
NZLSAR News

Volume 4 Issue 4

August 1998

CONTENTS

SAR at Mount Cook
A tricky navigation exercise
MapWorld and its products
An exercise in humour?
Search dog news
Oxford SAR Group receives payout from Prudential Assurance
SWAZI Apparel supports NZLSAR

SAR at Mount Cook

A distressed voice comes over the radio at the visitor centre in Aoraki/Mount Cook. It's a climber calling from Hooker Hut in the Southern Alps to say his partner, Jay Piggott (16) has fallen 50 metres into the Copeland Gut down a rocky moraine wall and may have a broken leg, possibly worse. There's a storm brewing and the wind has picked up to 40 knots in the last hour, so using a helicopter is out of the question.

From the moment that call is received by the Department of Conservation, it takes about 20 minutes for the search and rescue team (SAR) to get mobile. In that time, vital information has been relayed to several key players in the operation and a flexible strategy plan has been established. The SAR team on duty is called in and they are briefed on the situation. The controller then takes their post in the control room and informs the Tekapo and Timaru police of the situation. Any SAR operation is ultimately the responsibility of the Police, but in Mount Cook it's DoC who carries out the operation with the authority and presence of the Police in the control room.

Meanwhile the SAR team which consists of four Rangers, is working out how many people will be needed for the rescue, who will carry it out, what type of gear it will require, who will be responsible for first aid on site and back at the village, and who will undertake the technical rescue. Usually four people go out on an operation, but that number varies depending on the situation.

For Jay's rescue, seven Rangers have been called in because it's too windy to fly. A party of four is dropped off at Hooker Track to begin their four hour power walk, while the other party stands by in case the wind drops and they can fly in. It's four in the morning.

Visitor centre manager Shirley Slatter says the most challenging aspect of SAR operations is being able to think laterally "especially when everything turns to custard". If the weather is too rough to fly, do you send the team in on foot, how many will be needed, should they go now or when the weather improves, and what do you do if the phone goes down? Shirley has been part of the Mount Cook SAR team for two

years and wears several hats during the rescue. With the exception of going out and doing the actual rescue Shirley is involved in the operation from beginning to end. "I'd start off by being on the counter at the visitor centre, someone would call in with an accident report and I would go to the SAR control room and help coordinate the operation. Then when the patient comes in, I'd put on my St John Ambulance hat and go in and treat the patient."

This summer there were 25 rescues in the park of which two were ultimately fatal. One was a Czech man who bounced 700 metres to his death on Mount Cook. The other person slipped on hard ice and fell into the Copeland Crevasse.

SAR Coordinator Grant Prattley says the majority of injuries are broken limbs which are caused by falls and falling rocks and ice. Either a hard stretcher or a neck collar are always brought to the scene. "We don't have x-ray eyes so we have to size up the situation and determine if the stretcher should be used. We always err on the side of caution though."

Most of the rescues occur during the climbing season in summer, during which time SAR Rangers are on call 24 hours a day.

The number of rescues have generally remained the same over the years, but the types of rescues have changed says Grant. "There tends to be less of the high alpine rescue and more of the sub-alpine, so the climbers are usually less experienced."

Although these rescues are lower in the mountains, they are still very serious. "We've had two rescues half way up the Mueller Hut and one was a broken back. She was carried down on a stretcher for an hour and a half."

While the number of rescues has remained the same, the level of professionalism in

search and rescues has improved in Mount Cook.

To ensure consistency and auditability, standard operating procedures (SOPs) are reviewed regularly. Rescue equipment which is not up to standard is replaced every three to five years. This includes warm weather gear, helmets, karabiners, climbing ropes, helicopter strop and stretchers. Equipment has three monthly checks and the training sessions are held every year to up-date staff with new technology and techniques.

Area manager Bob Dickson says these changes have resulted in a level of professionalism that hasn't occurred before. And if you go on one of the bi-annual training sessions, you'll see the commitment and experience needed to be part of the team.

