
NZLSAR News

Volume 5 Issue 3

June 1999

CONTENTS

More on the Bulmer Rescue
Dog News
The First Search

Committee news
Bibs and bobs
National Police SAR course

South Owen Expedition and Bulmer Cavern rescue

In the April edition of the News Mike Brewer related his experiences as a rescuer in the Bulmer Cave for Kieran McKay. Here is another article, written by Lindsay Mains, one of the expedition organisers.

On 28th December 1998, 12 cavers assembled at Bulmer Lake, Mt Owen, for the 13th South Owen Expedition. Three of the group, Kieran McKay (Turangi), Marcus Thomas (Christchurch), and Rob Gillespie (USA) left for Bulmer Cavern to spend three nights at Camp Two, which was established last year as an exploration base for new extensions beyond the previous limit of exploration in the Soupmix area.

Bulmer Cavern is New Zealand's longest cave, with around 50 km of passages surveyed to date. The new extensions have given a long-awaited boost to exploration, adding nine km during several camping trips by small teams. The cave is complex, with several old phreatic levels and a streamway interconnected by vadose rifts and shafts. *(I asked what all this meant and the reply was such I was almost sorry I had done so. Phreatic passages are formed by water movement below the water table and are usually circular. Vadose passages are formed above the water table and are often T shaped as the water has cut downwards. Keyhole shaped passages start as vadose then change to phreatic. JPT).* There are seven entrances and the depth is 748 metres. The passage is all contained within an area about three kilometres from north to south and a few hundred metres wide.

On the first caving day those based at Bulmer Lake rigged down the Erebus Passage to The Labyrinth area, at a depth of about 400 metres, and toured around the upper levels of the cave. Most rested on the second day. At Camp Two Rob, Kieran, and Marcus surveyed about 200 metres of passage on the first day, and on the second day headed for a promising looking area involving some small shafts. Kieran descended a shaft to the top of a second one, and prusiked back up again to swap the ropes around. Just as he was starting to descend again, a large rock bollard forming one half of the Y-hang anchor broke loose and hit him, doing little damage but causing him to lose control of the rack and fall about 15 metres, landing on rocks at the bottom.

While Marcus and Rob were re-rigging the rope and descending, Kieran crawled clear of the base of the pitch (which was dripping heavily), and apparently lost consciousness. When the others reached him he was moaning and incoherent. He was bleeding heavily from a deep cut under the jaw, which they dressed as best they could. He had severe bruising all down his left side, particularly to the wrist, knee and ankle. They suspected broken bones, but as it turned out the only break was to the jaw.

After strapping his arm and splinting his leg, they were able to get Kieran back up the pitch

and started the trip back to Camp 2, normally about 1-1.5 hours. This took 6-7 hours, with Kieran walking most of the way and being assisted up pitches and climbs. Then they settled him for a long wait.

After a brief sleep, Marcus, who fortunately knows the route through the cave extremely well, set off for the surface at around 0200 hours on the morning of New Years Eve, arriving at Bulmer Lake at 0800 while people were having breakfast and preparing for the day's caving. After a brief discussion we swung into action. The Police were alerted via the Mountain Radio Service, and a few cellphone calls were made to key people to speed the process up. A team of three - John Atkinson, Julian Stone, and Andrew Matthews - was despatched to Camp Two to assist Kieran. Another team was given the task of trying to devise an alternative route at the top of The Lions Den, the pitch series which connects the upper and lower levels, which had been the site of major rock-falls in the past and was considered too dangerous for a rescue operation. The remaining three made preparations for the arrival of the rescue teams. Marcus was sent to bed.

The first rescue team of three arrived mid-afternoon and included Mike Brewer, a doctor who had recently been involved in exploration beyond Camp Two. After their departure to the cave a rescue headquarters was set up and another team of four strong cavers left to support the medical team, taking a rescue stretcher. The stabilisation team reached Kieran and Rob mid-afternoon and set to work to treat properly Kieran's injuries, and Andrew returned to the surface with Rob. The medical team reached Camp Two late on New Years Eve, and the stretcher team a couple of hours later.

Later, in the evening, the two cable-laying teams started - one to work from the entrance to the bottom of the pitches at The Roaring Lion, and the other from The Roaring Lion to the site of the rescue.

Both teams made good progress and the two wires were linked, giving telephone access as far as the Wildwest area, at about 0800 on New Years Day. The deep team continued to the

Soupmix area, meeting Kieran and the rescuers about three hours later. Kieran had been dragged in the stretcher through some of the low parts, but was walking with assistance along most passages. There were enough people present to use a direct haul on any climbs. The cable-layers accompanied the group to the Awesome Aven, a forty-metre flat-floored pitch, and then returned to the surface. A feature of the communications on this rescue was a VHF link from the telephone base at the entrance to the rescue controllers at the Lake, enabling those underground to talk directly to the controllers without the need for relaying.

