



Connecting the search and rescue sector

Link is a quarterly publication of  
New Zealand Search and Rescue



# Women thriving in Coastguard

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## About

Link magazine is published quarterly by the New Zealand Search and Rescue Secretariat. Editors: Duncan Ferner and Daniel Clearwater

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## COVER IMAGE

Sara Psailia from Coastguard Auckland at the second #WomenInSAR training, held in Bågaskär, Finland in August 2024.



# Duncan's last desk

## Kia ora koutou

My time at the New Zealand Search and Rescue Secretariat is at an end. Looking back at it, 19 years seems like a long time. But in the moment, it always seemed like there were so many things to improve and nowhere near enough time to get it all done.

When I started this role (way back in November 2005) the search and rescue (SAR) sector was both very different and remarkably similar. Then, like now, it was the people in the sector which made it a great thing to be a part of. Mostly unpaid, possessing common or similar purpose and values – all determined to do the right thing. Then, like now, we all brought different ideas to the discussion and a willingness to 'sort out' whatever the issue of the moment was.

But some things were very different. We experienced several operational failures where people lost their lives when we should and could have saved them. We had little idea who we were, what we achieved and what it cost to do our work. We got things done through a range of local arrangements as we had little in the way of nationally agreed standards, processes or systems. Many SAR organisations were far less 'organised' with no or very few paid staff and little in the way of policies or systems. Personal protective equipment was often a matter of personal choice and there was a lot less training available than there is now. We were just starting the changeover to 406 MHz distress beacons with 6 registered in 2006 compared to over 144,000 registered now. Equipment like digital radios and night vision equipment, thermal images and drones were almost unheard of outside of the armed forces.

Perhaps the biggest difference has been with Government's investment into our sector. In 2005, the NZSAR Secretariat managed no sector funding at all. This year alone, the Secretariat will oversee more than \$69 million of Government investment into our sector. This sustained increase in funding has, over time, enabled the sector to make continued improvements in a very wide range of areas. Most importantly, while we still have many challenges, we no longer experience systemic failures in the way we used to.

Ours remains a world leading search and rescue system and it is the envy of many countries. I like to think that my team and I made a positive difference to search and rescue and those needing our services. To everyone who encouraged, supported, advised and sustained us, thank you. At a personal level, it's been a great privilege to serve the sector. And my special thanks to all the people who worked for me directly as part of the Secretariat or as a contractor or consultant. Your good humour, patient advice and assistance has made the Secretariat a great thing to be a part of.

Stay Safe

Duncan Ferner

Director

NZSAR Secretariat

# Women thriving in Coastguard

Supporting women from Coastguard Tautiaki Moana to excel here in New Zealand and alongside their peers in Finland.

The Women thriving in Coastguard initiative began in 2023 with discussions with women about their experiences in the organisation. "It became evident that we could do more to promote and support women in their SAR journey with Coastguard," says Jacqui Arnold, Volunteer Manager for Coastguard Tautiaki Moana. The initiative aims to build maritime SAR skills and leadership capacity within the organisation. The goal is comparable rates of progression between all genders and ethnicities of volunteers. "By collaborating nationally and reaching out to SAR agencies outside of New Zealand, we aim to enable more women to develop and enhance their skills."

Sarah Psaila is one of the women who is making the most of these opportunities. As well as being the staff member coordinating the Safe Boating programme for kids, Sarah has been a Coastguard Auckland volunteer for nearly 10 years. She realised that she needed a little more encouragement to take the next steps into leadership roles. "My husband joined after me, but I saw him progressing faster towards getting his skipper's ticket," says Sarah.

"The first all-women Skipper's development course at Coastguard was just the thing I needed. It was fantastic to train alongside other women 'in the same boat' as me, who were all very capable, but just needed that little extra nudge. Since the course in July 2023, six of the eight women have qualified as skippers."

The International Maritime Rescue Foundation (IMRF) has been running a #WomenInSAR initiative since 2019, to increase the representation of women in the maritime SAR sector. Sarah had been following the programme and applied to attend the second #WomenInSAR training, held in Bågaskär, Finland in August 2024. Sarah, plus Kate Stewart from Coastguard Sumner were selected to attend. With support from Coastguard, Sarah and Kate joined sixteen women representing 10 SAR organisations from



**Sarah Psaila from Coastguard Tautiaki Moana attended #WomenInSAR at Bågaskär, Finland in August 2024. She joined sixteen women representing 10 SAR organisations from 10 countries at the three day event.**

10 countries at the three day training event. The emphasis was on building connections through sharing knowledge and experiences. Facilitated discussions on topics such as leadership and decision making complemented on-water activities.

Delegates helped crew Finnish Lifeboat Institution rescue vessels ranging from a 26-metre launch, to a 11-metre jet boat to a 5-metre rigid hull inflatable. "We took turns as helm, navigator or skipper, operating unfamiliar vessels, in unfamiliar waters with an unfamiliar local crew," says Sarah. "During the informal parts of the event, we could open up and discuss difficult topics freely with our female peers."

Although most of the general procedures were the same, Sarah noticed a few key differences. "Finland has tens of thousands of islands peppered around its coastline. For multi-vessel searches, they divide search areas into smaller quadrants, operating individually in and around the islands, rather than in a multi-vessel search pattern like we use in New Zealand's more open waters. The waters are cold, so the standard kit is a drysuit and helmet with internal comms."

Delegates were also very interested in the "Seaflex" onboard logging system which Coastguard Auckland has deployed across its fleet. Sarah shared that the software integrates all the incident sheets, fuel logs, vessel information and maritime checksheets with on-shore databases and comms networks.

The experience left Sarah with connections across the globe, with whom she continues to share and collaborate. "Everyone has been so open and supportive, and we're all benefiting from the shared knowledge and encouragement."

