

New Zealand Search and Rescue Council

# Annual Report

2011/2012





# Chair's Report



**Stop and ask a person in the street about search and rescue people and I am certain you will be told they are heroic figures who save lives.**

**And saving lives is what the search and rescue sector does: ensuring that when people get themselves into trouble across our land and sea there will be a highly skilled team, trained up and ready to do what is necessary to bring them to a place of safety.**

However, the more than 14,000 search and rescue (SAR) people know the service they provide is far more complex than just the 'saving lives' catchphrase. An effective SAR sector involves great commitment, appropriate training, sound knowledge and a willingness to get the job done.

Reflecting on the work the New Zealand SAR Council, Secretariat and Consultative Committee have undertaken, and the achievements we've made, I am in no doubt New Zealand's SAR sector is working in a fundamentally effective way. While there is always room for improvement, I believe the sector has taken up the challenge set by the Council's strategic goals: to seek new and innovative ways to provide an affordable, effective and sustainable SAR system.

At the sector's core, you will find SAR people who commit huge amounts of time to individual skills training, administration and equipment maintenance. In addition to this is the time spent in classrooms, at meetings and participating in exercises. Many are also involved with training others and preparing SAR plans or procedures. Finally, there is the assurance that they are available to be called out to conduct SAR operations, often in terrible weather and usually at unexpected times. The dedication our people provide to search and rescue is huge, and it is truly appreciated.

At a practical level, the glue that binds our sector together, is the many and varied relationships between people at every level of each SAR organisation. These personal connections are vital, as we must function as a team if we are to function effectively. They begin with team members within a single SAR organisation, and progress through to developing and maintaining strong inter-agency relationships. These associations serve to enhance the collaborative environment in which we share, learn and work as one SAR body. NZSAR is working to actively promote quality interaction by sponsoring SAREXs, running workshops, developing sector guidelines and creating collaborative policy.

With increasing fiscal pressures upon all of us, the sector has recognised the value in working towards the Council's five strategic goals, pooling resources and harmonising activities and initiatives where appropriate. Taking this a step further, where once paths may not have crossed, there are now evolving programmes, information sharing and people working together across agencies that, in some cases, extend beyond traditional SAR boundaries. This includes an increasingly close relationship with our emergency management partners in Civil Defence.

I would like to take this opportunity to thank the Council, the NZSAR Secretariat, the members of the Consultative Committee – and of course the thousands of SAR people who give up their time and use their skills so generously – for their work, their knowledge and their commitment to making our SAR sector world class.

Scattered throughout this report you will find exemplars of an effective SAR sector. I trust you will enjoy reading how our people are successfully organising around the end result – Saving Lives. ■

Martin Matthews  
Chair  
New Zealand Search and Rescue Council





# Secretariat Manager's Report



One of the goals of the New Zealand Search and Rescue (NZSAR) Council is to 'promote continuous improvement'. While this is not a destination that can be arrived at, it is a way of thinking and working in order to make things better over time. In support of the goal (and the other four), it has been great to see some very positive momentum building within the sector during the 2011 – 2012 year. Collectively, we are taking constructive steps to continually improve the search and rescue sector.

The National Search and Rescue Support Programme (NSSP) brings together a range of practical initiatives and activities that are aimed at realising the five NZSAR Council goals.

The success of the NSSP relies heavily on the participation, goodwill and hard work of a huge range SAR people and organisations. I would like to thank everyone involved for their guidance and assistance.

One of the most important components of this year's NSSP was the appointment of our Training Coordinator, Phil Burgess, who has made some real progress across a number of training-related initiatives since starting with us in December 2011. Phil has been across the country, visiting SAR exercises and attending meetings and workshops. His observations and insights are critical to making sure we target our efforts appropriately and stay in tune with the needs of the sector.

The Council supported 11 significant search and rescue exercises (SAREXs) during the year. The SAREX planning guidelines, and more effective monitoring and evaluation of SAREXs, are very positive outcomes. Of particular note were the two ambitious avalanche SAREXs run in the South Island. Avalanche search and rescue can be very difficult and a fast response is critical to achieving a good result. You can read more about Exercise Swift on page 12 of this report.

Effective air observation is crucial to the success of many SAR operations as we must locate people before we can rescue them. On behalf of the Council, the Rescue Coordination Centre (RCCNZ), with the assistance of the NZ Police, ran a number of basic and advanced Air Observer courses throughout New Zealand. This training involved one basic course and five advanced courses, reaching a total of 116 students (see story on page 16).

They also ran two successful On-Scene Coordinator courses for a total of 41 students. This advanced level training has been well received by participants, as it raises their skill level and clarifies roles and expectations between the two coordinating authorities.

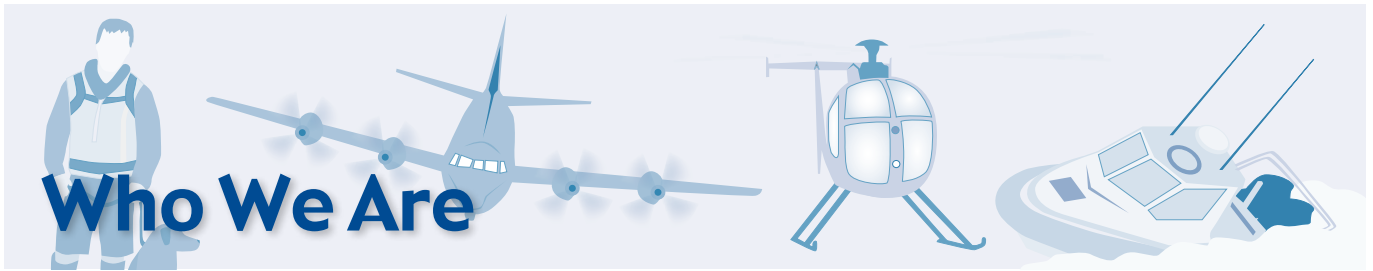
Several workshops were conducted over the year, each was targeted at an aspect of the SAR sector that collaborated to address specific issues and risks. The benefits are evident from the obvious strengthening of relationships throughout the sector and the widespread adoption of the 'one SAR body' culture. The SAR workshops and exercises supported by the NZSAR Council are a very practical way of establishing and nurturing those linkages (read more about these workshops on page 15).

Following on from previous work, a significant effort was directed into SAR preventative activity over the year. The promotion of the three Safety Codes for outdoor, boating and water activities, and of [www.adventuresmart.org.nz](http://www.adventuresmart.org.nz), gained some momentum over the summer months. The initiative is mainly aimed at New Zealanders and visitors to New Zealand who are participating in self organised, non-commercial recreational activities. Our goal is to provide and promote good quality, consistent safety information to the largest possible number of people. In doing so we hope to reduce the amount of people injuring or killing themselves, or requiring search and rescue services, while they are undertaking recreational activities. This is very much a collaborative effort across a number of organisations, many of whom are outside the standard search and rescue sector. The widespread support and enthusiasm for these initiatives has been rewarding to see, and I believe that they will have a positive effect on public safety over the coming years (see article on page 14).

In addition to the NSSP, the Secretariat also completed a number of discrete projects and fulfilled its many business-as-usual functions. With the assistance of the whole sector we collated, analysed and prepared a range of SAR statistics – many of which are presented in this report. The Service Level Agreements (SLAs), with the four key voluntary SAR providing agencies, are now in their fourth year and, are proving to be of immense value in clarifying relationships, defining expectations, capturing information, and funding the provision of vital SAR services.

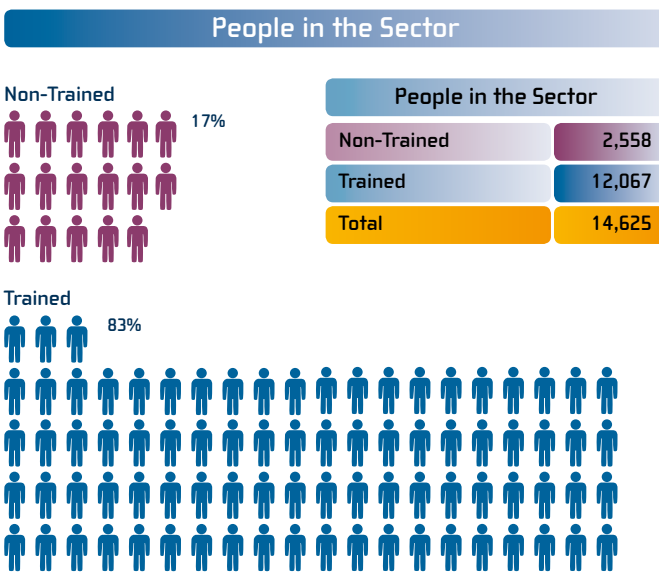
The positive cultural shift I noted in last year's report continues as we see and grasp more opportunities to cooperate and collaborate in order to achieve good search and rescue outcomes. Search and rescue is truly a team effort and we owe a large debt of gratitude to the many people and organisations that have assisted us over the past year. Thank you. ■

