



Connecting the search and rescue sector

Link is a quarterly publication of
New Zealand Search and Rescue

A photograph of a man with grey hair, wearing a red and black plaid shirt and khaki shorts, kneeling in a grassy field. He is holding a black handheld radio to his mouth. A coiled black cable connects the radio to a green, rectangular equipment case on the ground. The background shows a grassy hillside under a clear sky.

Snapshots of progress and change

Marking the 50th issue
of NZSAR Link

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Acting Senior Sergeant
Matthew Wheble page 15



Stretcher carry in the 1960's, Matukituki Valley

To mark the 50th issue of NZSAR Link, we're highlighting just some of the significant changes in SAR over the last 50 years – or thereabouts. We've spoken to a select few people around the country who've worked in SAR for a long time, whose memories and anecdotes are shared in the following five pages.

Special thanks to former librarian Constable Emma Milburn of Dunedin Police (who is also an experienced LandSAR Search Dogs handler) for her contributions to these stories. Other snapshots have been drawn, with permission, from existing articles, audio and manuscripts.

Cover pic

The origins of AREC

No reflection on the use of radio in search and rescue would be complete without dipping into the history of Amateur Radio Emergency Communication, or AREC as they are known today.

The organisation was born in 1932 after the Napier earthquake, to train radio operators in providing reliable message handling over the length of the country, for any type of emergency. Since then, communications have been provided – voluntarily – for thousands of events ranging from search and rescue operations to natural disasters to civil emergencies.

Snapshots from land



Feathers and radios

Dusted off after years of storage in the loft at the old Dunedin Police Station is a small, sturdily built box containing 70-year-old pigeon poo. To Senior Sergeant Brian Benn, it's a national treasure – a perfectly-preserved, tangible reminder of the progress we've made over the course of New Zealand search and rescue history.

In its day, this box would house homing pigeons – hitched on to the back of a Police officer as he set out into the field with locals under his charge to perform a rescue.

“The pigeons were released when someone was found, or at certain pre-arranged points during a search,” says Brian. The birds would dutifully fly back to Dunedin Police Station, where a designated person would watch for their return.

Even in the 1970s, radio communication in remote areas was considered unreliable – and the sheer weight of the equipment often meant that a runner, or pigeon, was the best way to communicate with search base.

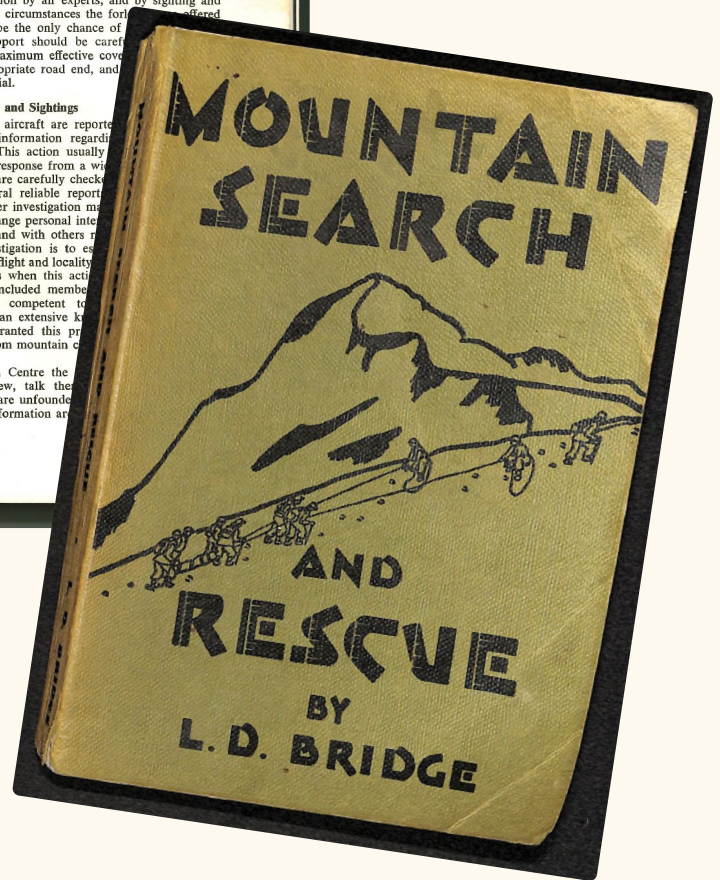
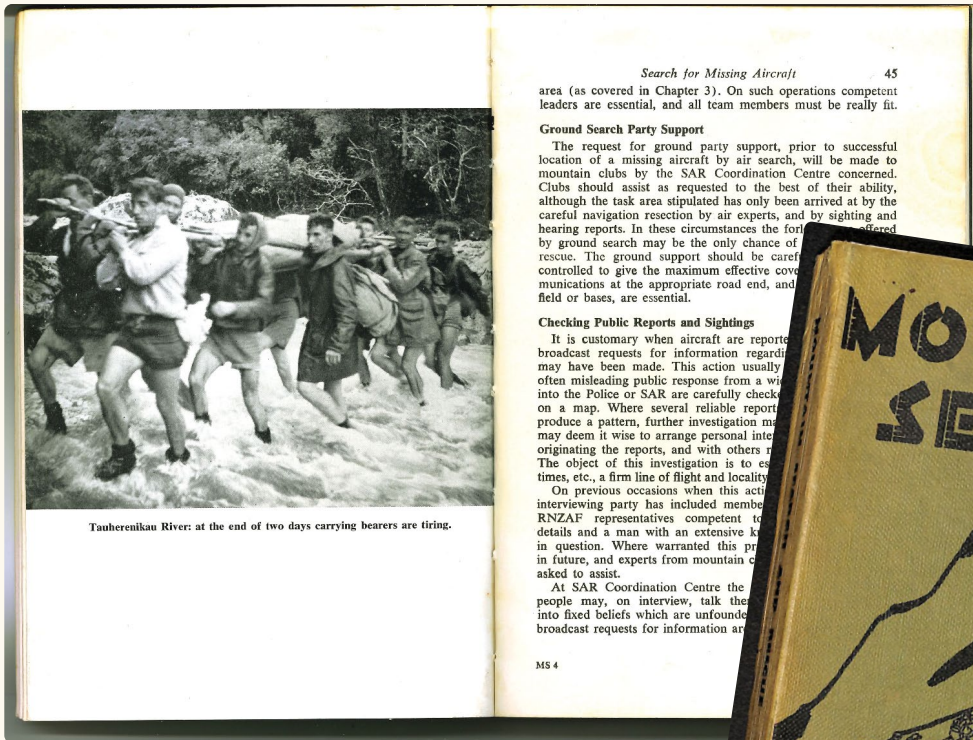
Former Police SAR Advisor and alpine cliff rescue specialist Ivan McLachlan says base radios weighed over 20kgs. They were sometimes taken up into the mountains by horse. The corresponding TRP1 radios used two large, cylindrical batteries about the size of a Pringles tube, making the overall package a cumbersome one. And because the batteries were unreliable, says Ivan, “we always had to carry two spares. All up, the radio and the batteries weighed 27 pounds [12kgs].”

