

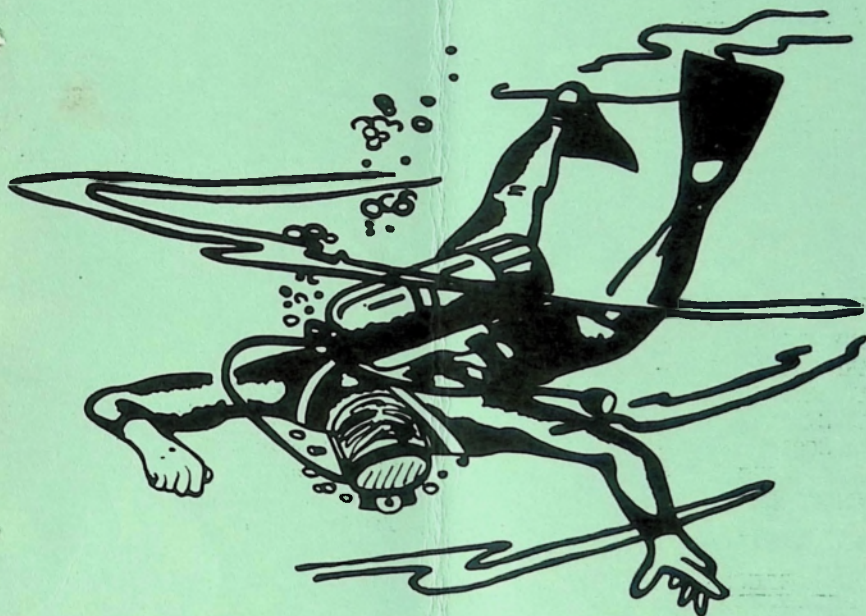
FATHOMS

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SAFETY IN DIVING

SEPT 180 50c



V S A G

VICTORIAN SUB-AQUA GROUP

F A T H O M S

(Official Journal of the Victorian Sub-Aqua Group)
Box 2526W, G.P.O., Melbourne, 3001

President
S.D.F. Delegate

DAVE MOORE
127 Hansworth Street, Mulgrave 547-2791

Vice President
Newsletter Editor
Training Officer

FRED FERRANTE,
16 Coppin Street,
EAST MALVERN
211-0708

Secretary

PAUL TIPPING
521 Lygon Street
NORTH CARLTON
387-2027

Treasurer
S.D.F. Delegate

JOHN GOULDING
5/22 Hill Street
HAWTHORN
819-1739

Committee Members

TONY TIPPING	-	80-4956	Social Secretary
BARRY TRUSCOTT	-	783-9095	Safety Officer
PAT REYNOLDS	-	789-1092	Property Officer
MAX SYNON	-	465-2812	Medical Officer/SDF Delegate
BOB SCOTT	-	367-2261	Points Scorer
CARL JIROFC	-	347-4110	Librarian
NEIL GARLAND	-	529-5484	Assistant Editor
DAVE CARROLL	-	391-2211 Ext.247	SDF Delegate

CLUB MEETING -

The next meeting of the Victorian Sub-Aqua Group will be held on Wednesday 17TH SEPTEMBER, 1980 at 8pm at the Collingwood Football Club, Lulie Street, Abbotsford in the 2nd floor Function Room. Bar facilities are available to VSAG members prior to, and after the General Meeting and meals are served from 6pm until about 9pm. A list of VSAG members will be provided to the Football Club thereby eliminating the requirement to sign the visitors book at the entrance. Visitors welcome!

F O R E W O R D

Another year has managed to creep up on us, and to many probably without realizing it.

Like most institutions, there is bound to be some periods of instability. The VSAG is no different, we were seen to have our own little bit of rough weather but things now have been smoothed out. Let us hope now that the calm will remain with us.

Looking back over the past year, the club has maintained its record of being one of the most active and also one of the most safety conscious in Victoria. This I believe reflects upon the committee, in the way they organize and run the scheduled dives and in the members in the way they conduct and contribute on the dives.