*Duncan Ferner*  
NZSAR Secretariat Manager

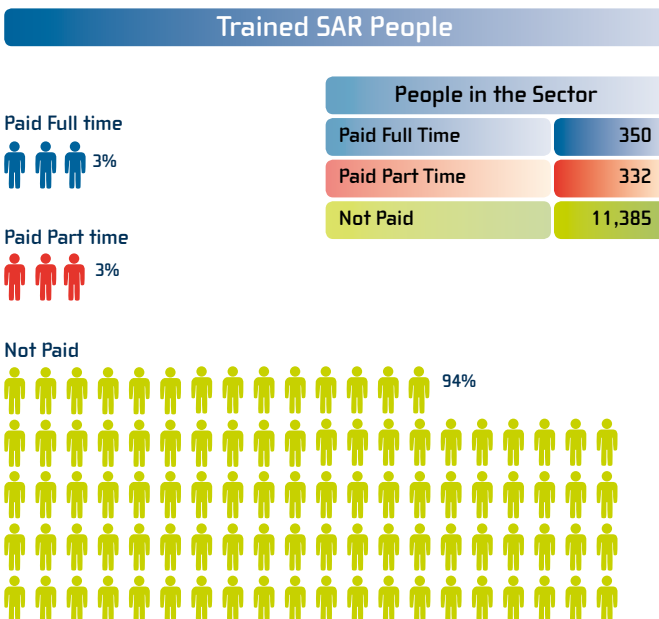


## People in the NZSAR Sector

There are 14,625 people involved in the NZSAR sector. 83% of these are trained for SAR roles, including coordinating a SAR response, flying a search aircraft, crewing a marine rescue vessel, or searching the bush as part of a team. 17% of the sector support SAR operations by performing roles such as providing strategic direction, administrative tasks, providing training, and carrying out prevention education.



New Zealand has one of the highest rates of volunteer involvement in SAR in the world: 94% of the people who provide the operational SAR response in New Zealand are volunteers.



## SAR People by Mode/Activity

The 14,625 people who are involved in the SAR sector are spread across different activities and modes of operation. The table and graph below show how many people are involved in each of the following activities.

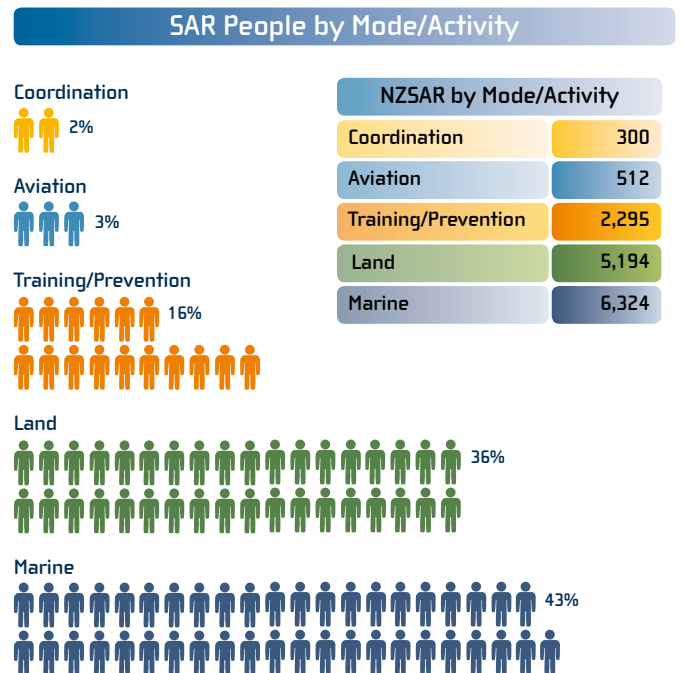
**Marine:** People who are active in marine-based SAR. Most of these people are volunteers from Surf Life Saving New Zealand and Coastguard New Zealand.

**Land:** People who are active in land-based SAR. Most of these people are volunteers from LandSAR New Zealand and the Amateur Radio Emergency Communications (AREC).

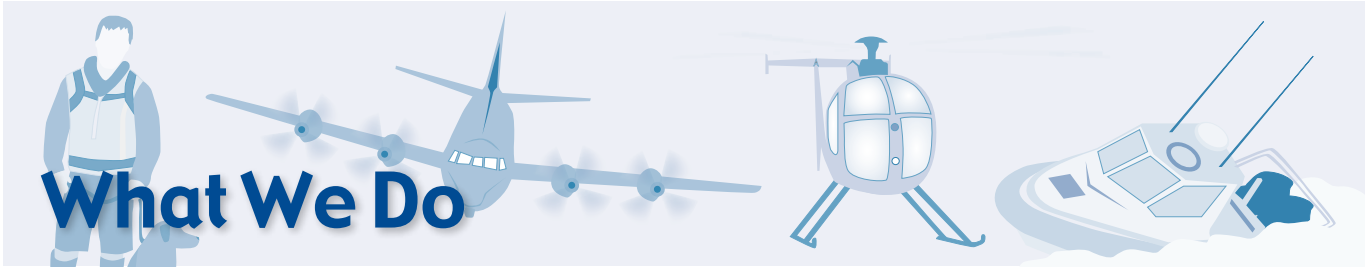
**Training/Prevention:** People involved in providing training and prevention services. Most SAR training is carried out in-house by each of the SAR organisations. The NZ Mountain Safety Council and Coastguard Boating Education Service are the main organisations that provide preventative education services to the public of New Zealand.

**Aviation:** People involved in the aviation segment of the SAR sector. This segment provides a great deal of support to a large number of SAR operations across all three modes – land, marine and air.

**Coordination:** People involved in the coordination of SAR operations, and in providing strategic direction and policy advice for the sector. These people are drawn from the New Zealand Police, Maritime New Zealand's Rescue Coordination Centre, the Maritime Operations Centre, and the NZSAR Secretariat.



There are also 27 operational SAR dogs working in the sector; 11 trained as avalanche search dogs, and 16 as wilderness search dogs.



## Coordinating Authorities

Two agencies in New Zealand have responsibility for coordinating Search and Rescue Operations (SAROPs) throughout the New Zealand Search and Rescue Region (NZSRR).

The New Zealand Police coordinate Category 1 SAROPs at the local level, including land, subterranean, river, lake, inland waterway and close-to-shore marine operations.

The Rescue Coordination Centre New Zealand (RCCNZ) coordinate Category 2 SAROPs at the national level, including operations associated with missing aircraft, aircraft in distress, and off-shore marine operations within the NZSRR. Category 2 SAROPs typically require the use of national or international resources and may involve coordination with other states.



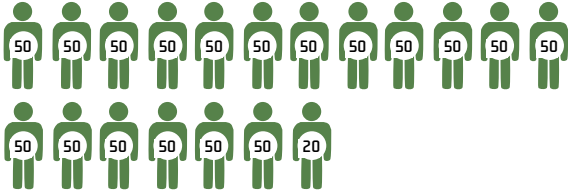
## Incidents

During the 2011/12 year, the Police coordinated 1,675 Category 1 incidents, and RCCNZ coordinated 666 Category 2 incidents. This is a total of 2,341 incidents, which is an average of 6.4 per day, and a slight decrease on the previous year.

There were 1,031 land-based, 989 marine-based, and 273 aviation-based SAR incidents during the year. Over the last five years there has been a slight, but steady, increase in the number of land incidents, and for the second time, land incidents outnumbered marine incidents. There were also 48 undetermined incidents caused by distress beacon activations of a short duration.