The introduction of High Frequency radios meant that communication was possible with search teams in remote valleys.

LandSAR and Police SAR squads now use rugged, hand-held radios with portable chargers when they are out of cell phone range. Repeater stations pick up the Very High Frequencies, making constant updates a breeze. And there's no second-guessing the location of teams, as SARTrack can plot their positions on a mapping programme each time VHF radios transmit.

S.A.R. OPERATION CHECKLIST	
S.A.R. ADVISER On phone at first notice Initial assessment. Pick likely Controller and call in. Get Police to alert selected Club men.	Transport - Water (Pay hourly rates? - Check Insurance) Harbour Board Lifeboats-Summer-Kaikoura Volunteer groups Jet Boat Assn. R.N.Z.N. Fishermen. Radio A.R.E.C. Civil Aviation-TR3,SSB, Bantam (Ground to air) Army Mountain Radio Service.
INFO. REQUIRED Details of incident, number in party ages, habits, experience, physical ability, clothing, equipment, rations how long overdue, where went in, where expected out, proposed route, who has maps, conditions, weather.	Aircraft for Search Flares Advise injured help coming Supply drop Rescue (helicopter-expensive) Obtained from; R.N.Z.A.F. Canty. aero Club Private operators (Insurance) Heat Hunters Top Dressing.
POLICE CONFERENCE Detailed assessment, if when and where to commence operation. Numbers to be involved. Call A.R.E.C. Communications Transport requirements. Special equipment, appoint Field Controller. Call Club Contacts - avoid persons losing pay, 4 man teams. Face Rescue team. High level. Low level. Volunteer groups. Caving group Ski clubs Other cont acts Forestry Park Local Knowledge Christchurch F.M.C. Country Groups Park Boards Local Runholders Persons recently in area. Mountain Radio Service. (Party in area?)	Doctors F.S.H.Q. Controller Assistant Liaison Stores Housing Desk Food Local Knowledge Press relations Log Base quartermaster Aids Dayglo jackets Citizen band radios First Aid kits Medical kits Loud hailer Auxiliary power N.Z.B.C. High level stores - Wigram, Ohakea Torches Spotlamps Tents Horses Food Stretchers Weather forecast Ground - air code Helicopter marshalling code
Maps Lands & Survey (aerial photos?) Mountain Equipment Ltd. Army Dept. R.N.Z.A.F. Local runholders Forest Service. Transport-Road - Pay Mileage? Army. N.Z.R. Road Services. Forestry Park Boards Volunteer Groups Local Runholders Landrover Club.	Information to Relatives - early Commissioner Town base O/C District Hospital Ambulance - Army - Civilian Staff families

A guide to the initiation of a search and rescue response, when tramping clubs and other groups were contacted in response to a call out, early 1970's



A formative guide

Written in 1959 by Bill Bridge (L D Bridge, MBE), *Mountain Search and Rescue* has now taken its place in history as the first formative guide to land SAR in New Zealand. At the time, search and rescue came under the Federated Mountain Clubs Search and Rescue sub-committee, with representatives throughout New Zealand. This committee became a separate organisation, New Zealand Land Search and Rescue Inc, in 1994.

Mountain Search and Rescue was the first comprehensive manual on the subject and is widely recognised as the start of a formal SAR structure.