As you are aware this month is the final voting period for the Literary Award, all nominations are enclosed in this issue of Fathoms. Also it is election time for the club and it is your duty as financial members to attend the Annual General Meeting to cast your vote for your respective nominations. Remember, the committee represents the club and you are the club, so be there to cast your vote.

Before I sign off for 1980, on behalf of the committee, I wish to thank Dave Moore (who is standing down and not seeking nomination) for the two very good years he has put in as President of this club. It hasn't been an easy job, but Dave handled it well.

ED.

DIVE CALENDAR

<u>DATE</u>	<u>LOCATION</u>	<u>TIME</u>	<u>DIVE CAPT.</u>	<u>NOTES</u>
SEPT. 14	CHIMNEY ROCK	10 AM	J.Goulding 819-1739	Barwon Heals jetty
SEPT. 17	ANNUAL GENERAL MEETING	8 PM		Collingwood F/C
SEPT. 21	WRECK DIVE	8.30AM	D.Carroll Ring Friday 391-2211	Sorrento B/R
SEPT. 26	SDF DINNER DANCE			

DIVE CALENDAR (Cont'd.)

<u>DATE</u>	<u>LOCATION</u>	<u>TIME</u>	<u>DIVE CAPT.</u>	<u>NOTES</u>
OCT. 5	WRECK DIVE	9 AM	B.Truscott 783-9095	Sorrento B/R
OCT. 15	GENERAL MEETING	8 PM		Collingwood F/C
OCT. 19	LIGHT OF THE AGE	10 AM	D.Carroll Ring Friday 391-2211	Sorrento B/R
NOV. 2	REEF DIVE	10 AM	T.Tipping 80-4956	Flinders B/R
NOV. 16	TENNIS PARTY	10 AM onwards	T.Tipping 80-4956	Location - Scmers
NOV. 19	GENERAL MEETING	8 PM		Collingwood F/C

COMMITTEE NEWS

1. Size of Diver's Flag is to regulation 750mm x 600mm (A.S.A.) the club will reimburse boat owners for purchase
2. Deposits are required for Christmas Trip by Sept. General Meeting. Deposit requirement is \$20.
3. Sub committee has been elected to investigate venues for Christmas break-up for VSAG
4. Members are reminded that a copy of your medical must be submitted to the medical officer
5. It was suggested that the club purchase a sextant for dive locations.
6. Design was submitted and approved for car stickers for V.S.A.G.

SEPTEMBER, 1980

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LETTERS TO THE COMMITTEE

UNDERWATER SEARCH & RECOVERY - SOMETHING TO THINK ABOUT (Part 2)

In dirty water dives, when the diver is operating amongst snags, it is very easy for him to become entangled. Inland lakes such as Eildon and Eppalock are horrendously entangled in trees and debris, and are particularly difficult and hazardous to work.

During the recovery of submerged motor cars, boats and the like, it is often necessary to enter inside such, to search for something, or to facilitate rigging for lifting.

Under these circumstances, if a diver becomes entangled or in difficulty, there is often little that he can do to free himself unaided. Rather than to cut himself free from his life-line, as a last extreme and definitely not to be recommended, it is far safer in most circumstances for somebody else to come to his aid and free him. This "somebody", perforce, must be able to enter the water at a moment's notice in case of an emergency. He must be a diver specifically nominated to remain fully kitted up and ready to enter the water for the whole duration of the dive. This emergency, or "stand-by" diver, will be operating under the same limitations as the working diver, and will need his own life-line and attendant. One attendant cannot safely and efficiently care for more than one diver.

It is generally necessary in the interests of safety and efficiency, to have the whole operation directed and supervised by the most experienced person available. He should not be physically engaged in the operation as a working member, but can assist where necessary. His main responsibilities are to plan and supervise the dive, to ensure that all safety measures are instituted and observed, and to hold himself in instant readiness for an emergency. It will be found that when an emergency occurs, the divers and attendants will be too engaged in their own function to worry about the overall operation or any other task.

