (Mr Cavanagh) which brought about his own death," Mr Hand said.

"Even experienced people (sometimes) do something that is just out of character. One slip and it causes their death."

Mr Hand also suggested that Mr Cavanagh, 47, had been "pushing himself too far on his dives". Mr Cavanagh died while diving 50m to the wreck of the Coolooli.

However, the coroner's court heard Mr Cavanagh was doomed before he even left his boat.

About 17 minutes into the dive, he was found by friends with his regulator out of his mouth and his mask flooded.

Showing no signs of breathing, a doctor was unable to revive him.

A post-mortem examination revealed Mr Cavanagh had drowned as a result of suffering an "oxygen toxicity attack". The court was told Mr Cavanagh had been using two borrowed tanks on this dive -- one containing normal compressed air and the other a gas called Nitrox.

However, police diving unit service technician Sergeant John Marshall said Nitrox was prone to produce oxygen toxicity in divers at depths of more than 49m. In order to swap from compressed air to Nitrox more easily, Mr Cavanagh had developed his own cross-over valve.

Sgt Marshall said this valve was "inherently dangerous" because it contained seals which could have resulted in gas leaking from the wrong tank.

He also said the valve contained no locking device on the lever used to switch the different types of gases, allowing for the wrong gas to be switched to Mr Cavanagh's regulator.

The officer said it seemed Mr Cavanagh had been breathing Nitrox, rather than compressed air, from the moment he began his dive and that at 50m, he began to suffer the effects of oxygen toxicity.

Mr Cavanagh's friends had warned him about the dangers associated with the home-made valve, but he ignored their pleas.

Submitted by Brad Clifton

CORONER'S INQUEST

Submitted by Pat Bowring

The New South Wales Coroner, Mr Derrick Hand, has called for the quick implementation of the Dive Australia Code of Practice, following an inquest into the death of one of the country's most experienced divers.

Paul Cavanagh, drowned on the scuttled bucket dredge, Coolooli, in the Tasman Sea on March 20 1994.

Mr Hand made his plea after rejecting a Work Cover Authority submission that he recommend the use of full-face masks for deep dives.

Mr Hand referred to the code of practice, which has been brought to the court's attention during the one and a half day hearing, saying that it had been compiled by people within the diving industry and provided the best guide of how recreational diving should be carried out in this country.

But he went on to say that no amount of regulation could prevent deaths from occurring. "I believe Paul Cavanagh's death came about through carelessness and you can't legislate against carelessness," Mr Hand added.

The court was told that Cavanagh, 43, assembled his gear at Long Reef car park prior to setting out on a charter boat for the

early morning dive. He was using a twin set-up on his back and carried a sling bottle. One of the tanks on his back and the sling cylinder contained air. The other tank contained a mix of 49 per cent oxygen and 51 per cent nitrogen.

As was his standard practice, the independent first stage regulators attached to his twin set-up, fed into a three-way valve mounted on his chest and from there to a single second stage demand valve.

Mr Hand found that Cavanagh mistakenly switched the valve to the enriched air mixture from the start of the dive, possibly due to confusion caused by the hurried assembly of his gear. At approximately 15 minutes into the dive, at a depth of approximately 48 metres, Cavanagh suffered a grand mal seizure, brought on by oxygen toxicity, and drowned. His body was brought to the surface by his two diving companions who had been unable to force his regulator back into his mouth after the seizure passed.

The court was told the former station manager of Channel Seven in Sydney had done many dives in excess of the depth at which he met his end, including one plunge to 105 metres.

He was a very experienced and qualified diver," Mr Hand said. "Maybe he pushed himself too far with his dives, but he had, in the past shown that he was a meticulous diver."

Mr Hand also rejected assertions that the accident took place during a training dive for a Trimix course. "I am quiet satisfied that it was not a Trimix dive. There was no Trimix in the deceased's tanks, so I can only accept that it was not a Trimix dive," he said.

"It was the nitrox mix that caused death."

While he hoped that the Dive Australia code would be implemented quickly, Mr Hand said that it would not guarantee safety. "Even with that code of practice, you can still have a moment of carelessness which can result in death," he explained.

"It is terrible when a situation like this happens. But I have seen many cases, over the years, when even experienced people do something out of character, (make) one slip which causes death.

"When one of these tragedies do occur, even to people who normally do take the greatest care, it highlights the care that must be taken by divers when setting up their equipment."

Easter '95 Penetration Course

It's Easter and my long time diving buddy, Chris and I have been eagerly waiting for months for this course to come around, and finally it has.

We arrive at the Jubilee Caravan Park in Mt Gambier S.A. early enough Thursday afternoon to find that a lot of the other candidates have already been here several days. We say a few "hellos", put our gear in our room, do the week's shopping in town and you guessed it, go for a pre course dive. After all, diving's why we are here.

Back to the unit, some dinner, meet our room mate and nervously off to bed, wondering if we really have what it takes to get through the next 5 days.

The next morning arrives and the course gets underway. We start with the introduction of our instructors/assistants Greg Bulling, Chris Brown, Glen Harrison, Tony Richardson, Max Marriott and Dave Warnes. Then on with an overview of what we will be doing and what will be expected of us. In the theory we would cover such topics as Equipment, The use of line arrows, communications, guide-line procedures, restrictions and dive planning. In the practical, the use of jump reels, mask and reg exchanges and blackout drills including line cutting, lost line searches and restriction negotiation. After this we launch into the theory until lunch then off to Gouldens for a practical session, where we try to put into practice what we have learnt in theory. Easier said than done, as we would be told later that we only missed finding the line by millimetres. Or, that as we cut through the tangled line, we also cut our jump reel line. Saturday was much the same as Friday with more theory in the morning, and in the afternoon more practical (both land based drills and in-water practice). This time was a little more confidence and less mistakes.

In the evening Greg put on a slide show of a trip to Florida and Mexico that he and Glen had done. We all just sat there spellbound. It must be a cave diver's heaven, with warm, deep blue springs and crystal clear waters.

Up to this point, the last 3 days have been warm and sunny. None of us could have hoped for better, and surely it could not last. In the early hours of Sunday morning we knew it had come to an end and as the rain thundered down it sounded as if the bad weather had set in for the next month. In the morning it looked as it had sounded, and we knew we would be wet and cold for the rest of the course. Oh well, we were tough and it was character

building, I hoped. After breakfast, as the rain and win continued we were thankful for more theory. After lunch we again met at Gouldens, to put into practice all that we had learnt (which, I must say, to this point was considerable).

The in-water tests would be in the form of a pre-dive assessment and stress management. This was the make or break. Unless we could show our instructors we had learnt our lessons well, and that we would not panic in the real situation, they would not allow us anywhere near a Penetration site. As it turned out, we all got through this section and found we enjoyed it. During the afternoon we were visited by the Standards Director, Ian Lewis, who called in to see how everything was going. Then later during a break in the weather, whilst packing up, one of the students, who shall be named "Eric the Viking" was seen swimming and frolicking in nothing but his bathers.

After dinner it was the theory and communication exams. The papers were marked and candidates debriefed on their performance thus far. Into bed we climbed, tired from the cold and the stresses and strains of a day of exams, for tomorrow were the first two of three supervised dives.

Monday morning and to our disbelief the sun was shining. We were split into two groups. Group one went to Englebrecht's East then West, group two to The Pines then Iddlebidy. That evening, after a great day's diving in more glorious sunshine, we gathered at the Western Tavern for our last night together and for a Graduation dinner. We ate a good meal and chattered (about

diving) with each other. I found Dave Warnes, CDAA card holder number 001, a really interesting person with so much knowledge and so many stories to tell.

Tuesday morning we gathered together and said our farewells. We exchanges names and numbers and after group photos split up again, for the third and final supervised dive. Group one this time going to Iddlebidy and group two to Englebrechts West.

The weather was fine until around lunch time then after one loud clap of thunder the sky clouded over and a light rain fell. I found our dive in Iddlebidy hard dirty work, just getting in and out was strenuous, however the dive itself more than made up for the effort. After the dive we were again debriefed on our entire week's performance and handed our temporary certification cards.

My buddy, Chris, and I both crawled into the car exhausted, but ecstatic. Not so much about our new level of certification but about the vast amount of knowledge and skills that had been given us.

In conclusion, to anyone contemplating the course, don't be deterred by the group size. I found that just meeting with these people and exchanging ideas about equipment etc was a really positive aspect. The cost, though it appeared expensive, turned out to be real value for money. (After all, what price can you put on safety and your life.)

To all those involved in our course, Instructors, Assistants and other candidates — THANK YOU

KEN WALLACE, CDAA2271



Penetration course, Easter 1995 (left to right) Erik Stogaard, Tony Richardson (Instructor), Ken Wallace, Peter Wye, David Winnall, Lyne Vincent, Simon Holland, Gary Norgard, Bob Bridges, Max Marriott (Assistant), Steve Sturgeon, Greg Bulling (Instructor), Chris Kirk, Andy Geve, Glen Harrison (Instructor), David Warnes (Assistant), Chris Brown (Instructor).

OMAN CAVE DIVING

The first question I hear you ask is "Where is Oman?"

Oman is an Arab Kingdom. It is located beneath Saudi Arabia, following the coastline from the Strait of Hormus in the Gulf, following the western side of the Indian Ocean through to the beginning of the Red Sea. Like all the Arab nations, it is desert, with lots of rock, sand and oil, but little water.

With so little water you wouldn't expect there to be any cave diving, but then again a lot of people are very surprised at cave diving on the Nullarbor. Like the Nullarbor, there is a lot of limestone in the Middle East.

The geology of Oman is interesting. The Indian and African tectonic plates meet at this point, causing massive upheaval of the earth's crust. All those geology lessons at school finally paid off for me. I got to see excellent examples of fault lines, folding, uplifting, sedimentary layers and mineral layers. There are locations where the ground has been completely flipped depositing earth's crust on top of limestone. The location where the two continental plates meet is highly recognisable as a distinct red layer where the rock above is sliding sideways whilst the rock is being pushed down.

