




WEAR YOUR LIFEJACKET



BE A RESPONSIBLE SKIPPER



TAKE TWO WATERPROOF WAYS TO CALL FOR HELP



CHECK THE MARINE WEATHER FORECAST



AVOID ALCOHOL

▶ saferboating.org.nz

Safer Boating Week 17-24 October 2014

New Zealand's first ever Safer Boating Week will set sail from 17-24 October – just as boaties are beginning to think about the summer boating season. Safer Boating Week is an initiative of the National Pleasure Boat Safety Forum (NPBSF) and it will see forum members run a number of national and regional initiatives to encourage boaties to:

- Prepare your boat and make sure it's safe
- Check you have the right equipment and it's working
- Know how to keep you and your crew safe when out boating.

Planning for the week is still underway, but it is envisaged there will be a number of events, some print material, and media exposure during the week. The success of Safer Boating Week relies on as many people and organisations as possible promoting safe behaviour and getting behind these messages on the boat ramps and river banks, at the local clubs and campgrounds, and in the classrooms. In fact, wherever there is water and a 'boat' NZSAR encourages you to play your part by running, participating and promoting activities in your area.

SAR people have been asked to focus on emergency communications and distress beacon registration. Please pass on any ideas you have about how we can promote safer boating week to your NPBSF member.

The National Pleasure Boat Forum is made up of government agencies, local government, marine industry, water safety and recreational boating organisations. It is aimed at reducing boating injury and fatalities and improving boat safety behaviour. Members include ACC, Coastguard, Coastguard Boating Education, NZ Marine Industry, Maritime NZ, Surf Lifesaving NZ, Water Safety NZ and NZSAR. ●



Did you know there are now two NZSAR Award categories?

If you know of an organisation, a group, or an individual who you think should be acknowledged for their contribution to search and rescue – for their role in an Operational activity or a Support activity – nominate them!

It is a simple process: just go to www.nzsar.org.nz/awards where you will find all the details about the NZSAR Awards, information about these two categories and the nomination forms.

The 2014 NZSAR Award nominations close 31 January 2015.



www.nzsar.org.nz



www.adventuresmart.org.nz



Bringing the Wander Partnership Framework to life came a step closer after a multi-sector symposium organised by NZSAR in Wellington last month

Wander Symposium

Wander is a catch-all term that has helped determine the organisations and people that have a role in collectively responding to the growing issue of cognitively impaired people getting lost or going missing (see Wander SAR incidents). The framework aims to reduce the risk of people going missing due to cognitive impairment by using the “4Rs” approach to emergency response risk management: reduction, readiness, response, and recovery. (Note that some other agencies use the term ‘Safer Walking’)

The organisations involved are diverse and include NZ Police, Autism NZ, LandSAR, IDEA, DHBs and the Ministry of Health. The framework aims to provide the opportunity for all the organisations to take responsibility for their areas of expertise, but also for each agency to work together in a fully collaborative manner so that we can collectively provide better outcomes for those who wander.

Wander Partnership Framework – Supporting ‘Safe Walking’

KEY GOAL 1:

To reduce the likelihood that ‘walkers’ will move out of a safe environment without appropriate protective measures.

KEY GOAL 2:

To ensure readiness of whanau, carers and response agencies should a response be required.

KEY GOAL 4:

To learn from experiences, collective thinking and research to enhance ‘safe walking’ sector capability.

KEY GOAL 3:

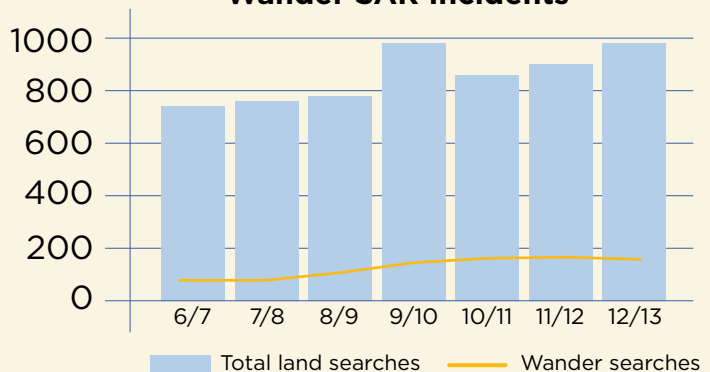
To locate and return the affected person(s) to most appropriate place as quickly as possible.