## 2024 was a year of significant anniversaries for maritime rescue

- 50 years:** The Safety of Life at Sea (SOLAS) convention which forms the key legislation for international maritime safety was enacted in 1974.
- 100 years:** The International Maritime Rescue Federation was founded in July 2014.
- 200 years:** The Royal National Lifeboat Institution reports saving over 146,000 lives since its inception in 1824. The Koninklijke Nederlandse Redding Maatschappij (KNRM) or Royal Netherlands Sea Rescue Institution was founded the same year.





Volunteers from seven Coastguard Units came together for the first-ever Coastguard RWC workshop at Raglan in May. Courtesy Coastguard Tautiaki Moana

# Fast, small and agile: Rescue Water Craft (RWC)

The unique capabilities of RWC help them fill an important niche in water-based search and rescue and emergency management capability.

RWC or Jet Skis are operated by New Zealand Police, Coastguard Tautiaki Moana and Surf Life Saving New Zealand.

Each of these operators value the ability of the RWC to quickly access places that would be difficult or impossible to reach with other types of vessels. This capability comes from high speed, agility and the absence of a propeller below the waterline. In addition, being able to operate with a crew of only one or two supports quick deployment and efficient coverage of an operational area with fewer people.

We spoke to representatives from each of the agencies and organisations that operate RWC, to understand how they apply the capabilities to their specific environments and situations.

## Sergeant Jesse Jenden oversees the RWC portfolio at the Tāmaki Makaurau Police Maritime Unit

The Unit first acquired a RWC as a general policing and public engagement tool. “It was ideally suited for policing events in the harbour, such as the America’s Cup. It allowed us to easily get up close to public vessels to talk.”

Of 21 staff at the Unit, 13 are qualified to operate the RWC. “Each has a minimum of Skipper – Restricted Limits ticket, plus we get trained by Surf Life Saving NZ in challenging surf conditions at Piha.”

Police generally operate in pairs with one crew member per RWC. Each vessel is usually fitted with an inflatable rescue sled connected at the rear. “Although we use RWC for patrolling, as a safety vessel for other training and during searches, they really come into their own as a rescue platform. The sled gives us the flexibility to switch roles quickly if we need to.”



The first time the Tāmaki Makaurau Police Maritime Unit RWC was used for search and rescue was during the Auckland Anniversary Weekend Floods in 2023. “We were called to search for a person last seen near a flooded river. Normally only 10 feet wide, the banks were now 400 metres apart with water flowing through trees, fences and other hazards. Operating alongside another RWC for mutual safety and support, we could nip into shallow areas and negotiate the current easily. That operation highlighted the need to have a support vessel when operating in challenging or high risk environments.”

## Johnny Banister is Regional Manager – Northern for Coastguard Tautiaki Moana

RWC complement the capability of other Rescue Vessels that Coastguard operates. “Their manoeuvrability, speed and size means we can access a person in moving and breaking water, where we wouldn’t put a larger vessel.”

RWC are operated by nine out of 62 units at Coastguard. Depending on the Unit location, they operate RWC at river bars, surf breaks, as well as further out to sea.

Some units have operated RWC for a long time, whilst others are new to the capability. “Coastguard is using Government investment to ensure that units across the whole organisation have access to standardised equipment, procedures, training and development opportunities. The first-ever Coastguard RWC workshop was held in May at Raglan. Seven units came together to discuss a purpose-built RWC training curriculum, share experiences and test their skills in a challenging environment. Raglan was the perfect location that covered many of the environments we operate in, including a fairly calm harbour, the river bar and the surf zone.”



Coastguard Units always run a crew of two on a RWC. This allows crews to recover an unresponsive patient and manage them during a longer transit back to shore. Alternatively, patients can be transferred to a larger rescue vessel, to provide more comfort and better care.

## Max Corboy is National Radio Communications Manager for Surf Life Saving New Zealand, and leads the Otago region Surf SAR Squad

There are around 30 Surf Clubs that operate RWC, which are mainly in the North Island. Nationally, RWC are used for general patrolling, preventative action, event guarding and SAR. “They don’t replace our traditional Inflatable Rescue Boats (IRB), they complement the capability. The IRB are much lighter and can be carried by as few as two people and launched on a shore break. RWC can only be launched where a vehicle and trailer can access fairly calm water. Whilst a RWC can manage one or two patients, the IRB can accommodate up to six if needed.”

Crew numbers depend on the task. For patrolling, one person operates the RWC. For rescue, a second crew member with flippers and rescue tube (float) is carried on the inflatable sled. In a multi-patient scenario, the crewperson can be dropped near one person, whilst the RWC driver recovers someone else.

For search tasks, RWC are around twice as fast as an IRB, which allows them to get to the search area quickly.

“In Otago harbour, we work closely with the local Coastguard unit. We can respond very quickly and our agility can help us get in close to allow a patient to leap onto the sled from the rocks. Then we can transfer them to an IRB or Coastguard Rescue Vessel.”

The training and qualification process is rigorous. Candidates must have held an IRB driver qualification for more than 2 years, and be endorsed by their club. After at least 10 hours of training, they sit an exam in waves greater than 1m in height.



# Gone bush on Great Barrier

Perspectives and insights from both the responders and subject person of a maritime SAR job that became a land operation.

At approximately 1pm on Sunday, 28 July 2024, John Ogden set off in his sea kayak from Medlands Beach, Great Barrier Island. John was 82 years old and quite familiar with the area. He was an experienced paddler, who was equipped with a wetsuit and personal locator beacon. His plan was a day trip past Shakespeare Point, then south along the coast before returning the same way.

