



Connecting the search and rescue sector

Link is a quarterly publication of  
New Zealand Search and Rescue



# A remarkable avalanche response

## Inside:

2023 Search and Rescue Awards  
page 3

Clearing the canyons  
page 10

Welcome to Giuliana Petronelli  
page 15



# Contents

## Issue 67 – June 2024

Duncan's desk	2
2023 Search and Rescue Awards	3
Measuring land-based outdoor activities	8
Searchlight: The search for Seek	9
We need your help	9
Clearing the canyons	10
Focus on lead agency collaboration during Exercise Whakarauora Tangata	11
A remarkable avalanche response	12
Clyde Rescue II	14
YSAR Satellite branches	15
Welcome to Giuliana Petronelli	15
10 questions with... Jess Sullivan	16

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## Duncan's desk

### Kia ora koutou

As reports come in of snow falling on high country across the country, I'm reminded that the avalanche season is upon us. In this issue, we look at a remarkable avalanche SAR operation from last winter and acknowledge the work of the forecasters and support staff who operate the NZ Avalanche Advisory. This system, funded by NZSAR and led by the Mountain Safety Council, is a highly valuable tool, not just for those heading to the slopes for work or play, but for rescue teams who might need to enter avalanche terrain during a SAR operation.

The final activities in Exercise Whakarauora Tangata were conducted recently, concluding 18 months of planning, preparation and exercises. We will look back in more detail about this exercise series in the next issue of Link, but it's clear that the sector has taken every opportunity to learn from these activities. Our next task is to update our Nationally Significant SAR Framework to reflect all the learnings. Thank you to all those involved in this considerable undertaking.

In May, we honoured the recipients of the 2023 NZ Search and Rescue Awards at Parliament. Hosted by the Associate Minister of Transport, Hon Matt Doocey, the evening was a great opportunity to celebrate the achievements of many teams and individuals from across the sector. You can read more about them on page 3. Congratulations again to all the Award winners.

Te Wiki Tūao ā-Motu / National Volunteer Week is celebrated from 16-22 June and provides an excellent opportunity to highlight the outstanding work and service of so many people across the motu. Of the 11,095 people involved in our sector during the last financial year, 89 percent were volunteers. Without your dedication to helping people when they need it the most, we couldn't deliver the quality of search and rescue services that we do. Thank you very much for your service.

It seems the wider public are well aware of the exceptional work done by our sector. Just recently, Search and Rescue was ranked #2 in the Verian Public Sector Reputation Index for 2024. Around 3,500 New Zealanders were surveyed for their opinions of public sector agencies across four areas: trust, social responsibility, leadership, and fairness. This impressive ranking reflects the very high levels of confidence that New Zealanders have in the people and agencies who make up our search and rescue sector.

Stay safe and keep warm,  
Duncan Ferner  
Director  
NZSAR Secretariat

## Kings Birthday Honours 2024

Several individuals were recognised for their services to search and rescue.

**Air Marshal Kevin Short** has been appointed a Companion of the New Zealand Order of Merit. Air Marshal Short has served for nearly 50 years in the New Zealand Defence Force, most recently as the Chief of the Defence Force. Air Marshal Short represented the NZDF on the NZSAR Council between 2018 and 2024.

**Wing Commander Mark Whiteside** was awarded the New Zealand Distinguished Service Decoration for coordinating the transition from the P-3K2 Orion aircraft to the P-8A Poseidon. These long-range aircraft and their highly capable crews provide search and rescue capability in the remote reaches of our 30 million square kilometre search and rescue region. Congratulations and thank you for your service.

### COVER IMAGE

Responders at the scene of a huge avalanche near Queenstown, on 5 August 2023. Courtesy Will Rowntree

# 2023 Search and Rescue Awards

Exceptional achievements and dedicated service honoured at the NZ Search and Rescue Awards.

On Tuesday 21 May 2024, the Hon Matt Doocey, Associate Minister for Transport, presented the 2023 New Zealand Search and Rescue Awards in the Grand Hall of Parliament.

“It’s people who are the beating heart of the search and rescue sector,” said Minister Doocey. “Nearly 90 percent of the people in the sector are volunteers. They go out day or night to help those in need, and I’d really like to acknowledge family, friends and employers of our volunteers who make that possible.”

Minister Doocey went on to acknowledge the number of years so many people quietly contribute to search and rescue. “A quick count of the support category recipients tonight revealed they have over 170 years of search and rescue experience between them. That’s quite simply incredible.”

At the ceremony, we were privileged to host three ministers holding portfolios directly linked to the search and rescue sector: Hon Mark Mitchell, Minister for Emergency Management and Recovery, Hon Brooke van Velden, Minister of Internal Affairs and Workplace Relations and Safety, and Hon Chris Penk Associate Minister of Defence. The presence of these Ministers demonstrated the very high regard that the Government has for our search and rescue sector.

These Awards are presented annually in recognition of outstanding achievements within New Zealand’s search and rescue region, which covers 30 million square kilometres.

Awards given in the Operations category recognise significant rescue operations that took place between 1 January and 31 December 2023.

Awards given in the Support category recognise the contributions of individuals to search and rescue in New Zealand.

Forty nominations were received for 2023, with two Gold Awards and ten Certificates of Achievement being awarded at this year’s ceremony.

“The stories behind each award are humbling to read,” says New Zealand Search and Rescue Secretariat Director Duncan Ferner. “Each recipient has demonstrated exceptional dedication to search and rescue. Their service and accomplishments are an inspiration to us all.”

“Congratulations to all our award recipients. We are grateful for your commitment and passion for search and rescue. Thank you for the work you do to reunite missing people with their whānau and friends.”



Hon Matt Doocey with the recipients of the 2023 NZSAR Awards. Courtesy Mark Coote





# Gold Award

## OPERATIONAL ACTIVITY

*He iti hoki te mokoroa, nāna I kakati te kahikatea.*

*While the mokoroa grub is small, it cuts through the white pine.*

The NZ Search and Rescue Gold Award (Operational) honours the people, groups or organisations who have performed at the highest level during a search and rescue operation in 2023. The recipients of the Gold Award have made a very significant contribution, going above and beyond their normal duties.