When opening the symposium, NZSAR Secretariat Manager Duncan Ferner described the goals that NZSAR hoped to achieve as being:

- A robust and integrated Wander system
- Efficient and sustainable Wander organisations
- Capable Wander people
- Reduced Demand for Wander SAR services

Wander SAR Incidents



- Average 134 per year over the last four years
- Approximately 14.4% of all land search and rescue work
- Believed to be significantly under recorded

NZSAR will continue its commitment for a more effective approach by supporting a number of initiatives agreed at the symposium. NZSAR will continue to be the point of contact and will facilitate a ‘map of organisations’ involved in the Wander sector to ensure everyone who should be is a part of this collective approach. Ongoing training for searchers, including training on what to do once a wanderer is found,

will form part of NZSAR’s role. NZSAR has also agreed to assist where required, for example with the development of templates and guidelines for Wander agencies, Wander-related research and development, and looking at relevant ethical and privacy issues, which are all elements that the symposium determined would lead to better outcomes for the Wander sector. ●

For documents and information see: www.nzsar.org.nz/SAR-Teams/Wander-SAR

Mass rescue operation planning – the global discussion

Mass Rescue Operations (MRO) are complex and require a well-coordinated, multi-incident, multi-agency response.

The complexity is such that numerous agencies from around the world gathered in Gothenburg, Sweden, in June for the International Maritime Rescue Federation's (IMRF) Marine Mass Rescue Operations conference. RCCNZ's Chris Wilson and NZSAR's Carl van der Meulen were among the delegates.



Chris Wilson (RCCNZ) and Bruce Reid (CE of the IMRF) climb aboard the 'rescue ferry' after the life raft drill

The overall aims and objectives of the IMRF's MRO project are to:

- Provide an international focus on mass rescue at, or by, sea
- Provide a forum for discussion
- Identify specific problems that would benefit from further research and development
- Identify potential amendments to international regulation and guidance
- Compile and host a dynamic online library of practical data

The IMRF's intention is to progress from focussing on MRO problems to identifying actions aimed at mitigating those problems. In line with this, the third conference in the Gothenburg series focussed on some proposed MRO solutions and gave delegates the opportunity to raise and discuss additional concerns, in the context of the aims and objectives.

Discussions included:

- Looking at integrating the preparation and planning efforts of all stakeholders
- Enhancing incident coordination
- Establishing supportive response systems

"The opportunity to listen to people involved in mass rescue and remote area operations, whether professional mariners, rescue response personnel or survivors, and to learn from their experiences was invaluable," says Chris.

"The conference highlighted the fact that our challenges are similar around the world, and that we need to plan and exercise with every organisation that has a role in the rescue and on-shore support of survivors."

Carl says he and Chris were encouraged to see that New Zealand's work is in line with international best practice.

"Our SAR sector cannot respond to any mass rescue by itself – we will need lots of support to meet the challenges of reconciliation, medical care, and welfare assistance. This conference helped us shape the objectives for the upcoming series of mass rescue desktop exercises we've called RAUORA. It's focussed our thinking on how we can evaluate the roles, responsibilities, and the agencies' linkages that will respond to any mass rescue incident in our region." ●

Canterbury University establishes a SAR graduate course

The University of Canterbury is to offer a new Graduate Certificate in Public Safety from 2015 with a choice of two endorsements: Emergency Management or Search & Rescue. The latter is the world's first graduate qualification in search and rescue.

The programme is customised so that advanced SAR practitioners can build on existing operational management courses and develop their academic writing and research skills, to encourage an evidence-based approach to public safety.

The qualification is made up of four courses that can be taken part-time over two years. The initial course is a one week block course, with the remainder of the qualification being delivered by distance through online, self-paced activities. Each course generally lasts for 12 weeks and typically requires 12-15 hours of study each week.

Upon completion, students with sufficient grades can enter Charles Sturt University's Master of Emergency Management or, on a case-by-case basis, AUT University's postgraduate emergency management programme.