"When I set off, conditions were sunny and clear, with light northerly winds," says John. But after lunch at his destination, the winds had picked up to around 20 kilometres per hour, with one metre high waves. As he returned northwards up the coast, John was about 500 metres offshore to avoid reflected waves from the rocky coastline. "I'd paddled in these sorts of conditions frequently, so I wasn't worried. However, hip pain from osteoarthritis flared up unexpectedly, which meant I couldn't control the kayak properly. I didn't want to be tipped over out there, so I turned and let the wind and waves help me to the safety of a rocky beach." John pulled his kayak up above the high-tide mark and began to walk back to his car by climbing over the Oruawharo high point then following the Kowhai Valley track. The route was steep and scrubby, which made for slow progress. When darkness fell around 6pm, he continued very slowly without a torch.

John had given his intentions to his wife, with an estimated return time of 6pm. As he was overdue and away from his intended route, he decided to activate his personal locator beacon. However, John suffers from Raynaud's syndrome, which results in numb fingers in cold conditions.

"Although I knew how to activate my beacon, the mechanism was awkward. In the dark with numb fingers, I simply couldn't do it."

John's wife reported him overdue to local Police around 7.30pm and at 8pm a SAR operation began. The Police Maritime Unit vessel *Deodar III* and the Police Eagle Helicopter departed from

Auckland. "At night, with increased northerly wind and rough seas, we expected the transit time to be about two and a half hours," says Sergeant Kevin Stone who was Incident Controller onboard *Deodar III*. "So once we were underway, we contacted Coastguard Great Barrier Island to see if they could respond sooner than us."

Coastguard volunteers launched from Tryphena harbour in good time and motored to the search area. Meanwhile, the Eagle helicopter crew were at the scene, and discovered a kayak on the rocky shore around 9pm. They asked Coastguard to investigate, but their vessel couldn't land due to the onshore winds and rough sea conditions. However, Coastguard determined the kayak had been intentionally pulled above the high-tide mark.

"In that area, radio communications with all the assets is a challenge," says Kevin. "But mobile phone coverage is reasonable, so images of John's kayak could be sent to us and to Eagle." That allowed the Eagle crew to confirm that the kayak definitely belonged to the missing person.

"We were very confident the missing person was no longer in the water, but he was not near the kayak. After a thorough discussion with our Tāmaki Makaurau SAR Squad colleagues, the decision was made to suspend the maritime operation and begin a land operation," says Kevin. Once incident control was handed over, *Deodar III* left the scene.

Senior Constable Steve Webb and Constable Pat Forde were flown to the scene in the Eagle helicopter. "After we relocated the kayak, the aircrew used their thermal imaging camera and found the man fairly quickly," says Pat. "Using the helicopter's loudspeaker, we told him to stay put."

The two officers performed a hover egress to a rock on the scrubby hillside, about 100 metres away. The officers reached John, who was in good spirits, but cold and wet. It was deemed too risky to attempt a hover ingress with John at night and with the pain in his hips, so Eagle returned to base and the Auckland



Operational area map. Contains data sourced from the LINZ Data Service licensed for reuse under CC BY 4.0



## Insights

**Excellent coordination** between several agencies and effective application of each SAR asset's capabilities led to an efficient and successful operation.

**Smooth transfer of incident control** ensured minimal delay to the progress of the operation.

**Safety first:** responders assessed the risks of delays, the condition of the patient and the prevailing conditions to choose the most appropriate patient recovery plan.

**Survivor stories are powerful SAR prevention tools.** John Ogden wrote his own account of the incident, with a range of insights and recommendations. These stories resonate with the public which aids in SAR prevention.

[www.greatbarrier.co.nz/expedition-excerpts-from-john-ogden/](http://www.greatbarrier.co.nz/expedition-excerpts-from-john-ogden/)

**Members of the SAR community are trusted by the public.** Encourage others to hire or buy a distress beacon that is appropriate to their activity, that can be activated easily in adverse conditions. See the Consumer NZ beacon survey commissioned by NZSAR for specific recommendations.

[consumer.org.nz/articles/emergency-alerting-devices/buying-guide](http://consumer.org.nz/articles/emergency-alerting-devices/buying-guide)

### **Paramedic from Northern Rescue (operator of the Auckland Westpac Rescue Helicopters) prepares to winch John from Great Barrier Island. Courtesy Constable Patrick Forde**

Westpac Rescue Helicopter was tasked to do a winch recovery. On arrival at the scene the helicopter crew decided that conditions were unsuitable to conduct the winch at that time, so they developed a plan for the officers to escort John to a better spot on the ridge top and try again at first light.

"It was really thick bush and slow going, but after three hours we made it to a good spot," says Pat. "We set up our tent fly for shelter from the wind and developing showers, then waited till the

morning." At first light, John was winched up with a helicopter medic and flown to Aotea (Great Barrier Island) Health Centre at Claris. The officers were picked up and flown to Auckland.

*Thank you to John Ogden for sharing his experience with us for this article.*

**After the incident, John wrote an account for the local newspaper, Aotea Advocate. The account had a range of personal insights and recommendations, but began with a grateful acknowledgment to the responders involved.**

"First and foremost – "thank you" to all those who helped get me out of the situation into which I had put myself and supported [my wife] as she worried about me. In particular I thank the Police who were dropped in from the Eagle helicopter to help me get to a safer position for an air-lift. All very professional, well equipped, fit and competent. Likewise, our local Police [who] kept in touch with the rescue pair and with [my wife] in a supportive and professional manner. To the helicopter pilots, especially the person flying the Eagle very low over irregular windshorn bush and rocky outcrops in the dark looking for me, finding me, and somehow dropping off my rescuers – thank you. Thank you too to the Coastguard from Tryphena. I know you were out there in the dark looking for me."



# Surf Patrol App

Placing integrated data collection, situational awareness and coordination into the hands of responders.

Needing access to accurate, real-time beach patrol information led to Surf Life Saving Northern Region starting development of an app in the early 2020s. With its consolidation with the national body, Surf Life Saving NZ (SLSNZ), the scope of this innovative app grew. The Surf Patrol App is now one of SLSNZ's three major operational IT systems. The other two systems are the Surf Communications Management system, which works alongside the National Coastal Radio Network, and a geospatial information system, powered by ArcGIS software.