### SAR Incidents in 2010/11

#### POLICE Land



#### POLICE Marine



#### RCCNZ Aviation



#### RCCNZ Marine



#### RCCNZ Land



#### RCCNZ Undetermined



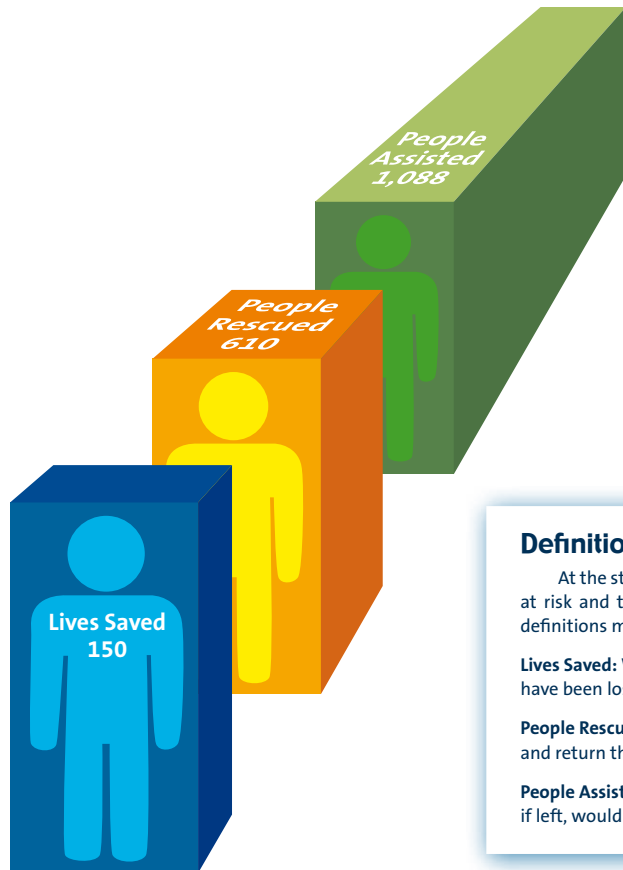
POLICE Land	920
POLICE Marine	755
RCCNZ Aviation	273
RCCNZ Marine	234
RCCNZ Land	111
RCCNZ Undetermined	48
<b>TOTAL</b>	<b>2,341</b>

Incidents by Coordinating Authorities			
Mode	POLICE – Category 1	RCCNZ – Category 2	Total
Land	920	111	1,031
Marine	755	234	989
Aviation	...	273	273
Undetermined	...	48	48



# What We Achieve

## What We Achieve



In the 2,341 SAR operations during 2011/12, a total of 1,951 people were identified as being at risk. The NZSAR sector saved 150 lives, rescued 610 people, and assisted a further 1,088 people. These are very significant numbers, and they demonstrate the positive impact of the NZSAR sector.

Sometimes it is found that people were not at risk at any stage of the operation. Common examples of these include accidental beacon activations (usually from aircraft undergoing scheduled maintenance) and possible flare sightings (often caused by Chinese lanterns during summer).

Unfortunately, there are also incidents that include the loss of life. Regrettably, a number of people perish before SAR services are notified, or despite our best efforts. A total of 103 fatalities were recorded during the 11/12 year.

### Definitions

At the start of each SAR operation, it is assumed that there is a person, or people, at risk and that they require the assistance of New Zealand's SAR services. These definitions measure how these people have been assisted.

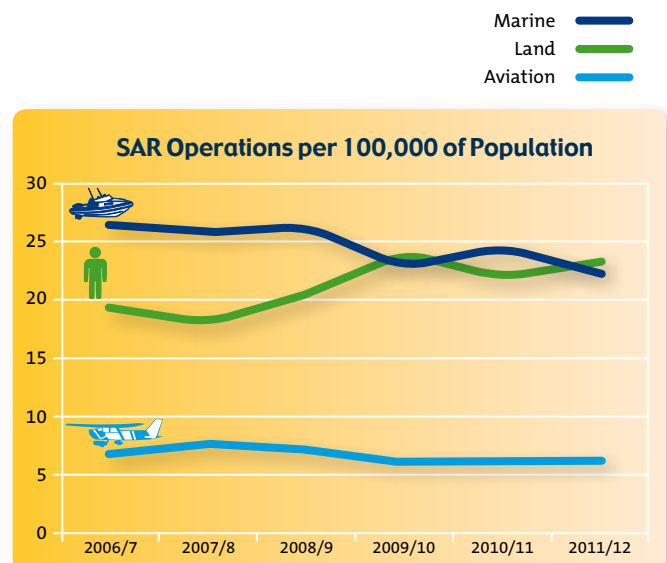
**Lives Saved:** Where, had SAR agencies not intervened, life would definitely have been lost.

**People Rescued:** Where SAR agencies locate and rescue a person or people at risk and return them to a safe location.

**People Assisted:** Where SAR agencies aid a person or people at low risk, but who, if left, would be at risk.

## Performance Management

In order to better understand the overall performance of the roles and work of the Search and Rescue sector, including its combined preventative efforts, it is useful to examine the number of operations we conduct in the context of the population of New Zealand. The graph shows the number SAR operations by mode per 100,000 of population. The year-on-year changes are not large, although there appears to be a slight trend of increasing incidents for land and decreasing incidents for marine over the past six years.





NZSAR has estimated that New Zealand averted \$495 million in social costs during the past year as a result of the 150 lives saved by the SAR sector. The people who were saved, along with their families and friends, were of course personally grateful. But it is also important to understand the economic benefit to the country of SAR operations, in terms of avoiding the social cost of premature fatalities.

To complete this analysis, NZSAR uses the Ministry of Transport's complex formula to determine a monetary value that can be assigned to loss of life (based on a Value of Statistical Life – VOSL – established from a willingness-to-pay survey). This approach has been widely used by many countries in safety intervention analysis.

The total social cost of a premature fatality includes a range of costs – both financial and intangible. Financial costs include medical care and search and rescue costs, and many of these costs will be incurred whatever the outcome of the search and rescue effort. Intangible costs associated with the loss of life include pain and suffering, and the emotional cost to families, friends and society at large. Intangible costs can be eliminated, or significantly reduced, if people can be saved in time.

During what was another busy year, New Zealand's rescue services and volunteers helped 253 people who were in life-threatening situations. Of those 253 people, 150 lives were saved, amounting to an estimated \$495 million saving in social costs for New Zealand.

Search and rescue provides very good value for money for both the Government and the people of New Zealand. The significant worth of the non-paid hours that volunteers provide to train and carry out operations cannot be underestimated. The sector delivers essential and effective response and rescue services to many New Zealanders and tourists, as well as across the wider Pacific and Antarctic in our international area of responsibility.

Although there are some limitations in the figures described on this page, it is apparent that for a relatively small overall investment, there is a very substantial return.

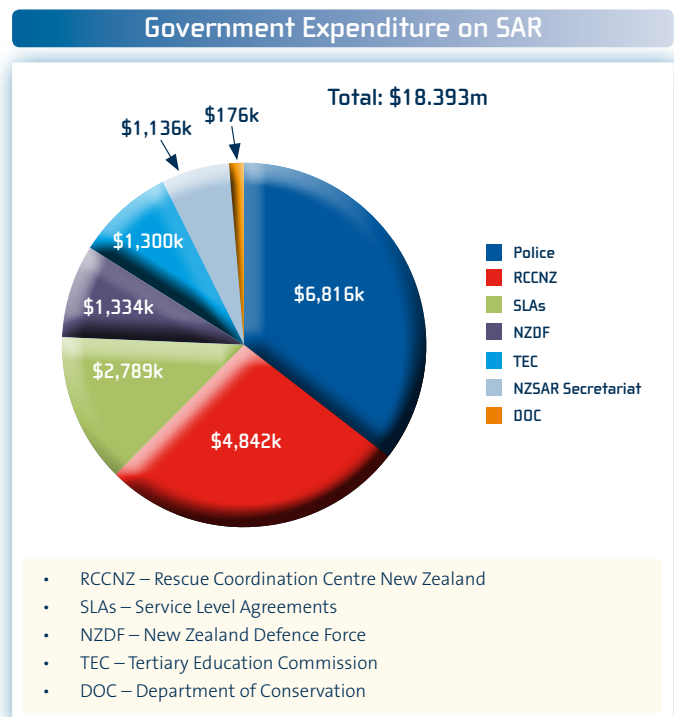
The Council is pleased to note the continuing financial efficiency and operational effectiveness of the sector, and aims to sustain and improve both these aspects in the coming years. Using these numbers, the intangible benefit-to-cost ratio may be estimated at approximately 27:1. The pleasing effect of course, is the many very happy individuals, families and communities who are able to continue to enjoy 150 lives that would have otherwise been lost. ■

## Government Expenditure on SAR

The Government's investment in search and rescue for the 2011/12 financial year was \$18.393m. \$4.679m of the Government SAR funding was sourced from the fuel excise duties paid by recreational boat users. This was directed to the costs and activities of the NZSAR Secretariat, funding the Service Level Agreements with key providers as well as elements of the Rescue Coordination Centre New Zealand's (RCCNZ) activities.

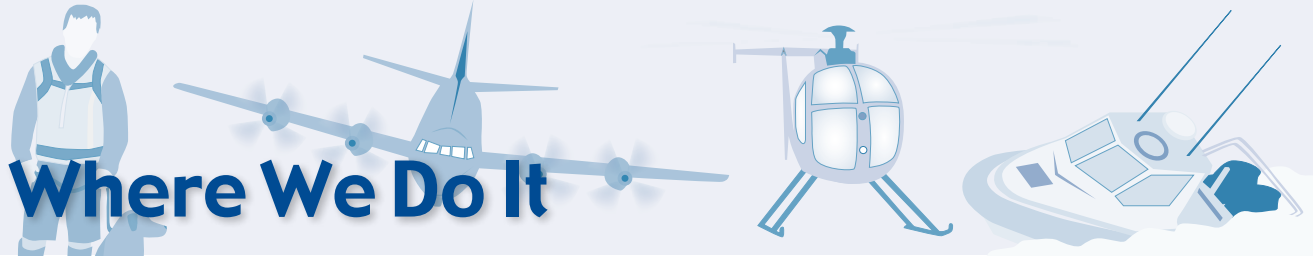
The total cost of SAR to Government is variable from year to year, as operational costs change according to the number, length and type of SAR operations conducted. In addition to the costs indicated, significant overhead and capital costs are not fully represented, as it is difficult for some organisations to capture this information. This expenditure ensures that coordinating services are available on a 24/7 basis and assists SAR people to be trained and equipped for SAR operations.