This course is a welcome addition to SAR learning opportunities, but it is not a requirement for any SAR role in New Zealand.

Enrolments open on the 7th of October 2014.

For further information visit www.publicsafety.ac.nz or contact steve.glassey@canterbury.ac.nz

○ SAR TRAINING

Learning to manage the initial response

Plugging what has long been identified as a gap in formal training, a new course has been introduced for people involved in running marine search and rescue operations. Called Marine Managing the Initial Response (MMTIR) it is the foundation block for Incident Management in a marine environment. The course, which runs over three days, has been established for the SAR sector by the NZSAR award-winning Coastguard Southern team: Chris Astall, Nicola Hockley and Rachel McKenzie, with input from sector-wide Subject Matter Experts (SMEs).

The course takes participants through procedures that must be followed from the onset of the notification and includes chart course plotting, wind speed, wind direction and drift patterns pertaining to different vessels and people in the water. It also explains the coordination of assets from other services; for example, setting up communications, other vessels and personnel. Driving home the importance of managing an incident by objectives a number of Incident Action Plans are produced over the three days. And, to keep the course as practical and as real as possible, the interactive scenarios are based on actual operations that have occurred in New Zealand.

There are some pre-requisites to attending MMTIR. These include completing the following:

- Search Area Determination module and
- Search Area Coverage module, see: www.nzsar.org.nz/Knowledge-Training/START
- A Boatmaster course
- CIMS 4

The MMTIR pilot course was held in Christchurch in July, run by Tai Poutini Polytechnic. Amongst those attending was Lox Kellas, a police officer as well as a Coastguard volunteer. He says the course structure flowed well in a logical and natural way.

“The challenges come at the right intervals with scenarios that demand critical thinking. It gives you the tools to develop a plan that works, while highlighting the need for teamwork.”

He adds that, as a police officer in a sole charge role, he naturally formulates a plan as events and incidents develop, based on local knowledge and resources, “but MMTIR demonstrates a process that allows you to respond with clear objectives in a timely manner. As we all know, time is always critical in a Marine SAR environment.”

Putting on his Coastguard volunteer hat Lox says the course exposes attendees to a process beyond reflex tasking. “It reiterates that volunteers need to understand how to plan and manage the initial response, their resource capabilities, and how to work with other agencies. Essentially the bigger picture – not a narrow focus.” ●

Text and find

CASE STUDY ONE: On the evening of Tuesday 21 January 2014 we had a call from a male, with his girlfriend in Queenstown, who had lost the walking track and had been trying to find it again for the last 3 hours.

He finally rung Police and we were able to use Mobile Locate to get their location with an accuracy of + or – 5 metres.

The local SAR team used the coordinates to identify that their location was too dangerous to attempt a night rescue, so the couple were advised to stay put for the night. A helicopter was sent in the next morning to recover them.

On this occasion, knowing where the couple were meant the SAR team was not put at risk by entering the area at night, and the subjects could be reassured that Police would find them first thing in the morning.

A new smartphone app, currently being trialled by Police, Coastguard and Wellington Free Ambulance, is establishing itself as another tool to add to SAR’s toolbox of technology.

Mobile Locate is a web-based application that uses a person in need’s smartphone geographic coordinates to help locate them. Once someone has called for help, the lead agency is able to log onto www.mobilelocate.co.nz and send a text message to that person’s phone. When they reply to the message the website interrogates their device for its location. It then relays this information back to the lead agency via the website, showing their location on a map.

Tim Hogan, a former telecommunications company employee, developed the app after identifying the potential to more accurately locate people using their mobile device.

How Mobile Locate works

HELP

ASSIST

1. End-user phones emergency services asking for help on their mobile device.
2. Emergency service creates a new event in the Mobile Locate system, entering the mobile number, the end-user’s name and a short description. The Mobile Locate service sends a text message to the mobile phone asking the end-user to simply press or select a link contained in the message.