The local population is fascinated by these rocks. They stop and stare at them for days. I mean, there is nothing else to look at. That's not completely true. If you don't like rocks, then there are goats and if you are lucky enough, a passing camel. Pet rock

collections are popular. A favourite pastime is to paint the rocks around the house. White, of course.

With all this movement and limestone layers half way up the side of a mountain, you get the geological conditions needed to create some interesting cave systems. Underground river systems within the country are extensive and begin at high altitude.

Probably the first trick and the hardest one in Oman cave diving circles is to find a cave diving dive site. This is no easier there, than anywhere else. Firstly, there is the normal trick of looking into every hole you can find. This method can be very successful, but with literally millions of holes extending no more than a few metres, it's a slow process. When the air temperature is over 45 degrees and the rock temperature somewhat hotter, this is not the best way to find caves. The second method is to ask the locals. However, as with locals everywhere, they usually have no idea what is in their own backyard. The third method is to find an oasis and try to figure out where the water comes from. As is typical of many desert locations, the water may travel for many miles beneath the ground. Here is where your high school geology comes in handy. No, I'm not going to tell you how. That's up to you to figure out. If you're lucky you'll find a cave. And if you're even luckier it will have a stream way leading to that oasis. Then if you are exceptionally lucky, the cave will become a water filled cave.

This highlights a very important difference between many of the cave systems in Australia compared to those

overseas. Mt. Gambier and Nullarbor cave systems are below the water table. Fissures in the rock and the natural movement of water within the water tables causes the limestone to slowly dissolve. The systems tend to form a maze pattern, extending wherever a new crack appears.

Water-filled cave systems also develop by underground streamways, hence the reason why cave diving in many countries is linked to dry caving. These systems tend not to be a maze structure but follow a progressive and meandering path. Underground streams are by definition a cave or penetration rating. The difficulty in getting into the water, currents and limited visibility often makes them penetration sites. Distances can vary from a little more than a breath-hold dive to many kilometres. For many countries, cave diver training begins in these sites.

Most of the sites in Oman fall into this category of cave. A day's diving goes a bit like this:

1. Try and leave home early so you can get into the cave before it gets too hot. Overnight temperatures are about 33 degrees.
2. Drive as close to the cave as you can. The first cave diving item you need is a 4WD. If you don't own one of these then forget the sport in this country.
3. Carry your gear to the cave entrance. With 31 degree water temperature, wetsuits and weightbelts aren't required.
4. Then go find the nearest oasis and go for a swim to cool off.
5. After that, crawl around on your belly for a while in the dry cave, whilst shuttling equipment and then go diving.

The trip home is a bit warmer. Whilst you are enjoying the nice 31 degree water, everything you left in the car is slowly roasting away. Temperatures in the car during the day reach well into the 50s. By the time you have dragged everything back

Accommodation MOUNT GAMBIER

6 kms from Post Office

Lodge style accommodation

Sleeps up to 11

Separate sleeping areas

Fully self contained

Specific facilities for divers

Tank filling service

Book/video library

Private secure parking

Equipment drying area

\$10 per night

Group Concessions available

Contact Julie or Phil ARGY

Phone: (087) 23 0879



John Vanderleest exiting the cave



Tiwi Sinkhole, Oman

to the car and you are ready for the drive home, you are also ready for the nearest pub. Being an Islamic country means that that can be a long way away.

As well as caves, I also visited Tiwi sinkhole. The sinkhole is about the same size as Blacks sinkhole. It has been surveyed down to 65 metres with sulphur producing bacteria producing a 4m sulphur layer beginning at 10m. This layer absorbs all light. I had a 250 watt Dive Rite torch shinned into my eyes from one metre away and all I could see was a dull glow. Once below the sulphur layer, all surface light was lost, however visibility was unlimited throughout the remainder of the sinkhole. Diving in the Nullarbor can be serious on equipment, mainly due to transport damage. Sulphur is a bit rougher and you can't do much about it. Any brass will turn black within an hour and most stainless steel will rust. Aluminium is great, it corrodes like you won't believe. My aluminium torch lasted the trip — just! You can get sulphur resistant metal but it ain't cheap. (Yes, Mr Alpha, I know that your torches don't suffer from that problem, but I didn't have one of them, did I!)

And what about those local cave divers. For a start, they're not really local. With my host doing his open water course in the Antarctic, diving through Scotland and the North Sea, I was in good company. They were as crazy about diving as I am.

The cave diving experience of the divers was based on the British system. Using items such as snoopy loops (large rubber bands with tie off loops used to hook over rocks), thick guidelines and large open reels demonstrated a practical and equitable approach to exploring caves. After

demonstrating the use of small, closed reels, 1.7mm line and Australian line-laying techniques, we discussed the merits of the British reels and snoopy loops. The differences in reeling in soon became apparent. At this point in time I was put in my place with the comment "we don't have to reel in here — we're too busy laying line".

Alright, so let's try cross training techniques. Pool on the beach, an island about one mile out with sea caves going through the centre, air conditioned compressor and gear rooms. A bar and food beside the pool. 32 degree water in the pool and ocean with whale sharks to keep you company. I could tell immediately, that I was going to gain more from this training than I was going to show them. When I arrived back in Australia I was asked to go diving. What do you mean the water temperature is 12 degrees and the air temperature 8 degrees! Get me out of here. Over the past two months I had been diving in the warm Florida waters, warmer Mexico water and glorious Middle East waters. And you expect me to get excited about jumping into an ice bath. I mean, they already know where all the caves go, don't they?

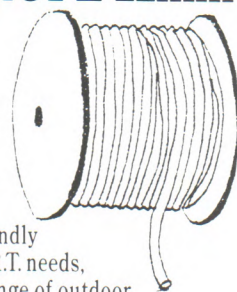
There are draw backs to all this warm water diving. There must be. I'm not sure what they are, but I'm sure they do exist. You have to carry gear in the heat. Hang on. In Florida, you can drive right up to the hole, whilst in Mexico and the Middle East you can always hire Sherpas. (I tried to bring one back with my dive gear but Customs made me give him back!)

Gaining access in the Middle East is something of a trick. Getting into the sites is not too bad, but getting into the country is a little different. To gain access, you must be

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sponsored. This can be achieved in three ways. Either you are sponsored by an employer, a resident, or a hotel. The hotel is the simplest method, but you must remember that the country only contains 5 star hotels. In fact, the main hotel was rated as the second best in the world last year. Showing your CDAA card to Customs' officials doesn't hold much weight. In a region that is paranoid about security, it's best not to admit that you play pseudo/para military games. Don't even think about bringing an Aqua Zepp. Trying to explain from an Arab prison that this is not a torpedo is not a good start to any holiday.

In the words of a great speaker — "I'll be back"!

by John Vanderleest

NATIONAL DIRECTOR'S REPORT

I'm happy to say that I'm in the position for the next year, and would like to thank all members that voted for me.

The response to the election was excellent. This gives the Directorate an idea as to whether or not we are doing the job the majority wants. I'd like to thank Karen for the year's effort she put in, and I'd also like to welcome Warrick to the position and say that I'm looking forward to working with him. Regarding the Constitutional changes that went out with the voting slips for Directorate positions, none of those changes could be voted on. There was a failure to include a proxy vote form for those members unable to attend the AGM, so therefore it would have been an invalid vote. Thank-you to all the members who contacted me on the issue.

I won't run through my entire report from the AGM as a copy of the minutes have been inserted into this issue of Guidelines. I'd be happy for members to contact me if they have any questions. At the AGM I did thank quite a few people who have helped me through last year but there were quite a few people I neglected to mention. Wayne and Jacqui Wilson, Gary Barclay and Linda Claridge and in particular Phil Argy. Phil has done an indispensable job as S.E. Rep this year, and also have a lot of changes occurred in his private life, a new baby being among them. Quite often I've contacted Phil for help with little or no notice and never has he declined that help. I can't thank Phil enough for the efforts he's put in. So it was with regret that I accepted his resignation the night of the AGM. That now leaves the position open, so any member living in the S.E. who feels that they'd like the job, write to me and I'll send out a job description.

SITE ACCESS

I also announced at the AGM that Swim

Through was remaining closed until the fencing was completed. I'm pleased to say I got a number of volunteers that night to do the job, so the New Year should happily see it open.

I also announced the opening of two new sites. Hann's Cave and Baker's Cave. You will find information on Hann's in this issue, thanks to the hard work of Gary Barclay. David Wholmes will be co-ordinating that site for me and the next issue of Guidelines will have all the necessary information for divers to access the site. At the moment the rating is "Cave", but as I said the next issue will see it include officially in the Site Access section of Guidelines. Cave and Penetration members are asked to send a stamped, self-addressed envelope to Linda at Records and she will forward you an indemnity to be filled out and returned. **NO STAMPED, SELF-ADDRESSED ENVELOPE — NO INDEMNITY.**

Bakers Cave is probably a little better known to members as it has been talked about for some years but remained closed. The site needs some preparation before it will be opened. I'm in the process of getting quotes to Warrick for the work and I'm using a group of members who assisted me with the back breaking work at Hann's Cave to prepare the site. Once again site access will appear in the next issue of Guidelines as the site cannot open until a secure lid has been placed over the opening. The rating for this site is still unsure as I need to have Ian Lewis come to the site as Standards Director to rate it, so for the moment it will go in as Cave level. So again if all Cave and Penetration Divers would like to send a stamped, self-addressed envelope to Linda at Records she will forward you an indemnity to be filled out and returned. **NO STAMPED, SELF-ADDRESSED ENVELOPE — NO INDEMNITY.** Any member who has a constructive suggestion as to how we select

divers for the site once it is open is welcome to contact me. Please note I said constructive. I have a list of all members who worked with Peter Horne in Mapping and Research, so if there can be a budget allocated to Mapping and Research this year, I will naturally be contacting those members.

I can't thank the owners of these two properties enough, and it's only through their generosity that we're gaining access to the sites. Divers will of course be limited in numbers on the selected weekends given for access, but even in controlled numbers, being able to access two new sites is of great benefit to all the members.

