

Room 1 Search Planning – Addressing the Myths & Misconceptions

Tony Wells

Search planning is just one component within an IMT. There are many myths and misconceptions around the application of search data such as LPB/MPB, the 300m circle/close-in search concept, reflex tasking vs. initial actions. The bike wheel model for search planning is widely known but often not applied, or barely applied, to SAR operations and often the understanding of it is at a very basic level. Add in additional confusion around operational periods vs action plans vs shifts and it is little wonder why some of our people and operations struggle with the planning process.

This session looks to bring some understanding to these issues addressing concerns raised in debriefs and by members to bring a shared understanding as to how and why these processes for search planning exist and to improve our operational response.

Room 2 Supporting Your Peers

Dr. Kristen Hamling & Jodi Star

Peer support is a valuable asset for first responder wellbeing. As emergency service work can cause stress and trauma for the first responder, peer support is often used as the first response in helping to facilitate recovery and post-traumatic growth. Peer support harnesses the powerful effects of connecting with others with shared experience.

Whilst most emergency service organisations have formal peer support models and training for peer supporters, volunteer emergency service organisations typically do not. LandSAR recognises the potential benefit of peer support and so we want to engage you as LandSAR members to participate in building the foundation blocks of the LandSAR “Peer Support” programme.

In this workshop we will look at what are the core characteristics of a peer support programme, and how would these transfer into a peer support programme in LandSAR. We will have the opportunity to practice one of the key components of peer support.

This workshop will be facilitated by Dr Kristen Hamling who has over 15 years’ experience working with peer support in emergency service and non-emergency organisations.

Room 3 WanderSearch Theory and Practical

Steve Davis

Introduction to Searching for WanderSearch devices. Steve Davis, from WanderSearch Canterbury and AREC National Training Advisor and will talk about the basic principles of the technology involved:

- Devices as radio frequency transmitters (beacons)
- Receivers and antenna
- Direction finding techniques, far and near.

This is followed by hands on practical in small groups to locate a few devices placed in the surrounds of Blue Skies.

Room 5 River and Flood Safety Part 1

Dan Manzano

This course requires pre-registration via the LandSAR Portal, search for ‘RFS 1378 PreConference’. By registering for this session, you are agreeing to attend part 2 on Friday morning.

This course is designed to introduce some theory knowledge and practical experience for working safely in and around rivers and being able to cross safely with a variety of methods. Across the two sessions we will cover background theory, basic throw bag techniques, river crossing, and defensive swimming.

Participants will be provided with take-home course reference material as well as an assessment workbook which will be collected from you. Full joining instructions including a gear list will be provided 3 weeks out.

We recommend you wear a wetsuit underneath your outer layers, but request you have shorts and fleece top on to simulate the conditions and forces on your body. You WILL be in the water on numerous occasions. Please be prepared for this.

Marquee 6 Navigation Skills Map & Compass Part 1

Sean Mulvany

This course requires pre-registration via the LandSAR Portal, search for ‘Nav-MC 1379 PreConference’. By registering for this session, you are agreeing to attend part 2 on Friday morning.

The purpose of this course is to upskill or refresh LandSAR field personnel with core map and compass skills to be safe, effective and competent for SAR operations. This course is a mixture of practical learning, exercise, and short theory components – with a core focus on being able to select and implement a range of navigation techniques for given situations.

Room 1 Search Dogs Operational Deployment Bridget Martin & Murray Bowden

Dogs are incredible hunting machines, whom humans can motivate easily to search tirelessly and locate virtually anything we want them to.

In SAR desktop scenarios you happily deploy your dog asset, but do you really know what the practical application of deploying a dog team looks like? Do you still believe one dog team is enough for your search response because you can only think of one tasking? Recently four dog teams were deployed at the same time into a search area and one dog team found the evading missing party. Do you still believe you cannot deploy a dog because the area is contaminated? Did you know you can deploy a SAR dog to find discarded articles?

This workshop is about the practical application of deploying dog teams, giving you more understanding and confidence. It covers the initial call right through to multi day deployments.

Room 2 Improving Crew Resource Management Using Aviation Techniques Claire Pettigrew & Stuart Graham

Crew Resource Management is used in the aviation and other industries to improve communication, leadership, and decision making in environments where human error can have devastating impacts. What can we learn from the aviation sector to improve situational awareness, reduce communication barriers and solve problems more efficiently in our field teams and SAR management?

Facilitators from Contract Aircrew Training will discuss the key principles of CRM and how they're used in the aviation sector. We'll then workshop how these can be applied within LandSAR.

Room 3 Ultimate Random SAR Challenge Aimee MacDonald & Co.

SAR sometimes can be like a box of chocolates – you never quite know what you're going to get....

