Great start to SAR ACE funding

In its first year of operation SAR ACE funding has enabled 1067 SAR people access to 67 courses – this equates to training 153 equivalent full time students (efts) in a myriad of disciplines from field skills, to leadership to incident controllers.

"The benefits of this training format are borne out in sessions where our people are not only learning themselves, but are also learning from each other and teaching each other."

Run for the sector by Tai Poutini Polytechnic, the courses are embedding a culture of 'one SAR body' as groups of people are brought together to train – because they meet and have to work with others from other areas of their own organisation as well as other SAR agencies.

The courses are conducted where there is demand for them. This has seen people gather in Motueka, for example, to train in Tracking in Wilderness Environments.

LandSAR is a big user of the training programmes on offer. CEO Harry Maher says their volunteers are using the courses to acquire technical skills to a very high level, such as vertical rope rescue, tracking in the wilderness, processing wilderness clue sites and managing the initial response phase of a search.



SAR Managers Course: Left to right: Mark Whitehouse, Keith Morfett, Clare Backes

"The benefits of this training format are borne out in sessions where our people are not only learning themselves, but are also learning from each other and teaching each other. This is also being seen in the field where we are witnessing a more cohesive approach to multiagency search and rescue operations." •

SAR recognised in New Years Honours

Congratulations to these SAR people who have been honoured for their contribution to search and rescue:

- Brooke Archbold, JP, of Auckland for services to Coastguard. MNZM (Member of the New Zealand Order of Merit)
- Kenneth Bruce Popple, of Porirua for services to the New Zealand Fire Service and Coastguard. QSM (Queen's Service Medal)
- Stephen Andrew Johnston, of Christchurch for services to surf life saving. QSM (Queen's Service Medal)











O SAR IN ACTION

Leading the way

"Day one: we learned the theory. Days two and three: we put it into practice".

"There I was wading through a dark tunnel, waist deep in cold muddy water with no light, team members suddenly collapsing or disappearing without warning – and the course tutors throwing us curve balls to adjust the scenario the moment it looked like we were doing ok."

"Out in the field in harsh conditions with various scenarios all designed to test our leadership skills, identifying not only our strengths and weaknesses but also critiquing the leadership skills of the others, you really get to know what you are capable of. What we learned over those three days is now being used in all aspects of our lives."

Coastguard Volunteer Radio Operator Ian Hendry aptly describes the value participants are placing on the skills developed while attending NZSAR's SAR Leadership course.

Tai Poutini Polytechnic run the three-day course which is designed to provide existing and aspiring team leaders and managers with the skills and knowledge to help lead small teams. This includes achieving critical tasks, often in remote and hazardous terrain. It combines theory sessions on leadership, group process, conflict resolution and feedback, with plenty of time to put it all into action in the field.



SAR Leadership Course

SAR ACE funding has enabled personnel from LandSAR, Coastguard, Police, and Surf Life Saving to attend the course. Participants have overlapping but different skill sets and like to share motivations, enabling a multi-agency approach where they learn not only from the tutors but also from each other – and themselves.

lan Hendry says so much can be learned from others' experiences, he wants to encourage agencies to get more of their people on the course.

Heather Pennycook, who was a team leader for the first time at the latest Wanaka SAREX, agrees. She says participating alongside personnel from other agencies took the knowledge to a whole new level.

"It removed our comfort factor that comes with familiarity. I was put in a high pressure situation where I didn't know the terrain, the people, their skill sets or abilities, and I had to lead my way through that. This is what can happen in large or multi-day operations. I ended with a better understanding of other organisations, how they work, and how we integrate with each other."



SAR Leadership Course

"Participating alongside personnel from other agencies took the knowledge to a whole new level."

She says it was also great to see women on the course. "Women team leaders are still fairly rare in LandSAR and it can be a bit daunting at times." Heather specialises in tracking for LandSAR and says they actively encourage a mix of men and women, "because our observations and thinking are quite different – putting both together enables you to cover all bases and get a better result."

Ashley Rule from Coastguard's Sumner Lifeboat Unit believes the lessons he learned on this course are life lessons.

All three easily identify examples of how they now use the leadership skills outside the SAR environment.

Ashley, who manages a team at the electrical company he works for, says the format for giving useful feedback has been very helpful. "The techniques I learned have easily transferred into my day job and I have used them to great effect in my role as Service Manager."

lan says he often refers to things he learned on the course both with his team at work and when he is mentoring others.