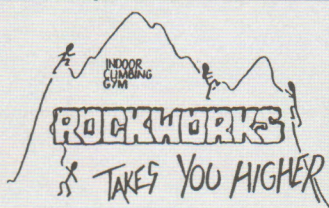
MAIL

There are three letters in this issue, two from Ron Jeffrey and one from the CDA/Landowner Liaison committee. I ask all members to read these letters seriously, as they are being put in to remind ALL MEMBERS of the delicate situation we are in at all times, when it comes to the access of sites we are given privilege to. There are also some old newspaper reports that may remind a few members of the very real dangers of cave diving. I also hope that these letters point out to members that this Directorate is keeping in touch with what is going on, both in the diving community, and more importantly this Association.

There is one more letter that may not be included, depending on the available space. It is a letter from our solicitor Rob Norman, regarding the Association's insurance. The letter explains the insurance, and answers 4 questions put to me by the Tank Cave guides regarding what the insurance covers. If the letter does not get printed, or only part of it appears, any member wishing to read it needs only to contact me for a copy.

LISA BERNASCONI

National Director



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AGM LEVY

At the 1995 AGM, it was voted that all members be levied \$5 per annum on top of their annual membership, to help cover the cost of the Association insurance.

Please send your cheque to the Records Officer as soon as possible.

CDAА PRODUCTS ORDER FORM

Please send Order Form, with cheque
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	QTY/ COL/SIZE	ITEM	UNIT PRICE	TOTAL
BOOKS		Cave Diving Communications. A manual from NSS-CDS dealing exclusively with all underwater communications used in cave diving. Including touch, torch and line signals, and use of line arrows and jump reels. A must for all cave divers bookshelves.	\$12.00	
		Cave Diving — A Blueprint for Survival. A book by the world-renowned cave diver, the late <i>Sheck Exley</i> , this is a case study of a number of accidents that have occurred in the USA and how to avoid them.	\$10.00	
		Basic Underwater Cave Surveying. The standard publication for anyone remotely interested in research and survey techniques used in water filled caves.	\$15.00	
		Cave Diving — the Cave Diving Group Manual. Completely new edition from the pioneers of the sport, the British. Covers every possible aspect including sump rescue solo diving and advanced oxygen and mixed gas theory. Reviewed in Guidelines No. 37.	\$40.00	
		CDAА Occasional Paper No. 2. From National Conference 1981. Includes topics such as Fossil Cave, Belay Techniques and Cocklebidly 1979.	\$ 8.00	
		S.R.T. Single Rope Techniques. Published by the Sydney Speleological Society. This is the definite work on all aspects of vertical travel in caves. Should answer most questions on rope work for cavers and cave divers alike.	\$27.00	
		DES Emergency Handbook. Revised 1990 edition by Lippmann and Bugg. Printed on waterproof paper this essential first aid manual should be part of every cave divers' kit.	\$15.00	
		NSS Cave Diving Manual. The standard reference manual in cave diving covering just about every conceivable topic. New Edition.	\$30.00	
		Research Handbook for Cave Divers. By Peter Horne. This book is a compendium of years of experience from various sources. A valuable addition for those interested in the other side of cave diving. As reviewed in Guidelines Issue 36.	\$20.00	
		Wukulla Springs Project. The U.S. Deep Caving Team, edited by William C. Stone.	\$59.00	
		The Darkness Beckons. By Martyn Farr. The history and development of cave diving.	\$59.00	
		Deep Diving. By Bret Gilliam, Robert Von Maier. An advanced guide to physiology procedures and systems.	\$30.00	
		Deep Into Blue Holes. By Rob Palmer. This is the project manual written about his trips to the Bahamas, diving some of the most advanced and spectacular caves in the world.	\$40.00	
		NSS Cavern Divers' Manual. The standard reference manual in cavern diving covering almost every conceivable topic. Also most principles behind safe sinkhole and cave diving.	\$18.00	
		The Lower South East Cave Reference Book. This 600-odd page publication is an invaluable reference detailing every known cave in the Mount Gambier region. Highly informative. Allow two weeks on top of normal delivery.	\$95.00	
VIDEOS		Caverns Measureless to Man. <i>Sheck Exley</i> .	\$40.00	
		Nullarbor Challenge. Produced by Hanger 137. The true story of the exploration of the largest single limestone cave region in the world.	\$29.95	
CLOTHING		Australian Caving Diving — A Contrast. By Tony Carlisle. Four short documentary type videos on Warbla Cave, Three Sisters Cave, The Road to Toad Hall and Tank Cave. Reviewed in Guidelines 54.	\$25.00	
		New Style T-Shirts. Colour: Red Earth. Sizes: Medium, Large, Extra Large	\$25.00	
		New Style Long Sleeve T-Shirts. Colour: Steel Blue. Sizes: Medium, Large, Extra Large	\$30.00	
MISCELLANEOUS		New Style Windcheaters. Colours: Purple, Forest Green. Sizes: Small, Medium, Large, Extra Large	\$35.00	
		CDAА Key Rings. Blue with gold motif. CDAА P.O. Box on back.	\$5.00	
		CDAА Stickers. Yellow. (Include stamped, self-addressed envelope for delivery.)	\$0.80	
		CDAА Stubbie Holders. Red with black logo. Foam/plastic shell.	\$2.00	
		Tank Cave Poster. Full Colour 14½" x 25" poster of Tank Cave by Peter Rogers. Price includes p&h.	\$8.00	

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Sub Total \$ _____

Plus postage & handling **\$6.00**

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PLEASE ALLOW 2 WEEKS FOR DELIVERY. Take a copy of this Form for your records.

CDAА SITE ACCESS

Remember: Access is a privilege, not a right.

Please be considerate of landowner wishes.

CN = CAVERN

S = SINKHOLE

C = CAVE

P = PENETRATION

SITE	LEVEL	OWNER	ACCESS DETAILS
MOUNT GAMBIER - SOUTH AUSTRALIA			
Ewens Ponds	Nil	DENR P.O. Box 1046 Mt Gambier 5290 (087) 35 1177	Groups of 6 or more, phone/mail to Dept. of Environment & Natural Resources (DENR). Smaller groups, no need. Ponds usually closed 1 Sept-30 Nov. yearly (phone to check). Indemnity form to be completed.
Horse & Cart Tea Tree	CN CN	Peter Cunningham PO Box 643, Mt Gambier 5290	By phone or mail, 1 week prior. Ph: (087) 38 4003
Little 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 CN C	DENR P.O. Box 1046 Mt Gambier 5290	Contact DENR by phone/mail prior to diving. Stay out of Gouldens when pump is operating. Indemnity form to be completed. Ph: (087) 35 1177
Ela Elap One Tree	S S	Mr. Peter Norman Private Bag 67, Mt Gambier 5290	By phone or drop in before diving. Accommodation also available. Ph: (087) 38 5287
Swim Through	C	Valerie Earl PO Allendale 5291	Currently CLOSED pending new access arrangements.
Piccaninnie Ponds	S	DENR P.O. Box 1046, Mt Gambier 5290	Permit holders by phone. Be aware of delicate vegetation. Indemnity form to be completed. Ph: (087) 35 1177
Hells Hole Pines Mud Hole	S C C	Primary Industries S.A. (Forestry) PO Box 162 Mt Gambier 5290	Contact Primary Industries S.A. (Forestry) by mail or phone to arrange permit. Collect permit from Regional Office, Jubilee Hwy., Mount Gambier. No diving on total fire ban days. Permits will ONLY be issued Mon-Fri between 8.30am-4.30pm. Ph: (087) 24 2759
Kilsby's	S	Landowner leased to S.A. Police	Restricted access conditions apply - refer Guidelines Issue 54. Twin tanks, maximum of 40 metres depth. Write to: P.O. Box 77, Mount Gambier, 5290, six weeks prior. 1995/96 weekends - 2 & 3 December 1995, 27 & 28 January 1996, 6 & 7 April, 8 & 9 June, 27 & 28 July.
Shaft	S	To be advised.	
Ten Eighty Bullock Hole Black Hole	S S	Mr. Colin Traeger PO Box 12, Mt Gambier 5290 (087) 26 6215	Contact CDAА Records Officer for diving deed THEN mail Booking Form to Colin Traeger 2-6 weeks prior, stating names/qual. of all divers, and time slot - 1pm Saturday, 9am or 1pm Sunday ONLY. Closed October-November for shearing.
Max's Hole	C	Mr T. Edwards PO Box 1319 Mt Gambier 5290	Phone or mail 1 week prior to dive. Ph: (087) 26 8277

CDAA SITE ACCESS

SITE	LEVEL	OWNER	ACCESS DETAILS
MOUNT GAMBIER - SOUTH AUSTRALIA (continued)			
Engelbrechts - East - West	C P	Mt Gambier Council	Obtain key from Mt Gambier Tourist Information Centre. Access agreement must be signed prior to diving. Key must be returned by 5pm.
Three Sisters	P	Millicent Council	Contact Linda Claridge (Records' Officer). Access available for experience Penetration divers only. Low profile or side mounted independent air systems required. Access agreement must be signed prior to diving.
Iddlebidy (5L250)	P	Primary Industries S.A. (Forestry)	5L250 open 1st & 3rd weekend of month. 5L290 open any weekend. Max. 4 divers per dive per day, 1 dive per day for each site. Only
Nettle-Bed (5L290)	P	PO Box 162 Mt Gambier 5290	Penetration divers completed practical in-water cross-over. Bookings via Forests Clerk - key from Lady Nelson. Must show permit & card. (087) 24 2759
McKay's Shaft	S	Closed until further notice.	
Tank Cave			Apply in writing at least 2 weeks in advance - CDAA Tank Cave Access, PO Box 290, North Adelaide, 5006. Open first weekend of each month. NB: New divers must first request an application form.
SOUTH AUSTRALIA - Narrina Lake Cave			Access under negotiation - closed until further notice.
NULLARBOR - WESTERN AUSTRALIA			
Cocklebidy	C	Regional Manager	Must apply for permission to dive at least 4 weeks in advance of trip. Ph: (098) 41 7133.
Murra El Elevyn	P	C.A.L.M.	
Tommy Grahams	C	44 Serpentine Rd,	Small dive site next to main chamber: Sinkhole
Weebubbie	C	Albany 6330	
NULLARBOR - SOUTH AUSTRALIA			
Warbla	P	NPWS Ceduna	Currently CLOSED to all diving subject to draft management policy.
WELLINGTON CAVES - N.S.W.			
Limekiln (McCavity)	P/C	Both Penetration and Cave Level are being accepted for this cave depending on it's water level at the time. The cave has a restriction at the entrance which is underwater making it a Penetration Dive. During drought, the water level drops to form a small lake below the restriction allowing experienced Cave Divers access to this delicate cave. Access arrangements allow one weekend per month. Divers will be joining already commissioned research groups.	
Water (Anticline)	C	Affected by high CO ₂ levels during Summer/Autumn. Apply for bookings to dive at least 4 weeks prior, as specified dive dates have been prearranged until the end of 1994. Ph/Fax Neil Vincent (043) 97 1798	
Narrina Cave	P	CLOSED	