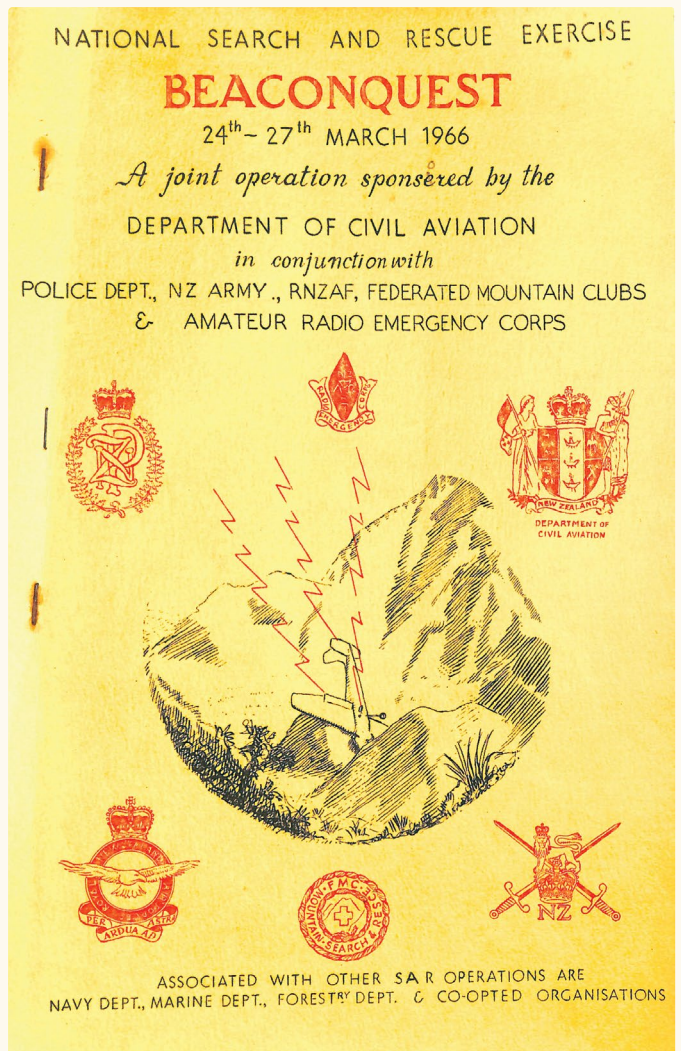
By the time of his retirement, Bill had risen to the rank of Superintendent in the New Zealand Police, Chief Guide of the Tararua Tramping Club (1939-1951) and past president of the Federated Mountain Clubs of New Zealand (1956-1958). He died on a SAREX in the Orongorongo Valley in 1973.

Calls for help

Distress calls were made from mountain hut radios in the 1970s, or by concerned friends or family members reporting an overdue trumper. The locations of injured or missing persons were not precise, which generally made search and rescue operations much longer than they are today.

The advent of personal locator beacons, avalanche transceivers and – of course – mobile phones has been revolutionary. In 2007, analogue beacons were replaced by digital beacons linked to a satellite system, making for quicker and more efficient rescues. Avalanche transceivers were digitised from 1997, working around difficulties such as signal overlap from their earlier analogue models.

The mobile smart phone has helped in more ways than one. Not only has immediate access to up-to-date maps and GPS prevented many people from losing their way, but the convenience of being able to call emergency services from anywhere within cellphone range has cut down response times. One of the most recent innovations is Mobile Locate, which is poised to become one of the most accurate programmes used in SAR – although it does require contribution from the lost or injured person to action and reveal their location.



“It is important to keep your skills up to date. Particularly if you are in a region where you may not be called out very often.” – Roger Bates, LandSAR Life Member

Training

Back in the 60s and 70s, there was no formal training in SAR techniques for field team volunteers. But courses were held on managing an operation.

LandSAR Life Member Roger Bates says they would rely on the Contact Search method in areas where there was a high probability of finding a missing person.

“We would line up, shoulder to shoulder, and keep that formation as we moved forward,” he says. “There really was no other recognised method at the time.”

However, there were occasional search and rescue exercises, such as the “Alpine Quest” of 1968, pictured here. This SAREX followed a national training exercise in 1966 called “Beacon Quest”, which trialled “the effectiveness of radio survival beacons as a SAR aid.”

Alpine Quest set out to “enable search and rescue representatives from throughout the Southern SAR Region to

observe the execution and planning of a Class II SAR operation for an aircraft missing in alpine country.”

Training in SAR changed in the 90s with the influence of Ross Gordon, who introduced techniques used in the United States – particularly tracking. He founded Emergency Management Ltd, the first private provider of SAR training in New Zealand, which subsequently became the Search and Rescue Institute of New Zealand (SARINZ).

“Ross had the courage and the commitment to bring SAR training up to speed,” says Senior Sergeant Brian Benn.

Today, there are many courses available for search and rescue volunteers.

“It is important to keep your skills up to date,” says Roger. “Particularly if you are in a region where you may not be called out very often.”

Snapshots from the sea

Reels, lines and rubber ducks



Over the black sands and powerful swells of Muriwai in the 70s, the dawn of a new era of lifesaving developed.

The reel and lines were becoming outdated and had their limitations, with only 440m of length.

[One of the team, known as the beltman, would swim out to the person in trouble, wearing a belt attached to a line which unrolled from a reel. Other members of the team would pay out the line, then reel in the beltman with the rescued swimmer.]

"If you got to the end of the line and you couldn't reach the person, that was it – the person died," says life member of the Karekare Surf Life Saving Club, Sir Bob Harvey.

Five district representatives had travelled to Southern California in 1968 to study their methods and bring back learnings, like neoprene tubes, rescue buoys and single-man rescues.

Among them was president of the Muriwai Lifeguard Service, John "JT" Thomas, who upon his return changed his club's mindset from 'lifesaving' to "lifeguarding". Rescues were long and exhausting so the shift towards prevention made sense.

But nothing transformed lifesaving as much as rubber ducks – known by the layman as Inflatable Rescue Boats (IRBs).

Developed for the Piha club in 1978, the Arancia IRB prototype was used within hours of being dropped off, for rescuing someone stranded on the rocks.

Now an essential piece of equipment at every lifesaving club in New Zealand – and most of the world – the IRB allows guards to skim over the waves and reach anyone in trouble in a matter of seconds.