The diving team on a S & R operation should therefore consist, as a minimum of the following:

- Dive master/supervisor
- working diver, and
- attendant,
- stand-by diver, and attendant.

It cannot be overstressed that when emergencies in S & R operations occur, they are generally very serious and very urgent. The greatest comfort to the diver, both during the general conduct of the operation

and during an emergency itself, is to know that he/she has a reliable buddy upstairs, fully kitted and ready to enter the water the moment assistance is needed and called for.

Conduct of the operation

The particular search technique used in any operation depends upon the peculiar circumstances of that situation and each technique may be modified as necessary. However, there are general principles which can be applied to most circumstances, and the use of these as guidelines may save fruitless hours of searching and lessen the risks inherent in these type of operations.

Before leaving for the site

Make a very thorough recce of the dive site to ensure that the job is:

(a) possible (b) practicable

Considerations such as extreme depth and a very large search area may make the operation economically unfeasible. Added factors such as the inaccessibility of the site, dangerously snagged bottom, fast currents, the presence of power boats or personal cowardice will need to be thoroughly considered to determine whether the safety margins are great enough should an accident occur.

ALLOW FOR THE WORST, HOPE FOR THE BEST

Ensure that you obtain every possible piece of information relevant to the operation. In particular, if at all possible, get any persons with any direct knowledge of the location of the missing object to attend at the dive site. You will probably get as many locations indicated as there are witnesses but patience, persistence and some good investigation work will narrow your search area enormously.

Pertinent information such as state of the tide, direction of the current, time of day, wind direction etc. will assist in this determination of the dive site. Any effort spent at this stage will be more than amply repaid later in reduced time spend u/w.

Determine what specialist equipment if any, eg. cutting torches, lifting gear, re-compression chambers, protective clothing, etc. will or may be needed for the particular task. Assemble all equipment and check off before leaving for the site.

BAD PLANNING LEADS TO BAD ACCIDENTS

At site (a) Ensure all equipment is readily to hand.

(b) Make sure that everyone knows the location and operation of all safety equipment eg. resuscitator, re-compression chamber, first aid kit.

(c) Make a final recce to ensure that situation remains same.

PLAN DIVE

Take into account such factors as:

- (a) Altitude
- (b) Temperature of water
- (c) Increased physical activity
- (d) MAXIMUM depth
- (e) Nature of bottom, direction of currents
- (f) Particular safety requirements, eg. working around props on ship's hull - engage hand turning gear

BRIEF TEAM

Check to ensure that each member fully understands their own role and the overall plan.

Re-confirm any particular safety measures. Rehearse particular signals as required, especially emergency signals.

Ensure that the stand-by diver is fit and ready to enter the water before committing the work diver/s.

DIVE TO THE PLAN

Don't be tempted to cheat for those last "few" minutes, it's not worth it.

Don't forget the dive flag.

PLAN THE DIVE AND DIVE THE PLAN

During the dive. Everyone must stay alert. The diver's attendant must constantly watch the diver's bubbles, both to observe if he becomes snagged, and to ensure that he's still breathing.

The dive master must be alert to such things as the boat dragging, the weather changing, the wind varying, the attendant switching off etc. Routine dulls the mind but unfortunately, divers die just as dead on routine dives as they do on particularly nasty ones.

The dive log must be maintained accurately in order to calculate for repetitive dives.

If one diver gets into trouble and the stand-by diver is committed, any other divers must be surfaced at once.

F. FERRANTE

(written from notes and lectures by P.L. Butler, Police Search & Rescue.)

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LITERARY AWARD NOMINATIONS FOR 1980.