CDA A INSTRUCTORS

INSTRUCTOR	CN	S	C	STATE	PHONE (H)	INSTRUCTOR	CN	S	C	STATE	PHONE (H)
Nick Jones	•	•		ACT	015 851 313	Stan Bugg	•	•	•	VIC	(03) 9379 8791
Ian Gothard	•	•		QLD	(075) 71 0106	Brian Cornell	•	•		VIC	(059) 85 2514
Frank West	•	•		QLD	(070) 53 7334	John Dalla-Zuanna	•	•	•	VIC	(055) 61 2805
Ron Allum	•	•	•	NSW	(02) 552 6348	Chris Edwards	•			VIC	(03) 9579 4352
Terry Cummins	•	•		NSW*	(02) 417 2800	Barry Heard	•	•	•	VIC	(056) 27 6474
Peter Grills	•			NSW	(049) 90 1118	Ian Lewis	•	•	•	VIC	(03) 9395 1008
Gary Norgard	•			NSW	(049) 68 4588	Phillip Mann		Retired Sept 95			
David Ogilvie	•	•		NSW*	(02) 977 4355	John McCormick	Specialist Non-Teaching				VIC*(03) 9555 5777
Andrew Robertson	•			NSW	018 412 563	Warrick McDonald	•	•		VIC*	(03) 9579 2600
Des Walters	•	•	•	NSW	(060) 25 3506	Tony Richardson	•	•	•	VIC	(03) 9754 6163
Andrew Wight	•	•	•	NSW	(02) 428 2176	Bob Wealthy	•	•	•	VIC	(03) 9789 6389
Liz Wight	•	•		NSW	(02) 428 2176	Frank Ziegler	•	•	•	VIC	(055) 26 5288
Chris Brown	No longer teaching					Marilyn Boydell	•	•		WA	(09) 349 5646
Greg Bulling	•	•	•	SA	(08) 265 4978	Gary Bush	•	•	•	WA	018 318 837
Glen Harrison	•	•	•	SA	(08) 386 3237	Simon Jones	•	•	•	WA	(09) 344 4343
Max Marriott	•	•	•	SA	(08) 47 3360	Hugh Morrison	•	•	•	WA	(09) 409 9807
Richard Megaw	•	•	•	SA	(08) 344 1730	Andrew Poole	•		•	WA	018 928 028
Richard McDonald	No contact – presume resigned					Steve Sturgeon	•	•	•	WA	(09) 527 9211
Stephen Arnel	•	•		VIC	(055) 26 5230	John Vanderleest	•	•	•	WA	*(09) 426 8623
Bill Bernhardt	•	•	•	VIC	(03) 9725 9716	Alan Jolliffe		Currently Overseas			
Jane Bowman	•			VIC*	(03) 9579 2600						* Work phone number

LETTERS

South Australia Police — Water Response Section

25/5/95

Dear Lisa

I am writing this letter to express my concern at the information that has come to me through various members of the Cave Diving Association of Australia. The information I have is based partly on fact and what is rumoured as having occurred in the sinkholes and caves of the South East of South Australia.

The following occurrences have come to my attention, and appears to be gathering momentum as the 'norm' when carrying out recreational diving in the South East.

- Diving well in excess of the recommended 40 metre depth limit (whilst being under a guide and/or in a group of divers)
- Using 100% oxygen in water for decompression stops
- Using mixed gases, eg in excess of 30% oxygen (nitrox)
- Using Tri-Mix gases
- Compromising land owners by requesting permission to dive outside the recommended diving CDAA standards.

My obvious concern is that familiarity and complacency has occurred with some divers in regard to recommended standards and procedures and this attitude is predisposing to causing a diving illness and/or deaths.

I have included copies of media releases to reinforce the reasons why the Sinkhole Committee was originally formed and to highlight my concern.

These concerns will be raised by me at the Sinkhole Liaison Committee meeting being conducted at Mount Gambier on Friday 26th May 1995. (I am available to express my concerns in your "Guidelines" if the Committee advises so.)

Yours sincerely

RON JEFFERY,

Senior Sergeant,

Officer In Charge,

Water Response Section

19/7/95

Dear Lisa

Reference: Kilsby Sinkhole

The South Australia Police are the leaseholders of Kilsby Sinkhole and do not sanction nor will allow the use of 'Mixed Gases' or 'Oxygen' when diving is being carried out by members of the Cave Divers Association of Australia in Kilsby Sinkhole.

Access to the Sinkhole will be denied for an indefinite period if mixed gases or oxygen is used by your members.

The continued support of the South Australia Police for your members to access the site will only occur whilst 'air' is used as the breathing medium, and the conditions of entry are complied with.

If you require any further information please contact me.

Regards

RON JEFFERY, APM

CDAA/Landowner Liaison Committee

TO ALL CDAA MEMBERS

The landowner members of the CDAA/Landowner Liaison Committee, which is made up of the CDAA Directorate & Landowner/representatives fully endorse the comments made by Senior Sergeant Ron Jeffery of the South Australian Police Department.

As the people responsible for CDAA classified sites we are willing to allow appropriately qualified members of the CDAA controlled access to dive. We feel that these unique features should be available for the education and enjoyment of divers.

We are however, concerned by what we hear about the manner in which people are using these sites. When allowing access our primary consideration is the safety of the diver, but if divers are consistently undertaking diving practices that are outside the recommendations of the CDAA and that expose landowners to liability then access arrangements may have to be reviewed and the sport will most definitely suffer.

The onus is on all CDAA members to ensure they are complying with approved standards and acting in a manner that will ensure the continued access to these sites.

We fully support any action taken by the Directorate to overcome these problems.

TIM COLLINS

Chairperson, CDAA/Landowner Liaison Committee

The Sinkhole or Deeper, Darker, Longer, Better!

Most RAHSAC divers believe that safe diving is just a matter of keeping an eye on the ad in Diver Magazine and buying the latest gear as soon as it becomes available. But, as this recent adventure shows, even the best equipped and most scrupulously careful divers can have mishaps.

Cave diving is a challenging and specialised form of diving, not without its own share of specific dangers. Everyone has read in this magazine of the early attempts on the sinkhole. Time moves on, and

penetrations get longer, requiring greater planning and more careful selection of equipment. The planned dive this time was to push the air space beyond the aptly named Felchers Bottom. It was to be relatively shallow compared to many already made. In view of the thermal problems inherent in diving mixed gases it was felt that dry suits would be required for the prolonged decompression. To keep a sense of proportion we have already plumbed similar depths on a single 12 with a line tied round our waists!

A challenging dive to be sure, but I was up to it. Dual totally redundant mixed gas 15s, one with a Y and independent redundant regulator, side mounted twin travel EAN40 12s, FCDs all round, 61 pony and 61 O2 stage bottle. Some divers prefer to leave the O2 bottle on the line but having had one nicked by a fisherman and lost a second when the string broke, I now feel safer carrying it with me.

Each Mixed regulator was equipped with an octopus alternate second stage and an octo-plus inflator and regulator combined. Of course the wings had a redundant second bladder to give 44kg of lift. This runs off the right regulator (primary one, mixed) octo-plus. Since there is always a remote possibility in times of stress or narcosis to get confused about which regulator to use I always colour code them. I find the most effective way is to paint coloured bands around the body of the regulator. If, like me, you favour Poseidens, this gives a pleasing effect not unlike a large electrical resistor. Primary One Mixed is Blue-Gold-Blue, Primary One Mixed Alternate is Blue-Gold-Red, Redundant Primary Mixed is Gold-Blue-Blue, Redundant Alternate Mixed is Gold-Blue-Red and so on. To absolutely eliminate any confusion I also mark the second stage — PE = Primary EAN40, PM = Primary Mixed, PAM = Primary Mixed Alternate, etc.

We had just entered the water when the first mishap happened. My buddy (no names) decided to scrub the dive as he had a problem with his number 4 regulator (= PEA). I decided to make the dive alone. A novice fresh from the hands of the RAHSAC Instructors may find this irresponsible and even alarming. However for a fully equipped, experienced diver like myself, it's a piece of cake.

I made a fast decent down the main line and across the cavern at 35m to Felchers Bottom. Having tied the line reel off with a fail-safe Swiss Army Knot, I prepared to set off through the constriction. I did a final check on my lights, Primary, redundant, primary backup, redundant backup, backup backup all working. I switched and inhaled deeply on the mix and struck out for the depths. Then it happened, click, out of gas. I quickly shifted to my Redundant Primary Mixed. No gas! or was the valve off? I reached back to check but the lights on my roll bar regulator protector (a nifty idea pinched off a Jeep) blocked the way.

Nothing to do but switch to the pony. I began an emergency ascent even as I switched regulators, finning hard for the cave exit. I got scarcely one breath from the

Continued on page 12

GUIDELINES

ATTENTIONAL ALL VICTORIAN CAVE DIVERS

A new non-profit dive club has been formed to cater for all special interest diving groups, in particular cave diving.