From the article "The guardians of the beaches" by Amelia Wade, published in the NZ Herald on 4 January 2020

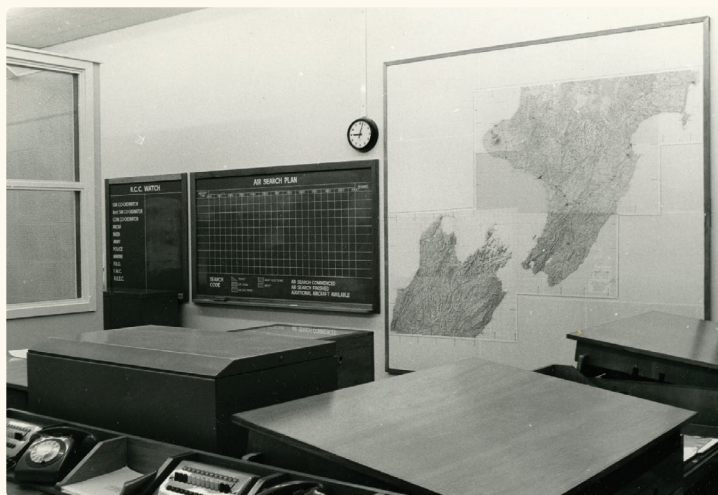
Duty desk

This snapshot is from the personal collection of the late Roger Barrowclough, a key member of the Federated Mountain Clubs and founding member of LandSAR. It shows an early rescue co-ordination centre, possibly taken between 1960-1976.

In 1989 the rescue coordination centres in Auckland, Wellington and Christchurch were replaced by the National Rescue Co-ordination Centre, run by the Civil Aviation Authority. However, a fatal accident off the coast of Oamaru on 11 May 2003 exposed problems with communications. Senior Sergeant Brian Benn was rescue swimmer that day, after the fishing boat *Time Out* overturned and sank – leaving its crew of five in desperate need of help.

"At the time, the RCC duty officer was managing multiple incidents," he says. "We rescued two survivors, but three of the men perished in the water."

A review of the incident led to government funding for a 24-hour, seven-day service, to be provided by a new body,



the Rescue Coordination Centre New Zealand (RCCNZ) in Lower Hutt. It began operations in 2004, under the management of Maritime New Zealand.

While maps still dominate the Operations Room at the RCCNZ today on large computer screens, they bear little resemblance to those pictured – not to mention the telephones!

Boating safely

The Wahine disaster in 1968 spurred the formation of the Wellington Sea Rescue Service (now the Wellington Volunteer Coastguard). The organisation's first lifeboat was purchased with funds raised through a public *Wahine* memorial appeal.

In 1971 the Police decided that separate volunteer groups were needed to help with marine rescues. They encouraged the growth of more Coastguard organisations. The New Zealand Coastguard Federation was formed in 1976.

With a national body behind them, safe boating education became a large part of the services that Coastguard units offered. In 1986, about 500 boaties attended Coastguard courses and attendance increased over the years – last year 10,800 certificates were issued.

But for Senior Master Ian Coard from Riverton Coastguard, one of the biggest changes for the organisation over the past 50 years or so has been the training of volunteers.

“Before the affiliation to the NZ Coastguard Federation, there wasn't a great deal of contact between units,” he says. “Knowledge would be passed on within a Coastguard unit, but no further. Training wasn't standardised as it is today.”

“Now we have a good pool of volunteers keen to advance through the ranks,” he says. “And not so many ‘Captain Araldites’, who were pretty set in their ways.”

New technology is changing the Coastguard landscape too.

“With the launch of the Nowcasting service in the 90s, we are providing boaties with an accurate picture of current conditions in their intended spot, before they head out,” he says. “We've generally become a lot more safety conscious – from TracPlus keeping tabs on where our vessels are, down to the design of the vessels themselves – until recent years, for example, there were no open cabins to get out of the weather.”



Helping survivors on board one of four life boats from the stricken *Wahine*, 1968

“Knowledge would be passed on within a Coastguard unit, but no further. Training wasn't standardised as it is today.” – Ian Coard, Riverton Coastguard



The original Wellington Sea Rescue Service

Acknowledgments:

He Purapura Marara | *Scattered seeds*, Dunedin Public Library and the Dunedin Lebanese Community, www.dunedin.recollect.co.nz

'Search and rescue' by Nancy Swarbrick, *Te Ara – the Encyclopedia of New Zealand*.

"She was caught in a rip and being pulled across the beach, towards Lion Rock."

Off-season rescue puts new lifeguards on the spot

A coaching session for new lifeguards turned into a life-saving emergency for Patrol Captain Rhys Lloyd and his colleagues from Piha Surf Life Saving Club on 13 October 2019.

Rhys was in pre-season instruction mode at 2.30pm on this Sunday afternoon, when he spotted someone swimming alone, who looked like they were in trouble in the water.

"She was caught in a rip and being pulled across the beach, towards Lion Rock," he recalls. "I grabbed the binoculars and confirmed that this person was in need of urgent help."

Rhys and his colleague Murray acted quickly and launched the IRB.

"There was a 2-metre swell, with an outgoing tide, so it was a bit stressful not being able to see her," he says. "Because it wasn't patrol season, the IRB hadn't been used in a while - and it didn't start immediately. It also cut out as we were heading out, but it eventually warmed up."

Back on the beach, new lifeguard Warren Tyler - who had just qualified for patrol support the previous weekend - was tasked to keep his eyes on the drifting person, so that he could direct Rhys and Murray to the right spot. But she disappeared, out of sight behind Lion Rock, soon after the IRB hit the water.

As Rhys and Murray approached the swimmer's last-known position, they spotted her.

"Only her hand was above water," says Rhys. "I remember my stomach dropped, because at that point it went from being a pretty standard rescue to something a bit more intense that might not end well."

The pair focused first on getting their patient's head clear of the water. The 28-year-old woman was unresponsive as Rhys and Murray worked together to pull her on to the IRB.

"When the patient is already submerged, it can be quite hard to get them up on to the boat - especially when they're in a rip," says Rhys. "She was slippery from sunscreen as well, but lucky for us, quite petite."

On the shore, senior lifeguard Vanda called an ambulance and was prepared with fellow lifeguards Jack and Reid to administer emergency first aid.

"We carried her up the beach, as far from the waterline as possible," says Rhys. "It was during the carry when she came to."