Because strops (four strands of 25 metre rope attached to the helicopter, with a breaking strain of three tonne) are used frequently during rescues to transport people, helicopter pilots have to practise positioning the rope from a long line. All pilots from Helicopter Lines in Mount Cook have had previous experience with long line positioning, says Grant. "It's a pre-requisite. They're doing most of the work, and it's their control and expertise that get you there."

Another part of the pre-winter training session, is learning how to cope with extremely cold temperatures. Emergency Services Ranger Bruce Janes, who's spent two years in Antarctica, advises the team to wear layers and make sure no flesh is exposed. "The coldest conditions we go to is -35 degrees including the wind chill factor. Beyond that it's just too extreme to go out."

Calculating the perceived temperature is now done with a chart which combines the wind-chill factor with the ambient temperature. "When you're hanging from a strop at 11,000 feet and the helicopter is doing 20 knots and it's -17, that means it's really -29. The

maximum time you can be out at -25 is five minutes.”

Obviously, getting the job done as quickly and efficiently as possible is a big factor, especially when there are avalanches to contend with as well as cold weather. And training on specific techniques helps rescuers and helicopter pilots become more efficient in their delivery.

Bruce almost prefers the training to the real thing because it's not as stressful. “You're chilled out, whereas on the actual day, there's no time to notice if you're enjoying yourself. You're too busy making sure you've done everything you need to do.”

Mount Cook Alpine Rescuers are required to have a proven mountaineering background in the Park as well as an Avalanche One Certificate, and Pre-Hospital Emergency Care (advanced emergency first aid). The majority of patients are taken out on a strop by stretcher, however for minor injuries or for the partner of the patient, they may experience the pleasure of the nappy; a harness device which clips onto the strop. “Some partners have taken the opportunity to snap a few shots” says Grant. And why not - the view is great, even if the seat is not entirely comfortable. But for the rescuers, the biggest priority, is getting the patient out as quickly as possible and coordinating their manoeuvres with the helicopter pilot. “With the greatest hazards being falling rocks and ice,” says Grant, “quick evacuation is essential”.

Tekapo Police Senior Constable Bill Apes says it's a real team effort between the SAR team and the helicopter pilots - “they've got to have competence and faith in each other and there's certainly no room for cowboys.”

In terms of the relationship between the Police and DoC, Grant says cooperation and communication has improved significantly over the last year. “Police have a greater awareness from a District level of our

operation and needs, so they are able to help and respond and provide back-up.”

Constable Apes says the situation in Mount Cook is unique because the Police are reliant on DoC staff and their mountaineering expertise, and yet the police are responsible for funding and overseeing the operation. “By the time we arrive, they've already set themselves up in the rescue room and are well into it.”

Other alpine locations such as Wanaka, Queenstown, Fiordland and Ruapehu have a mix of civilian and DoC SAR teams, but the isolation factor of Mount Cook combined with the level of skills and training involved makes it difficult for civilian volunteers to be involved with SAR in Mount Cook, says Grant.

“Some people would find it difficult to understand why DoC would do SAR, because we're supposed to be looking after tracks and huts and bio-diversity. But once you're here and you take into account the quick response time that's needed, it makes sense for us to be involved because we can respond at a moments notice and we're trained, experienced and equipped to provide the service.”

Aside from being logistically prepared for search and rescue, there is also a psychological toll one goes through being involved in SAR operations, says Grant. “You need to be able to deal with each situation as it arises which you learn through training, personal awareness, and healthy coping mechanisms. But after a particularly difficult search and rescue (if there's been a death or it was bloody) you're mentally exhausted.”

In Jay's case, the rescue was a positive one. When the team got to him eight hours after his fall, he was conscious and relieved to see the rescuers. The weather had cleared enough for a helicopter to fly onto the Hooker Glacier - 100 metres below Jay. “Before the team arrived I was absolutely shattered, I was sitting in the rain with rocks

the size of fridges falling all around me. My pack got ripped to shreds as it was protecting me from falling rocks, and my helmet got majorally chipped. The river had risen four feet and I was freezing. It's the closest I have come to a near death experience, and to have someone rescue you from that horrible nightmare is quite amazing."