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October 1979 - Nominations

Rotomahama	B. Lynch	2 votes
Editorial	F. Ferrante	3 votes
Tip's Tit-Bits	T. Tipping	3 votes
Long Road Back	F. Ferrante	2 votes
Over the Bridge	B. Lynch	5 votes

Top Vote - Over the Bridge - B. Lynch

OVER THE BRIDGE

Tony, Bazza and I usually have an annual competition as to which of us can get the most worn out during the early-year Fun Run. This once a year clash has now been vastly improved upon by the increasing number of fun-runs and marathons taking place in and around Melbourne during the year. Since about 1977 however Tony's health has been declining with this going wrong, and that being strained, lumps coming up here and things dropping off here. So it came as a big surprise when sometime in the wee small hours of Sunday morning the 23rd September I got a telephone call informing me at great length, that he was going to run over the Westgate Bridge. This is just to show you dear reader the machinations of the Tipping mind and the psychological warfare that goes on behind the scene and to introduce you to the 18km Super-run across the Westgate.

The day dawned fair and cool. I arrived at the MCG, parked the car and then received a number and deposited a sweater and a pair of trousers to be collected at Flemington. At this point the organisation was excellent, I do believe it began to creak a bit around the seventeen thousandth mark, just shows you what a bit of sunshine can do. The start wasn't too bad. Mr. Hamer fired the starting gun, and the first few rows moved off followed eventually by the rest of us. Down to Flinders Street and a glance behind to the Hilton corner was unbelievable, the whole road massed back, wall to wall people. Down past Spencer Street and over the Johnson Street bridge, the going nice and easy with the wind blowing us along. We were then on the freeway and approaching the bridge. As we approached it, the length of it looked like a long way to run, but once we hit it the gradient wasn't too bad at all probably having the following wind helped a lot. It was here that I caught up with a couple of the wheelchair entrants, only to have them fly by at about 30 mph as we descended the other side.

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Williamstown Road was quite a comfortable run, Geelong Road too although now the wind was against us. Finally a right hand turn and I could see that we were approaching the race-course. We crossed the Maribyrnong River by the aptly named "Lynch's Bridge", and then turned beneath it for the last section, which seemed to be corner after corner until we emerged onto the track. Up the straight we cantered, in front of a crowded grandstand, then through the timing chute, and finally we could stop running and relax.

After a drink of staminade I collected my clothes and moved onto the platform and caught the first train back to Jolimont. A quick run to the car then off to drop in at the club barbeque on the banks of the Yarra.

Here I discovered Fearless Fred leading his voyage of discovery between the table and the gas barby. After being presented with a beer by John McKenzie and a sausage roll by Marie Truscott, I wended my way homewards for a welcome shower and a rest.

November 1979 - Nominations

Truk Lagoon	F. Ferrante	1 vote
Up the Yarra	June Scott	2 votes
Flotsam & Jetsam	Ma-Linda Fish	1 vote
Editorial	F. Ferrante	1 vote
Maintenance of equipment	F. Ferrante	1 vote
Up the Yarra '79	F. Ferrante	3 votes
Long Road Back	Submitted by F. Ferrante	6 votes

Top Vote - Long Road Back - F. Ferrante

THE LONG ROAD BACK - a personal account of the agonizing recovery of a bend's victim - by Ron Johnson

The date was August 26th 1972. My wife, my friend Nigel and I left the wharf with other members of the Auckland Diving Club about 8.30am. Our destination was two impressive rocks called The Pinnacles. They are several miles offshore and rise sheerly out of several hundred feet of water. It is possible to find depths in excess of 200' only a boat's length from the rocks. The Pinnacles and the Poor Knights as a whole are New Zealand's great underwater showground - good clear waters, plenty of fish life, black coral at greater depths and good all round dive conditions.

I was just over a bout with the flu that had hung on for about 3

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months. Later, due to blood tests it was found that I had an extremely high blood cholesterol level and high blood pressure. Physically I would never have passed an insurance medical. (How long since you have had a good medical check up?)