The patient was placed into the recovery position and given oxygen. She started to fade in and out of consciousness and the responding lifeguards decided to move her to the first aid room immediately. Once there, the lifeguards continued

Training update

Search and rescue training for 2020 is well underway, with course providers Tai Poutini Polytechnic and LandSAR already shifting gears from registration to delivery.

Over 130 courses will be offered this year, all fees-free to members of search and rescue agencies. You can keep on top of the key changes in CIMS, learn about tracking, river and flood safety or step up into SAR leadership and discover how to manage the initial response – among so many other opportunities.

For a complete list of courses, dates and enrolment details, check the following websites:

- www.tpp.ac.nz/study-options/search-and-rescue/search-and-rescue/
- www.landsar.org.nz/training-calendar/ (members' log-in needed).

Alita Bigwood, Training Co-ordinator at NZSAR, says there are also some new courses on the horizon.

NEW ZEALAND SEARCH AND RESCUE

TWO DAY COURSE

CIMS4

The CIMS4 practical two-day course is for those people who wish to advance their understanding of the Coordinated Incident Management System in a multi-agency environment in a SAR operation.

Pre-requisite: CIMS2

By the end of the CIMS4 workshop participants will have:

1. Demonstrated the CIMS structure at incidents to a team member as indicated in the CIMS unit standards 2553 and 2554.
2. Demonstrated knowledge of the inter-related functions of incident management to the model of coordinated incident management.
3. Demonstrated knowledge of Central function responsibilities.
4. Describe other incident management team (IMT) function manager roles in an incident.
5. Demonstrate knowledge of, produce and update an Action Plan in an incident.
6. Gain and convey situational awareness in an incident.
7. Demonstrate appropriate communication skills in an incident.

Course purpose: This course is a pre-requisite requirement for the Extended Search Planning and the Manage the Marine Response courses.

Enrolment through Tai Poutini Polytechnic at:
www.tpp.ac.nz/study-options/search-and-rescue/search-and-rescue/
0800 800 411

“Watch this space for an update in June. It’s so important to meet the changing needs of our sector and fill any gaps in training to develop and maintain skills.”

“Our advisory committees and governance groups ensure we take a collaborative approach to SAR training and always have a variety of ears to the ground.”

Despite a delayed start to the 2019 programme, more than 1,500 people received search and rescue training. Over the course of the year, Tai Poutini delivered 31 multi-agency courses, while LandSAR delivered 83 courses specific to their membership.

Course content, the degree to which it was applicable to SAR activity and the quality of tuition all rated very highly in an independent survey of participants.

“We’re pleased with the working relationships we have with our training providers,” says Alita. “SAR training is in good health – take full advantage of it and get stuck in.”

to supply oxygen, kept her warm and monitored her vital signs while they waited for the ambulance to arrive.

National Lifesaving Manager Allan Mundy says the swimmer was very fortunate to be alive.

“Basic beach safety messages were absent from this swimmer’s mind prior to entering the water that day,” he says. “If it was not for the diligence and skill of the team of lifeguards, ignoring these messages would have cost the young woman her life.”

Allan says this type of rescue is all too common in New Zealand.

“A significant number of the general public show no respect at all for the sea conditions. This person had caught an Uber from the city for a swim at Piha. She was alone and had headed straight into a rip. She was very fortunate that our guards were out training that day and happened to spot her. A few seconds later and it would have been too late.”

The beach safety messages for swimming are:

- **Choose a lifeguarded beach and swim between the flags.**
- **Get a friend to swim with you – never swim or surf alone.**
- **Don’t overestimate your ability or your children’s ability to cope in the conditions.**





Mentoring and relationship-building on the ranges

A regional search and rescue exercise (SAREX) in November 2019 gave some Police SAR members with little experience in Incident Management Team roles the opportunity to learn alongside experienced LandSAR personnel.

“The SAREX was a good opportunity to assess their training. Most of those volunteers have stayed and enrolled in core SAR courses this year, so that will lower the average age of our team members!”

Based in the Mount Cone and Totara Flats areas of the Tararua Forest Park, the SAREX brought six Wellington and Wairarapa search and rescue groups together over three days to put their skills to the test. This helped to develop and strengthen relationships between the groups, says Evaluator Brett Main of Wellington Police SAR.

“Without regular contact, the Wellington and Wairarapa personnel had become unfamiliar,” he says. “New LandSAR members from both areas not only had the chance to meet, but also gain knowledge of the terrain and the difficulties it presents to missing persons and searchers.”

Murray Johnson of LandSAR Wairarapa says they had an influx of volunteers after the search for Darren Myers in June last year (see SAR Insight, page 12).

“The SAREX was a good opportunity to assess their training,” he says. “Most of those volunteers have stayed and enrolled in core SAR courses this year, so that will lower the average age of our team members!”

The SAREX scenario

On Wednesday 13 November a party of four trampers were dropped off at Walls Whare in the Tararua Forest Park. Police Communications received a call from one member of the party at about 2pm on Friday 15 November. He had become separated from the group the day before, got disorientated, and he was suffering from diabetes.

Contact was made with his next of kin, who reported that the party had failed to arrive at their arranged pick up point at Holdsworth Road that afternoon. She said their intentions were to go to Cone and then to a hut in Totara Flats.

The other three trampers had also become separated from each other and were injured or unwell on different spurs off Cone ridge.



How it panned out

Four role players entered the bush on Friday to get themselves lost. Over 40 people from Wairarapa LandSAR, Wellington LandSAR, Police SAR squads from both areas, AREC and Amalgamated Helicopters battled challenging conditions to find them.

At 8pm on Friday, the scenario was handed to Police SAR and an Incident Management Team (IMT) was formed. Eleven teams were tasked for action on Saturday 16 November. But high winds meant the plan to deploy some of those field teams by helicopter did not go ahead.