The graph shows the breakdown of the \$18.393m spent by the Government for SAR purposes in the 2011/12 financial year. ■

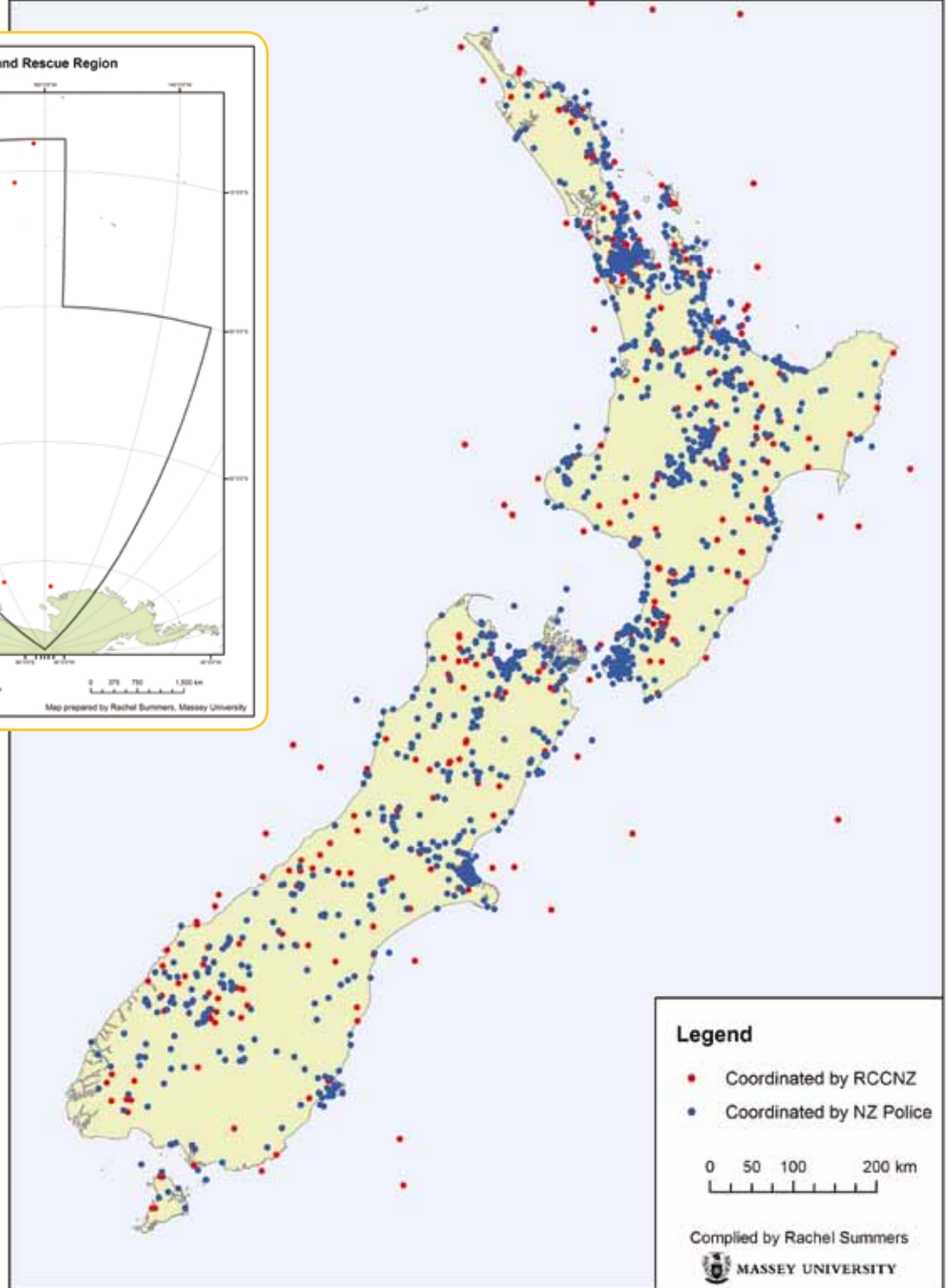
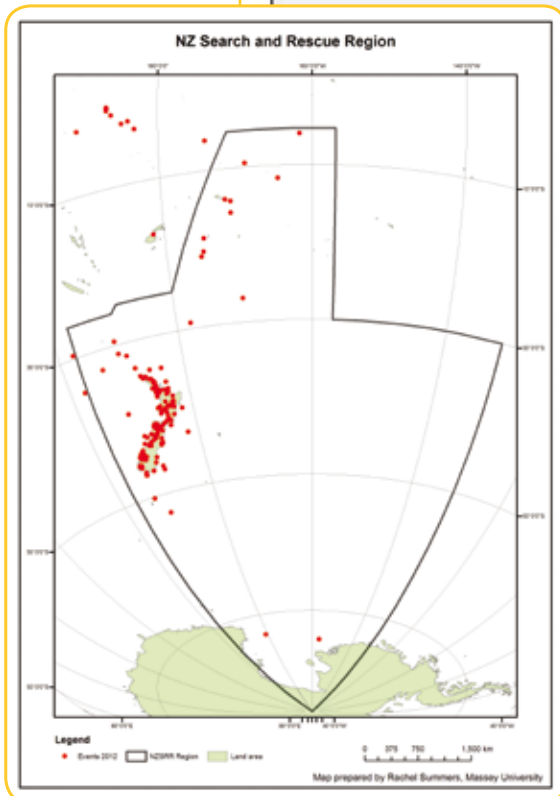




# Where We Do It

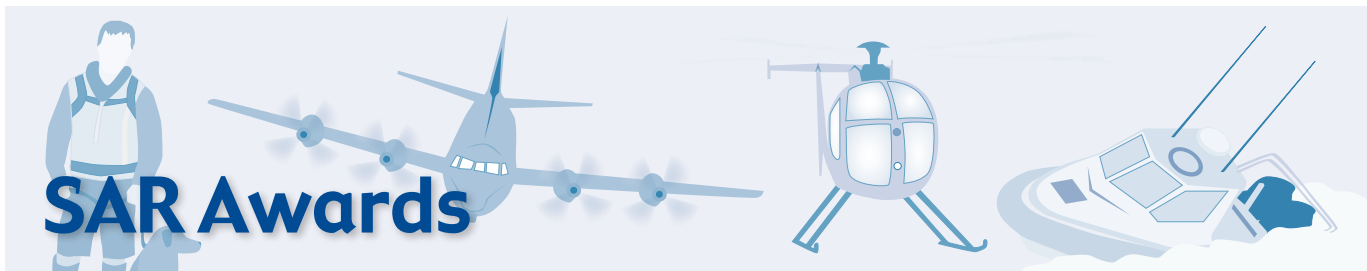


## Category 1 and 2 Search and Rescue Operations 2011/2012



The Secretariat is working with the Geographic Information Systems (GIS) team at Massey University to produce various maps such as this which assist in making robust strategic decisions for the sector.





*“I come here today with the greatest respect and admiration for the bravery and dedication shown by the Award recipients – your actions show remarkable perseverance, commitment and compassion, and in some cases, quick thinking in the face of danger.”*

Associate Minister for Transport, Hon Simon Bridges, acknowledged the important contribution made by everyone involved in New Zealand’s Search and Rescue sector, including the Award recipients, during his speech at this year’s NZSAR Awards held in Parliament in May.

“All of you, whether volunteer or career search and rescue specialists, do a terrific job in what can be very trying circumstances. Your work makes a massive difference and is hugely valued and appreciated by all New Zealanders.”

Mr Bridges commended the work that has been done on measures to improve the operational performance of the Search and Rescue sector, adding: “It is also encouraging to see the sector embracing the goal of ‘one SAR’ – recognising that while the sector is diverse, it works best when it works together.”

Thanks to the many and varied sector representatives present, the ‘one SAR’ sentiment was certainly circulating throughout the Grand Hall of Parliament House that evening. It was also reflected in the incredible actions of each of the Award recipients. Joint Gold Award recipient, Geoff Taylor, later re-iterated the importance of working together to the *Hawke’s Bay Today* when he noted that the successful Kawa yacht rescue “was a team effort”. ■

*The NZSAR Gold Award was awarded for the most significant contribution to search and rescue in the New Zealand Search and Rescue Region during 2011.*

- Dean Herrick & Geoff Taylor from the Hawke’s Bay Helicopter Rescue Trust and Stephen Smith from the Order of St John received their Award for their outstanding efforts during the rescue of the yacht Kawa, 11 October 2011.