The club meets once every 2 weeks at the Brighton Surf Lifesaving Club.

Meetings usually commence with an informal BBQ and include guest speakers.

Club activities include weekend dive trips and cave diving expeditions.

For more information call Rob Boucher
(03) 9754 7685, 018 539 115 or Richard Servadei
(03) 9578 7291, 018 300 269.

All divers are welcome!

EQUIPMENT

A Versatile Shotline for Cavern and Sinkhole Diving

A desirable but often overlooked item of equipment is the shot line.

It is assumed by many to be such a simple item that any old lump of rope joined to a float will do. This frequently leads to disappointment with what the makeshift shot line offers, and a reluctance to bother with one on future dives.

A shotline provides the diver with several clear advantages:

- The divers have a point of reference when descending and ascending. This is especially valuable in poor visibility.
- The shotline can be placed away from walls. This is far more environmentally friendly than descending and ascending on the walls, where divers and bubbles cause damage, and also reduce visibility.
- The shotline can be marked in decompression depth increments.
- Spare air can be located at these deco stops.

The ideal shotline will hang vertically. Sinkholes vary in depth, so a versatile shotline needs to be easily adjustable. The different vertical drops vary from 13m in 1080, 25-30m in Little Blue, 28m in One Tree, and less than 10m in several of our local cavern training venues.

Our shotline comprises four separate sections:

- The float
- The decompression line, separated by 10cm rings at 3m, 6m, 10m and 15m
- The down line, 24m long, with a wire "shark clip" on the free end
- The shot weight which has a 2m line ending in a 10cm ring

The float must be quite substantial, and capable of supporting several negatively buoyant divers. Our buoy has a capacity of 20 litres, which can support up to 20 kilograms. The deco line is attached to the float with a caribener or D shackle. Spare air can be clipped at a chosen depth prior to a dive. The line is preset before the dive, based on what depth is expected. The down line is attached to the ring on the bottom line, then attached to the 15m ring on to deco line. As the divers reach the 15m ring, the line can be shortened by sliding the shark clip down, and attaching when the line is vertical. This takes no more than 5-10 seconds.

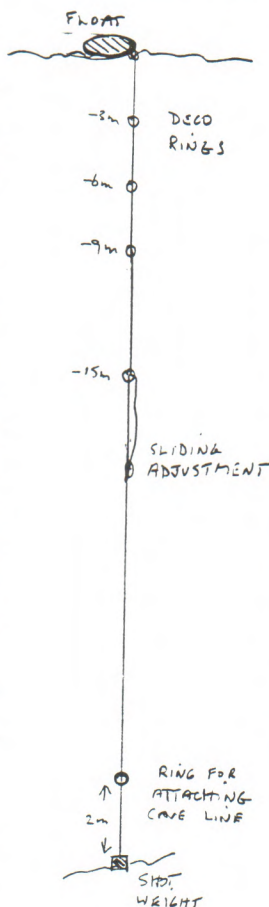
The divers can attach their reel line to the ring 2m off the bottom, without stirring the silt. The system is versatile enough to be adjusted for depths between two and 40m, depending on which sections are joined together by caribeners.

Needless to say, the rig is equally useful for ocean diving.

We used 12mm synthetic rope. We chose three strand rope because it allowed us to insert the many eye splices needed to attach the rings.

Total cost for the component parts was about \$60.

BY STAN BUGG AND BRIAN CORNELL



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TRADING POST

FOR SALE: Seatek Wings plus backplate and harness — \$200. Dry suit, Viking size 3 (that will fit you if you are around 6ft tall), needs some minor repair — \$550. Phone John (03) 416 9370.

FOR SALE: Alpha 2000, 35 watt, as new, with charger — \$300. Alpha Explorer Reel, with line — \$120. Nikonos 15mm lens c/w viewfinder — \$2500. Closeup kit — \$400. All as new with books. Fully serviced. Phone Gary 018 318 837.

FOR SALE: Seapro Wings, brand new, never been wet, approx 45 lbs lift — RRP \$450, sell for \$300. DiveRite large wings in as-new condition, approx 60 lbs lift — RRP \$499, sell for \$325. Complete AGA full face system in exc cond, positive pressure full face mask & regulator, twin 300 bar cylinders with manifold, reserve system, harness & instruction manual RRP \$3000 approx, sell for \$1200 ONO. Tony (03) 9781 3820 or 018 370 941.

BUSINESS REPORT

The AGM was once again an event not to be missed, discussion between members over matters, that will possibly effect the CDAA for many years, is to be encouraged.

A number of points were directed to my predecessor by the members during question time, that I believe require further attention.

(a) The substantial amount of time spent "putting out fires".

I feel that in future instead of members "swamping" the Directors with questions, which are usually left on the answering machine, and require an answer (telephone calls are one of our biggest cost areas) that they write to the Director concerned. This will ensure a WRITTEN answer, there cannot be a misunderstanding, you will have the facts, and so will we.

(b) Sections of the elections were constitutions breaches.

The situation was explained satisfactorily to the members, but as Business Director I will endeavour to prevent any future transgressions.

(c) Suggesting that consideration be given to outsourcing Guidelines.

I will be meeting with the Editor and other concerned parties in the near future to discuss some way to decrease costs but effectively present a magazine that we can all be proud of, carrying the CDAA banner.

(d) The need for cost cutting.

It would seem I have already ruffled a few feathers, but I make NO apologies, costs must be cut if we are to survive as an Association. The auditor (Kevin Burrowes) and myself discussed the situation after the AGM and basically the Association is in a sorry state, which must be remedied as soon as possible. A new computer program has now been installed at the Treasurer's office and we will be able to know our situation, within a short time of any request for information.

(e) The Directorate to give more financial accountability to members.

What this simply boils down to is that without an approval I will not present claims for payment. If you are working in some form for the CDAA and expect compensation for monies spent, then apply to me FIRST, submit a budget for the position you hold, only spend money after gaining approval and consider any money you spend without the OK as your own. The CDAA needs more volunteers willing to "put in" — this would see our balance increase considerably.

(f) The Kilsbys account

As far as I am concerned this matter is closed. I believe the member involved has acted in good faith. I understand a request for CDAA materials to be returned will be complied with and that will end the matter.

(g) The need for constitutional change

Cheryl Johnson beat me to it, to her credit she raised a motion that a "Limited Directorate to be set up with C. Johnson as a member to review the constitution and to report back in January 1996 with a view to voting at the AGM". The guidelines for this are well covered by point 18 of our Constitution. The Constitution also provides under 17(vi) that the National Director will "be an ex-officio member of all Limited Directorates of the Association".

(h) The issue of the 3-person Directorate

As per above, this area will be covered by the National Director. The area does not fall within the role of Business Director under the "Duties of Directors" as per the Constitution.

(i) The legal costs ballooned last year due to unprecedented claims.

I can assure the membership that should a similar dispute come about the parties will get NO sympathy from this Director.

(j) Unpaid creditors

I am endeavouring at this time to catch up all outstanding accounts. I will stress again that if approvals were not granted in advance or receipts not supplied then individuals may miss out until the relevant documentation is forthcoming.

(k) Membership

At the time of writing this report (23/8/95) the Association has 664 members.

(l) A motion was passed that "The budget should be prepared by the Directorate and put back to the members, to ensure that the Association trade in surplus next year and that the Directorate would take all necessary steps to cover this matter"

I am currently working on a spreadsheet to achieve this goal, a few budget forecasts are still outstanding and I am trying to tie up all loose ends as quickly as possible. To those of you who have not submitted a budget for your area of concern, I am more than willing to lend you my crystal ball.

(m) A new \$5 levy was passed at the meeting to allow the insurance deficit to be adjusted. Therefore all members currently owe the Association this levy. Please forward your cheque or whatever as soon as possible, so that your membership standing can be brought up to date.

The current standing of the CDAA (thanks to Wayne and Jacqui Wilson) after I sorted through the creditors list is:

(1) All previous financial year creditors have been paid

A couple of exceptions owing to lack of information.

(2) The CDAA bank balance is \$17,079.70

(3) Outstanding debtors total \$5,537.23

(4) All creditors have been paid up to 15/8/95

WARRICK McDONALD,
Business Director

THE SINKHOLE OR DEEPER, DARKER, LONGER, BETTER! continued from page 10

pony!! That left only the O2 stage tank, Red-Blue-Red-White. Normally it would be suicide at depth to use this given the risk of O2 fits, but there was no other option and I was already ascending rapidly. A calculated risk but one worth taking. I whispered a prayer as I shoved the primary regulator in my mouth and was rewarded with a healthy lung full of air. I slowed the ascent to the recommended 10m/min and continued. Something was still wrong! Was I more panicked and winded than I thought? Running out of air usually causes a dramatic increase in my consumption. (Once I can find the redundant reg of course!) I was breathing so fast I was hyperventilating, but

without finding any sustenance in the air. It took me several breaths to figure out why. I was breathing Argon!

Obviously whilst kitting up I had switched my Argon dry suit inflation bottle of my O2 stage bottle. An understandable error to be sure, but right at that moment terribly inconvenient. In some ways I was quite lucky this time. The last time it happened my long Johns had been oil stained from roadside repairs on the Mike Philips Range Rover. When the high pressure O2 hit the oil it immediately ignited and blew the leg off my dry suit. The resultant fire took every hair off my right leg as slickly as I Mac. I learnt my lesson that time. I no longer travel in Range Rovers!

The Argon was flushing out the O2 in blood at a great rate now but still wasn't

giving any O2. With every breath I was getting closer to unconsciousness. A hard choice! A free ascent with no O2 in my lungs or continue breathing the Argon which would at least keep the CO2 levels down. I chose the latter and hit the surface just after I blacked out.

No problem there. When I dive, my buddies know enough to keep a sharp eye out for me, just in case of such minor difficulties. Besides, when I break the surface, they tell me that the effect of all my lights bursting out is quite dramatic. Rick says it is just like standing point black in front of a parked 747 when they switch on the landing lights. He should know, being a pilot. Add to that the frantic beeping of multiple dive computers screaming for safety stops and you've got a real attention getter. It usually guarantees I won't be floating face down for too long!