EMERGENCY SERVICES 111

Mobilelocate.co.nz

CREATE NEW EVENT

Mobile Number +64273333333

Persons Name John Smith

Short Description Lost in bush

Text Message To help you please click on the following:
<http://www.mobilelocate.co.nz/>

Create

NEW EVENT ENTRY FORM

SAR INSIGHT

“Telecommunication companies can tell you what mobile site (tower) the mobile device is registered with, but this only gives you an approximation of location. Mobile Locate uses a number of methods to get an accurate location including GPS, wifi crowd sourcing and cell phone tower knowledge.”

The cases documented to date all show significant time and resources have been saved by people using Mobile Locate. In some cases, Mobile Locate has also prevented unnecessary risk to SAR people who may otherwise have been called upon to undertake a full-scale search and rescue operation.

Tim cautions against too much hype, though, making it clear that – as with all technology – Mobile Locate has its limitations.

“There are a lot of tools out there; this is just one more that will prove valuable in certain circumstances. The key is ensuring the coordinating authorities are aware of it and can determine when it would be advantageous to use.”

Tim also points out this is an opt-in system, meaning the person at the end of the mobile device needs to give permission for their device to be used. Other requirements include:

1. Mobile coverage is mandatory; it is anticipated that the end-user has used the mobile device to phone or ask for help; therefore, the assumption is that coverage exists to begin with.
2. The device must:
 - a) have and support mobile data
 - b) have a Web browser that can support HTML5
 - c) have the location features turned on.

“Luckily most modern smart phones will have this capability – and it may not be long before you can’t buy a phone without it.” ●

LOCATE

3. The mobile device will ask the end-user to confirm that they want their location shared and will then send this location back to the Mobile Locate system.



TEXT RECEIVED BY PERSON REQUIRING HELP

Status
All Events
Current Event
Reports
Help
Admin

PHONE: +64 273333333

DESCRIPTION

CREATION TIME: Wed 21 Aug 2013 11:51:47

DATA RECV TIME: Wed 21 Aug 2013 11:52:38

LOC RECV TIME: Wed 21 Aug 2013 11:52:48

STATUS: LOCATION INFORMATION RECEIVED FROM DEVICE

DETECTED DEVICE: iPhone Version 5.13 If John needs help with this device go [here](#)

Send additional TXT

Close Event

Send to tracker

TYPE	AGE	TIMESTAMP	LATITUDE	LONGITUDE	ACCURACY	SPEED	HEADING	MAP	PLACE
	21h	21/08 11:52	-41.278463	174.774459	65.0 metres		0/0	MAP	903 metres N of Wellington
	21h	21/08 11:51	SEND	RCVD	MobileLocate is trying to find you, select the following link: http://mobilelocate.co.nz				

EVENT UPDATE INFORMATION

CASE STUDY TWO: At 1927hrs on Saturday 15 February 2014 a Land Rescue was entered in the Dunedin area for two teenage boys missing in what they described as bush area in Pine Hill, Dunedin. One of the missing boys was able to call his mother from his mobile phone, stating that he and his friend had entered a bush walk track off Pigeon Flat Road, Pine Hill. He then told his mum that they were lost and did not know where they were.

Using Mobile Locate, we were able to obtain the latitude/longitude position of the boys within minutes and send local Police to their location. The event was entered at 1927hrs and closed at 2034hrs with the boys returning safe and well to their home address.

Great that Police were able to locate these boys before it got dark – or worse – they had to spend a night in the dark!

CASE STUDY THREE: At 0015 on the night of Saturday 14 June, we used Mobile Locate to pinpoint the location of a small boat off Rangitoto. It worked perfectly, giving us a GPS position with 10m accuracy. The position was considerably north of where the person in the boat thought he was, so it was also really useful for minimising the response time.

INSIGHTS

- Mobile Locate works on a large number of devices including most smart phones, tablets and even PCs
- There is no need to pre-load an application on the mobile device
- People must agree to use their location for the system to work
- Updated positions can be sent by re-selecting the embedded link
- The person in need is instructed to keep the app up and running to allow the mobile device to attain more accurate location information
- The coordinating authorities make the decision about when Mobile Locate should be used.