“All teams had to walk into the search area,” says Brett. “An area of exclusion from the search was provided to the IMT to ensure the scenario worked as planned.”

The role players were also brought a little closer to the search teams to compensate for the cancelled helicopter deployment.

Wairarapa SAR Co-ordinator, Sergeant Tony Matheson says that despite the weather, schedules were met.

“All lost and injured parties were found on the Saturday, as expected, however it did take longer and field activity on the Saturday night went through to 9pm for some teams.”

“Once the IMT had determined that first aid treatment and medical assessments had met the standards required, the role players were assigned to the team that found them, as walking baggage,” says Tony.

Brett says the SAREX provided an excellent opportunity for the officers new to the Incident Controller role to experience a realistic search, without the pressure of an operational incident.

“Both areas worked well together, and a professional team spirit was evident throughout,” he says.

SARdonyx
JOINT SEARCH AND RESCUE OPERATIONAL INFORMATION SYSTEM

High quality data supporting the SAR sector

SARdonyx has been live for almost nine months now. NZSAR Data Analyst and Assurance Coordinator Jeff Lean is already seeing a dramatic improvement in the quality of data available for presentation and analysis.

“In the pre-SARdonyx data for the land activities that were being undertaken, we see the classification of “Other” in around 40% of incidents,” he says. “This has fallen to just 18% with the data entered directly into SARdonyx. The proportion of “Other” categories is now spread more evenly across a range of activities. This gives us confidence that we are now seeing more accurate reporting than we have in the past.”

NZSAR’s vision is for SARdonyx to become the single source of accurate search and rescue data in New Zealand. As SARdonyx matures, the data it holds will be used to inform detailed analyses of search and rescue activities

in New Zealand, but also to communicate the excellent work being done by every search and rescue agency in the sector.

NZSAR has just released three data summary dashboards on our website – ‘SAR Overview’, ‘Beacons Summary’, and ‘Water Incident Summary’. These can be found at: www.nzsar.govt.nz/Resources/SAR-Dashboard

Eventually, we hope to make a selected range of SARdonyx data openly available under the New Zealand Government Open Data Programme. This could support the analysis of incidents in specific areas, or prevention strategies.

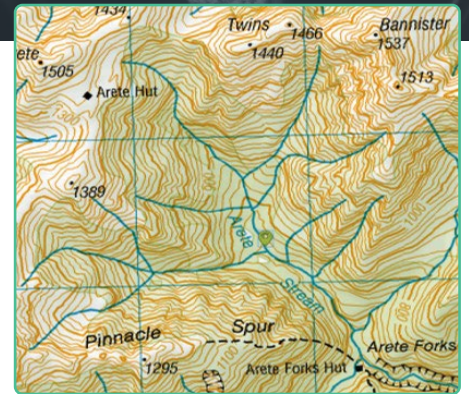


The search for Darren Myers

Darren Myers was reported overdue from a solo Northern Crossing of the Tararua Forest Park on 1 June 2019, launching an extensive search and rescue operation the following day.

Coordinated by Police, the search was carried out in cold, alpine conditions over ten days. Due to the challenging weather, there were limited windows of opportunity to send search teams into the field. But the unrelenting efforts of Police SAR squads, LandSAR and AREC volunteers, Defence Force personnel and a commercial helicopter operator made it possible for Darren to be returned to his family, tragically deceased.

Over 3,000 hours of volunteer time were logged over the course of the search, with LandSAR volunteers coming from Wellington, Horowhenua, Manawatu, Taranaki and as far afield as Hawke's Bay to help their colleagues in the Wairarapa. An independent review of the operation has highlighted its strong points and some interesting issues that could be considered for searches over similar terrain in the future.



Search timeline

01.06.19

Having consulted with LandSAR, Police allowed a further 24 hours for Darren to complete the crossing, as rivers and weather may have caused a delay. Plans were made for search and rescue activity the following day, if he did not arrive.

A text conversation between Darren and his wife Kim suggested that he left Arete Bivouac on the morning of Thursday 30 May, intending to head to Tarn Ridge Hut.

02.06.19

A planning meeting with LandSAR advisors took place. A helicopter search of huts in the area and Darren's intended route returned no sightings. A search team was deployed to Tarn Ridge Hut, where there was no entry from Darren in the log book. Snow at Tarn Ridge was reported to be 300mm deep.

03.06.19

Search activity intensified, including more ground team deployments, the use of a search dog and aerial infrared. Incident Control focused on Darren's likely route, decision points and areas of possible misadventure.

Police also began the investigation phase, which included a home visit, background enquiries and the analysis of phone data over several days. A survivability expert was consulted.

04.06.19

Searching continued. All teams except one at Arete Bivouac were extracted at the end of the day due to the weather forecast.



What went well

The independent review commended the Incident Management Team's attention to safety, family liaison and support, and the handling of media interest in the search.

Incident Controller Sergeant Tony Matheson of Police SAR Wairarapa says working to the weather was key to ensuring people were safe.

"The field teams battled winds of up to 140km an hour and temperatures down to minus 14°C. There were a number of days where extreme weather drove them back to just 2-3 hours of work," he says.

"On Day 5, we moved to a 4-day cycle for ground teams, rather than the 2-day period that most volunteers were available for. This put a lot less pressure on logistics – getting people in and out with deteriorating weather and difficult terrain."

It was made clear from the beginning of the search that team members needed to be operationally competent and suitably equipped to operate safely in the environment where they were being deployed.

Reflections

Tony says the terrain and the hostile conditions were the biggest stumbling blocks.

"There were a number of areas that we simply couldn't access until the weather cleared," he says. "At one point a field team got within 50 metres of the site where Mr Myers's body was located, but had to turn back because of the conditions."