"The 2022-23 season was the first time all our clubs and patrol locations had access to the Surf Patrol App," says Laura Beanland-Stephens, Surf Communications Centre (SurfCom) manager.

"The Surf Patrol App was a game changer for senior members of SLSNZ, such as Patrol Captains, Instructors, Coaches and SAR Squad members. They could all view the relevant operational data in real time. Capture of the data became far easier, reducing administrative load on the clubs and improving the quality of the information we recorded. Plus here at SurfCom, we had unprecedented visibility of operations and resources."

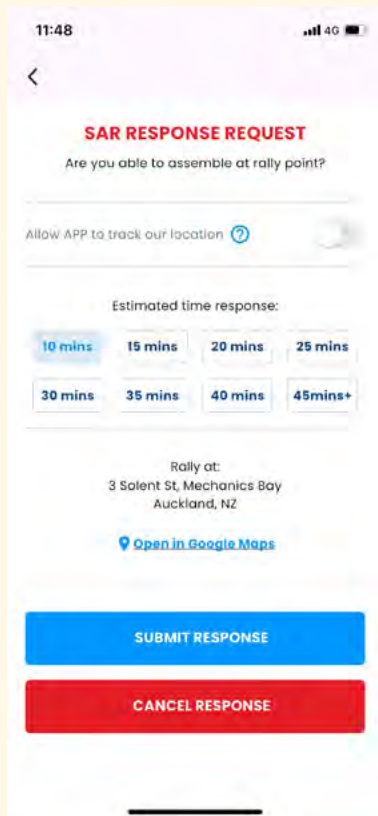
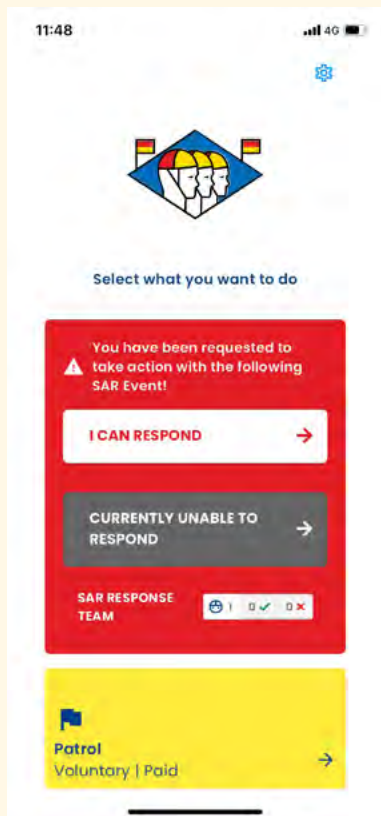
Initially limited to Lifeguard Patrol operations, with Government investment and support from NZSAR, the Surf Patrol App now captures data from all activities from training, to surf sports and SAR.

Previously, SLSNZ SAR Squads relied on a range of mechanisms for notifying a call-out, but now the Surf Patrol App is the primary method. SurfCom initiates the call-out via the SurfCom Management System with a defined rally point. Responders can use the App to click if they are available, give an estimated time of arrival to the rally point and log when they've arrived. Squad leaders can check the qualification status of those responding at a glance, and SurfCom has oversight of the whole process.

Operational Risk Assessments for any type of activity can now be completed on the App. Pre-filled information such as live environmental condition data and responder qualification status from the database speeds up the process. Only questions relevant to the particular situation are posed to the user, who can fill the form through dictation or typing.

"We're working with NZSAR to refine and clarify our data strategy," says Laura. "It's vital that we collect the right information for analysis and reporting, but at the same time remove unnecessary steps to make it efficient," says Laura.

SLSNZ is now working on integrating its three main operational IT systems and sharing its progress along the way. "Regular contact with our SAR partners helps us all keep on the same page with the information we collect and common processes surrounding SAR operations," says Laura "With the evolution of these integrated systems, together we're moving in an exciting direction."



The App streamlines the SAR call-out process through a single system. Both coordinators and responders have real-time transparency of who is responding, what their qualification status is and when they have arrived at the rally point. Courtesy SLSNZ



# Youth Search and Rescue Instructor pathway

Enabling the volunteers who develop the next generation of SAR and Emergency Management personnel.

As part of its recent Service Level Agreement, Youth Search and Rescue (YSAR) is increasing its capacity and starting more branches around New Zealand. "Our goal is 22 branches by 2031. There are volunteer opportunities for group instructors who can make a regular time commitment, part time support roles in logistics and branch management as well as micro-volunteering opportunities as expert guest instructors for one evening," says Brett Harper, YSAR National Operations Manager. "We've set up our system to make it work for a range of volunteers with different availability and interests."

A branch instructor agrees to commit to two hours a week on Wednesdays, during school terms one to three. There are six weekend exercises and a five-day exercise in December. "These activities and dates are programmed a year in advance, to provide certainty for students, parents and instructors alike," says Brett. The organisation is looking for people with good soft skills around teaching and relating to youth as well as experience in the voluntary sector.

"We're not only training the next generation of SAR and Emergency Management personnel, but encouraging volunteerism as a wider contribution to our society."

Instructors need a good foundation of outdoor experience, but SAR experience isn't essential. "The courses and learning management system are well developed. We also provide access to several Land Search and Rescue plus Coastguard courses. So a keen person with a willingness to learn can join a branch under the mentorship of a more experienced instructor. In fact, a diverse range of skills is really helpful in developing a wider perspective in the students."

SAR or Emergency Management experts who are short on time can also contribute to once-off sessions. "Our syllabus is fairly rigid,

which means we can say there's a radio communications lesson on a certain Wednesday, or a weekend focusing on tracking skills, nearly a year in advance. This gives an expert volunteer certainty about their commitment, and the students really appreciate the instruction from those with lots of experience in the lesson content. Often, the once-off instructor enjoys it so much, they come back several times a year to contribute."