### Hawke's Bay Surf Life Saving NZ SAR Squad

**For the rescue of over 200 people from Esk Valley and Pakowhai during Cyclone Gabrielle on 14 February 2023.**

In early February 2023, Cyclone Gabrielle brought unprecedented rainfall to the North Island. Widespread flooding and landslides claimed 11 lives and destroyed homes, businesses, and infrastructure.

At 5am on 14 February, the Hawke's Bay SLSNZ SAR Squad were called to assist in the Esk Valley, where rapidly rising floodwaters had stranded many people in their homes and on their rooftops.

Following a rapid risk assessment, the squad deployed to the area. They launched their inflatable rescue boats into the swift current and began rescuing people from the floodwaters. Each team had to operate in strong currents, navigating a maze of buildings, trees, fences, and debris for nearly five hours.



In the early afternoon, the squad were redeployed to Pakowhai with other Surf Life Saving NZ personnel. The Ngaruroro River had burst its banks, flooding houses and rendering the area near unrecognisable. Seven inflatable rescue boats were deployed, and the teams worked into the evening rescuing stranded people.

That day, the squad rescued over 200 people. Being locals, many of the squad members had their homes and livelihoods personally impacted by the cyclone. They dropped everything to rescue others in need, clearly going above and beyond for their community.

The NZSAR Council acknowledges the severe and ongoing impact Cyclone Gabrielle has had on the affected communities. The Council extends its deepest gratitude to all the agencies, organisations and individuals who were involved in search and rescue operations during the cyclone.



# Certificate of Achievement

## OPERATIONAL ACTIVITY

**Northland Land Search and Rescue**  
**Northland Police SAR Squad**  
**Fire and Emergency New Zealand Ti Hiku Specialist Water Rescue Team**  
**Fire and Emergency New Zealand Urban Search and Rescue Team**  
**Fire and Emergency New Zealand Whangārei Fire Station and support staff**  
**Northland Plumbing and Gas**  
**For the search for a missing teenager in Abbey Caves on 9 May 2023.**

On 9 May 2023, Police were notified that one student was unaccounted for after a school group got into difficulty in Abbey Caves, Whangārei.

Severe thunderstorms lashed the area, as responders searched the cave entrance where the student was last seen. They conducted frequent risk assessments as water levels rose. Staff from Northland Plumbing and Gas operated a fibre optic camera to investigate areas underwater.

That evening, the rain eased off and the water levels dropped. The missing student was located but was sadly deceased. After a difficult rope recovery operation, the student was able to be returned to his whānau.

## Wakatipu Land Search and Rescue – Alpine Cliff Rescue

For the rescue of two climbers from The Remarkables between 1-2 July 2023.

Around 5pm on 1 July 2023, the Wakatipu Land Search and Rescue – Alpine Cliff Rescue team received a call from Police regarding two climbers caught out by a rapid weather change in The Remarkables mountain range near Queenstown.

Four team members attempted a helicopter rescue but were thwarted by failing light and 100-kilometre per hour winds. Conditions were severe, with heavy snow falling, -15 degree wind chill and high avalanche danger.

After a detailed risk assessment, the team deployed on skis at 10:30pm. Frequently re-assessing their route and risk management, they reached the stranded climbers around midnight, before escorting them to safety.



## Rakaia Land Search and Rescue

### South Canterbury Land Search and Rescue

#### Murray Bowden and Buck

For the rescue of a missing tramp from Little Mount Peel / Huatekerekere between 26-27 December 2023.

Around 10pm on 26 December 2023, Police were informed that a solo tramp had become lost in Peel Forest.

Two field teams, each with search dogs, searched the tracks on Little Mount Peel / Huatekerekere throughout the night in persistent rain and low cloud.

Murray Bowden and his search dog, Buck, located the tramp a considerable distance from the summit shelter around 6am. He was assisted to the shelter, where he was treated for minor injuries and mild hypothermia. The weather prevented a helicopter extraction so field teams assisted the tramp off the mountain.



## The crew of the *Amaltal Apollo*

### The crew of the *Moana Chief*

#### No. 40 Squadron Royal New Zealand Air Force

For the rescue of a solo sailor 50 nautical miles from Cape Kidnappers / Te Kauwae-a-Māui between 29-30 March 2023.

Around 5pm on 29 March 2023, a solo sailor on the 10-metre yacht *Astra* was swept overboard. The sailor managed to swim back to the yacht and activate his distress beacon, but a helicopter rescue was impossible due to 60-knot southerly winds and 7-metre swells.

The following morning, the 42-metre *Amaltal Apollo* and 175-metre *Moana Chief* arrived, guided by the aircrew on a C-130 Hercules aircraft from No. 40 Squadron.

With the *Moana Chief* providing shelter, the crew of *Amaltal Apollo* rescued the sailor using a line thrower rocket, plucking him to safety from the large swells.



## Northland Rescue Helicopters

For the rescue of a sailor 100 nautical miles from Kerikeri on 12 May 2023.

On 12 May 2023, the skipper of the 18-metre recreational launch *PATRIOT X* notified authorities that a crew member needed medical attention. At this time, the yacht was 150 nautical miles north-east of Kerikeri, bound for Fiji.

An urgent evacuation was deemed necessary, and the Northland Rescue Helicopters crew from Whangārei were tasked to respond.

At 11.40 pm, 100 nautical miles off the coast, the Whangārei helicopter crew winched the sailor on board in three-metre seas and 20-knot winds, displaying exceptional skill and teamwork near the edge of the helicopter's operating range.







# Gold Award

## SUPPORT ACTIVITY

*He kotuku rerenga tahi.*

*A white heron flies once.*

The NZ Search and Rescue Gold Award (Support) honours the individual who has made a very significant contribution through their work over a sustained period. The recipient of the Gold Award (Support) has performed at the highest level to deliver a marked impact on the search and rescue sector.