ENGLEBRECHTS CAVE SITE NOTICE

**Englebrechts will be closed
on the January long weekend
(26th, 27th & 28th)**

BUT ALL IS NOT LOST

On that weekend a team of cave divers are promoting the sport. Two divers will be diving for fifty hours with a video link-up to the surface. All of the action will be happening on the grass above the cave in a large marquee. Lots of diving memorabilia, equipment displays, try your luck at our free raffle (win a cave diving course), have your photo taken in a U.S. Navy Mk5 hard hat diving suit, and lots, lots more. Your support will make all our efforts worthwhile and would benefit the cave diving industry. So bring your family and friends and let them see first-hand what your sport is all about.

Thank you,
Allan Skinner

If you have any ideas or interesting equipment or even photos that would make an attractive display for the public, I would be grateful for your input. You can call me on (08) 263 5531. I must apologise for any inconvenience to those divers that planned to dive Englebrechts on that weekend.

**ALL ENQUIRIES PLEASE CONTACT
ALLAN ON (08) 263 5531**

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A few minutes later I was drifting back to consciousness, the doc had got off my chest and Joe had stopped the mouth-to-mouth. The good natured ribbing started, as you can well imagine. Rock Bottom for me again. Looks like it was my turn to buy the Amstel Lights (that's Dutch beer for all you yobbos!).

It wasn't hard to figure out what the problem had been. I'd started the dive breathing from Pony one, Red-Gold-Blue, not Primary EAN40 One, Blue-Gold-Red. Or was it Blue-Gold-Blue? The colours all look so different underwater. When I thought I was shifting to the Mixture, I was shifting to the Primary EAN40 One — which had never been switched on. The blame for that, of course, lies squarely with my absent buddy!

Well we never did get past the constriction to the air space at Felchers Bottom. It will have to wait. Meantime have you checked out the specs on the new Cis-Lunar Rebreather, makes the Oceanic look sick! Throw away your dive tables, dial in the partial pressure (whatever that is) and go as deep as you like. 300m as easy as 30 and no decompressing — the machine does all that for you! My order is in already. Continental Shelf drop off — watch out!!

An anonymous stinkhole diver
REPRINTED RAHSAC, JUNE 1994

CALL FOR VOLUNTEERS

At the AGM a motion was voted in — it reads as follows: “**Limited Directorate to be set up to review the constitution and to report back in January 1996, with a view to voting at the AGM. Cheryl Johnson is to be part of the Limited Directorate.**”

Any members interested in participating in this Limited Directorate with Cheryl and Lisa Bernasconi, please contact Lisa as soon as possible. I must point out as with all Limited Directorates this year, budget constraints will mean that there is no funding for travel and/or phone calls. Everything must be done on a voluntary basis.

PHIBIAN REBREATHER

Rebreathers are quite different from open circuit equipment with which recreational divers are familiar. With conventional open circuit equipment the diver carries one or more cylinders of pre-mixed gas. Typically, in the normal sport diving range the gas mixture is compressed air. It is however becoming increasingly common for recreational divers to make use of synthetic mixtures of nitrogen and oxygen which have been specifically mixed for the planned depth of the dive.

As the diver inhales, breathing gas is passed from the storage cylinder via the regulators to the diver. The diver metabolizes a small amount of the oxygen present in the breathing mixture. This process caused Carbon Dioxide to be liberated in the lungs and this together with the un-metabolized oxygen and the inert gases are exhaled and lost to atmosphere.

With each breathing cycle, between 3% and 5% of the oxygen will be metabolized and a similar amount of Carbon Dioxide produced, leaving the balance to be lost to the water. While a small amount of the inert gases within the compressed air, predominantly nitrogen, will be absorbed by the tissues of the body, most will be just exhaled and lost.

It can be readily appreciated that this process is VERY wasteful and as the ambient pressure increases, as the diver descends deeper into the water column, the worse it becomes.

A rebreather such as the PHIBIAN CCS captures the diver's exhaled breathing gases, cleans, analyses, re-oxygenates and RECYCLES the breathing mixture with no loss to the surrounding water. In addition to re-circulating the diver's breathing gas, constant adjustments to the composition of the mixture is made to maintain the ideal level of oxygen. This has a profound effect on the efficiency of the dive, expanding the No-decompression envelope for the recreational diver without the need for synthetic pre-mixes and gas blending.

Rebreathers such as the Phibian CCS are equipped with a fully integrated dive computer, data logging facilities and user friendly controls and BC. The recreational diver is able to take advantage to techniques and methods previously confined to the domain of the commercial and military diver.

TECHNICAL DESCRIPTION OF THE PHIBIAN CCS50

It is a fully functional electronically controlled closed circuit scuba system, designed to maintain a fixed partial pressure

of oxygen within the diver's breathing mixture. The system is designed for use within the normal air diving range. The depth limits for recreational diving vary around the world and in keeping with Oceanic's policy of encouraging safe and responsible diving, it is recommended that the use of this equipment be limited to 35 metres or 130 feet.

STANDARD CONFIGURATION

PHIBIAN CCS50 is worn on the diver's back, with all the critical parts of the system contained within the protective backpack.

The following schematic shows the main components of the CCS. The gas supply comprises two 3 litre cylinders rated for a charging pressure of 232 bar, (3400 psi with a capacity of approximately 24 cu.ft). One cylinder is for oxygen or a predominantly oxygen mixture and the second compressed air.

The diluent gas which for the CCS50 is

usually compressed air is similarly stored in a 3 litre cylinder with a charging pressure of 232 bar (3400psi/24 cu.ft).

CARBON DIOXIDE absorbent canister. The coaxial canister fitted to the CCS50 has a capacity of 2.9 litres.

COUNTER LUNG/BREATHING BAGS The CCS50 is a dual breathing bag system and each bag has a capacity of 4.5 litres. One bag provides the inhalation compliant volume, the other the exhalation compliant volume.

POWER PACK 4 D-cell alkaline or regular batteries supply power to the unit with options provided for dual lithium power supplier for specialist applications.

BUOYANCY Compensatory/Harness assembly The unit is supplied as standard with a buoyancy compensator which draws gas from the diluent cylinder. The buoyancy compensator may also be fitted with an independent inflation cylinder.



SAFE SECOND/emergency gas supply
In its basic form a conventional octopus or safe second stage is attached to the system's diluent cylinder.

ELECTRONIC Process Controller and Sensors The gas mixing system monitoring divers data displays are controlled by an on-board computer and Oceanic proprietary software. The oxygen partial pressure of the circulating breathing gases is measured by electrochemical sensors, the signals from which are fed to the main computer for processing. Carbon dioxide sensors which are an option to the basic system use infra red technology. Depth and the pressures in the various gas cylinders are measured by electronic strain gauges. The status of the equipment is communicated to the diver via the main data display with a conventional icon and alpha numeric based liquid crystal display. A head up display in the form of colored light emitting diodes or numeric field diodes provides key information within the diver's field of view and an audio alarm may be fitted to alert the diver to check main data display.

The details of the dive are recorded to internal memory that may be subsequently down-loaded to a personal computer. Two data recording modes may be selected, the FULL mode for completed tracking of all parameters and Reduced mode for just the basic dive record.

DECOMPRESSION Computer The on-board dive computer provides real time decompression computation based on the Canadian DCIEM model.

The oxygen partial pressure is controlled to a level that is normally higher than would be found in air if that were used as the breathing gas.

The increased oxygen partial pressure present in the breathing mix provided by the CCS50 expands the No-Decompression envelope for the recreational diver by reducing the inert gas uptake. Within the decompression range the decompression obligation is also reduced. For example, for a dive to 40 metres for 60 minutes (130 ft for 60 minutes) the respective decompression obligation for the Air diver and the CCS diver are given below:

- Air diver's decompression obligation
40msw 60 min = 118 min.
- CCS50 decompression obligation
40msw 60 min = 46 min.

GAS SAVINGS While the cost of compressed air may be low, the problems in providing enough gas for even a modest open circuit dive are significant. Going back to the 40 msw 60 minute dive, the mean open circuit gas requirement would be approximately 9000 litres, as compared to the 400 litres of gas used by the CCS.

For further details contact Oceanic Diving Australia on 008 034 413.

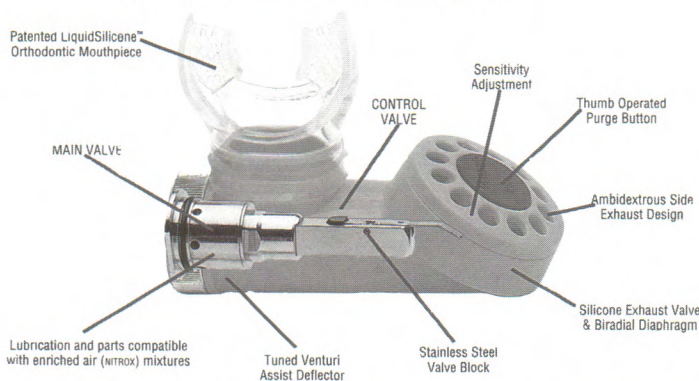
by Russell Kit, CDAA 260

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NEW PRODUCT

Drager Atlantis I

In a move that is likely to leave deep divers miffed, Dragerwerk AG and Uwatec AG have decided to pitch the first readily available rebreather at the general diving public.

The Atlantis I is expected to be strapped to the backs of no-decompression divers in Australia by the end of this year.

The Draeger range of mechanical

rebreathers, based on FGGIII, the FGT series and others, have become the most widely used military rebreathers in the world.

Now a sports derivative has been reconfigured by Drager for recreational applications and will be distributed by Uwatec on a worldwide basis.

Use and purchase of the Atlantis I will require that the user has qualified in the application of the apparatus. The first approved international training programme, by Technical Diving International, was launched at their UK facilities meeting on May 4th, in Bristol, UK.

TDI's first instructor course will be run in July, in the Bahamas, and student and instructor courses will be available thereafter.