- Feel like getting out and stretching your legs?
- Think you may have the winning team when it comes to Nav and rope skills?
- Do you have a quiz master within your midst?
- How are your orienteering and teamwork skills?

Gather up your mates, create a team of 4 and register for the ultimate SAR challenge There are some sweet prizes to be won... but ultimately who will be crowned the Ultimate Random SAR Challenge team of the year?

Room 5 River and Flood Safety Part 2 Dan Manzano

A continuation of yesterday course covering the units and competencies below:

NZQA Unit Standard

- 427 Cross Rivers

LandSAR Competencies

- 4.01: Describe when to cross and when not to cross a waterway.
- 4.02: Demonstrate knowledge of river characteristics, dynamics and hazards.
- 4.03: Identify an appropriate place to cross a river and justify for solo and mutual support methods.
- 4.04: Demonstrate river crossing techniques.
- 4.05: Demonstrate safe river crossing technique with a stretcher.

Marquee 6 Navigation Skills Map & Compass Part 2 Sean Mulvany

A continuation of yesterday course covering the units and competencies below:

- 2.01: Demonstrate care and maintenance of maps.
- 2.02: Orientate a map.
- 2.03: Use the map to describe a route.
- 2.04: Demonstrate navigation using natural and cultural features to a selected position.
- 3.01: Demonstrate the use of bearings to a defined feature.
- 3.02: Demonstrate navigation to a selected position, on and off track, using a compass.

Room 1 CanyonSAR: How It Can Help Your Search

Oli Polson

More info TBC

Room 2 Increasing Diversity, Improving Inclusion

Sally Mackenzie, Claire Pettigrew & Johnny Franklin

– Interim Findings

Research into the search and rescue volunteer sector suggests there is a risk to volunteer workforce sustainability. To reduce its impact, our volunteer recruiting pool should be as wide as possible; Land Search and Rescue should appeal to and welcome volunteers from all backgrounds. Additionally, having a volunteer base from all walks of life has undisputable benefits to Land Search and Rescue's operational capability.

Research has been commissioned by Land Search and Rescue to understand why we have low levels of gender and ethnic diversity. The research also explores the personal experience and opinions of Land Search and Rescue volunteers to gain insights into how the organisation can be a place where volunteers of all genders and ethnicities feel supported, are treated equally, and are enabled to thrive.

Come along to hear about the interim findings and participate in the debate which will shape the final report.

Room 3 Safer Walking and WanderSearch Overview

Clare Teague

Clare Teague the National Safer Walking Coordinator, LandSAR will discuss Safer Walking in the context of the following questions:

- What is Safer Walking?
- How did it come about?
- Why it is important?
- Who is involved?

WanderSearch is one technology that is an enabler of Safer Walking for those with cognitive impairment and a risk of going missing. We will discuss when and where WanderSearch is useful, and what the Donald Beasley Institute (disability-focused research specialists) had to say about it.

Saturday 30 October 09:45 – 10:30

Room 1 Anaphylaxis: lets do this!

Dr John Apps

Awareness raising of the potential lethal risk of a severe allergic reaction in a remote setting and how to manage it. Will use the NZ Resus Council guideline to demonstrate/teach the practical skills needed to safely carry and inject adrenaline. Will discuss the supply and legal aspects too.

Room 2 Volcanic Risk Assessment for Staff Field Deployment at Mt Ruapehu

Nico Fournier

Eruptions at Mt Ruapehu can occur with little or no warning. In the absence of recognisable precursor activity, a main Health and Safety challenge for GNS Science is therefore how to assess the level of residual risk our staff take when working near the crater lake at Mt Ruapehu. In other words: how can we make an informed decision about how safe it is for our staff to conduct fieldwork at Mt Ruapehu when the monitoring data are not providing clear insights into the current and future level of volcanic activity?

In this presentation, we describe the quantitative risk assessment methodology we developed and routinely use for our field staff safety at GNS Science. We also explore opportunities and challenges related to the provision of forecast and expert advice at volcanoes in time-pressured rescue and recovery operations following an eruption.

Room 3 Know Your Neighbourhood

Elaine More SportNZ

Elaine More from the SportNZ Insights Team will provide an overview of the Sport NZ Insights Tool. This interactive online resource was designed to guide good decision making in the recreation sector but has applications across many industries including aiding in SAR response preparedness.

This repository of information and data draw from Statistics NZ, The Active NZ survey, The Ministry of Education, The Ministry of Health and other sources, allows you to visualise and share information effectively. You will be able to understand key population groups, activity trends and view data that is specific to your region, providing relevant and targeted insights on the people in your neighbourhood

Saturday 30 October 11:00 – 12:30

Room 1 Marni Sheppard Operation: A multi-disciplinary approach to ground search

More info TBC

Room 2 Stretcher Mules, lifting our game

Terry Blumhardt

Stretcher Mules, lifting our game...thinking about what we consider to be standard kit when we think about a SAR job that will or might involve a stretcher.