Once the team arrived it was all go says Jay. They assessed the situation took some of his wet clothes off and warmed him up, strapped him in a stretcher and gave him some nitrous oxide to ease the pain.

The SAR team carried Jay down a steep rocky stream bed for an hour onto the Hooker Glacier, where he was flown to Mount Cook, treated by a St John Ambulance paramedic and flown to Timaru Hospital. Aside from a broken pelvis and

nose and some lacerations, Jay is recovering nicely and hopes to represent New Zealand at the Rock Climbing World Cup in Kuala Lumpur in September. He also plans to return to Mount Cook to meet his rescuers.

Grant says there is definitely a use by-date for SAR rescue, however he hasn't reached this yet. This is his sixth year, and back when he started it was the challenge of extending his ski patrol skills and the excitement of rescuing people. "Now, it's the satisfaction of helping people get out of trouble, and possibly saving lives which is quite a buzz."

Janine Gray for Paul Dale

Representative of the Department of Conservation on the NZLSAR Committee

A navigation exercise with a twist

In March this year the Wairoa Search and Rescue organisation, in March had a weekend training which included first aid, radio procedures, hut searching, team problem solving, helicopter familiarisation including air observation skills and a

navigation exercise. **Dave Withers** a Gisborne District Adviser sent me the programme and I include the instructions given for the navigation exercise

TEAM EXERCISE
PLANNING AND NAVIGATION

- Your Team is located at GR ----- and **YOU CANNOT LEAVE THAT SITE**
- You are aware of another group of not so able people located at GR ----- They are lost because they don't know what to do - **YOU DO**
- In 90 minutes time an opportunity arises to pass information to this group - that opportunity last for **FIVE MINUTES**

- They only have a **COMPASS**

TASK

Using your map, compass and your teams skill and local knowledge:-

1. Identify a suitable route for the lost group to follow to your location.
2. Present that route in such away that:-
 - a It can be passed over a radio in five minutes
 - b The other group understands the information

NOTE THERE IS NO RIGHT OR WRONG ANSWER - JUST A WORKABLE ONE

John P Tristram
NFO

MapWorld, GPS and Navigation Specialist

New Zealand's first specialist map and navigation retailer, MapWorld, has recently opened a retail outlet in Christchurch. This adds to their mail and phone order service throughout New Zealand. MapWorld is owned by **Neville Jones**, previously a National Park Ranger with Lands and Survey then DoC. Neville has had considerable involvement with Search and Rescue; was DoC's national SAR representative for five years and was instrumental in setting up Land SAR Inc.

Of particular interest to SAR people is the wide range of handheld GPS units MapWorld stock, as well as compasses, emergency beacons and gear to keep your maps dry. As opposed to a marine outlet, the MapWorld crew use and test GPS in bush and mountain terrain, a far tougher

environment for GPS and where performance is critical. Neville believes that GPS units offer a significant advance in outdoor safety and particularly in search efficiency, and is keen to assist groups getting this equipment make the right choices and get the maximum out of their units. MapWorld also has trained navigators who can offer training in basic, advanced or electronic navigation to SAR groups.

Contact details for MapWorld:

Phone 03 374 5399
Fax 03 374 5633
Postal: PO Box 13 833 Christchurch
Street: 173 Gloucester Street
Email: gps@mapworld.co.nz

Editors comment. My understanding is that GPS units need to be Y2K compatible. That is they have a "clock" in them and unless it can accommodate the year 2000 it may not work. Be aware of this if offered a 'bargain basement' priced GPS unit and if need be ask for, in writing, an assurance, that it going to work after the turn of the century.

Humour of a sort (I think)

Peter Summerfield while browsing the Internet noticed a paper containing a number of comments left on USA Forest Service registration sheets. While many may have been "tongue in cheek" some sound typical for the persons we sometimes search for.

- Trails need to be reconstructed. Please avoid building trails that go uphill.
- Chairlifts need to be in some places so that we can get to the wonderful views without having to hike to them.
- A McDonalds would be nice at the trailhead.
- The places where trails do not exist are not well marked.
- Too many rocks in the mountains

In a not to dissimilar vein I was given these definitions at The Region Five Advisers Seminar.