Goulden's Dreaming

The mission objective was to "bottom-out" Goulden's Sinkhole, a particularly menacing pool of water which lay on the outskirts of Mount Gambier in South Australia. It is a site which has been dived by many, most of whom return with horror stories about their encounters.

Tales of eerie monsters, looming from the algae gloom to deprive hapless divers of their masks and regulators, while entangling them in the lines which are the only means of finding the way to safety, sound fanciful, but occur too regularly to be casually dismissed.

And while divers from all parts of Australia have attempted to reach the bottom of this seemingly bottom-less pit of misery, until now the perils and narcotic depths, in excess of 10m, have thwarted all.

Until now.

The successful assault on Goulden's was accomplished after a massive amount of planning. Obviously a small army of top-side support had to be conscripted to handle the enormous logistical problems of transporting the estimated 60kg of equipment, used by the three member "push team", down the steep 45 degree slope which extended almost 30m to the water's edge.

Needless to say, the "push divers" needed to be not only highly trained in the use of all manner of high-tech equipment, but had to be psychologically as well as physically in shape to handle the fear factor and the emotional strain.

Unlike that other exploratory exercise with which diving has been likened -- mountain climbing -- these hardy souls had no idea what lay ahead of them. Apart from

the limited visibility offered by the menacing morass, the "push divers" were often working without masks and with only one air source between buddy pairs.

Because of the extreme depths facing the in-water team, God's Nitrox, sometimes referred to as "air", was deemed unsuitable for the final stage of the assault. A special breathing mix consisting of 38 per cent nitrous oxide was prepared.

This was deemed to be the appropriate mix after much experimentation by dive team leader BK, who emerged from one of his meditation sessions in a Sydney hyperbaric chamber uttering the now apocryphal statement "you've got to laugh!"

Meanwhile the surface support team was coping with a myriad of environmental problems. Freak winds seem to emerge from the bowels of Goulden's hole. At one point they threatened by dry the towels hanging from the roof racks of the convoy of vehicles parked on the rim of the massive collapse.

They had to put aside forboding which arose after support team members were confronted by ominous spiritual signs, such as the appearance of a menacing blue-tongue lizard on the narrow path leading to the entrance.

Despite the vast quantity of water into which the team would drop, perhaps never to return, it was deemed unsuitable for drinking and treks had to be made to the Bellum pub for supplies of suitable fluid replacements.

Even this had to be filtered through kidneys. Sometimes a secondary filtration process utilising lycra and neoprene membranes was used.

A unique communications system was established to link the divers with the support crew. Messages from above were sent to the divers using empty beer bottles in a complex code. One empty for stop. Two for O.K. Three or more for "off-to-the-Bellum-pub-for-more-fluid-replacement".

Yabbie traps were set in case of emergency in water nourishment.

As the "push divers" readied for their mission the blue

tongue lizard reappeared on the now well-trodden track leading to the brink of the abyss. Its presence was disquieting. By now the question of whether it was an omen sent by the spirits which inhabit Goulden's cast a pall over the group. Then it was suggested that the creature may merely have been scavenging through aftermath of an avalanche, which resulted when one of the support crew dropped the remains of a large chocolate mud cake?

Despite apprehension, the "push divers" decided to go ahead with their mission and gently eased their way down into the murky depths and propelled themselves with their hi-tech Avanti and Liberator propulsion devise.

Their odyssey took many hours and they encountered strangely shaped obstacles and restrictions which finally forced them to turn back. The return journey presented its own problems, as an intricate decompression schedule, composed using advanced computer software written by a mixed-up gas organisation in Manly, NSW, had to be adhered to.

"The difficulty was that dive timing devices do not work in 10 second increments," explained team member known only as the Generator. "My deco was over mid gas switch. I blinked and missed it," she giggled, between lung-fulls of pure nitrous oxide back at base camp.

A thorough de-brief was conducted over bottle of Tokay and an appropriate selection of local cheeses and biscuits. Although time and resources were, by now, stretched to the limit, it was decided to make one final charge.

"What the heck!" muttered team leader BK.

Unfortunately this was terminated when lead diver, Elle The Belle, jammed herself in a submerged tree trunk. While extricating herself she drew on her enormous mental capacities and devised a whole new system of diver communications, which is sure to become the lexicon for use in limited visibility situations.

Called the "Cone Head System", it involves gentle squeezes to the air pocket which forms in hoods which do not contain customised venting apertures.

Stay tuned for the next mission. Linking the Two Sisters.

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Convenience At 171mm in diameter, BOSS is significantly slimmer and more compact than any other on the market giving you a more stable dive.

Finish No question, BOSS has the best, most durable finish available. They have a course texture of zinc coating plus baked on enamel which is the toughest and best paint finish available. This is why BOSS cylinders look so good for so long.

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V A L E

MRS BETTY JEAN ASHBY

Members who have enjoyed the spectacular beauty of the sinkhole called "The Shaft" will be saddened to learn that Mrs Ashby passed away quietly, at the age of 70, during the night of Thursday, 27th April 1995.

Her recent health problems and hospital trips had caused concern for many of us who had known and respected this remarkable lady for many years, but nobody suspected that her condition would be so suddenly fatal. In fact, when I spoke to her just a few hours before she went to bed that night, she was as bubbly and cheeky as ever, telling me that she would take my advice and get her poor husband, Viv (who has his own heart problems), to do the ironing, washing and the other domestic chores for a while!

Having known Viv and Mrs Ashby for more than 12 years (I never felt it was right to call her "Jean!"), I actually looked forward to standing in the rain for many hours each year, gossiping about cave diving and cow-breeding matters while Viv wisely stayed out of sight, in the warm living room . . . now, it will never be the same again. and I will really miss her "ta-da"s at the end of our telephone chats.

To Viv and Mrs Ashby's family, Trevor, Anne, Brendan, Kerryne, Robert and Allison, the grateful cave diving community extends its heart-felt thanks and sincere condolences during this difficult time; we wish you well for the future and thank you again for your support over the years. Mrs Ashby's friendship and genial nature will always live on in the memories of the present generation of cave divers who have visited that wonderful sinkhole.

BY PETER HORNE

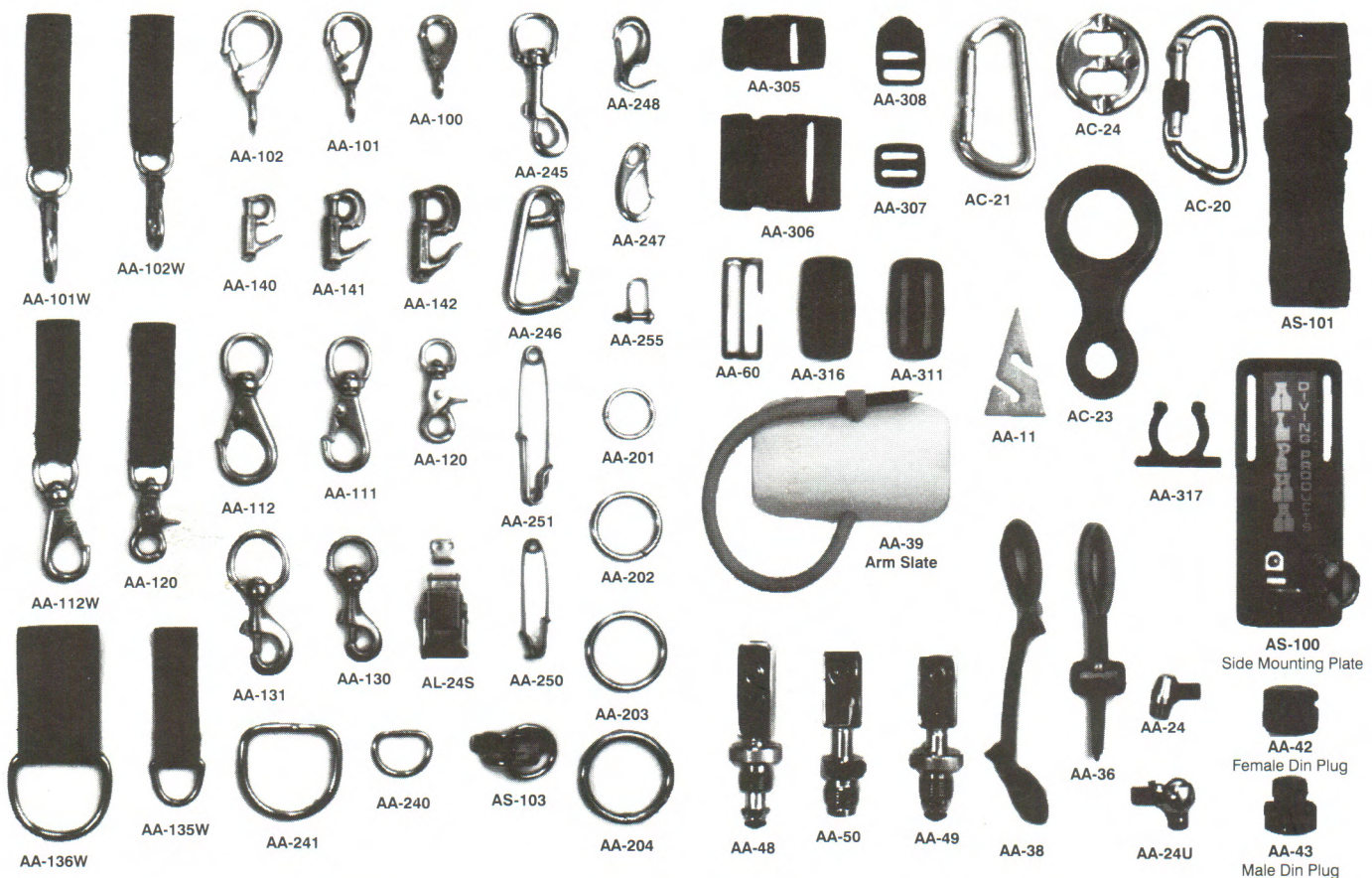


Mrs. Betty Jean Ashby, 1991

Photo kindly provided by Mr. Viv Ashby

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AUSTRALIAN MADE

MINUTES OF ANNUAL GENERAL MEETING Cave Divers Association Of Australia

Date: 29th July, 1995
Meeting Opened: 8.00 p.m. (Local Time)
Meeting Chairperson: Mr K Burrowes (Public Officer)
Minutes Secretary: Mrs J Wilson
Meeting Held: Mount Gambier

MEETING OPENED

Meeting opened. K Burrowes presented an introduction (covering Hotel Management requests to the attendees of the meeting), submitted the agenda and gave an explanation of the rules of the meeting as outlined on page two of the agenda.