Currently, there are volunteering opportunities in Thames/Coromandel, Wellington, Christchurch and Dunedin. Also, in 2025, there are new branches starting in Wānaka and South Auckland. "We're working alongside Land Search and Rescue to also develop some capability in places where recruitment for volunteers has been more challenging."

As branches grow, they develop a year one, year two and year three cohort of students. The third years are ready to join a local SAR group, but sometimes there's a waiting list. "Ex students are great instructors for YSAR. They know the syllabus and system, plus it is an additional opportunity to develop their leadership and life experience." YSAR has a Junior Instructor training programme to support interested graduates into the instructor role.

Prospective instructors are encouraged to reach out to YSAR, and attend a Wednesday and weekend session to see if they like it. After a discussion with the branch manager, instructor candidates undergo police vetting and an induction with one of YSAR's branch support specialist staff members. Further training opportunities for leaders include Land Search and Rescue courses in tracking, leadership, first aid and incident management. Coastguard courses include VHF radio operation and Day Skipper. Instructors who demonstrate their commitment and motivation can be supported through two different course options graduating with a Level 4 Bush Leader qualification and/or a Level 4 NZ Certificate in Adventure and Nature Based Youthwork. Both courses are set up for part time study and include online and in person assessments.



YSAR instructor at work during a field exercise. Courtesy YSAR

To find out more about becoming a YSAR volunteer, contact [info@ysar.nz](mailto:info@ysar.nz) or visit [www.ysar.nz](http://www.ysar.nz)

# The NH90 Helicopter

**No.3 Squadron is the New Zealand Defence Force (NZDF) Tactical Helicopter unit, responsible for providing rotary wing support for the New Zealand government, including agencies responsible for SAR.**

Located at RNZAF Base Ohakea in the Manawatu, 3 Squadron operates eight NH90 and five A109 helicopters. The NH90 is a large, twin-engine helicopter with SAR capabilities that are unique in New Zealand.

The helicopter's size and performance means it can operate in higher winds than smaller civilian helicopters. For night operations, military rules also allow the crew to operate in worse conditions than civil aviation rules.

Space for 12 fully equipped SAR personnel, endurance of up to 3.5 hours and a high-speed winch with 250 feet of cable means the NH90 is especially capable of transporting large numbers of field teams over significant distances during an extended search. The NH90 can weigh up to 11 tonnes, which is much heavier than other common helicopters used for SAR, such as the BK117/H145 (3.5 tonnes) and AS350/H125 Squirrel (2.2 tonnes). This means the rotor down-wash during landing or winching operations can be severe, which is important to take into account. Field team members require a safety brief, and where appropriate, a practice winch before being deployed on exercise or operations. These can be conducted immediately before deployment.

For offshore rescue operations, the NH90 can reach a search area 150 nautical miles (278 kilometres) from their fuel source and remain in the area for up to one hour. They do not have a rescue swimmer capability, but they can conduct visual searches and winch recoveries from vessels no smaller than 10 metres long. The NZDF is developing the capability to deploy a liferaft from the helicopter, to assist small vessels or persons in the water.

The NH90's capabilities have proven vital in a number of SAR and Civil Emergency situations. In May 2020, they were utilised to



**NH90 Helicopter conducting a winch recovery.**  
Courtesy NZDF

transport large numbers of searchers across a wide operational area in the search for two trampers lost in Kahurangi National Park. In June 2021 during floods in Canterbury, NH90 crews were able to rescue three people, when poor weather and low cloud base prevented civilian helicopters from getting airborne. During Cyclone Gabrielle, the endurance and cabin capacity allowed NH90 crews to rescue multiple people from an area in one hit.

## To request assistance

For incident controllers, the key is to define the specific operational effects needed and identify that the NH90 is the asset best suited to deliver those effects.

All requests for NZDF support to SAR operations is via Headquarters Joint Forces New Zealand.

For Cat 1 SAR operations, incident controllers would contact the Major Operations Group Duty Officer at Police National Headquarters to discuss the request, before it is forwarded to the NZDF. For Cat 2 SAR operations, the Rescue Coordination Centre New Zealand contacts Headquarters Joint Forces New Zealand directly.

Once support is approved, the incident controller and 3 Squadron liaise to deliver the desired effects.

An NH90 helicopter and crew are on standby at all times. Considering the transit to places like Auckland or Christchurch is an hour's flight time from base, when incident controllers think the capability may be required, they are encouraged to initiate the request process as early as possible.

## Capabilities at a glance

- Can remain airborne for 2.5-3.5 hours
- Operate 280km from fuel source, with 1 hour in the operating area
- Crew of four, plus a SAR medic
- Cabin space for 12 fully equipped SAR personnel
- Dual high-speed rescue hoist with 250 feet of cable
- Radio Direction Finder for distress beacon signals
- VHF/UHF/HF radio communications
- Night Vision Goggle capable



# 14<sup>th</sup> International Cave Rescue Conference

**Kiwi cave rescuers collaborating with the international community.**

The Union Internationale de Speleologie (UIS) was founded in 1965, as the international body for caving and speleology. Every four years, the UIS Cave Rescue Commission organises Cave Rescue Conferences. In June this year, three kiwis representing the New Zealand Speleological Society (NZSS) and Land Search and Rescue travelled to northern Spain for the 14<sup>th</sup> edition of the conference. Justin Hall, NZSS CaveSAR coordinator, found the opportunity very valuable.

“The mix of presentations, discussions, practical demonstrations and exercises in local caves gave us an excellent chance to benchmark our procedures and structures with the other 17 participating nations.”