### Senior Constable Conrad Smith

**For his service and commitment to search and rescue and the Ruapehu Emergency Services Charitable Trust.**

Senior Constable Conrad Smith has been an active member of the search and rescue community for 18 years, from field team member to incident controller and chairperson of the Ruapehu Emergency Services Charitable Trust.

He has managed numerous high-profile search and rescue operations in the Central North Island, including the Mangatepopo canyoning tragedy and the Te Maari eruption that destroyed Ketetahi Hut. Conrad has also volunteered for the Ruapehu Alpine Rescue Organisation (RARO) for over 15 years, often turning up for jobs on his days off from Police.

Five years ago, Conrad identified the need to future-proof the Central North Island's search and rescue capability. He led the small team that established the Central Plateau Emergency Management Facility, which provides a modern incident control point, training space, equipment store, and staging area for local operations. Thirteen different organisations and local iwi were consulted in the process and nearly \$1.2 million raised. The facility will be officially opened in mid-2024.

The facility sits on land gifted by local iwi and is the combined home of the Ruapehu Alpine Rescue Organisation, Ruapehu Land Search and Rescue and Ruapehu Civil Defence. It also acts as an operations base for the Whanganui Police SAR Squad, enabling faster, more effective responses to emergencies for Ruapehu communities and visitors.

Conrad is a humble and inspirational leader, who is considered a role model for how to build and maintain relationships across the search and rescue sector.



# Certificate of Achievement

## OPERATIONAL ACTIVITY



### Martin Balch

**For his service and commitment to search and rescue in Otago.**

Martin Balch has been involved in search and rescue for nearly 50 years, in multiple organisations including Dunedin Marine SAR and Amateur Radio Emergency Communications. He has made significant contributions to governance, holding many key roles in each agency.

Martin is highly regarded for his commitment to building relationships between different groups across the Otago area.

Martin's knowledge of the weather, tides and conditions is highly regarded and has been invaluable to many search and rescue operations. He is a personable and highly skilled individual, who is considered a true team player.



## **Graeme Irvine**

### **For his service and commitment to search and rescue in Otago.**

Graeme Irvine has contributed to search and rescue on land and water for over 50 years. He is highly respected for his local knowledge, and operational experience.

Graeme contributed his professional engineering skills to acquire and maintain new rescue equipment for Dunedin Marine SAR. His passion for recreational off-road driving helped him develop a formal off-road transport capability for Dunedin Land Search and Rescue.

Also a valued member of the incident management team, Graeme has provided exemplary support to training and operational processes.



## **Rob Carpenter**

### **For his service and commitment to search and rescue and Coastguard Marlborough.**

Rob Carpenter joined Coastguard Marlborough in 2015 and became unit president in 2021. His leadership style prioritises relationships and community engagement.

Under Rob's leadership, the unit has significantly raised its profile within the community. The crew are now familiar faces at local schools and community events. He is a champion of diversity, encouraging and supporting a wide range of volunteers.

Rob's colleagues within Coastguard describe him as a truly transformational leader, who is dedicated to serving others.



## **Phil Harman**

### **For his service and commitment to search and rescue and Surf Life Saving in Hawke's Bay.**

Phil Harman joined the Waimārama Surf Life Saving Club in 1982 and has contributed to the Surf Life Saving Hawke's Bay SAR Squad for more than 20 years.

During a decade as squad coordinator, Phil developed a team of highly skilled surf lifeguards and oversaw many search and rescue operations. He simultaneously held positions as regional examiner, national committee member and patrol auditor.

Phil's knowledge and experience in marine search and rescue is highly regarded by his team members, the wider Surf Life Saving community and the search and rescue sector.



## **Jonathan Walmisley MBE**

### **For his service and commitment to search and rescue and Coastguard Wānaka Lakes.**

Jonathan Walmisley joined Coastguard Wānaka Lakes in 2012 before becoming president in 2014. Under his leadership, the unit has become a sustainable and highly functioning team.

Jonathan's inclusive leadership style has had a long-term positive impact on both day-to-day operations and unit culture.

Jonathan spent over five years leading the establishment of a dedicated Marine Rescue Centre in Wānaka. Altogether they fundraised over \$1 million, with the centre opening in November 2022.

Jonathan is highly regarded by his SAR colleagues and local community for his integrity, commitment, and leadership.

# Measuring land-based outdoor activities

A quarterly survey commissioned by the NZSAR Secretariat yields useful information about participation trends.

New Zealand’s water and boating recreation sectors both conduct regular participation surveys, but until recently, there has been no land-based equivalent. The NZSAR Secretariat commissioned a trial of a year-long study, beginning in Autumn 2023, to provide evidence for recreational safety, prevention and SAR efforts on land.

Each quarter, 750 participants representing the general New Zealand public were surveyed on their participation in 14 land-based recreational activities. They were also asked about their preparedness and attitudes to risk, distress beacon carriage, plus awareness of safety and prevention messaging. Finally, each was asked about any incidents or SAR operations they’d experienced, and whether that changed their behaviours.

“The research will help the sector identify trends over time, and allow analysis of the underlying behavioural factors which might lead to a SAR operation,” says Tania Seward, NZSAR Senior Advisor Communications and Prevention.

Relative exposure is a score that quantifies the number of hours per day that a person is exposed during an activity, their preparation,

equipment and whether or not they are in a group. The higher a relative exposure score, the less likely they are to be able to avoid, or survive, a distress situation.