"Mr Myers died at the highest point in the Tararuas, two days before we started looking for him. Early in the search, we believe his body would have been covered in about a metre of snow. We had to focus on survivability, which also led us elsewhere."

One learning for Police that arose from the search was to interrogate the missing person's cellphone data in the early stages, if possible.

"Although it wouldn't have affected the outcome in this case, there is a lot to gain from obtaining this data early on. We used it to refine the search area, confirm likely scenarios and reinvest time in some areas."

The review highlighted a general gap in awareness of developing technologies in search and rescue. It suggested more information was needed for SAR Managers about new tools that are available and potentially helpful in operations like these.

"During the SAROP, a number of existing and emerging search technology devices were suggested by people not involved in the search," says Tony. "For example, Recco detectors and search area image recognition software."

"That technology isn't funded nationally, but could potentially be very useful."

The full independent review of Operation Myers is available on our website: www.nzsar.govt.nz/publications/NZSAR-reviews

05.06.19

No searching due to severe weather. Plans were made for further investigation and search activity.

06.06.19

Teams were re-deployed for 4-day durations. Search activity continued but poor weather continued to hamper efforts.

08.06.19

A chocolate wrapper was found in Arete Stream, 600 vertical metres below Arete Bivouac. An investigation of bank records, till receipts and CCTV established that it belonged to Darren Myers.

Muddy boot prints were found in boggy areas leading from Arete Hut and south to a specific point, but not beyond.

10.06.19

A cell phone ping that was generated by Darren activating his phone on the morning of 30 May was analysed. For a short time, the phone connected with a repeater. An area of probability was established, ranging from Arete Bivouac to the headwaters of the Ruamahanga and Mangahao. Teams were deployed into the headwaters of both rivers.

Searching continued in Arete Stream.

11.06.19

Poor weather restricted searching.

12.06.19

At 9.30am, Amalgamated Helicopters located Darren's body in Arete Stream, below a 6-metre waterfall.

CIMS third edition

From 1 July 2020, the third edition of New Zealand's Co-ordinated Incident Management System (CIMS) will replace all previous versions. Before then, the National Emergency Management Agency (NEMA) has asked all agencies using CIMS to actively transition relevant document content and training towards the new edition.

Are you up to speed with the updates? We've included a short summary here, but visit the NEMA website for detailed information and resources to support CIMS training:

www.civildefence.govt.nz/resources/coordinated-incident-management-system-cims-third-edition

Check out the power point on START for an overview on CIMS: www.nzsar.govt.nz/Knowledge-Training/Start

The main changes are:

- the previous ten CIMS principles have reduced to three core principles, and the remaining (previous) principles are now presented as 'CIMS Characteristics'
- an emphasis on the inclusion of/engagement with iwi/Māori
- a more holistic consideration of all the consequences in Response, and better integration between Response and Recovery
- expansion of the CIMS supporting protocols and systems by introducing a concept of 'Incident Classifications', an enhanced description of 'Governance', and a 'Strategic Communications' role
- a new section on the application of CIMS, to demonstrate how CIMS can be applied across the range of response levels – from incident through to national level
- more fulsome descriptions of the CIMS Functions
- the addition of Recovery (in response)
- some new appendices and templates.

If you have previously undertaken CIMS training, please read the new edition and familiarise yourself with the changes. Existing CIMS unit standards remain valid – you do not have to repeat training.

New Year Honours

Congratulations to the following people who were recognised in the New Year Honours for 2020.

Queen's Service Medal

Gary Dickson (LandSAR), for services to search and rescue.

Gary is credited with developing one of the most professional volunteer alpine cliff rescue teams in New Zealand. For the past 18 years, he has volunteered as communications advisor for Wanaka LandSAR and as the alpine rescue team leader for nine years. He has advised LandSAR New Zealand and is former president of the New Zealand Mountain Guides Association, where he developed qualification standards. Gary has represented New Zealand at the International Commission for Alpine Rescue (ICAR) and the International Federation of Mountain Guides Associations (IFMGA), and facilitated LandSAR New Zealand's membership of the ICAR.

Officers of the New Zealand Order of Merit

Graeme and Rosslyn Gale (Helicopters Otago), for services to aviation and conservation.

Graeme and Rosslyn's fleet of 17 helicopters provide emergency air ambulance services for search and rescue operations, but also medical emergencies, commercial, agriculture, and pest control services. Graeme is Chief Pilot of the Bell 206 Jet Ranger rescue helicopter and was instrumental in developing the Otago Rescue Helicopter Trust, which now operates the rescue service. Rosslyn provides logistical support – co-ordinating pilots, helicopters and equipment.



10 questions with ...

Acting Senior Sergeant Matthew Wheble

Matthew has had a few different job titles at Police, but those who know him best might suggest “gear freak” is a better fit. His passion for the outdoors is coupled with a desire to be well kitted out for his adventures – “much to the annoyance of my wife”, he says. Whether its mountain biking, trail running or tramping, Matthew likes to have the right tools for the job.

On the SAR front, Matthew is normally a frontline Sergeant and 2IC for the Wellington District Police SAR team. In September 2019, he stepped in as Acting Coordinator: Search and Rescue, Training and Development at Police National HQ. Altogether, he’s worked 14 years at NZ Police – 12 of which have been with the SAR squad.

What does your role entail?

I provide a national resource and SAR advisory service for the Police Districts. This involves communicating with the Police SAR District Co-ordinators to ensure they have what they need for operations to run smoothly. I liaise with agencies involved in SAR so we have a clear understanding of what each group will provide and how we will work together. I also have input into SAR training – working alongside NZSAR to help make sure it is fit for purpose.

What led you to work in search and rescue?

Mainly a love of being outside, off the beaten track. Before I joined the Police, I managed outdoor stores which helped to fund my adventures and pay for all my gear! It was always a goal of mine to join the NZ Police and being part of the Police SAR team was a great way to stay involved in the outdoor community, gain new skills, give back and work with like-minded people.