*The NZSAR Certificates of Achievement were awarded for an important contribution to search and rescue in the New Zealand Search and Rescue Region, either during 2011 or over an extended period.*

- Nelson Colyer, from Coastguard Canterbury for his efforts during the rescue of the tug Rakanui, on 23 April 2011.
- Brook Rapson and Murray Phipps-Black, from Worsley Bay Surf Life Saving Club for their response to the stricken East by West Ferry, on 2 March 2011.
- Wayne Keen from LandSAR South Canterbury for his persistent efforts in concluding two unresolved search operations.
- Shane Beech, from Coastguard Maketu for his efforts in rescuing two surfers in the Kaituna Cut, on 23 January 2011.

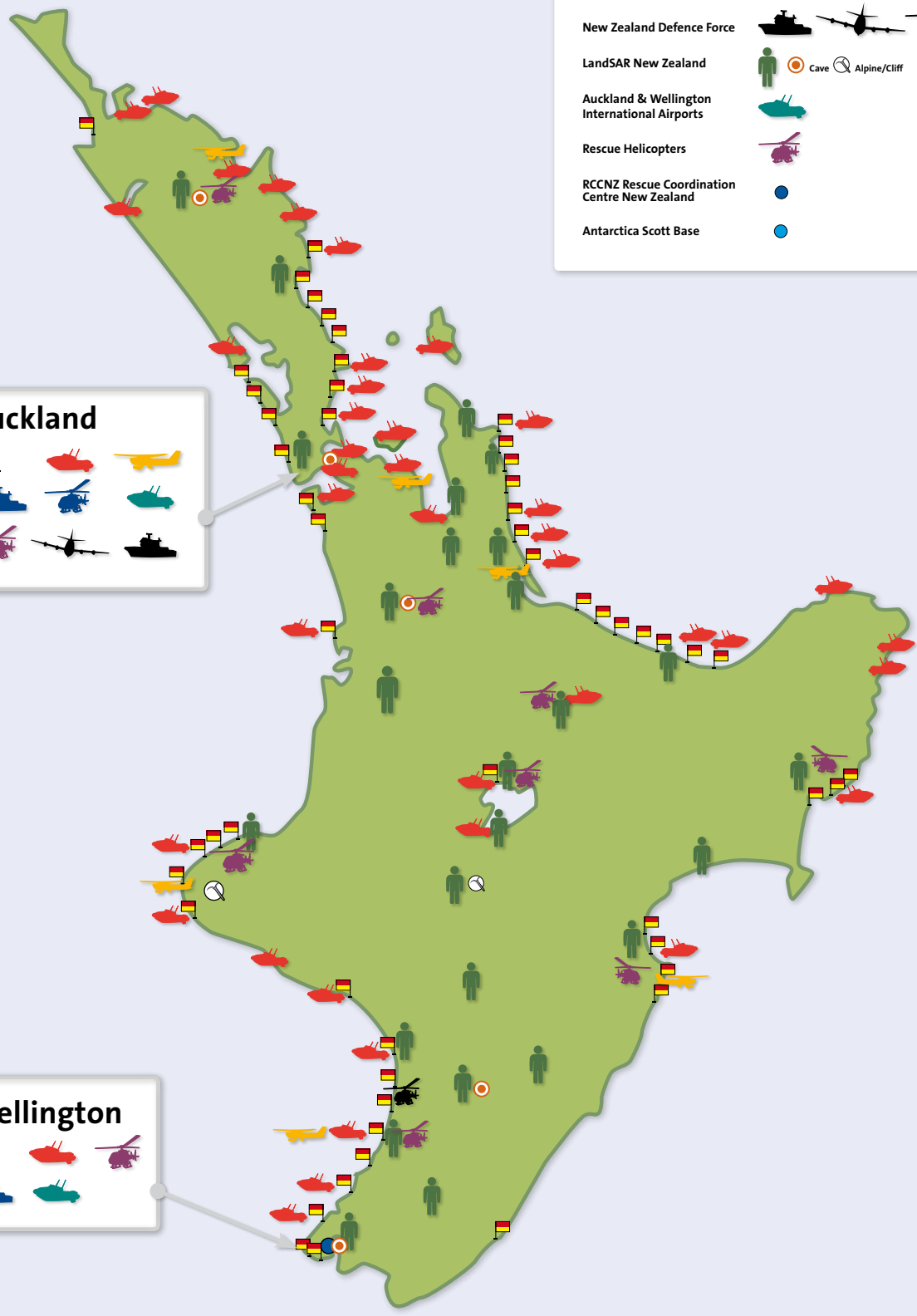
# What We Use



Coastguard New Zealand	 
New Zealand Police	 
Surf Lifesaving New Zealand	
New Zealand Defence Force	  
LandSAR New Zealand	  
Auckland & Wellington International Airports	
Rescue Helicopters	
RCCNZ Rescue Coordination Centre New Zealand	
Antarctica Scott Base	

**Auckland**

**Wellington**





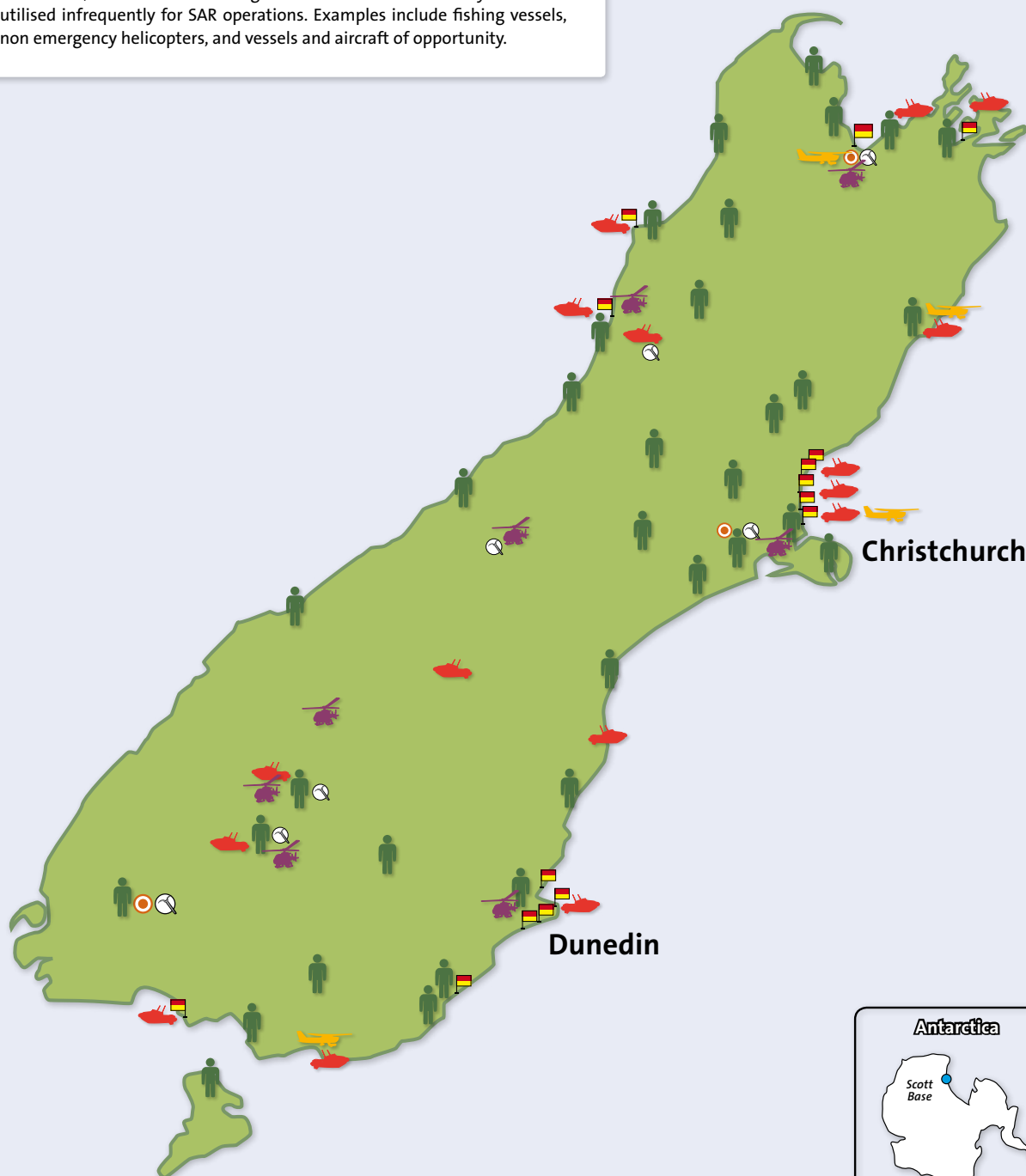
## South Island Search and Rescue Assets



The most important component of New Zealand's search and rescue sector is its people, and they use a wide range of physical assets to support them during search and rescue operations. This map illustrates where the sector's Groups, Units, Clubs, and assets are located around the country.