There was a mix of paid and volunteer rescue teams, who each had different approaches. The paid teams were often multi-disciplinary, covering environments such as alpine, canyon and cave. “They were slick with their rope systems, potentially twice as efficient as moving a patient than ours. However, their systems were comparatively very complex, requiring specific bits of gear. Also

those systems demanded a frequency of practice which a voluntary organisation would struggle to achieve,” says Justin. “Our approach relies more on regular caving equipment, which is familiar, easier to rig and operate, less likely to be lost or left behind and ultimately more adaptable.”

This approach is similar to the other voluntary cave rescue organisations worldwide, and was put into good use last September during the high-profile rescue of an American caver who became critically ill more than 1,000m below the surface of a cave in Turkey. “Several countries came together for the operation, although not all had compatible systems and processes,” says Justin. Compatible teams were grouped together and assigned sectors of the cave which matched their systems and strengths. “The rescue took 12 days, which was remarkable and opened our eyes to the possibility of wider international collaboration if such a situation were to arise in New Zealand.”

The Europeans were impressed with the Memorandum of Understanding (MOU) between the NZSS and the Australian Speleological Federation, which acknowledges the strengths of each organisation. “We have more expertise in deep, vertical caves, whilst the Aussies have more experienced cave divers. The MOU has been ratified by Police from both nation’s, so that if we need to help one another, the international volunteers are immediately covered within the host nation’s safety management systems.” The agreement also facilitates reciprocal attendance at Cave SAREXs and regular exchange of information.

“Overall, the conference gave us some fresh ideas, lots of new contacts and showed that our kiwi cave rescue capability compares very well worldwide.”

Learn more about the UIS Cave Rescue Commission at [rescue.uis-speleo.org](http://rescue.uis-speleo.org)



The kiwi delegates took the opportunity to investigate the latest equipment being used overseas. “We got to have a play with the Petzl NEST cave rescue stretcher,” says Justin. “We’ve developed our own specialised stretcher with Christchurch-based manufacturer, Aspiring Safety. It was great to validate that our home-grown solution was just as capable in most situations, and even more portable and compact than the European equivalent.”

Another interesting bit of equipment was a patient protective suit, made by a local Spanish manufacturer. “The suit has full velcro and zip seams, so you can get an injured patient in and out with minimal manipulation of their body as well as providing easy access for the medics. It looked to be the perfect mix of durability and patient protection. We’ve ordered one to evaluate it back home in New Zealand next year.” Images courtesy Justin Hall

# The pathway to SAR Managers Course

Supporting and developing experienced SAR managers in New Zealand.

The SAR Managers Course is the pinnacle of formal training in SAR management. It is aimed at developing Police SAR Incident Controllers to be subject matter experts, capable of supporting the system across district boundaries and during nationally significant incidents.

The 10-day course brings together experienced SAR personnel from across the country to share their knowledge and develop their skills to the highest level. Senior Sergeant Lea Smith is the National Search and Rescue Coordinator, responsible for delivering the course. "It's about elevating the capability of our top SAR people so they can contribute at a senior level, including leading complex operations at district or national level. Graduates become highly regarded experts; senior Police leaders can look to them for advice and guidance, particularly when considering search suspension or review."

With Exercise Whakarauora Tangata recently concluded the course has been re-developed with additional material about mass rescue and Nationally Significant SAR incidents. "This course is currently one of the few opportunities for formal training regarding the expectations of being an On Scene Coordinator at a national-level event. As well as running scenarios to explore what might be expected of an officer in that role, we've got the chance to review Exercise Whakarauora Tangata and discuss the key learning outcomes from that activity."

Senior volunteers from the SAR non-Governmental Organisations attend the first week of the course. "The benefits

are two-fold, first the volunteers are a major part of the incident management teams around the country, and they benefit from the shared knowledge and high-level training," says Lea. "Secondly, they bring experienced volunteer perspectives to the course. This aids our officers to develop a deeper understanding of the volunteer and coordinating agency partnership and how it plays out in complex scenarios."

In the last year, implementation of the 'Block course' has significantly improved the training efficiency for the prerequisite courses. "Now, Managing the Initial Response, Managing the Marine Response and Marine SAR Technical can be delivered in a single block, which reduces travel and time overheads. Candidates can then apply the whole range of theory straight away, helping them develop more effectively and be ready for the SAR Managers Course sooner than may otherwise have been possible."

With further experience, SAR Managers Course graduates have a range of new opportunities open up. "They can help deliver better training in their home district, be a tutor on the National SAR Qualification Course, or eventually the SAR Managers Course itself," says Lea. "There's also downstream possibilities of attending the Australian SAR Managers Course, and improving the CV, when looking for career advancement or moving into a District SAR Coordinator position."

Officers who want to know more about the SAR training pathway and SAR Managers Course should first approach their own District Assistant SAR Coordinator for more information.

## SAR Management Pathway

The SAR management pathway is not specific to Police and is followed by sector partners. There is no change to the learning outcomes in this framework, as these are currently fit for purpose courses.





# Have beacons taken the 'search' out of land-based search and rescue?

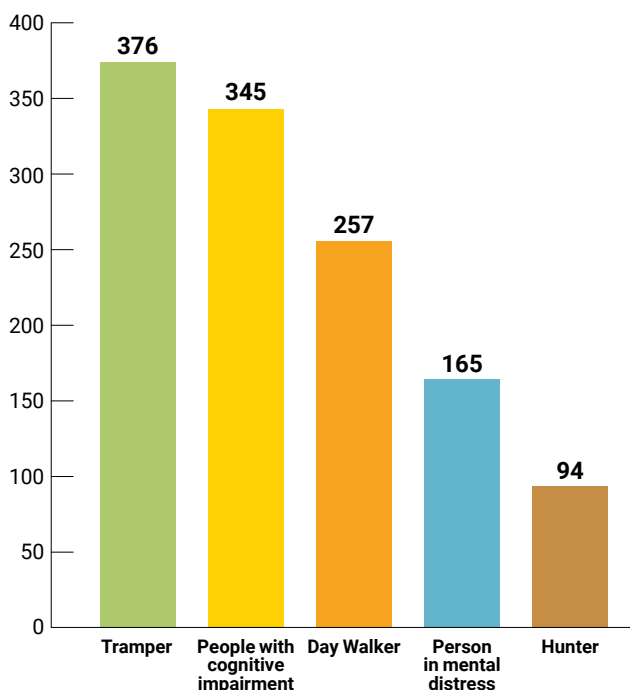
Even as public use of beacons and emerging communication technologies grows, data from land-based SAR incidents reminds us that robust capability in traditional search methods is still vital for our sector.