POLICE DISTRICT SAR COORDINATOR

Leaps tall buildings in a single bound.
Is more powerful than a locomotive.
Is faster than a speeding bullet.
Walks on water.
Gives policy to God.

POLICE DISTRICT SAR SERGEANT

Leaps short buildings in a single bound.
Is more powerful than a shunting locomotive.
Is just as fast as a speeding bullet.
Walks on water when the sea is calm.
Talks to God.

POLICE LIAISON OFFICER

Leaps buildings with a running start and a favourable wind.
Is almost as powerful as a shunting engine.
Walks on water in an indoor swimming pool.
Is occasionally addressed by God.

NZLSAR ADVISER (BOTH LAND AND UNDERGROUND)

Barely clears the outhouse.
Looses tug of war with the shunt locomotive.
Can fire a bullet.
Swims OK.
Has heard of God.

As too much of this type of material “could be detrimental to your health” I will continue this story (which is based on well known facts) in another edition of NZLSAR News

John P Tristram
NFO

SAR Dog Update

Recently a meeting was held between members of the Dunedin Land SAR Committee, Dunedin Police Dog Section and the Dunedin Branch of NZ Alpine Search Dogs. The purpose of the meeting was to formulate an agreement between all the parties for the appraisal, training and deployment of search dogs. Dogs as a search tool in NZ have been grossly under utilised and this meeting and the training being done in Dunedin are significant steps to redressing this oversight. Some of the points in the signed agreement are:-

- A yearly joint appraisal of civilian search dogs, against an agreed Standard, will be conducted by the local Police dog handler and representative of the local search dog group.
- Dog and handler combinations which meet the agree criteria will be included in

a list of operational dogs held in the Dunedin SAR Plan.

- Only operational combinations will be deployed on SAR operations.
- A dog/handler combination shall be deemed operational for twelve months before re-testing is required although revocation of operational status can be made.

There were a number of other clauses in the agreement and if you wish to know more please contact me. If I am unable to assist, I can put you on to the right person in Dunedin.

John P Tristram
NFO

Oxford SAR Group receives payout from Prudential Assurance

In March 1988 the FMC SAR Subcommittee concluded a deal with the Prudential Assurance Company, where for each live rescue of one of their policy holders, they would make a donation of a \$1,000 to the SAR group responsible. Well, after nearly ten years, via a missing person and a subsequent search and rescue operation, the jackpot has been hit. Only a few of us old, greyheaded "silverbacks" would probably be aware of or remember the offer, so I suppose it was one of the long time members of the Oxford SAR who reminded them when they rescued Mr Broomfield in July 1997 (it's taken a while for the paperwork to be processed). Prudential have honoured their commitment and in July this year, Oxford were sent a cheque for a

\$1,000. A nice present for the organisation's 30th anniversary celebration and the 70 people who attended this function held on 2 August this year.

Discussions will be held with Prudential in the near future to see if a mutually favourable arrangement can be drawn up with NZLSAR to continue this generous offer. In the meantime if you make a live rescue, enquire as to the persons insurance status and if they are with Prudential let me know ASAP.

John P Tristram
NFO

SWAZI - NZLSAR SAR Supporters Shirt Arrangements

NZLSAR have recently completed an arrangement with SWAZI Apparel whereby all the profits from the sales of a "SAR Supporters Shirt" will go to provide "hi vision vests" for SAR personnel. The shirts retail for \$79,80 but we are able to make bulk purchases directly through to SWAZI for \$65 and I include an order form for you to fill in and send to them. Please make sure of the sizes you require. Its a smart looking shirt and the sales proceeds will be a big advantage to SAR. Buy one for all your friends! The distribution of the vests has yet to be considered, but should not take too long. See page 8 for more details on the shirts.

John P Tristram
NFO

Editors Comments

To **Janine and Paul, Dave, Neville 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 **October News** is most welcome and the close-off date is **Friday 24 September**. 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@xtra.co.nz** . Regards **John P Tristram** National Field Officer