The key on the opposite page will help you see where the various LandSAR Groups (including caving and alpine/cliff rescue teams), Coastguard Units (including air patrols), Surf Life Saving Clubs, Rescue Helicopters, Police SAR assets, and Defence Force SAR assets are located. In total the sector can call on 210 Inflatable Rescue Boats, 77 Coastguard Rescue Vessels (plus 33 Private Rescue Vessels), 79 aircraft (helicopters and fixed wing), and over 250 four wheel drive/all terrain vehicles.

Most of the assets shown perform other roles on a day to day basis and only undertake SAR tasks when requested by the coordinating authorities. In addition, there are a wide range of assets in the community which are utilised infrequently for SAR operations. Examples include fishing vessels, non emergency helicopters, and vessels and aircraft of opportunity.





## Preparing Well

**NZSAR Council Goal:** *To promote continuous improvement.*

**Case study:** Avalanche search and rescue planning.

**Approach:** Avalanche SAR requires considerable collaboration from commercial and non-commercial organisations to ensure they work very closely and efficiently together during an incident. Growing an understanding of everyone's roles, and continually improving the overall skill and knowledge-base, greatly increases the effectiveness of an avalanche SAR response.

An avalanche has hit the backcountry near Mt Hutt in Canterbury. Nine people are caught up in it – three of them are buried by the snow. This was the scenario that various SAR agencies, medics and commercial operators faced as they put into action an important avalanche SAREX – Exercise Swift – on June 29th this year.

Exercise Swift was the culmination of years of consultation and planning. The seeds were sown after the deaths of three men in separate avalanches near Methven in 2009. Reports and analysis of these tragedies identified greater pre-planning, consultation and practice were necessary to improve the already very slim survival chances for anyone buried in an avalanche.

This is the story, then, of how the strategies born from the recommendations in these reports developed and then weaved their way to the slopes of Mt Hutt. Also, of how SAR people are benefiting from having a cohesive plan with roots firmly planted in an ethos of continuous improvement by working together more effectively.

When Sergeant Ryan O'Rourke took over as the Police SAR Coordinator for Canterbury in September 2009, one of his priorities was to develop a joint avalanche pre-plan. He was tasked with bringing together the Police, LandSAR, avalanche dogs, heli-ski operators, rescue helicopters, ski field staff, and DOC staff, amongst others, and then coming up with a comprehensive, definitive plan that they could all work to when an avalanche required a swift response.

*"It was a big job, a long process, but I think a very effective one," says Ryan. "We started by talking with all the groups involved and then bringing them together so we could gain a full understanding of each other's skills and how and where they fit into the greater picture. It was no mean feat, and required goodwill and cooperation from everyone involved."*





The plan had just been put in place when NZSAR ran a workshop for avalanche rescue people. Ryan says this was an important step as it brought the right people from across the country into one room. “We were able to explore the various roles; we could share our plans, ideas and expertise. It gave us succinct knowledge and it also gave the process credibility.”

It became apparent, post-workshop, that it was now time to test the plan. As Ryan points out: “it is all very well having a plan –it is another thing knowing it will achieve what you hope it will achieve.”

Planning the exercise was another big job. “Organisations do a lot of practice on their own, but it is very rare to practice jointly because of the cost and logistics of bringing everyone together at once. Funding and support from NZSAR went a long way to ensuring it happened.”

Ryan says Exercise Swift was a great success. “We had all the key players there and everyone learnt something. From the specialist medical teams (avalanche victims need specialist on-scene medical treatment), to a number of commercial groups, and of course the SAR agencies, the cross-sector goodwill was a credit to the work put in over the past few years. We used a lot of Mt Hutt’s resources and many people gave their time, such as the commercial heli-ski operators. Everyone was happy to contribute and be involved because they realised that one day it may be for real.”

Ryan is now working hard on the post-exercise recommendations. “The plan showed us there is still plenty of work to be done to fine tune it and improve our response. But that is what we strive for – to continually improve. I would not have known what didn’t work well had we not held Exercise Swift, and trust me, it is better we learnt from an exercise than from an incident.” ■



**A key benefit identified by a number of people was “human”, in terms of getting to know and work with other people from various agencies, and the crossover of discussion and expertise. This [continues to be] particularly important given the number of staff and volunteer changes...**

**Exercise Swift 2012 – Final Report**

# Preventing Injury and Death

**NZSAR Council Goal:** *To support SAR preventative strategies.*

**Case study:** Collaborative promotion of AdventureSmart and Safety Codes.

**Approach:** Work closely with others in the SAR sector and with those who have an interest in keeping people safe. We can provide easy access to good quality, consistent information that helps New Zealanders and tourists take responsibility for their safety before they begin their recreational activities. This can reduce the numbers of people being injured, killed or requiring search and rescue services.

The AdventureSmart website [www.adventuresmart.org.nz](http://www.adventuresmart.org.nz) and the safety codes bring together consistent safety messages for people taking part in recreational activities across New Zealand. The three Safety Codes – water, boating and outdoor are simple step messages encouraging people to take responsibility for their own safety, plan well and prepare effectively – particularly before they undertake an adventurous recreational activity. The Codes’ strength lies in their consistency across activities and organisations, allowing the key messages to cut through to the public.

[www.adventuresmart.org.nz](http://www.adventuresmart.org.nz) is a web portal. It was re-launched late last year, and carries tips and advice to help people prepare for their adventures. The Mountain Safety Council (MSC), under contract to NZSAR, has done a fantastic job of planning the site’s improvement and expansion. They added large numbers of activities, significantly more content, and links to safety information from various sources, including government departments, governing and regulatory bodies, and land, snow, water, boating and air organisations. MSC has also arranged some very useful media coverage of the safety messages. Thousands of pamphlets, in a number of shapes and sizes, promoting AdventureSmart and the three Safety Codes have been distributed around the country.

NZSAR has continued to build on the relationships developed with numerous organisations that have an interest in recreational safety. We are presently establishing a collaborative partnership with Coastguard NZ, MSC and Water Safety New Zealand (WSNZ). This partnership will be organised around achieving a collective result, where we work more closely with each other and take up opportunities to cross promote, share information and distribute pamphlets and safety information. This should reduce duplication and allow each partner to leverage off the skills, expertise and effort of the others while still respecting their particular specialisation. More on this in next year’s report. ■

**www.adventuresmart.org.nz**

**KNOW BEFORE YOU GO**

Land  
Snow  
Water  
Boating  
Air

*New Zealand offers amazing adventures. Get out and enjoy them!*

**Be Adventuresmart**

Check out our website It's got tips and advice to help you prepare for your adventures so you can have a great time, safely.

Get Ready, Get Outdoors  
**ADVENTURE smart**  
[www.adventuresmart.org.nz](http://www.adventuresmart.org.nz)

BEFORE YOU GO CUT OUT THESE POCKET SAFETY CODES TO HELP YOU PREPARE FOR AN ADVENTUROUS TIME

**The Outdoor Safety CODE**

- 1 Plan your trip. Seek local knowledge, plan your route and allow a reasonable amount of time.
- 2 Tell someone. Let someone know your plans and when to raise the alarm if you haven't returned.
- 3 Be aware of the weather. Check the forecast and expect weather changes.
- 4 Know your limits. Challenge yourself within your physical limits and experience.
- 5 Take sufficient supplies. Take enough food, equipment, clothing and emergency rations – plus an appropriate means of communication, for the worst-case scenario.

**The Water Safety CODE**

- 1 Be prepared. Learn to swim and survive. Use safe and correct equipment. Know the weather and water conditions before you get in.
- 2 Watch out for yourself and others. Always watch children around water. Swim with others and in lifeguard zones.
- 3 Be aware of the dangers. Enter water feet first and obey all safety signs and warnings. Do not drink alcohol and swim.
- 4 Know your limits. Learn safe ways of rescuing others without putting yourself in danger.

**The Boating Safety CODE**

- 1 Life jackets. Take them – Wear them. It will increase your survival time.
- 2 Skipper responsibility. Keep everyone safe – stay within the limits of your vessel and your experience.
- 3 Communications. Take at least two separate waterproof ways of communicating.
- 4 Marine weather. Check the forecast first. If in doubt, don't go out.
- 5 Avoid alcohol. Safe boating and alcohol do not mix. Stay alert and aware.

Example of an advertisement targeted at overseas tourists.