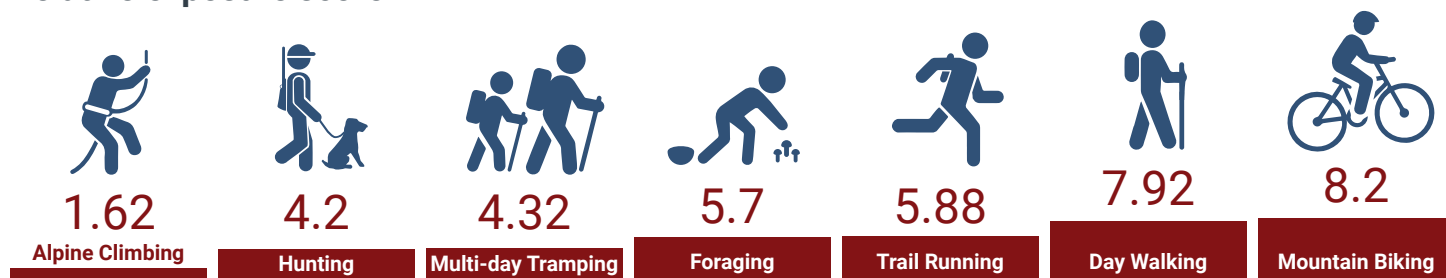
However, groups with greater relative exposure didn’t always feature highest in the SAR operation statistics gleaned from the SARdonyx database. Within the survey analysis, mountain bikers had the highest exposure score of all land-based activities, but only accounted for a 4.2% share of the SAR operations within the top seven underlying activities. Multi-day trampers showed moderate participation rates, were generally prepared well, took suitable equipment and mostly travelled as a group. This gave them a moderate exposure score overall, but out of the seven most common underlying activities leading to a SAR operation, trampers accounted for 40.8 percent of those operations.

“Having a year’s worth of data is invaluable,” says Tania. “It’s a new tool in the toolbox that will help us measure the effectiveness of the safety messaging and other prevention work undertaken by the sector.”

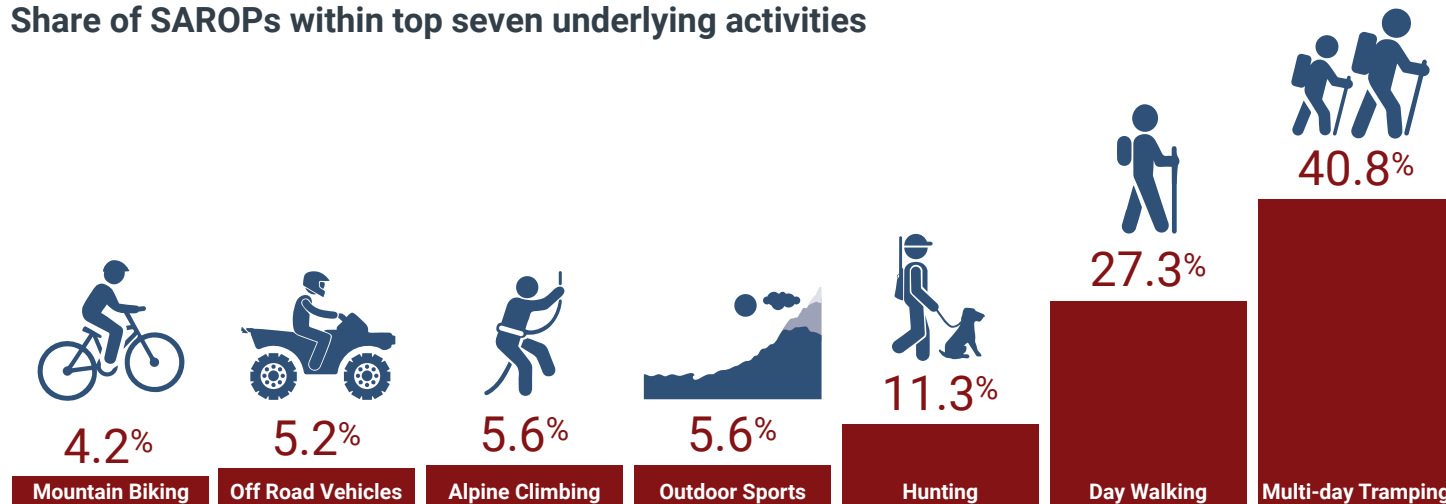
## Exposure doesn’t correlate to SAR operations

If we consider only the top seven recreational activities which lead to a SAR operation, we can compare their share of SAROPS with the relative exposure of the activities with the highest scores from the survey.

### Relative exposure score



### Share of SAROPs within top seven underlying activities



- Data period: 12 months between 1 March 2023 - 29 February 2024.
- Data sources: SARdonyx and Land recreation quarterly survey.



# Searchlight: The search for Seek

During the month of May, Land Search and Rescue ran the 'Searchlight' public awareness campaign, to engage with supporters and develop new relationships.

Market research conducted in 2023 showed nearly half of the public had no idea what Land Search and Rescue was. "A big part of our organisational resilience is to have diverse and meaningful relationships with the public," says Katie Arden, Fundraising Manager for Land Search and Rescue. 'Searchlight' is a strategic campaign, run for a month over the next three to four years, to build relationships and diversify non-government income streams. "Tactically, it will raise our profile, celebrate the efforts of our volunteers, and give our supporters the tools to help us engage with the public."

Supporters such as sponsors, suppliers and members of the community were offered posters to hide in plain sight on their premises. They feature the new mascot 'Seek' the dog, which the public were encouraged to find.

"After finding Seek, they can scan a QR code, which takes them to a campaign website. The site showcases the work of our volunteers and highlights those that support us."

Everyone who found Seek was eligible to enter a draw to win prizes as well as make a donation. "This interaction gives us the opportunity to engage with people and build longer-term relationships. Hopefully, some will develop into donors and sponsors," says Katie.

Other campaign elements include promotional videos placed during on-demand TV shows, motorway billboards, social media and email communications, fundraiser resource packs, newspaper ads and supporter ribbons to give away.



"It's about celebrating everyone who supports us, and trying to make it as easy as possible for them to spread the word about what our volunteers contribute."

Find out more at [landsar.org.nz/searchlight-mascot](https://landsar.org.nz/searchlight-mascot)

## We need your help

Complete our short survey to help us better tailor our communications to your needs.

The NZSAR Secretariat is looking at ways to improve our communications, and as part of that we want to better understand how our information and content is – and can be – distributed.