The Awesome Aven was a formidable obstacle which was intended to be re-rigged for the rescue, but because of Kieran's mobility and the availability of enough people and rope, he was hauled using the existing pitch rope, with a safety rope. Then the team moved on through the Wildwest-Wildcat area, arriving at the old campsite in the Octopus Room in the evening. Here they stayed the night.

Meanwhile rigging teams were working in the Lions Den to ensure that this phase of the rescue would operate smoothly. A deep rigging team was to be despatched, but Kieran's speed continually confounded planning and none of the further pitches were re-rigged. However the rescue team was carrying sufficient rope with them to deal with each obstacle as they reached it.

On the next day, January 2nd, a second rescue team relieved those who had stayed overnight at the Octopus Room, and started moving Kieran forward again. By now retrieval of gear was a priority, and other teams had entered the cave to carry out superfluous equipment behind the rescue team. Several such teams of "cleaners" were used during the rescue.

Kieran now seemed to be walking more readily, and his increased speed meant plans were continually changed and ETAs updated. He reached the Roaring Lion around midday, was hauled up the pitch to Castration Corridor. The narrowness of the passage and the small pitches caused little delay, and the team was at the base of the two 40 metre Lions Den pitches at around 1400. These were set up with hauls, with a long tyrolean rigged above the upper

pitch so that the very loose section there was avoided. This worked like a charm and Kieran's landing on level ground in the upper levels, along with a brief interview, was recorded by a TV3 cameraman who just happened to be there.

With the whiff of the entrance in his nostrils there was no holding Kieran back, and he made good time to Panorama Entrance, assisted by numerous additional handlines which had been installed over some of the scary traverses and climbs. At around 1530 he was picked up by a helicopter from Panorama Entrance and taken to Bulmer Lake, before being flown to Nelson Hospital.

Meanwhile cleaning teams worked on de-rigging the ropes, winding the phone cable back, and lugging all the gear out of the cave. This wasn't completed until the following afternoon. A debrief was held on the morning of the 3rd, and then the rescuers were flown out. The expedition members continued until

the 7th as planned, but everyone was tired and very little was achieved.

Overall, the rescue was hugely successful and things ran very smoothly. There were some minor hiccups, as you would expect on an operation of this size, but generally people worked very well and did what was required to make the rescue happen. About 80 cavers were involved on the mountain.

The usual absurd statements appeared in the media, with ridiculous comments about crawling under 5 km of parked cars (there are no squeezes and very few crawls in Bulmer). There were also the usual outraged taxpayers complaining about the rescue's cost, but generally these were treated with the contempt they deserve. All in all it was a very successful operation.

Lindsay Main
(South Owen Expedition organiser).

Dog News

While in Dunedin on the dog and volunteer handler course, I spent some time talking to one of the local Police dog handlers. He related a couple of recent searches and finds that the Dunedin Police dogs had made in the previous few weeks. While interested in their success, what really impressed me was the cop's unspoken but implicit belief that for finding a person or object, a well trained dog was an extremely valuable tool.

The first instance was for a person missing for more than 18 hours. His car was discovered and the dog and handler cast around it for a "direction of travel" which they picked up. The dog was released to free search into the first area which was covered in variable coastal scrub. After travelling some four to five hundred metres through this, a bundle of clothing was found which was relevant to the search. The dog and handler continued onto a hillside of four to five acres of bush and it was there the missing person was found. The time from leaving the car to finding the person was less than 30 minutes.

The second instance was for a teenage "runaway" who was believed to be sleeping in the grounds of a local school. About midnight the dog and handler went to the school and after a 20 minute search located the missing youth asleep in a nearby patch of bush.

Nationally, the Police Dog Section is looking at what assistance they can provide to land SAR. Last year they selected a number of suitable handlers and dogs and took them through a ten day course which included living and searching in the bush. Wellington has benefited by "Vandal" and handler, who some time ago, were instrumental in quickly finding a missing youth who had deviated from a track one dark night and was in the creek below, again only minutes from the road end.

Wellington Police have also been pro-active in promoting dogs for SAR and recently held a public meeting for those interested in becoming "search dog units". Attended by some 40 people including members of the public, District Senior Sergeant in charge of the Dog Section and his personnel, District SAR Sergeant, Advisers, and members of Central Search

Dogs, it was an interesting meeting and we may only know if it was worthwhile if Wellington SAR ends up with an operational SAR dog unit.