## Bringing SAR People Together

**NZSAR Council Goal:** *To achieve a culture of 'one SAR body'.*

**Case study:** NZSAR supported workshops.

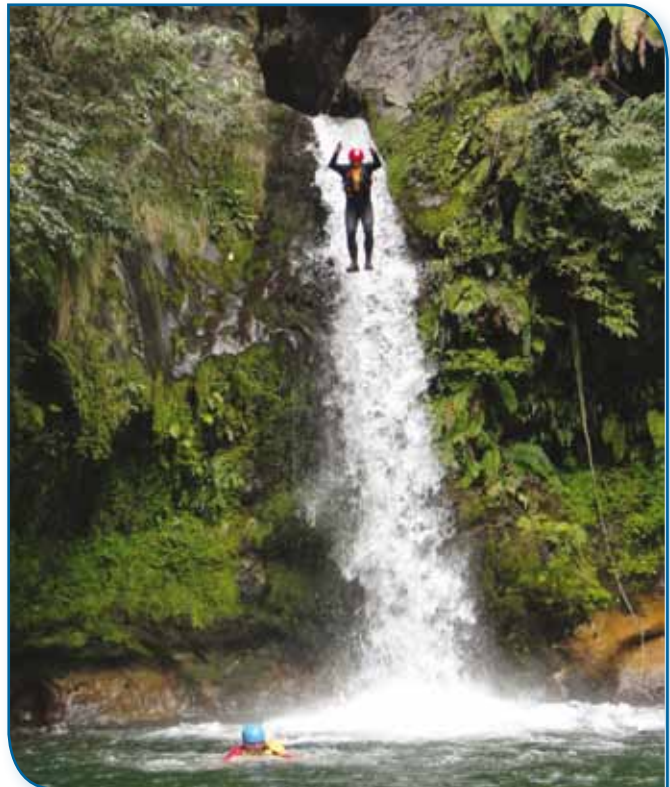
**Strategy:** NZSAR workshops are intended to enhance the SAR sector's collaboration and cohesion while addressing specific areas of concern. Bringing people together in one room to explore, share and plan, strengthens relationships and knowledge across the sector and in turn provides the foundations for a culture of working together more effectively.



**Two workshops were conducted in the 2011/12 year: one for marine search and rescue, the other to look at backcountry technical standards.**

The marine workshop was held in Auckland in August 2011 and many of the topics built and followed on from the previous marine SAR workshop, run in Wellington in May 2010. The purpose of the workshop was to improve the management and coordination of marine SAR incidents in and around New Zealand, and there was a mix of information and workshop sessions. It was great to see everyone actively participating in the wide range of discussions and breakout sessions. The various subjects covered included the escalation of incidents, sharing knowledge (operationally and non-operationally) plus a lengthy list of additional themes for future discussion.

The backcountry technical workshop, run by LandSAR with NZSAR financial support, was held in Christchurch during May this year. Backcountry rescue includes a range of specialist disciplines, such as alpine, cliff, cave, swift water and canyon rescue. The aim of this workshop was to establish an expert working group to oversee and support the conduct of backcountry technical rescue activities in New Zealand. It also explored ways to: enhance inter-operability, identify issues that have an effect on operational effectiveness or responder safety, and clearly define needs and areas of operational coverage for backcountry technical rescue. Participants also spent time revisiting previous backcountry technical rescue standards, work and reviews. The workshop proved to be very useful for both advancing a range of issues and creating a detailed post-workshop activity list. ■



## The Psychology of Searching

**NZSAR Council Goal:** *To maximise the potential of SAR people.*

**Case study:** The national pool of Air Observers.

**Approach:** Reduce the numbers of trained Air Observers to a core pool and give them quality training. This helps to maximise their potential and provide New Zealand Search and Rescue with an appropriately sized team of well-trained Air Observers to cover the country, enabling more efficient searches.



Where's the tramper?

**It has been likened to spotting a needle in a haystack – from the air. Finding a crashed aircraft, a person or a boat when there is no trace is one of the most highly skilled, vital roles in searching.**

Recognising the significance of the Air Observer role NZSAR, together with RCCNZ and the Police, developed an improved Air Observers' course. It was agreed to reduce the number of Air Observers trained annually and instead train a smaller pool that could be deployed nationally when needed for large air searches. Police SAR Coordinators were asked to choose experienced SAR practitioners from Coastguard, LandSAR, Surf Life Saving, and other SAR agencies to form their District's pool of observers.

Ability, reliability, availability and a fundamental understanding of 'search' were among the characteristics they were looking for. Not getting air sick is a prerequisite! With financial backing from NZSAR, the RCCNZ ran a series of courses throughout the country.

Paul Craven, RCCNZ's Operational Support Officer, says air observation is all about the psychology of searching. "Observers need to understand how the eye and brain work together, the tricks they play and, therefore, what targets to look for. Searching over land or at sea doesn't mean hanging out a helicopter looking for a boat or plane per se, you will look for differences in shadow, colour or broken branches. The skill lies in the technique – the more you do, the better you become," he says.

Paul says being able to pull together people across the agencies has been central to this initiative's success.



Spot the helicopter crash.

*"These guys have vast experience across a number of different disciplines, and considerable search experience. We were starting from a higher point, meaning we weren't teaching them to suck eggs. We've harnessed all that experience and built a team, spread throughout the country, that the coordinating authorities can now rely upon to perform better when we need them."*

Until these changes, the Air Observer's role was confused and inconsistent, says Paul.

"It is a bit of a paradox because we are not able to maintain a team of Air Observers in areas across the country like you do a Surf Life Saving team or a Coastguard unit, so people weren't always up to speed when called upon. Now this pool of Air Observers has dual roles, ensuring they are ready when needed as observers, but that they spend most of their time back within their team or unit."

He believes creating the pool of Air Observers makes good sense on a number of levels, but in particular fiscally.

"You can have all the assets in the world and throw all the money you like at a search, but if you go up with an observer who doesn't have the skill to find what is missing – it's all wasted. Skilled Air Observers are invaluable." ■

1. First image: Kahurangi – there's a tramper in the middle of the picture
2. Second image: There's a crashed helicopter, can you find it? And no it's not the helicopter parked on the rock, that's the rescue helicopter.



## Becoming More Efficient

**NZSAR Council Goal:** *To enhance the effectiveness and efficiency of the NZSAR sector.*

**Case study:** Planning – from paper to action.

**Approach:** Develop exercise guidelines and pre-operational plans for search and rescue organisations to use. This will provide consistency for analysing the training need, then designing and conducting that training, followed by the debriefing and evaluation. The SAR sector will have a greater understanding both of their own and each other's roles and responsibilities, leading to more effective responses.



**Planning and exercising are fundamental to successful search and rescue outcomes. NZSAR has supported the development of guidelines for search and rescue exercises (SAREXs). The guidelines are a practical resource outlining generic steps that can be taken to plan, conduct and evaluate an exercise.**

Organisations are taking advantage of the financial support offered by the NZSAR Council, and a number of exercises have now taken place across the country. This is one example:

When Tūhua Trust Board in the Bay of Plenty (BoP) opened up access to Tūhua/ Mayor Island, in conjunction with the Department of Conservation, it meant a lot more people visiting the island. They decided to carry out a SAREX so that they were prepared to respond to any incident if required.

Using the SAREX Guidelines and NZSAR funding, the BoP Police SAR Coordinator, Sergeant Craig Madden, pulled together personnel from LandSAR, Coastguard, AREC, Coastguard Air Patrol, TrustPower TECT Rescue Helicopter, DOC and Police to run a multi-agency exercise in April this year.

They conducted a hot debrief and wrote an evaluation. The team identified a number of things that went well, plus areas that could be improved, resulting in 11 recommendations. Amongst the recommendations was a requirement for a pre-plan to be developed. This is now underway thanks to assistance from DOC and the Tūhua Trust.

To help others in the sector learn, all the documentation from SAR Exercise Tūhua is posted on [www.nzsar.org.nz](http://www.nzsar.org.nz) in the training and workshops section. This enables ideas and techniques to be shared, promoting and improving best practice across the sector.