Responders rely on fundamental capabilities such as track and clue awareness, search methods and understanding lost person behaviour to find a subject person who does not have a beacon or electronic communication device.

According to SARdonyx, between 1 July 2023 and 30 June 2024, there were 2,313 land-based SAR incidents. Five of the most common land-based activities resulting in a SAR incident were Trampler, Day Walker, People with cognitive impairment, Persons in mental distress and Hunter. Together, these activities made up over 53 percent of all land-based SAR incidents. However, the same five activities took more than 68 percent of the 51,040 total hours spent on land-based SAR incidents.

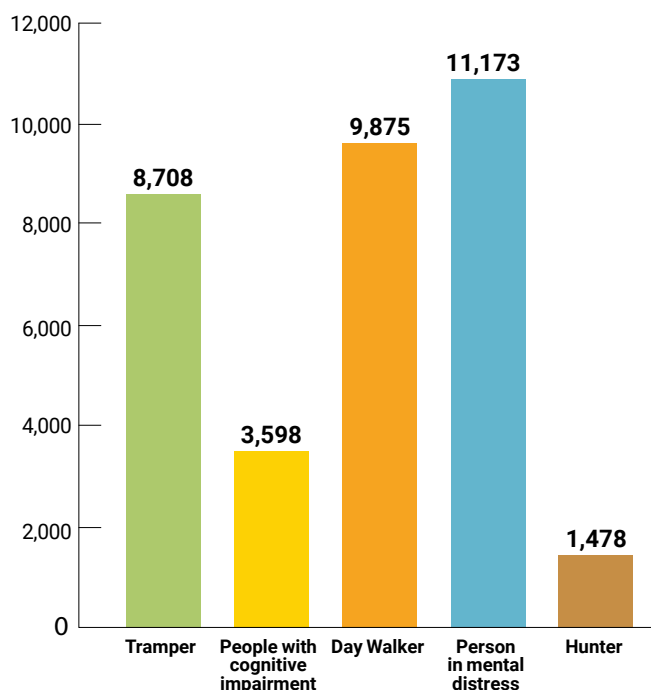
## SAR incident counts

Five of the most common land-based activities



## SAR incident by total hours

Five of the most common land-based activities



Source: SARdonyx, between 1 July 2023 to 30 June 2024

During the same period, just over 7 percent of SAR incidents for people with cognitive impairment were resolved thanks to a WanderTrack radio location device worn by the subject person. However, for most SAR incidents for people with cognitive impairment, or in mental distress, emergency communication devices were either not carried or not used by the subject person.

The Land Recreation Quarterly Survey carried out between 1 June 2023 and 12 March 2024, indicated that 40 percent of Trampers regularly took an emergency communication device. The proportion was 33 percent for Hunters and only 5 percent for Day Walkers<sup>1</sup>.

Together, the data suggests that most individuals doing an activity that is one of the most common for SAR incidents are not carrying an emergency communications device. This reinforces that a significant proportion of land-based SAR responses are conducted using fundamental search methods. Developing and maintaining a high level of responder capability in these fundamental methods is essential to finding a large proportion of those lost, missing and injured.

<sup>1</sup> Although these rates of beacon carriage may seem small, New Zealand has the highest per-capita ownership of beacons in the world, according to the Maritime New Zealand Rescue Coordination Centre.

# Changes at the NZSAR Secretariat



**Tania Seward** has been seconded to the Department of Conservation to run the Land Safety Forum, with an expected return date of July 2025. She started with the Secretariat in November 2020 after working in communications for the Tertiary Education Commission and the Ministry of Justice.

As Senior Advisor Communications and Prevention, Tania oversaw a significant communications programme for the wider SAR sector. She ran numerous media training workshops, oversaw a four-year distress beacons marketing campaign, and worked on prevention initiatives across the sector, as well as producing Link magazine and the annual report.

She also organised the NZ Search and Rescue Awards for the last four years, which she describes as a highlight of her time with the Secretariat. "One of the best parts of my job was calling people up, usually on some vague pretext, and telling them they had been selected to receive an Award. It wasn't unusual for both of us to get a bit teary during the conversation."

"I have so many good memories of my time in SAR, from huddling under sodden marquees during SAREXs, to photographing helicopter training sessions, to interviewing people about their work. The SAR community is full of skilled, passionate people who excel at what they do. It's been a privilege to walk alongside you and tell your stories – thank you."



**Matthew Wheble** left the Secretariat in December. Prior to joining the Secretariat, Matthew became a Land Search and Rescue volunteer and Police SAR Squad member in 2008. Other Police roles prior to joining the Secretariat included National SAR Coordinator as well as National Disaster Victim Identification and Emergency Management Coordinator. Starting as Senior Advisor at the Secretariat in December 2021, he brought a wealth of SAR operational and policy experience, which benefited the sector immensely.

Among many responsibilities, he chaired the Innovation in Technology Forum, SAR Telecommunications working groups and oversaw the Operational Framework for the New Zealand Search and Rescue Region. Highlights included the ICESAR Conference in Iceland, building relationships and learning from SAR people from all over the world. Mathew also led the Incident Management Software project, identifying no fewer than 65 separate systems in use and setting a pathway towards a common solution. Overseeing the Exercise Whakarauora Tangata team was another major achievement during Matthew's tenure.