This session is to discuss and challenge the perception on what is considered as minimum Stretcher gear and why.

Join in and get hands-on with Mule Wheel units, seats, stretchers, packaging options and lightweight low angle slope gear. It's about keeping us, the Responders safer by working smarter, not harder.

Room 3 Wilderness Dogs Demonstration

Barry Dougherty, Murray Bowden, Bridget Martin

More info TBC

Room 1 Iceland SAR and a Christchurch Case Study

Juliette Hunter & Phil Simmonds

Iceland has a population smaller than that of Christchurch yet they have approximately 10,000 search and rescue volunteers. In 2018 I was fortunate enough to receive a LandSAR scholarship to attend the Iceland SAR conference (ICESAR Rescue 2018) to learn about how they operate. The first part of our presentation will be about the ICESAR conference and Iceland Search and Rescue.

The second part of our presentation will be a case study about a recent Christchurch search for Emma Beattie, this will discuss the benefits of using a cold case or unresolved search as the basis for a District SAR exercise.

The case study will include a summary of the search effort that was initially conducted, the review of that process. We will discuss the planning for the SAR Ex including the search file review, any additional information, the identification of new search tasks, family liaison role, media releases, the planning and running of the District SAR Ex.

Room 2 D4H Incident Management

Johnny Franklin & Craig Gibson

D4H Incident Management or D4H Live is an alternative to SARTrack. This session will introduce D4H Incident Management to the audience. It is intended to provide an overview to demonstrate its flexibility and intuitive use.

It is acknowledged that it does not possess the same functionality of SARTrack, but it is simple to use. Users can access it from any device connected to the internet: from home, SAR base or in the field.

Whilst a number of LandSAR groups use D4H Personnel and Training, very few use Incident Management. It has been adopted by Coastguard and increasing in popularity in Civil Defence.

The presentation is made by two volunteers from Wakatipu, who are currently using it instead of SARTrack. The inclusion of this presentation at the conference is not an endorsement by LandSAR, but intended to consider alternative ways of doing things.

Room 3 Continuous Improvement

Claire Pettigrew, Alan Marriott & Ed Cooke

LandSAR Wellington will present their approach to Continuous Improvement, using some examples of lessons identified from their SAROPs and changes they've made. We'll also touch on some of the key elements of a Continuous Improvement approach based on international emergency management best practice, and invite other groups to share their improvement systems.

For the second half of the session, we'll work through a tabletop exercise to brainstorm improvements to some SAR issues groups may encounter.

Saturday 30 October 14:15 – 15:00

Room 1 Cold case searching – What happened to Christian Prehn? Richard Walker

At the close of February 2014 Christian Prehn's pack was found abandoned on Travers Saddle in the Nelson Lakes and the subsequent search at the time failed to find any sign of him.

This workshop uses this case as a facilitated discussion on "cold case" searching. We will look at the "how to", and what we can gain from revisiting old cases.

Room 2 SARTrack

More info TBC

Room 3 Training Youth to become Search and Rescue Volunteers Steve Campbell

YSAR is a non-profit organisation providing a three-year training programme for secondary school students, with its focus being skill development, community service principles and authentic outdoor education learning outcomes that are aligned with the Search and Rescue and Civil Defence Emergency Management sectors. Through YSAR, our students develop friendships, develop bushcraft and outdoor experience, grow strong interpersonal skills, enhance real-world problem-solving techniques, improve career opportunities, develop a sense of community service and a broader sense of hope for the future. In return, our youth help LandSAR, Coastguard, Police, FENZ and others in the EM sector to address their acknowledged aging demographic. Over and above this, because young people are early adopters of new and often disruptive technology, they assist these organisations to trial and assimilate innovative new practices, software and equipment.

YSAR is on a trajectory for scaling regionally throughout NZ, currently investing resources to ensure safe and sustainable growth. Steve and the YSAR Board see partnering with LandSAR and other SAR sector agencies, key to moving forward adding youth and diversity to the pool of SAR volunteers in NZ. <https://www.ysar.nz>

Saturday 30 October 15:30 – 14:30

Room 1 Rescue Programme Development: Identify the problems and define the outcomes Grant Prattley

Success comes from identifying the problems and defining the outcomes first before deciding what to deliver. To get something that matches the needs of what we do in New Zealand and meets best practice takes careful thought. Considerations include the terrain you are operating, the types of operations you get, the people you have, the amount of training you undertake, the equipment you have and your budget.

It involves a collective of experienced practitioners with knowledge of New Zealand and overseas. Testing with the equipment we have available and use in New Zealand is key to validation. We will be looking at case studies developing and delivering programmes for Cave, Canyon and Antarctic.