○ SAR IN ACTION

A SAREX with an icy twist

An avalanche on a glacier requires intense specialised search and rescue skills. People responding to an incident need an ability to work in glaciated terrain as well as general mountain avalanche capabilities. Jane Morris, who was the Avalanche Site Commander at the recent Fox Glacier Search and Rescue Exercise (SAREX), sums it up: “It’s about still being able to operate to a high standard without getting distracted by extra environmental curve balls like crevasses.”

Teams from all over New Zealand gathered below Pioneer Hut in Westland National Park in June to take part in the biggest glacial avalanche search and rescue exercise (SAREX) ever undertaken in New Zealand. Mountain Guide Association members, LandSAR ACR teams from Fox, Christchurch and New Plymouth, as well as members from its Mackenzie team, and Police from the Tasman, Canterbury and Central Districts all participated. Plus – to ensure this was as ‘real’ as possible – the RNZAF 3 Squadron, The Helicopter Line and Tekapo Helicopters were funded, not only to get the teams on site, but also to remain there and operate as they would in an actual event.

Brent Swanson, a Search and Rescue Coordinator from Tekapo, was part of the team organising the exercise and says they wanted to set up a situation that was as close to the real thing as possible. “We chose challenging terrain that was isolated and we brought various SAR teams from four different sectors together on-site without any prior meeting or discussion.”

Don Bogie, the Regional Planning Manager for DOC in Christchurch, helped set up the exercise and stayed on as an evaluator. He says the scenario – four people caught in an avalanche with one getting swept into a crevasse – had a number of complex elements.

The scenario challenged the teams as well as the site managers’ scene triage considerations.

“The terrain meant that rescuers travelling to the site, and in places on the site, had to use crevasse travel techniques – roping up – so if one person fell in, the others on the rope could arrest the fall and pull the person out.

“The scenario challenged the teams as well as the site managers’ scene triage considerations. It also made transceiver searching more difficult – to finish the exercise the rescue team had to complete a crevasse rescue using a stretcher and ropes.

“The other thing that we did, which was a bit different from previous exercises, was evacuating the victims by helicopter while they received appropriate medical treatment. In most avalanche exercises, though patient care is often given to the victims, it is usually stopped on-site. This time it meant someone had to be doing CPR in the helicopter while being transported – from the moment the victim was extracted from the snow until they were landed at the evacuation point.”

Jane believes this kind of thinking made it an exceptional training exercise; the extent of pre-planning that went into this SAREX is the best she has seen.





“It’s about still being able to operate to a high standard without getting distracted by extra environmental curve balls like crevasses.”

“The details, like the dummies buried being stuffed with water cartons so they resembled a real size, shape and weight of a person and having to fully extricate the patients using on-site helicopters, all added to the realism of an actual incident. Bringing together crews from various sectors meant that we experienced first-hand how we can effectively work alongside each other in a relatively pressurised environment without too much discussion or questioning. It was brilliant to see in action; it brought home how many layers exist in the coordination of an operation like this. Everyone ended up with some excellent learnings – all at different levels, depending on their roles.”

Jim Spencer, Senior Team Leader with Mount Cook’s Alpine Cliff Rescue Team, was also involved in organising and participating in the exercise. He says the specialised skills necessary for glacial avalanche SAR centre upon the greater hazards involved. “The risks are more serious. You are working at altitude, where the wind speeds and precipitation are likely to be much higher, and there is also a stronger likelihood of residual avalanche activity, so some of you need be skilled in assessing that.”

Jim adds that what can be achieved always comes back to personal safety and not exposing yourself unnecessarily. “That component of SAR doesn’t change in any environment. So, operating within your capabilities and knowing where they are remain core to getting the job done.”

Jim, Brent and Don say the competency and experience of the teams was outstanding. Jane agrees: “If it was a real rescue, and that was the pool of people who would be responding, then I’d be very happy to have them come rescue me!” ●



Duncan's desk



So – what will our search and rescue sector look like in 2034? It's important that we make an effort to think about its long-term future from time to time. In mid-August, the combined NZSAR Council and Consultative Committee did just that – looking ahead 20 years. We 'work-shopped' a range of issues including the things that will influence us, our coordination arrangements, governance processes and sector

funding. There was a general consensus that the pace and nature of the things that drive the need for SAR will continue to accelerate. And that, as a sector, we will need to continue to adapt, evolve and reshape ourselves – based on solid information – to meet the increasing expectations of the public we serve, as well as ourselves. The notes from this workshop session will be made available on our website shortly.