"It has been amazing to work with everyone around New Zealand and internationally, especially working with the NGO's and ex-colleagues, who are all striving to do the best for the sector."

**Duncan Ferner** – Secretariat Director left in December. See 'Duncan's last desk' on page two for his reflections on 19 years of service to the sector.

**Penny Salmon** – Senior Advisor Research also left the Secretariat. **Matthew Mintrom** – Senior Advisor Policy and **Wendy Harrison** – Team and Projects Administrator have moved to similar roles in the Ministry of Transport. On behalf of the NZSAR Council, we thank all the staff for their hard work and service in support of the sector.



# Nominations close soon for the NZ Search and Rescue Awards

Agencies and individuals have until 31 January 2025 to submit their nominations.



Hon Matt Docey, Associate Minister of Transport with the recipients of the 2023 NZSAR Awards. Courtesy Mark Coote

The NZSAR Awards acknowledge the exceptional search and rescue work by individuals, groups and organisations and raise public awareness of SAR efforts across the country.

The awards cover two categories: operational activity and support activity. The operational category is open to SAR operations that took place between 1 January and 31 December 2024. The support category is open to individuals, groups or organisations which have made a significant contribution to search and rescue in New Zealand. A person doesn't need a long history of service to be a worthy nominee; some of the previous winners have only been in SAR for a few years but have made a big impact in that time.

## Tips for NZSAR Award nominations

### Operational category

- Relevant facts and figures are helpful: What was the sea state, temperature, wind speed, or altitude at the time of the rescue?
- Try to list all the agencies involved in the rescue.
- Focus on the action/s which had the most impact on the operation and explain why you consider them exceptional.

### Support category

- A short biography covering the nominee's history in SAR can be useful.
- If the nominees' efforts affect more than one organisation, consider a joint nomination.
- Clearly convey the impact of the nominee's efforts on the local community, organisation, or wider SAR sector.

### Find out more

Visit [nzsar.govt.nz](https://nzsar.govt.nz) for nomination forms, NZSAR Awards policy and details of previous winners.

Nominations close 31 January 2025, but early nominations are welcome.

If you would like help compiling a nomination, or have any questions, please contact [info@nzsar.govt.nz](mailto:info@nzsar.govt.nz)



# 10 questions with ...

## Dan Manzano

**Dan is the Director of Rescue 3 Australia and New Zealand, a rescue skills training provider, and a volunteer with Rotorua Land Search and Rescue.**

### **What types of training do you deliver to responders in New Zealand?**

There's lots! For example, we run Swiftwater and Flood Rescue Technician courses for Surf Life Saving New Zealand. The Surf Lifeguards have plenty of skills and experience in swimming and boat handling in the surf and ocean environments. We show them how to adapt that knowledge to the flood environment, by understanding the unique hazards and applying tailored response techniques and decision making. We adapted the same course for Fire and Emergency New Zealand, acknowledging their existing skills in rope rescue and applying them to the swiftwater environment. We also run training for NZ Response Teams, and bespoke rescue swimmer training for helicopter operators.

### **What are some of the main differences between river rescue and swiftwater rescue?**

Rivers are far more predictable! In a swiftwater flood environment, additional hazards can include fences, livestock, vehicles, buildings, contaminants and culverts. Each demands its own set of tricks to manage.

### **Can you tell us about the International Association of Water Rescue Professionals symposium?**

It was founded in 2012 as a way to collaborate between experts around the world. I first attended in 2019, and was invited to come back after the pandemic to facilitate at two further conferences. Now I'm part of the instructor cadre. Everyone is really open to sharing and new ideas.

### **What were some of the key ideas you brought back to New Zealand?**

Simplicity. Yes, there's a technical aspect, but the best approach is often the simplest.

New Zealand's flood response capabilities are still very much developing. The conference gave us contacts and ideas from countries who've had formal flood response capability for several decades. There's a lot we can learn from international experience in this space.

### **Are there other international experiences you can share with us?**

I do a bit of training in the United States, on helicopter rescue from floodwaters. During a course in Las Vegas, the team leader said they hadn't had a water job in more than eight years. Just three weeks after that course, they had the deluge in the desert that famously stranded more than 70,000 people at the Burning Man festival. The team found themselves performing dozens of helicopter rescues from swiftwater around the region.

### **What led you to an interest in rescue and emergency response?**

I grew up in southern Chile, spending loads of time outdoors. When I was 14, I joined a climbing club at school and went on a seven day trip in the snow. Without the right gear I suffered through it, but it sparked a passion for mountaineering. Wanting to contribute to the community, I joined the local mountain rescue team.

### **What was mountain rescue like in Chile?**

In those days, there were no distress beacons or satellite phones. We would only get called when someone noticed a group was overdue, which meant we did a lot more recoveries than rescues.

### **Why did you move to New Zealand?**

While mountain guiding, I met some visiting kayakers and told them paddling must be easier than mountaineering. Turns out they were sponsored kayakers, so they made everything look easy! I joined them on a trip, got thrashed on a grade three river, and was inspired to learn to kayak. That developed into a commercial rafting and kayaking career for a couple of years, which took me first to Australia, then to the Kaituna River near Rotorua. Those experiences led to entering the water rescue space.

### **When did you start volunteering in Rotorua?**

The urge to give back to the community at my new home was strong, so in 2009 I joined Rotorua Land Search and Rescue as well as New Zealand Response Team 15. My previous experiences helped me progress well in those groups; for NZRT15 I was 2IC, Training Officer and Team Leader.

### **How did you get involved with Rescue 3?**

Rescue 3 International is a widely recognised provider for technical rescue training, so as my rafting career developed, I naturally attended one of their courses. In Rotorua, I attended some Rescue 3 courses for NZRT15 rope rescue and swiftwater training, which led to an invitation to an instructorship. Things developed from there, and I'm now the Director of Rescue 3 Australia and New Zealand.