Room 2 Member Wellbeing (Carrying the Burden) Lindsay Eunson & Jodi Star

Lindsay will share his personal experience of an unsuccessful search where I had known the missing person and his family for many years. The effects of not finding him at the time and now while still living in the same community. The pressure and stress at the time and weeks after.

This session will conclude with an introduction in the LandSAR Member Assistance Programme introduced in 2021. How to access, what services are available, welfare checks, etc.

Room 3 Stop the Bleeding Kane Turner & Dr John Apps

Bleeding from trauma is a leading cause of death, and as first responders and LandSAR members, we may be exposed to it, either within our own teams or within the general public.

Knowing fast efficient ways to stop the blood loss is key, having the right equipment helps, but what else can we use in the field that will save our team members?

Knowing how to use, prepare and carry this equipment is also key to stop the blood loss within the few minutes that we may have.

Room 1	Scholarship Presentation: Texas Home Land Security Special Operations	Dan Manzano
<p>The presentation is to highlight my time with the Texas Department of Public Safety, Texas Task Force 1 and other different SAR organizations and law enforcement agencies.</p> <p>The purpose of the trip was to observe and take part on different SAR activities, but mainly on how the agencies mentioned above approach water incidents, either in the wilderness or during large scale events like tropical storms or hurricanes. How they select the responders, conduct training, skill maintenance cycles, equipment selection, tiers of training and response and multi-agency cooperation.</p>		

Room 2	LRDR Update and demo	Matt Ellingham
<p>More info TBC</p>		

Room 3	International Commission for Alpine Rescue	Roy Bailey, Jono Gillan, Pete Zimmer
<p>Three different SAR practitioners will share their perspectives, experiences and insights about the LandSAR involvement with the annual ICAR Congress.</p> <p>You will hear about the work and opportunities that flow on from the congress attendance during the rest of the year and over the years with ongoing network and knowledge exchange opportunities.</p> <p>The value proposition is not to just be a member and take, but also to be a contributor to give and share with an international audience and peers with a huge SAR knowledge base between like-minded organisations and people. It is about what can we gain and give back to our local membership and international colleagues. The main benefit is in specialist backcountry technical rescue environments (alpine, river, canyon, cave, dogs), and there are also opportunities with wilderness search “amongst the trees” or incident management.</p>		

Sunday 31 October 10:45 – 11:30

Room 1 Cellular triangulation of a MP using historical data

Bevan McNaughton

With cell phone/mobile network coverage constantly expanding, the likelihood of a missing person's cell phone showing their last location is more probable.

This Workshop will briefly cover:

- Cell-tower technology and how cell phones connect to multiple towers.
- Reading data Police obtain from network carriers (Vodafone, 2 Degrees, Spark) & how to interpret some of the data.
- Mapping tower data and creating overlays to assist with relative POA's and likely DP's.

Some of this workshop will require a basic comprehension on GIS for the practical side.

This may not include information based on still active cell phones on a Carriers network.

Room 2 Exploring Fatigue and the Impacts

Dr Karyn O'Keeffe

Due to the nature of Search and Rescue work there is a heightened risk of fatigue for LandSAR Members. The SAR activities (training, SAREXs, & SAROPs) are generally in addition to the volunteer members full working week and everyday life. To this end, it's important we understand the full effects of fatigue and the impacts this can have.

Join us for a presentation from Dr Karyn O'Keeffe, who is a Senior Lecturer at the Sleep-Wake Research Centre at Massey University. She will be talking with us about an up-to-date definition of fatigue, causes and consequences of fatigue, and personal management strategies.

Room 3 LandSAR Competency Update and Q&A

Tony Wells

The LandSAR competency framework has undergone a major update and restructure over the last two years. Along with this the process for assessment has been simplified and made less onerous for Groups. Training has been realigned to assist with knowledge and skill development to support the framework. New tools are coming to make recording and reporting easier. Despite much of this being communicated as it has occurred, there are still questions arising based on the old framework and processes. This session looks to bring some clarity to the changes as well as include a Q&A session to address any questions from the floor.

Sunday 31 October 11:30 – 12:30

Room 1 Introduction to AF8 and the National LandSAR Response

Craig Gibson & Alice Lake-Hammond

A national response to a forecasted major seismic event

Recently there has been substantial increase in odds that New Zealand will experience a massive earthquake in the next 50 years. A magnitude 8 earthquake on the Alpine Fault (AF8) that has the potential to cripple the South Island, and which will require a coordinated national response.

This presentation is broken into two parts. First, an introduction to AF8 where we unpack the science, explore the assumptions, and peek at the potential impacts and aftermath.

The second part will look at LandSAR preparedness and our key role in response. Why this becomes a national issue and why LandSAR is a key strategic agency in a national response.

Is your group ready to respond?