The task for most of these people will be huge. With little or no knowledge of the Standards required for a search dog, the probable need for most to acquire bushcraft skills, a degree of personal physical fitness to attain and all this before or as they are being introduced to the SAR system and its methods. However I think

the biggest challenge is for all those involved in SAR management to be assisting and encouraging the development of these people and their dogs. From all that one reads and hears of the national and overseas experience of the use of a proficient search dog unit, they will find missing people, they will save lives.

John P Tristram
National Field Officer

The First Search

Can you remember your first search? The phone call usually comes after 2200 hours.

As you try to get to sleep, questions about the terrain, the weather and the task crowd into the mind. Its an early start for the drive to the HQ or forward base. There are a lot of hardened looking characters there, some look very fit. The talk and equipment is absorbed by the newcomer who is happy to let the team leader do the talking. Its both daunting and impressive for the first timer. Gear issue including strange little yellow radios, sealed first aid kits (don't use them unless you have too) and other rituals follow.

Then the team leader disappears into the inner sanctuary for a briefing. While the teams waited I remember looking at the assembled 4WD vehicles and the Iroquois - staff transport into the hills. The leader returned and informed us of our task. We were to be choppered in to search a side stream. We were due to be lifted out that evening but he said to take full packs just in case. Our leader was wise.

The first Iroquois flight is another one of those things you never forget, particularly when remembering that they were new in 1965 and often the pilot is newer. The first winch down is memorable and then the silence after the chopper has gone. Double checking that the Air Force had dropped us in the right place-our wise leader again showing his experience-we set off

on the task. The task was not too difficult, the terrain not so tough and the weather reasonable. A good introduction to SAR. Eventually we were recalled after the lost person was found by another team. He had drowned.

A lengthy return to base was followed by a welcome Red Cross meal. The Police had laid on counselling assistance for anyone who felt they needed to get aspects of the find off their mind. The gear was handed in and a quick debrief held and we went home. I have been on a few searches since and seen the elation of a good find and the sadness of finding a body.

Looking around at the beginning a of a search there are usually one or two new faces watching, taking it all in and listening intently. With a mix of excitement and apprehension they set off on their task. Joining a SAR team for the first time is a special event. I am grateful for the wisdom, experience and enthusiasm provided by the team leader and members on my first search.

The SAREX's have provided an opportunity for experimenting and trying new tactics. The inter club humour is enjoyable - why do the local hunting club have 3 pubs programmed into their GPS?

Matthew Nolan
Parawai TC Kapiti Coast.

Committee news

The Committee met on Saturday 13 March and among the agenda were the following items.

- **Patient Care Standard.** This document specifies the Standards of performance required for patient care and management. The paper is in four parts, Non Operational, Pre Operational, Operational and Post

Operational and has a glossary of terms at the back. The document is to be issued to all Land and Underground Advisers, Regional Secretary and Representative compendium holders, put on the NZLSAR webpage and made available to anybody who requests a copy. If you are aspiring to provide the best patient care service to your "customer", you need a copy of the Standard. The Committee expressed their gratitude to Tric Moller and Glenn Mitchell for the work they had done on this document and to all those who had made comment on the draft.

- **Communications.** The Communications Subcommittee tabled an outline of the budget proposal they had prepared for presentation to the Police for purchase of new and replacement equipment. The proposal is for another ten sets of six VHF radios, 10 repeaters and 20 VHF base sets and has subsequently been presented to the Police. Money, as always, is very tight and so as well as being of great benefit operationally if we get them, it will also be to the credit of Ross Thompson who did a great deal of the work in bringing together the information contained in the proposal.
- **Alpine Cliff Rescue Review.** This review under the Chairmanship of Don Bogie continues. In considering the driving forces

for change it is worth remembering that the original ACR Teams were set up some 30 years ago. Apart from Wellington's Team being de-commissioned, little has changed in the siting of these teams since then. However society and the use of the outdoors has. Adventure tourism type activities has put pools of skilled outdoors people in many of the previously under-resourced areas. These people being nearer the operational scene, often well versed in Safety Plans and the administrative detail required of their professional background coupled with frequent practice are able to offer a more prompt and generally better service than some of the historical teams. The Alpine Rescue Recommendations presented by Don addresses these demographic changes and was approved by the Committee. As a major cost item that has accumulated for a number of years and in view of the seriousness if nothing is done, he was asked to prepare a detailed budget as a identifiable item for inclusion in the 99/00 NZLSAR budget request to Police. A copy of the paper can be obtained from any of the ACR Team Leaders, Regional Representatives or myself.

John P Tristram
National Field Officer

Bibs and bobs.