As a member of NZ's SAR community, or someone with an interest in our work, your views are very important to us. We want to ensure our communication with you is helpful and relevant.

This survey comprises 20 questions designed to capture key aspects of your readership experience, including your connection with NZSAR, how you receive Link magazine, and what other channels you use to receive information from us. It will take just 5-10 minutes to complete.

The information gathered will help us to refine the way we provide content to you, to better meet your needs.

Simply scan the QR code or visit [nzsar.govt.nz/survey](https://nzsar.govt.nz/survey) to get started. If you have any questions, please email us at: [info@nzsar.govt.nz](mailto:info@nzsar.govt.nz)

Thanks for your support.

Tania Seward  
Senior Advisor – Communications and Prevention  
NZ Search and Rescue Secretariat.



# Clearing the canyons

More than 50 people from a range of organisations and agencies participated in the bi-annual National Canyon Search and Rescue Exercise (SAREX) held in the Queenstown Lakes District on 1 March 2024.

At the Makarora Fire Station, the Incident Controller explained the scenario. A pair of hitch-hiking social media influencers had told friends they intended to photograph some famous gorges near Haast Pass. The pair failed to turn up to a social gathering, sparking a comprehensive search by air and ground involving field teams and canyon teams from Land Search and Rescue.

"It's a complicated environment to operate in," says Dan Clearwater, SAREX organiser and Wānaka Canyon team coordinator. "We are managing exposure to heights, swiftwater hazards and cold temperatures, whilst needing to effectively search areas such as log jams, rock sieves and undercuts where a person could become entrapped."

There are about 100 trained Canyon SAR volunteers, who are part of teams based in the greater Auckland area, Central Plateau, Wellington, Motueka, Hokitika, Christchurch and Wānaka. "This SAREX gave us the chance to share knowledge and promote national consistency in our techniques," says Dan.

This year the SAREX had observers from Australian and Taiwanese Canyon SAR teams, plus Police SAR coordinators and staff from the Rescue Coordination Centre New Zealand. Relationship building was a key aim of the SAREX.

"We are trying to help the coordinating authorities understand what we can do: safely and effectively search in and around gorges, canyons and waterfalls. Then we can rescue or recover people from those environments."

After a morning of searching, mannequins simulating the two deceased influencers were found in Robinson Creek canyon. A radio repeater had been installed with the help of Wānaka Search and Rescue chairperson Bill Day and his helicopter. This repeater enabled the Wānaka-led incident management team to re-task the canyoneers to the recovery operation. At the staging area, the Makarora Volunteer Fire Brigade provided a freshwater biosecurity wash.

Two police officers donned canyoning gear, and were guided to the scene to conduct an examination. Then, after a karakia was said, the mannequins were loaded into floating canyon rescue stretchers. Rope systems were rigged to lower each stretcher down four more waterfalls within the gorge, the largest being 25-metres high.

Wānaka Police SAR coordinator Alan Lee was impressed. "Those canyons are intimidating, cold, and high-risk environments, but the team were obviously in their element. They did a fantastic job of finding and recovering the mannequins."



Canyon teams are trained in vertical rescue, using techniques that also manage swiftwater hazards. Courtesy Eugene Yeo



A team member is belayed to a ledge to search a rock sieve using an avalanche probe. Canyon SAR volunteers use wetsuits for protection against lengthy exposure to swift, cold water. Harnesses, ropes and technical gear allow them to abseil down waterfalls and progress through the canyons. They use diving masks and snorkels to search pools, and in highly turbulent water, use avalanche probes or GoPro cameras on a selfie stick. Courtesy Eugene Yeo

Coordinating authorities can reach the Canyon teams using the NZSAR Resources database: [nzsar-resources.org.nz](https://nzsar-resources.org.nz)

Local team contacts are also available at: [nzcanyoningassociation.org/rescue](https://nzcanyoningassociation.org/rescue)



# Focus on lead agency collaboration during Exercise Whakarauora Tangata



## Nationally Significant SAR Exercise

The third phase of Exercise Whakarauora Tangata was conducted in Wellington on 20 March, and brought together over 70 personnel across multiple agencies. The exercise focused on a police-led multi-agency Incident Management Team (IMT) supporting a Category 2, RCCNZ coordinated incident response. A boutique cruise ship with 256 passengers and crew enroute to New Zealand was forced to evacuate north of Kāpiti Island. The exercise centred on the functional management of the passengers and crew, addressing their medical and welfare needs plus customs and immigrations issues. The IMT provided coordination regarding foreign embassy questions, such as those related to foreign diplomats, disaster victim identification and management of human remains, plus the reconciliation of all passengers and crew.

On 17 April, a Stakeholder / Lead Agency Workshop was held. The aim of the workshop was to identify the requirements for effective higher level incident coordination and management during a Nationally Significant SAROP - how these would be implemented and may change over time. Participants were presented with the scenario of a charter aircraft which crashes while on a flight between Wellington and New Plymouth. The aircraft was transporting a foreign industry delegation, a party of third country investors, senior businesspeople, and an associate minister.

Multi-agency groups were asked to consider a range of questions that would guide the structure of the response in terms of the strategic and operational leads, and how agencies would collaborate to manage the likely consequences. Following plenary discussions, the

groups were provided with further developments, which included mass fatalities, and asked to consider how the response might need to change and what would need to be considered from a consequence and risk perspective.

Feedback was that the workshop provided a better understanding of the National Security System, the functions of Watch Groups and ODESC, plus the roles of strategic and operational lead agencies. Both the exercise and the workshop also provided great opportunities for participants to further their understanding of what other agencies contribute and how they would be involved in a Nationally Significant SAR event.

### The National Security System

The National Security System is activated if a situation is sufficiently complex or significant that it needs national coordination and response. The National Security System is activated by the Department of the Prime Minister and Cabinet. Watch Groups are formed in response to a potential, emerging or actual event, and comprise senior officials of agencies relevant to the situation.

When necessary, the Officials Committee for Domestic and External Security Coordination (ODESC) is convened. ODESC composes the Chief Executives of the relevant agencies. Together they provide all-of-government coordination to ensure the lead agency and agencies in support have the resources and capabilities to respond to a situation.