Heather, who is also the Chief Fire Officer for Makarora Rural Fire Force/First Response Unit and the Office Manager for a building company, points out that in reality most people spend a lot of time in a team environment.

"Regardless of whether I am leading or just one of the team, understanding team dynamics and conflict resolution, exploring styles of leadership and ways different people react – what works, what doesn't – means I can contribute more effectively at work, at fires, accidents and emergencies, or tracking down a lost person with LandSAR."

Preparing for the 'Big One'



Left to right: Marcus Hayes-Jones (Napier CDEM), Paul Craven (RCCNZ), course facilitator Jo Guard (MCDEM), Carl van der Meulen (NZSAR)

Designing multi-agency exercises helps ensure that the right people are in the right place, doing the right thing at the right time in the case of a mass emergency. To this end, Carl van der Meulen and Phil Burgess from the NZSAR Secretariat, along with Paul Craven from RCCNZ, recently attended the Ministry of Civil Defence and Emergency Management's (MCDEM) Exercise Writing & Management course. This course is designed for people who will be involved in writing and managing multi-agency exercises, which will be useful as we develop our exercise programme for mass rescue operations (MROs).

MROs are large and complex by nature, requiring a well coordinated multi-incident, multi-agency response. Search and rescue will form only one part of the overall response to any MRO incident – albeit a very important part. So there has been a concerted effort over the last year by NZSAR, RCCNZ, and NZ Police, to develop MRO readiness plans.

The focus is now on checking that these plans will provide an effective, efficient, and well-coordinated response to any MRO. A number of table top discussion exercises across the Police Districts, involving agencies and personnel that don't typically work with the SAR sector, are presently being planned.

Carl says that this is why they participated in this course. "There are so many strands to an MRO response: the SAR component, mass welfare needs of survivors and possible mass casualties. Our readiness plans need to ensure that all these strands of activity will be well-coordinated in an MRO response. So we need to develop our exercises accordingly – to focus on the higher level coordination of an MRO – and to do that we need to exercise with other agencies like CDEM."

An important part of exercise development is the documentation. The MRO exercises will be developed using the series of exercise templates recently developed for the National Exercise Programme. Phil says that these templates will help us get the best benefit from the exercises. For example: "making sure our exercise goals, objectives and KPIs are well documented and known to all agencies involved."

Paul agrees, "The temptation with writing an exercise is to dive right into the scenario before considering things like the real purpose of what you are trying to achieve. There's also a danger of assuming that what you consider to be the purpose of the exercise may not necessarily be what others think. The course highlighted to me the importance of the initial planning phases of an exercise, to ensure your ducks are all in a row before starting with the scenario."



How you can help

Promote Adventuresmart so you can help everyone, whether they are a local or a visitor from overseas, plan and prepare for their outdoors activities with:

- downloadable copies of the safety codes available in multiple languages
- tips and advice to help people prepare for their land, water, boating, snow and air adventures
- videos of the three safety codes and on avalanche awareness
- Outdoors Intentions Process for land-based activities, which provides visitors with easily accessible ways to tell people where they are going - plus when and how to raise the alarm if they haven't returned
- more than a thousand links to safety information from appropriate organisations
- links to where people can up-skill and learn more about their chosen activity.

We encourage you to spread the word about the AdventureSmart website, which is now mobile-friendly. You can help build awareness by 'liking' our Adventuresmart Facebook page and by letting people know about the AdventureSmart brochure, which is available free from many i-SITES and DOC centres nationwide.



Adventuresmart's mobile friendly version



O INSIGHT

Using all the tools in the toolbox

Improvements to technology are playing an increasing role in search and rescue, and though there is no doubt there are countless benefits to what the latest and greatest 'tool' can do – a recent incident illustrates caution against total reliance on automated technology.

A Personal Locator Beacon (PLB) was activated in the Pohangina Valley in the Manawatu region of the North Island. The Palmerston North Rescue Helicopter was tasked to search. The pilot, crew man and advance paramedic on board picked up the signal and spent 40-50 minutes searching, but had no luck pinpointing the source. However, they located the lost person's vehicle, landed alongside it and called in LandSAR's Tony Groome to locate the signal from the ground.

"I headed to the area with my hand-held radio signal direction finding tool. Due to the terrain, which was a step, rocky valley system with medium bush and scrub on the valley floor, the helicopter was unable to trace the signal or see the person who had set the PLB off.