ID Cards. A reminder that NZLSAR has Adviser ID cards available upon request. Although people may be able, with relative freedom, to get in or out of their local Police Station, the cards with the photo and dual NZLSAR and Police logos have proved to be handy in a number of other situations where ID is called for. The cards are for Advisers, both Land and Underground, the only requirement being that you must have been on a Advisers Standards Workshop. If you have been on such a Workshop all you need to do is get two good passport photos of yourself, fill out the form and mail to PO Box 12081 Thorndon Wellington. All except 39 Advisers of the 179

Land and 16 Underground Advisers in the country have attended a Workshop, but not all the attendees have availed themselves of this service. Contact me for the form.

Display panels and NZLSAR banner. A reminder that NZLSAR has display panels and a 15 foot long banner that are available for loan upon request. Used at some 23 different activities last year it has been added to with a couple of panels by the Police. These have photos and information pertaining more to their input into SAR and together to show the volunteer-Police partnership. These, with a

number of pamphlets for handing out, are available from the national office.

Adviser List. NZLSAR has undertaken the responsibility of annually updating and circulating the Land and Underground Advisers List. This list also includes details of Districts Air and Communications Contacts. Air Contacts or Air Advisers, the title, role and subsequent training implications have been considered and it is felt Air Contact is appropriate. At the end of April a letter was sent to each Police SAR Coordinator asking for details for their respective Advisers and Contacts. This is a time for SAR Organisations

to review the performance of their senior people, the adequacy of their numbers and whether there is a need to introduce new people to the responsibilities of these various roles. It is also a time for the incumbents to personally consider their availability and commitment for the next year to search and rescue and to act as always "in the best interest of the victim". A reply will be requested as per the timetable in Police General Instructions, i.e. **No later than 30 June.**

John P Tristram
National Field Officer

Police National SAR Course and VHF Radios

The 1999 National SAR Course was held at RNZAF Dip Flat between 18/30 April. A two-day SAREX, held in the second week, completed the course and gave all participants an opportunity for a practical application of the topics covered in the first week.

Dip Flat is an RNZAF training facility in the Wairau Valley about 120 kilometres inland from Blenheim. The complex is at an altitude of about 660 metres and the St Arnaud Range rises to an altitude of over 1900 metres.

The scenario for the SAREX was based on the eastern side of the St Arnaud Range. Radio communications with the "lost party" teams and SAREX field teams were based on HF, with Condors and PolSAR radios being used. We also planned to use VHF repeaters which had recently been supplied by the Police (after a "business case" for their purchase had been made by NZLSAR Ed). We had three repeaters available from Greymouth, Nelson and Christchurch, along with 24 ICOM radios.

Seven SAREX teams were deployed on Tuesday and the repeaters were installed late morning. The first repeater was installed at a high point (1618 metres) on the southern side of Six Mile Stream (main access to the Rainbow Ski area) and the second repeater on a high point (1702 metres) between Woolshed Stream and Rough Creek.

There had been difficulty with HF radio reception but the VHF radio repeaters, which

took three non-technical people about 8 minutes to install (most of the time spent securing the repeater with a large rock on the lid) and guying the aerial mast) gave instant communication to the majority of the field teams.

I would encourage the use of VHF radio, where possible, because it releases field teams from the hourly or two-hourly skeds and information is able to be passed between teams quickly and clearly. In addition teams can use the ICOM radio for "team to team" or between team members communication on a simplex channel without "cluttering" up the main link to the search HQ.

During the two week SAR Course we used in excess of 450 AA batteries in HF radios, VHF radios, Ground-Air radios and GPS units, so it is necessary to have a large supply of AA batteries available. It also helps to have a helicopter available to deploy and collect the repeaters.

I would recommend that areas make use of the VHF repeaters that are available. The Christchurch repeater has been used for the Canterbury SAREX in the Lewis Pass, the National SAR course and at a South Canterbury SAREX in May.

I see little point in any equipment sitting in a store somewhere and not being used when its use can make an operation, or exercise, more efficient and effective.

Peter Summerfield

Police SR Coordinator
Canterbury District

Editors Comments

To **Lindsay, Matthew and Peter** a big thank you for your articles. To those who proof read and check the spelling and grammar, thank you also. Copy for the **August News** is most welcome and the close-off date is **23 July 1999**. Articles on gear, SAR training or operations are most welcome. Please either mail as neatly hand-written, printed hard copy or on a disc to **NZLSAR, PO Box 12081, Thorndon, Wellington**. Alternatively email it to **tristram.nzlsar@extra.co.nz** ..

Regards **John P Tristram** National Field Office