Learn more at [www.dpmc.govt.nz/our-programmes/risk-and-resilience/odesc-system-during-crisis](http://www.dpmc.govt.nz/our-programmes/risk-and-resilience/odesc-system-during-crisis)



An illustration of the exercise-play movements of passengers and crew once the Master of Silver Pacific II ordered the ship to be abandoned. Google Earth Screenshot, Data SIO, NOAA, U.S. Navy, NGA, GEBCO. Image (C) 2024 Airbus.

# A remarkable avalanche response

Just before midday on 5 August 2023, two snowboarders triggered a huge avalanche beyond the boundary of The Remarkables Ski Area. Experts later assessed the avalanche at size 3.5; which means more than 10,000 cubic metres of debris with the power to destroy cars and small buildings.

A significant number of people and resources were rapidly deployed to search the debris. Although responders discovered that no one had been buried, the speed and effectiveness of the search demonstrated the readiness of the sector to respond to an incident like this.

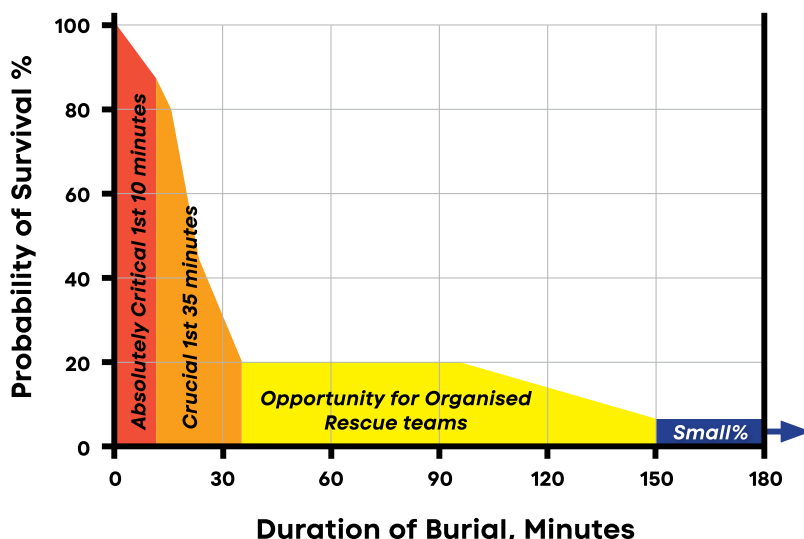
Most avalanches involving people happen away from ski areas or cell phone coverage. This makes avalanche SAR operations like this extremely rare: there were only seven recorded since 2015.



Aerial overview of the avalanche site. Courtesy Will Rowntree.

Russ Tilsley, coordinator of the Wakatipu Land Search and Rescue – Alpine Cliff Rescue team happened to be nearby when the slide happened. “It’s a popular ski touring area, and we’d seen ten or more people in the area when the slope avalanched,” said Russ. He sent one of his friends to a nearby ridge line to call the Police, and then began a search of the debris using avalanche transceivers. One person was partially buried, but had dug themselves out by the time Russ and his companion arrived.

## Indicative survival times



The best chance of survival for someone buried in an avalanche is to be located and dug out by people from their group within 10 minutes. Survival rates then drop rapidly, but there is still an opportunity for organised rescue teams to save life if they can respond quickly.

Indicative survival times. Source: New Zealand Avalanche Search and Rescue Readiness Guidelines May 2022.



Sergeant Terry Wood, of Queenstown Police SAR squad, received the call and activated the avalanche response readiness plan. "People on-site hadn't got any transceiver signals from beneath the debris, but with so many others in the area, it was impossible to know if someone without a transceiver had been buried," says Terry. "Because survival is so time-critical, the plan calls for us to activate a range of resources, very quickly."

The avalanche experts at The Remarkables Ski Area were near the top of the calling list. "Within minutes of the call, we had two patrollers heading up a lift, to ski over the ridgeline to the scene," says Will Rowntree, Snow Safety Officer for Remarkables Ski Patrol. Soon afterwards, the first helicopter arrived to take Will plus a colleague and his dog to the scene. "Avalanche Dogs are trained to sniff out a buried person, providing the best chance of survival if that person wasn't wearing an avalanche transceiver."

Following the readiness plan, Will took the role of Avalanche Site Commander. "We flew around the avalanche site, to properly understand the situation. Russ was pretty sure there were no transceiver signals, but considering the size of the event and the numbers of people nearby, there was no concrete evidence that no-one was buried. So we had to run the system."

Soon personnel and dog teams from Cardrona Ski Patrol arrived by helicopter, and Will coordinated the progressive clearance of the site. First with avalanche transceivers, then with the RECCO system (which detects radio signal reflections from a small metallic tag sewn into snow clothing) and then avalanche dogs. "The dog teams are our only viable option to find people who are buried who are not wearing a transceiver or RECCO clothing."

"We swept the entire site with all three dogs, then specifically in the higher probability terrain areas," says Will. "About an hour and forty minutes after being called, we declared the site clear."

Communications were challenging on site. Radios on the search and rescue channel provided comms between operational teams, but Will needed to use the Remarkables digital radio



When a dog showed interest in a certain spot, members of Coronet Peak Ski Patrol excavated the snow to ground level, roughly 3.5 metres down, to comprehensively clear that area. Courtesy Will Rowntree

network to reach back to the Incident Management Team at the ski area base.

At the post-operation debrief, there were a few suggestions for improvement. Some phone calls pre-empted the planned information flow, which led to some double handling of data. However, all involved agreed that overall the response was extremely well conducted.

Because avalanche SAR operations are so rare, Will considered this event a career highlight. He presented on the operation at the Southern Hemisphere Alpine Conference, held in Wanaka, in mid-June.