"The danger is we become so reliant on GPS, etc. I tell my people: helicopter rescues were going on long before we had this gear..."

"It took me about 35-40 minutes to track the signal source, after I eliminated the radio signals that were reflecting off the walls of the valley. Once I had a strong signal in one direction, I tracked it and found the lost party adjacent to a stream, lying under some willow trees clutching his PLB. Of course his trusty farm dog was at his side alerting me to his presence by growling at me."

Tony Groome says in this type of terrain where the signal is bouncing all over the place, it is imperative that someone has knowledge and experience of how radio signals work. Unfortunately, less people seem to have these particular skills.

Life Flight Trust's Operations Manager, Dave Greenberg, is another advocate for ensuring SAR practitioners "can turn off auto and operate in manual". He spends many hours explaining and training new crew in using their equipment to its limits, and then finding the alternative.

"The danger is we become so reliant on GPS, etc. I tell my people: helicopter rescues were going on long before we had this gear, so if it breaks, or comms is not able to give us an accurate GPS position, it is possible to get by without it. It is a matter of using common sense and having the training in gear (plus skills such as map reading), which may not be frequently used, so that when you need to use these things you can."

Dave adds the training does not have to be an expensive, formally organised exercise: "we often pull the helicopter out onto the tarmac and use the DF finder to track planes on the ground, or in the air on normal ATC frequencies. No flight time required."

Both Tony and Dave agree training to skilfully use hand-held 121.5MHz tracking devices needs to be passed on.

"One of the challenges we have is that as old timers move on we are losing key fundamental skills and knowledge. We need to find ways to pass on the industry knowledge – especially to people who only know how to use automated equipment," says Dave. •



Tony Groome with his hand-held radio signal direction finding tool.

Insights

- Understanding how to utilise all the features of your DF gear, such as scanning the entire 406MHz spectrum or quickly switching over to a 121.5MHz signal, involves good training and lots of practice.
- Radio signal direction can be affected by terrain with signals bouncing off hard surfaces like rock or concrete, or absorbed by dense vegetation.
- Use NZSAR's online DF trainer. It is an invaluable tool: http://nzsar.org.nz.org.nz
- Often people will set off a beacon and then become unresponsive either through injury or terrain, so alterative skills are required to track the signal source.
- Use common sense if it's too hard to get to, chances are people won't be there.
- Ensure consultation with local people is also undertaken in relation to where lost parties may be.
- Informants are key. Arranging to have the informant stay in cell range and available to be picked up and lead you to the incident is often the best way to reduce search time.
- Sometimes we can get so busy following our GPS or DF gear that we forget to look out the window.

O SAR ORGANISATIONS

The New Zealand Defence Force

The New Zealand Defence Force (NZDF) has had a long involvement with search and rescue in New Zealand, and this is set to continue, but its role is changing. Demand for its services in some areas is reducing, as other assets within the SAR sector become just as capable. In other areas it is increasing, as the NZDF acquires new technology enabling it to be more effective at SAR.

One example of this is the NH90 helicopter that the Air Force is currently introducing into service to replace the Iroquois. The NH90 brings the Rotary Wing Force into the 21st Century with an impressive suite of flight deck electronics, as well as increased speed, range, and lift capacity.

The NZDF is required by Government to maintain assets at a higher-thannormal state of readiness to be able to respond to SAR incidents when requested by the two SAR Coordinating Authorities: RCCNZ and NZ Police. For incidents at sea, typically in the Pacific Islands, the P-3K2 Orion aircraft is the key asset of choice. A crew and aircraft are always at two hours noticeto-airborne status, and with enhanced sensors and impressive range and endurance, the aircraft can be on-scene quickly and remain airborne for up to 14 hours, depending on environmental conditions. Additionally, the Navy maintain a ship at eight hours notice to sail status for offshore or mass rescue situations.

For land search and rescue, a UH-1H Iroquois is still kept at two hours noticeto-airborne status. As with the other rescue helicopters in NZ, the 'Huey' is adept at aerial searching, as well as providing transport support to SAR teams.

But a SAROP is only one of the many roles that the NZDF performs; its people are multi-disciplined and trained to carry out a wide range of operations. The NZDF is significantly smaller than a lot of other military forces and, therefore, it operates differently. To that end, it uses its assets for a wider range of roles than other nations. It would not be cost effective for New Zealand to mount substantial United States modelled Coastguard and Customs forces, so the NZDF



The NH90: image courtesy of the NZDF

is able to fill in where other agencies have gaps in their capability. NZDF personnel also train and exercise alongside SAR agencies, maintaining and updating their skill sets and knowledge by supporting Police-led SAREXs. For instance, by using the Iroquois helicopters for transport - illustrating again the inherently cooperative character of search and rescue.