Carl has been busy with two major projects over the last few months. I mentioned the first in Link 27, which is around search and rescue information. Good progress has been made in establishing a data store and associated analysis tools for all Police and RCCNZ search and rescue operational information. This project has already uncovered a range of issues to fix, and is promising a range of new ways to understand both ourselves and our future through improved clarity of the work we do – and what it takes to do that work.

Carl is also involved in the series of Mass Rescue Operation (MRO) exercises, which we plan to support around the country. Called RAUORA (Te Reo Māori for rescue), these exercises will be conducted

in each Police District over the next few years. They will involve a wide range of both SAR and non-SAR organisations as we evaluate each district's MRO preparedness by exercising their own MRO plan. The next exercise will be held in the Southern Police District on 1 October 2014.

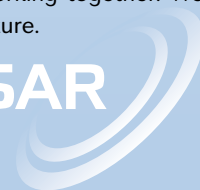
Phil has been head down managing all things NSSP (National SAR Support Programme) on behalf of the sector. It takes quite a bit of his time to manage and finesse our SAR ACE arrangements. At a collective level, we – the SAR sector – are still learning how best to predict our collective training requirements, and constant adjustments need to be made in response to changes in training demand and supply.

Phil has been instrumental in getting two significant SAR courses developed, with a third one now underway. The first full SAR Mangers' course was successfully conducted at the Police College in June (the one run in 2013 was a pilot course). It is now a very strong resource, with the mixture of volunteers and Police proving most successful. More recently, the first two Marine Managing the Initial Response courses were completed, with both receiving very positive feedback from those that attended (see story page 3). Next on the list is developing and delivering Formal Search Planning – Land. More on that soon.

NZSAR recently hosted a very successful Wander symposium (see story page 2). It became apparent during the day that there remains quite a bit to do in this space, so we will be working with a range of partners to assist and improve our performance in this area. These initiatives illustrate what can be achieved by working together. We look forward to continuing in that vein into the future.

Duncan Ferner
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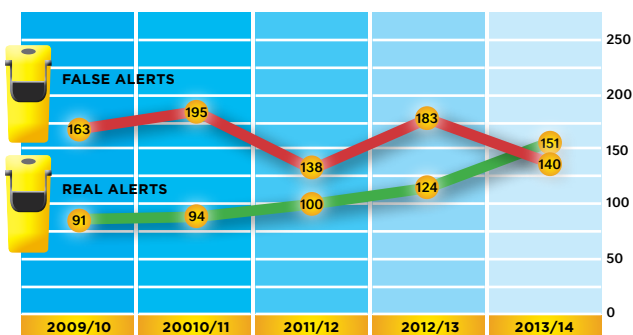
NZSAR



STATS ATTACK

Last year (2013-14) Rescue Coordination Centre NZ responded to more real distress beacon alerts than false alerts. The first time that this has happened!

The graph shows a steady increase in the number of real alerts over the last five years, and there has also been a trend for false alerts to decrease over this time.



CALENDAR

SAREXs and SAR training – see:

<http://searchandrescuecouncil.org.nz/nzsar-calendar>

Exercise RAUORA (Southern 2014): 1 October, Dunedin

Australian NATSAR Meeting: 1-3 October, Sydney

LandSAR Conference: 17-19 October, Hanmer Springs

NZSAR Consultative Committee Meeting: 4 November, Wellington

NZSAR Council Meeting: 20 November, Wellington

WEBSITES

www.nzsar.org.nz – New Zealand Search and Rescue Council
 This newsletter is available as a PDF on this website

www.adventuresmart.org.nz – Safety information and tips for the public planning outdoor activities

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

www.metservice.com – Comprehensive weather reports

www.nzsar.org.nz/awards – NZSAR Awards nomination form

<http://natsar.amsa.gov.au> – Australia's National Search and Rescue Council

www.civildefence.govt.nz – The Ministry of Civil Defence & Emergency Management

www.landsar.org.nz – LandSAR