APOLOGIES

Apologies were received from T Davis, I Ploenges, G Rice and A Gifford Moore.

MINUTES OF PREVIOUS MEETING

Minutes of the previous meeting were submitted and a motion to accept the previous minutes was raised. A motion was then raised by B Heard to read the minutes of the previous meeting, seconded by W Reed. The motion was carried and the minutes were read by the National Director. A motion by N Dillon to accept the minutes was called, seconded by W Wilson. Minutes of the previous AGM were accepted.

BUSINESS DIRECTORS' REPORT

K Burrowes amended the agenda to allow the National Director to have a break from presenting her report first. The Business Directors report was presented by K Kennedy. K Kennedy outlined that copies of the report were available and that she would not read the report in full. K Kennedy covered the following points during her presentation :-

- the substantial amount of time spent "putting out fires"
- sections of the elections were constitutional breaches
- Congratulations to W McDonald on his election to the office.
- Suggesting that consideration be given to outsourcing Guidelines
- the need for cost cutting, acknowledging an error in the "Cost Cutting" section of the Business Directors report.
- the directorate to give more financial accountability to members
- the Kilsby's account, the need for constitutional changes and the issue of the five person directorate.

A motion to accept the Business Directors Report was made by J Vanderleest and seconded by T Rafferty. The motion was carried and the Business Directors Report was accepted after a vote.

QUESTION TIME - BUSINESS DIRECTORS REPORT

Question time on the Business Directors report followed with questions from G O'Connell regarding the outsourcing for guidelines, and the suggestion that guidelines be issued twice a year. K Kennedy replied to these questions. G Harrison raised a question regarding the legal costs and the unpaid creditors. L Bernasconi replied that there had been a member-to-member lawsuit that the association needed to obtain legal advice on. L Bernasconi was required to outline the case in question excluding the names of the members involved. L Bernasconi

continued on a discussion regarding indemnities for the Shaft, and explained that these were the main costs incurred with regard to Legal Costs. The question regarding unpaid creditors was addressed by K Burrowes, and it was agreed to defer the question to after the Financial report had been read.

N Dillon raised another question regarding whether a cost benefit analysis had been done on the outsourcing of Guidelines and K Kennedy replied that she had discussed the matter with several people. J Badman questioned whether the association had been running on a budget, to which K Kennedy replied. G O'Connell queried the legal costs and asked if the site was a CEGSA site, why was the association paying the legal bills, to which L Bernasconi replied. A Skinner asked whether the site was closed prior to the incident, to which L Bernasconi replied. K Burrowes closed question time on the Business Directors report and introduced I Lewis to present the Standards Directors report.

STANDARDS DIRECTORS REPORT

I Lewis presented his report. Access to Tank Cave and Penetration Courses was discussed. I Lewis commended P Prust and those associated with Tank Cave and said the running of Tank Cave project was excellent. He commended G Bulling for his co-ordinator's role in regard to Penetration courses and gave praise to the work of all instructors.

I Lewis explained that he had encountered a diversion to his duties during the Christmas period due to his involvement in the finances of the association. He outlined that there had been no forums this year due to a lack of funds. He had held one instructor meeting in Melbourne during the year with four people who were a representative group. He reviewed his discussions at this meeting, outlining the future direction. I Lewis advised that there would be a follow up meeting in six weeks.

I Lewis discussed the green page and outlined instructor appointments, and advised that M Marriott had recently been added to the list. He explained how the instructors were being certified and advised that the appropriate section of the manual would be written by year end. He advised that there would be a notice for discussion in the next Guidelines. He outlined instructor records and discussed active and inactive instructors. He concluded with an overview of the last few months, and advised that no more instructors would be certified until further discussion had followed.

He then discussed Technical and Local issues outlining standards and training issues. He read from a letter regarding landowners and site usage, and discussed "illegal" diving issues, and the double standards this encompassed. He read from another letter from the Sth Australian Police regarding deco stops, mixed gas diving and discussed the familiarity and complacency that divers currently had. He referenced further newspaper titles regarding the death of P Cavanagh. I Lewis discussed temporary permits for overseas visitors and the timeframe needed to authorise these issues. I Lewis concluded the Standards Directors Report by complimenting the other members of the directorate. A motion to accept the Standards Directors Report was made by A Skinner, seconded by W McDonald. The motion was carried. Question time on the Standards Directors report followed.

QUESTION TIME - STANDARDS DIRECTORS REPORT

A question was raised by G O'Connell regarding the mixed gas policy from the previous year. Question deferred to General Business. D Doulet questioned the instructor certification criteria and I Lewis replied. G Harrison commented on the certification process and the removal of the guidelines. C Johnson questioned whether the Training Committee was still operational. I Lewis replied. P Argy raised the issue that CDAA endorses rules and if people dive beyond those rules then the CDAA could not be liable. I Lewis replied that the association would act in the interests of the landowners as well as the members.

FINANCIAL REPORT

K Burrowes advised that as independant auditor he would not present the Financial Report as it was appropriate for this to be presented by the Directorate. K Kennedy presented the Financial Report, highlighting that expenditure was down, that Guidelines advertising revenue was up and that the issue of Legal and insurance costs had already been covered. A motion to accept the report was made, and seconded by unknown people. The motion was carried.

QUESTION TIME - FINANCIAL REPORT

Question time on the Financial Report followed. G Harrison queried the cash flow, to which K Kennedy replied. K Burrowes outlined that at the time of auditing the books there were 447 members who had not renewed from the previous year. B Bridges queried the revenue analysis. K Burrowes replied on how the reports were prepared. B Bridges queried the deficit of this year and last year, incorporating the issue of net assets into his question. W Wilson replied that not enough money was coming in to sustain growth at the current rate.

J Vanderleest raised the issue of where expenditure could be cut and a general discussion followed. There were several questions regarding telephone accounts, the allocation of membership funds from the last report to this report and the issue of new members. A question was raised regarding why members were not renewing. There was a general discussion regarding these issues.

An unknown person motioned that the budget should be prepared by the directorate and put back to the members, to ensure that the association trade in surplus next year and that the directorate would take all necessary steps to cover this matter. The motion was seconded by J Badman. The motion was carried.

C Johnson suggested a motion that a budget be generated and issued at the next AGM for the following financial year. This was then withdrawn. A motion to extend the meeting by 15 minutes was made, and seconded by unknown persons. The motion was passed. A motion to accept the Financial Report was made by J Riddel and seconded by C Johnson. The motion was passed.

NATIONAL DIRECTORS REPORT

The National Directors report was presented by L Bernasconi. L Bernasconi outlined the progress with the State Meetings, general insurance issues and advised that a new policy was being investigated. She thanked C Johnson for her input. She discussed the excellent response received from the Landowner liaison committee and commended the landowners. B Heard presented a brief report as head of the Mixed Gas working party. He asked for help with the group as there had not been a positive response to date. He briefly discussed the progress of the group. L Bernasconi then read a letter from Mr R Jefferies regarding Kilsby's, which outlined that no mixed gas diving would be allowed on the property. L Bernasconi discussed the issue of insurance and read a section from a letter giving an example of the type of cover the association had secured. She said that the letter would be published in guidelines. She discussed the following points:-

- Membership fee increases from last year to this year did not cover insurance.
- Site access was limited due to the deaths of two of the landowners.
- Kilsby's arrangements were working well but that no one was to contact T Collins at work - and that they must contact him via mail only.
- She advised that the Shaft would be closed until further notice.
- Barnoolut would be open for Sunday access only and that this would be in Guidelines.
- she asked that the keys to Englebrechts be returned by 5.00p.m. each day and that the gates be closed and the lights turned off by the last person there.
- Swim Through would be opened only after the fencing had been complete
- Hopes to have Warbla opened in the near future.

- advised two new caves, Hanns cave, and Bakers cave and discussed the access arrangements to date.
- she discussed Mapping and research and advised that both of these caves would need be mapped.

L Bernasconi concluded by thanking those who had supported her during her term. W Wilson motioned that the National Directors report be accepted. Seconded by J DallaZuanna. The report was accepted.

QUESTION TIME - NATIONAL DIRECTORS REPORT

Question time on the National Directors report ensured, and there was a brief discussion regarding mixed gas diving. R Boucher and J McMillan raised queries regarding the policy on mixed gas diving. D Blundell raised a query on regard to mixed gas diving.

GENERAL BUSINESS

A motion was raised to extend the meeting by another 15 minutes. The names of the people who raised the motion and seconded it are not known. The motion was passed.

D Blundell raised a motion that "where applicable, with permission of Police, Landowners etc., qualified divers may use mixed gases on the sites with the permission of the CDAA." A motion to amend the motion was raised, and was lost in a vote.

A motion was raised by G O'Connell that "the CDAA accepts the policies and standards of relevant mixed gas associations". D Doulet, B Heard, W McDonald, S Donn and P Argy spoke regarding the motion. A vote was taken and the motion was not passed.

J DallaZuanna raised a motion that membership fees be increased to \$50.00 per annum effective immediately. This motion was withdrawn and re stated as "Levy all members an additional \$5.00 p.a. effective immediately". The motion was seconded by J Vanderleest. A vote was taken and the motion was passed.

C Johnson raised a motion that "Limited directorate to be set up to review the constitution and to report back in January 1996 with a view to voting at the AGM". This was amended to include the clause that C Johnson would be a member of the directorate. A vote was taken. The motion was carried.

End of General Business

Meeting Closed. 11.30 p.m. (Local Time).