Nigel and I started a slow descent down a deep wall hoping to sight some grouper. We swam parallel to the face of the reef and then descended to about 180' to look at some black coral trees. There were several opportunities to shoot kingfish that were up to about 60 or 70 pounds, but I was not tempted as it was Nigel's first time at this depth.

I was sure I had the situation under control and checked Nigel out. He seemed fine so I pointed out a patch of pure white sand which seemed 40' or so beneath us. We both had about 1500 psi left in our steel 71.2 cu.ft. cylinders.

We hit the sand fairly hard and each breath we took made our air cylinders ring. I did a double take at my depth gauge - it showed 255 feet! I glanced at Nigel's - his gauge only went to 250 feet and the pointer read off the end of the scale. The pressure gauges showed approximately 1000 psi each.

We fully inflated our buoyancy compensators and they barely gave us positive lift. We ascended the face of the wall and picked up the anchor rope at about 150 feet where it draped over the reef. Ascending as slow a rate as possible, we made it to 10 feet where we stopped to drain the last few breaths from our tanks. Our total dive time was 18 minutes.

Upon surfacing, I had rather a tight feeling at the base of my throat and, by the time we had reached the boarding platform, I was feeling nauseous. At this stage, I was sure something was wrong - was it embolism or the bends? Nigel felt fine. We shed our gear and I had to get my jacket off as I felt like I was choking.

I told the skipper to recall all the divers and to try and contact Dr. Slark who was also diving the area. By way of contacting a charter boat near the doctor's boat, we managed a rendezvous. After a quick check over by Dr. Slark, it was confirmed that I had the bends.

By this time I needed no convincing as both legs had lost feeling, and I could feel the numbness creeping up my body. We transferred to a speedboat and were met by an ambulance within 30 minutes. The decision to drive the 100 miles back to the Auckland Naval base was made immediately, as no one was sure how long it would take to get a chopper into action. During the trip back I developed a bad cramp

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in my right shoulder and left elbow. The loss of sensation in my arms was almost complete by the time we reached the Naval Base.

A series of X-rays, blood tests etc., and into the chamber we went approximately 5 1/2 hours after the first symptoms. The decision to try the oxygen tables meant a descent to 50 feet on pure oxygen. Observing no change in condition, we took off the oxygen gear and then went down to 165 feet. The decompression lasted 43 hours, the last few hours spent on oxygen. I emerged from the chamber very tired, possibly in a worse condition than when I entered.

The next day I was asked to go back in for another 5 hours on oxygen. I agreed, but apparently I was susceptible to oxygen poisoning, because toward the end of the 5 hours I had difficulty in breathing and the next thing I remembered I was being revived by a very anxious Dr. Slack. I do not remember the next day or so.

After a week at the Naval Hospital I was transferred to the Middlemore Hospital to the Orthopedic Department, where a gentleman introduced himself as a senior member on the staff of the hospital saying he had come to read my notes. After 20 minutes or so he stood up and announced that they were pretty sure they would get my arms working, but that I would never walk again. It is at this stage that the press loses interest and you soon fade into obscurity. It is also at this stage that the real story begins. Let anyone who thinks getting bent is rather romantic read carefully from here.

Doctors came around and poked and prodded to assess how much sensation and motive powers I had left in my limbs. This let everyone know at what level the spinal damage had occurred. In my case, a massive nitrogen bubble probably formed in my spinal cord at about the lower ribs. The expanding nitrogen bubble acted like a tourniquet in reverse by expanding within the spine and starving the nerves to the lower body of blood thus killing them (the damage being similar to a broken back with the exception that nothing was actually cut through).

My condition at this stage was that of a quadraplegic, I could use my left arm a little and, if someone put a fork in my hand, I could get the odd morsel of food into my mouth. Most of it would miss the mouth and end up anywhere in the general vicinity of my head.

Now eating and drinking were essential to life - but what went in had to come out. This was the most humiliating part because the paralysis also affected all the muscles that controlled the bladder and bowels and there was nothing I could do to control these functions.

The bladder was a relatively simple inconvenience as they inserted a