International SAR

Check out this series of videos from the international SAR organisation IKAR. Shot during last year's congress in Croatia, the videos include examples of land, medical and air search and rescue exercises: http://topographmedia.com/









Duncan's desk



While the summer of 2013/14 was a bit of a disappointment for many of us, there appeared to be no shortage of people needing search and rescue. Almost every day there have been reports and headlines about people getting into trouble around the country, but also of the selfless efforts of SAR people helping out those in need. While it is good for SAR to have a positive profile, it is also helpful to continually remind our communities

about the need to plan and conduct their activities in a way that sees them come home alive and well at the end of the day.

Although our effective SAR safety net will always be required, I am becoming increasingly encouraged that a greater number of people are making the effort to take more responsibility for their own safety. We now have over 42,800 registered 406MHz emergency distress beacons, thousands of people are visiting www.adventuresmart.org.nz for safety information each month, many hundreds are using the Outdoor Intentions system, and more people are wearing lifejackets while boating than ever before. In the last thirty years we have observed a huge cultural shift in people's attitudes to things like wearing seatbelts. I am now hopeful that we are starting to see a similar cultural shift around recreational safety, and it's very good for the SAR sector to provide leadership in this process.

With our new strategic plan in place, the Secretariat is focussed on delivering the Council's revised goals. A particular focus of our time and effort is assisting SAR organisations to develop and sustain capable SAR people. We are now in the second year of TEC funded SAR ACE training and, while it is all still maturing, the indicators I have seen show a very positive picture of quality training being made available to

SAR people based on operational requirements (see story page 1). We also welcome the decision by TEC and our Emergency Management (EM) colleagues to establish EM ACE to support the delivery of quality training for the EM sector. I understand that EM ACE will commence in 2015 and we will look at ways to better integrate both ourselves and our training with the wider EM sector.

It was great to see the NZSAR Council accept the Integrated SAR Incident Management Training Pathway report at its recent meeting. This report provides an updated snapshot of SAR incident management training and identifies our strengths, along with opportunities to improve. If you're curious, the report is available on the NZSAR Council website. We'll now work with SAR organisations to consider the recommendations and take the next steps to fill out and enhance the content and quality of the SAR incident management training available to the sector. Plus, we'll soon be launching START, our web based knowledge system and also exploring the potential of SARNET to assist in these processes.

2014 has got off to a quick start and we (Carl, Phil and I) look forward to working with you to further improve our SAR sector over the course of the year.

Interested in helping out NZSAR?

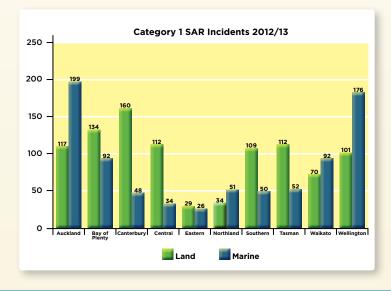
The NZSAR Secretariat often requires assistance of paid part-time contractors and consultants to help us get a wide range of things done. We're always on the lookout for practical, can-do people to help us out. If you're interested – please drop me a line.

Duncan Ferner NZSAR Secretariat Manager d.ferner@transport.govt.nz



STATS ATTACK

This graph gives a breakdown of the type of SAR activity that occurred in each Police District during the 2012-13 year. Auckland and Wellington were once again the busiest areas for marine SAR incidents – which is to be expected with their large populations and easy access to harbours. Canterbury and the Bay of Plenty were the busiest areas for land SAR incidents.



CALENDAR

SAREXs and SAR training - see:

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

Major SAREX Planning and Training Meeting: 2 April, Wellington Search and Rescue Europe Conference: 7 - 9 April, Copenhagen

NZSAR Awards Ceremony: 13 May, Parliament

NZSAR Consultative Committee Meeting: 13 May, Wellington

NZSAR Technology Workshop: 21 May, Wellington

NZSAR Council Meeting: 29 May, 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.nss-snrs.gc.ca - Canadian SAR Secretariat's new look site

www.nss-snrs.gc.ca/en/quadrennial-review/quadrennialsarreview-report.page - For those interested in how Canada organises for search and rescue

http://topographmedia.com/ - IKAR videos and information