### Resources for Avalanche responders

The New Zealand Avalanche Search and Rescue Readiness Guidelines are available to download from [nzsar.govt.nz/sar-system-support/avalanche/](https://nzsar.govt.nz/sar-system-support/avalanche/)

The guidelines were significantly updated in 2022 with funding support from NZSAR and extensive consultation with the New Zealand and international avalanche industry. They aim to assist response agencies with developing and improving their own readiness plans.

The NZ Avalanche Advisory is delivered by the Mountain Safety Council and funded through NZSAR. As well as providing condition assessments to the public, the Advisory is also intended as a resource for SAR personnel to use when responding to incidents in avalanche terrain. [avalanche.net.nz](https://avalanche.net.nz)

The Southern Hemisphere Alpine Conference (SHAC) is held every two years, to promote sector collaboration and continual improvement in alpine safety. SHAC is run by the Mountain Safety Council, with support from NZSAR. [mountainsafety.org.nz/shac](https://mountainsafety.org.nz/shac)

### Insights from The Remarkables operation include:

- Pre-planned communication procedures should be followed as closely as possible for maximum efficiency and to avoid double-handling of information.
- Ensure dog handlers get a good visual overview of the site from the helicopter before being tasked.
- In high-tempo operations, helicopters can be used to shift people and dogs even short distances across the site. This can conserve responder energy and precious minutes.
- Reviewing readiness plans annually, plus after operations and SAR exercises, ensures plans are fit for purpose.
- Annual pre-season meetings of response players support working relationships. These meetings also provide the opportunity to reconfirm improvements and standing arrangements in the readiness plan.

# Clyde Rescue II

**A one-of-a-kind Coastguard Rescue Vessel, now operational on Central Otago's lakes and rivers.**

Alongside local iwi representatives and members of the wider Coastguard community, Central Otago Mayor Tim Cadogan blessed *Clyde Rescue II* on 4 May. This unique vessel is specifically designed for its operational context, with a suite of modern technology providing a significant improvement in safety, comfort and capability for Coastguard Clyde.

Central Otago's waterways, terrain and climate provide some specific operational challenges. Although they regularly respond to boating incidents on Lakes Dunstan and Roxburgh, volunteers also frequently support land-focused operations.

"The number of cycle and walking trails in the region has grown significantly in recent years," says Chris Thornton, Southern Lakes and Seas Unit Support Manager at Coastguard. "Many locations are difficult or impossible to access by road, which means Coastguard Clyde is often called to assist."

*Clyde Rescue II's* unique folding bow door is a key enabler for these operations. Manually operated by a crew member, the door enables convenient, dry access to shore, which is a game changer for transporting stretcher-bound patients, or in sub-zero winter conditions.

The tall, semi-enclosed cabin provides warmth in winter, and shade during summers that reach nearly 40 degrees celsius. "Collaborating with emergency services, other SAR agencies and commercial users is always on our mind when conducting an operation," says Chris. "As well as responding to search and

rescue incidents, the vessel can transport and deploy personnel and resources from partner agencies to aid the outcome of the task." A large open space at the bow allows for carriage of such ancillary equipment.

Powered by a trimmable 215 Hamilton Jet unit, the 7-metre-long rescue vessel is well suited for its operational area, encompassing nearly 4,000 square kilometres. The area's rivers, lakes and dams all have shallow zones and underwater hazards. Detecting and avoiding these hazards is one function of the vessel's StructureScan 3D Sonar; searching for objects of interest is another. "The volunteers have the capability to scan parts of the river and lake bed during a search, which may help in the detection of these objects," says Chris.

This vessel is the culmination of a two year project with countless hours of volunteer time dedicated to planning, development, fundraising and project management. Financial support from Coastguard Tautiaki Moana, Lottery Grants Board, Central Lakes Trust, local sponsors, public contributions, and the Unit's own funds, has brought this \$500,000 project to life.

"We're so excited to welcome *Clyde Rescue II* to our fleet," says Coastguard Clyde President James Robinson. "Our new vessel represents not only an upgrade in our equipment but also our investment in our volunteers and setting up the Unit for future success. The next step is bringing in a new wave of committed volunteers to help support the community on its waterways."



***Clyde Rescue II*, with its distinctive and unique folding bow door has a suite of advanced electronics that provide a large boost to safety and operational effectiveness.**

**A modern GPS plotter provides accurate navigation information, and powerful radio gear provides enhanced communication reach from the deep valleys where these lakes and rivers are often located.**

**Because many of these waterways are narrow, the crew is often operating in close proximity to shore, which is particularly difficult at night. The new vessel is equipped with a Syonix Low light camera, providing enhanced collision avoidance and operating effectiveness in those situations.**



# YSAR Satellite branches

A hybrid training model for the next generation of SAR responders in rural areas.

Supported by government funding through a Service Level Agreement with NZSAR, Youth Search and Rescue (YSAR) continues its National Scaling Strategy to establish new branches and grow student numbers. One of the branches set up last year was Thames Coromandel.

“In rural areas, the number of potential students is relatively low, and often farther apart than a practical car-journey to attend an evening training session,” says Robin Douglas, instructor for Thames Coromandel.

With students spread between Ngatea, Whitianga and Tairua, the solution to make best use of volunteer instructor time was a hybrid model. “We would run the weekly training sessions at a hall in Ngatea, and students would gather in Whitianga and Tairua to participate online,” says Robin. They found challenges when teaching hands-on skills like map and compass, so reached out to local Land Search and Rescue groups for volunteer instructors.

“Some potential instructors were cautious about the time commitment. But after helping out, the volunteers realised the rewards of working with youth and getting to practice their own core SAR skills more frequently.”



Level 2 students during a hybrid training session.  
Courtesy Robin Douglas

Now there are volunteer instructors from each of the five Land Search and Rescue groups in the Coromandel region, and local Coastguard units have hosted students on unit training activities.

In-person training exercises are run over six weekends a year, joining in with the YSAR Waikato to share resources. “As we get more students and instructors, Thames Coromandel might become separate branches, but for the near future it’s an excellent way to deliver the training with limited volunteer instructor resources.”