How many resources are dedicated to Police SAR nationwide?

We have one National SAR Coordinator, three full-time SAR District Coordinators, 23 Police SAR Squads and approximately 230 Police working part-time in SAR throughout New Zealand.

We also have two Maritime units, staffed by 20 people in Auckland and 12 in Wellington.

When do Police co-ordinate a SAR operation?

We co-ordinate all Category I searches, which are searches that can be managed at a local level. Police are usually the first point of contact for people who are concerned that someone is overdue from an outdoor activity – whether it’s on land, underground or on the water (within 12 nautical miles of our coastline). We engage local SAR organisations and people who are familiar with the area.

The Rescue Co-ordination Centre (RCCNZ) will also notify us of beacon activations. Generally, Police will then co-ordinate any Category I searches triggered by an activation, while RCCNZ will co-ordinate Category II. It’s all about working together to make sure things run smoothly.

What is the most challenging aspect of your work?

Taking a step back from operational work to focus on the national co-ordination side of SAR.

What motivates you?

I gain a lot of satisfaction and sense of purpose from being involved in operations and bringing someone back to their loved ones – alive or sadly, if they are deceased. Working with all the different people in SAR is also a huge motivating factor.

How would you describe your working relationship with volunteer groups?

I’ve had the opportunity to work with some fantastic people from such diverse backgrounds. I’m always amazed at how much time and effort they put into their organisations. Being part of the SAR family is a wonderful thing and I’ve made a lot of good friends along the way.

How has Police SAR changed over time?

The biggest change has been that of technology, from administrative functions through to supporting operational work in the field. For example our ability to live-track field teams and having more reliable communications keeps staff safer in high risk environments.

We’ve also seen a lot more searches in the urban environment for people living with Alzheimer’s and dementia. Wandatrack has been a great asset in assisting with these searches.

Having said that, Police SAR principles haven’t changed much. Technology is just another tool at our disposal. We always go back to the fundamentals of SAR and use these tools as we need them.

How do you relax?

I like to get out mountain biking and trail running as much as I can during the week. I usually take three decent trips a year – one week tramping with my wife, one week mountain biking with mates and another week by myself skiing and alpine tramping.

If there was one thing you could impress upon people about staying safe, what would it be?

To be prepared: plan your trip; check the weather; tell someone your plans; know your limits; take the right supplies; and take a PLB.

(Technically seven things Matthew, but we’ll let you off the hook).



Duncan's desk

Summer 2019-2020 has proved to be a bit of a rollercoaster across the country. We've seen record high temperatures and drought in some parts of New Zealand, torrential rain and floods in other parts, while the lower North Island has experienced relentless gale force northerlies for weeks at a time. Although the SAR numbers aren't all in at time of writing, sadly it appears to have been a particularly bad summer for fatalities in the water.

This is our 50th edition of the Link newsletter. From the feedback that I've received over the years, I'm confident that Link has been of interest and benefit to SAR people across the country. It's hard to reach busy people and we're very conscious that everyone has a lot of demands on their time. We'll refresh all our communication channels this year, so I'd welcome your ideas for Link or other areas of interest you think we should be talking about.

You'll see our cover story has explored a bit of our search and rescue history. It's often hard to find the time to look back and take the longer view, but it can be rewarding to do so. As a sector, we've experienced a huge amount of change over a relatively short period of time. It's now hard to conceive of SAR being performed without reliable lightweight radios, helicopters, all weather rescue vessels, comprehensive SAR training, satellite positioning and navigational aids etc. These things (and many more) form the basic building blocks of modern

search and rescue practice but were almost unknown 50 years ago.

No doubt change will continue, probably faster than ever before. The NZSAR Council has asked the Secretariat to be more proactive at looking at new technologies and other ways to improve and enhance the sector. I look forward to working with SAR agencies as we explore these opportunities.

Another area of focus for us is learning from our experiences. For the past two years, we have run operational reviews on selected SAR operations. These reviews have identified a host of things to consider, change and improve across our SAR system. It's a useful process, but it is proving challenging to share these 'lessons' effectively with everyone who could benefit from the knowledge.

Fees-free SAR training has also been occupying our time in recent months. It was certainly pleasing to be able to start the training year in January this year, compared to last year's late start. Our current funding is only interim, so on behalf of the SAR Sector, we are engaging with the Ministry of Education and Tertiary Education Commission to establish more permanent arrangements for 2021 and beyond. I'm very confident we'll sort something out, but it might be a bit different to what we are doing now. We'll keep you updated.

Stay safe
Duncan

Calendar

SAREXs and SAR training:
nzsar.govt.nz/Calendar/Events

28-29 March 2020 – Health, Safety and Wellbeing Workshop

6 May 2020 – New Zealand Search and Rescue Awards

1-2 June 2020 – Disaster & Emergency Management Conference 2020, Gold Coast

Websites

www.nzsar.govt.nz
Search and Rescue sector resources and information, including a PDF of this newsletter

www.adventuresmart.nz
Safety information and tips for people planning outdoor activities

www.beacons.org.nz
Information about 406 beacons, including where to purchase, rent and register a distress beacon

www.tpp.ac.nz/study-options/search-and-rescue/search-and-rescue/
SAR Multiagency training

www.landsar.org.nz/training-calendar/ (members' log-in needed)
LandSAR Training

www.nzsar.govt.nz/Resources/SAR-Dashboard
'SAR Overview', 'Beacons Summary', and 'Water Incident Summary'

www.civildefence.govt.nz/resources/coordinated-incident-management-system-cims-third-edition
NEMA website for detailed information and resources to support CIMS training

www.nzsar.govt.nz/knowledge-training/start/SARdonyx
SARdonyx training on START – Search and Rescue Knowledge Library