## Welcome to Giuliana Petronelli

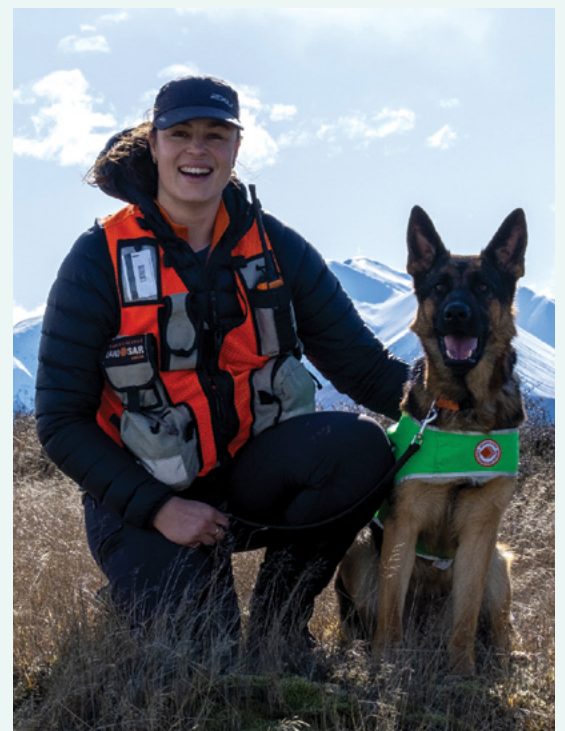
We are pleased to welcome Giuliana Petronelli to the NZSAR Council as our new Independent Member, representing the interests of the nearly 10,000 volunteer professionals in Aotearoa New Zealand’s SAR sector.

“For three generations on both sides, my family have been involved with the military, the Police and with search and rescue,” says Giuliana. Her grandfather, Tony Cunningham, was involved with Police search and rescue for decades, and it was his stories of search and rescue operations that ignited her interest in joining from a young age. “As a young girl, I recall incredible stories of survival and the lengths that rescuers would go to, to reunite and return loved ones to family members, this was and is of utmost importance,” she said.

In 2022, after retiring from all sport, Giuliana joined the Rakaia Land Search and Rescue Group and is currently training to become an operational search dog handler. “My family has had dogs since before I could walk,” she says. “Becoming a search dog handler is the perfect role to combine my love of working with dogs, the outdoors, and to give back to the community. Training a search dog comes with the highs and lows of learning any new skill set, but I’m thoroughly enjoying and relishing the challenge.”

As well as working as a lawyer in Christchurch, Giuliana has a strong background in governance, most recently with the Italian Chamber of Commerce in New Zealand, New Zealand Rugby Judiciary and as a Founding Trustee of the Canterbury Community Rugby Trust.

“Being on the NZSAR Council is an exciting opportunity to be a conduit between SAR volunteers and the Government officials that support them,” she says. “I’m pleased to be able to use my skills and experience to bring the voice of our SAR volunteers to the top table. It’s a great chance to give back to a sector I’m very passionate about.”



Giuliana with trainee search dog Lanza, near Hakatere, inland from Ashburton.  
Courtesy Chris Pansters



# 10 questions with ...

## Jess Sullivan

Jess draws on her broad experience in SAR and Emergency Management to train and inspire the next generation of responders at Youth Search and Rescue Christchurch.

### Can you tell us about your background growing up?

My family is into the outdoors, but the Four Peaks Challenge during primary school was really influential for me. The challenge involved training and support to climb the iconic Canterbury foothills of Mt Grey, Thomas, Oxford and Richardson. Later I completed a Bachelor in Sustainability and Outdoor Education at Ara Institute of Canterbury.

### What led you to an interest in SAR?

A close family friend was a Police SAR Squad member, and I was fascinated with all the stories he told. But being involved in a SAR operation was what really got me! During the Four Peaks challenge, one of the adults got injured, and we had to call for help. Seeing the rescue in action was amazing: I knew I had to be part of that one day.

### When did you become a SAR volunteer?

I joined Land Search and Rescue Oxford in 2020. It's a fantastic bunch of people, with a wide range of special skills. For example, we've got people that use radios for work who do our comms training, and medical professionals who run regular first aid sessions.

### What is important to you about being a Land Search and Rescue peer support person?

Mental health is so important for responders. We all get into this sector to help others, but who helps the helpers? I want to provide a relatable sounding board for volunteers who are having a hard time, or help them access the other well-being resources that Land Search and Rescue has on offer.

### Is there a memorable SAR operation you can tell us about?

There isn't one that stands out in particular, but we are getting more operations that are multi-agency. It's rewarding to contribute our skill set as a piece of the solution to a bigger problem.

### You also volunteer for other agencies. What roles have you done there?

I volunteered for eight years for NZ Response Team 1, which supports Civil Defence and Urban Search and Rescue. While working for Hato Hone St John, I started volunteering on the ambulance and still get out on the trucks when I find some free time.

### What do you do for work and how did you get into it?

I work for Selwyn District Council, as an Emergency Management Officer. My own experience with natural disasters, such as a large cyclone when in Australia, highlighted the need to improve emergency response. That inspired me to study for a Graduate Certificate in Emergency Management. My past experience and diverse skill set allows me to have a multi-agency perspective to my work.

### How did you become a YSAR instructor?

I'd heard a little about YSAR before learning the Christchurch branch was starting up. They were after people with a background in the outdoors, SAR or emergency management and I ticked a lot of those boxes. I reached out to them and began instructing at the start of 2024.

### What's the best thing about volunteering with YSAR?

We get to watch these young adults grow in confidence, not only in their SAR skills, but in themselves. We're able to give them the space to develop their leadership, problem solving, communication and teamwork.

### What would you say to others who might be interested in instructing for YSAR?

Having role models is so important for our YSAR wāhine. I wanted to continue the legacy of women before me, to show young women that there are many places for them in SAR and Emergency Management. So, I want to really encourage other women in the sector to consider instructing for YSAR. There are new branches starting up around the motu and they all need quality instructors.