The networking, relationship building, debriefing, evaluation, lessons learned, and sharing of information from these initiatives through the NZSAR website are all fundamental to growing the sector's ability to respond wherever and whatever the incident. Helping others to raise the SAREX bar through the use of guidelines and exercises means the processes the organisations develop will empower their people and foster a more effective and efficient SAR sector. ■



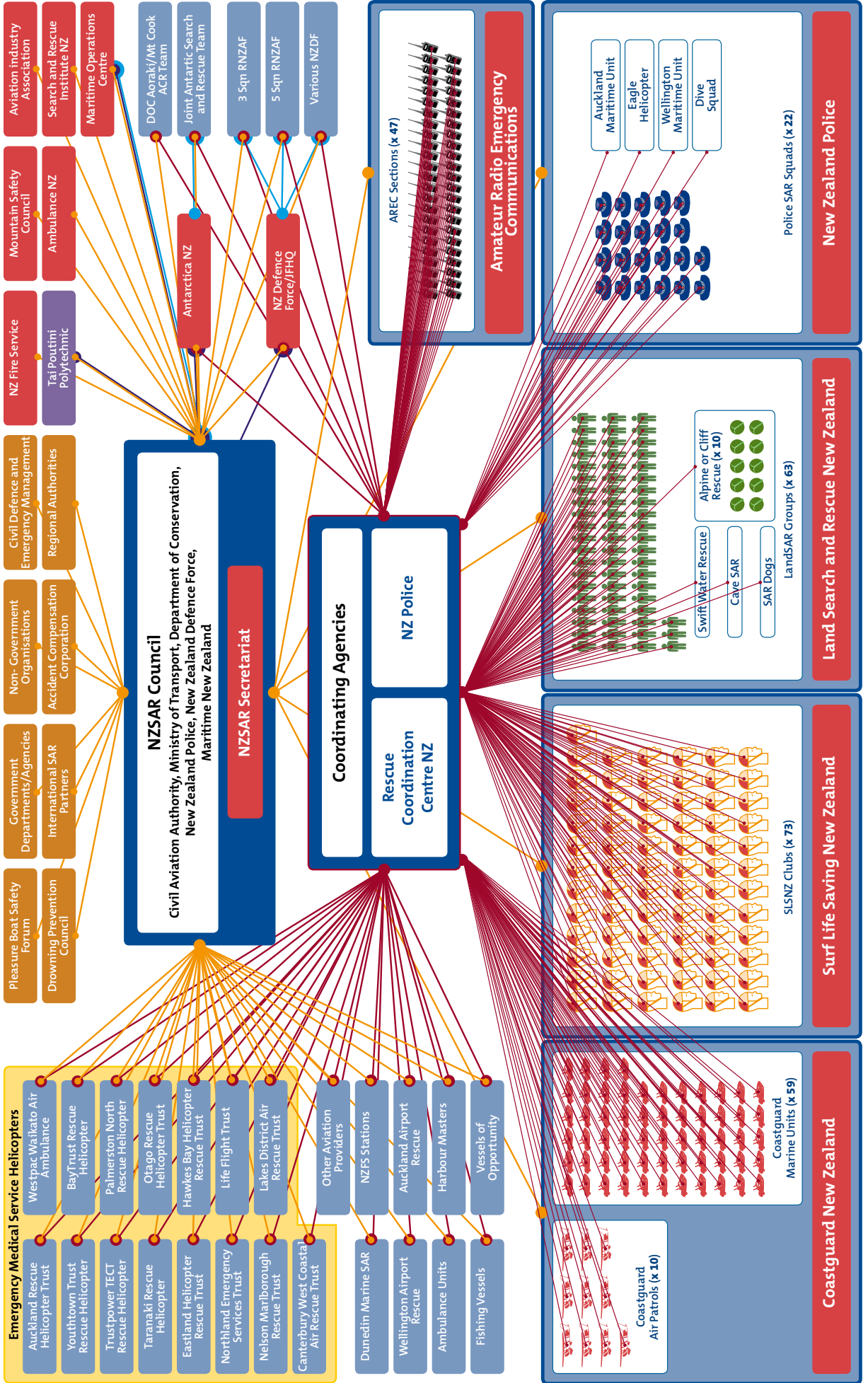
# New Zealand Search and Rescue Linkages

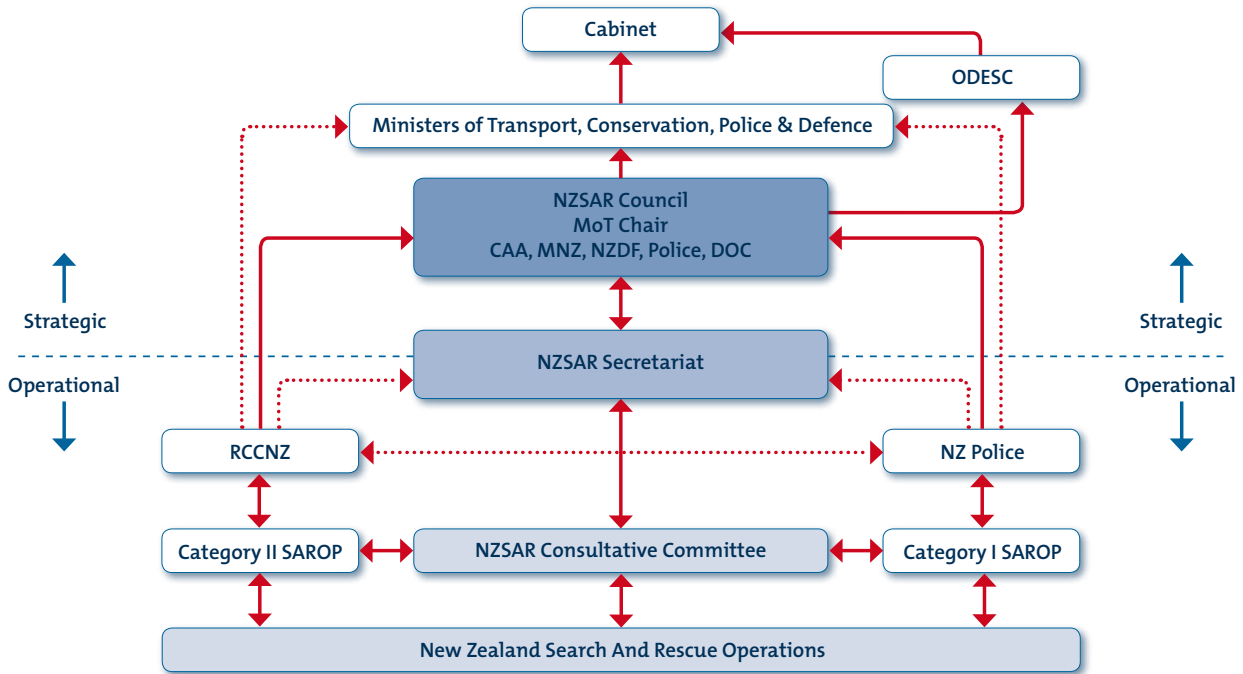
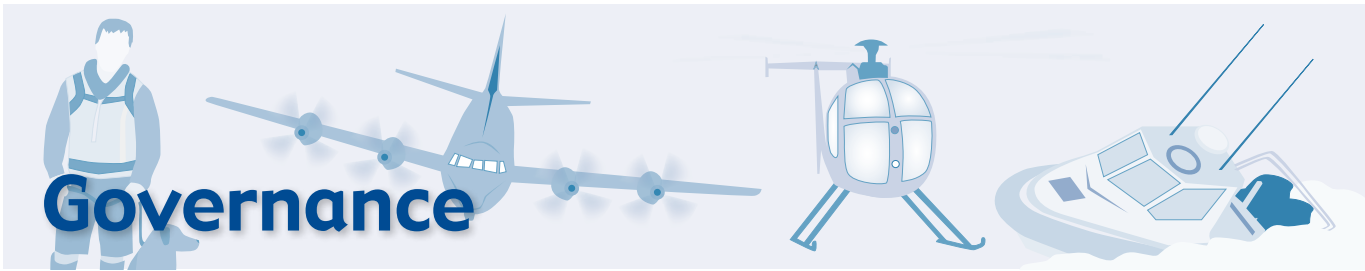
**SLA Partner**

**NZSAR Consultative Committee**

**SAR Asset(s)**

**Prevention Information**  
 Integral (Yellow line)  
 Operational (Red line)  
 Collegial (Blue line)





SAROP: Search and Rescue Operations  
 CAA: Civil Aviation Authority  
 MNZ: Maritime New Zealand  
 RCCNZ: Rescue Coordination Centre  
 New Zealand

MoT: Ministry of Transport  
 ODESC: Officials Committee for Domestic and  
 External Security Coordination

NZDF: New Zealand Defence Force  
 DOC: Department of Conservation

## NZSAR Council

The Council's role is to provide national strategic governance to New Zealand search and rescue.

In keeping with the Council's high level strategic function, its membership is drawn from the chief executives (or delegated to a person from the senior executive level) of the Ministry of Transport, New Zealand Police, New Zealand Defence Force, Department of Conservation, Maritime New Zealand and the Civil Aviation Authority.

## NZSAR Secretariat

The council is supported by the NZSAR Secretariat. Its purpose is to provide a national forum for all New Zealand SAR stakeholders including voluntary groups. It provides the Council with support services, policy advice and implements agreed measures to effectively coordinate strategic SAR in New Zealand.

## Consultative Committee

The Committee provides advice to the Council and informs the strategic decision making process. Consultative committee members include:

- Amateur Radio Emergency Communications
- Ambulance New Zealand

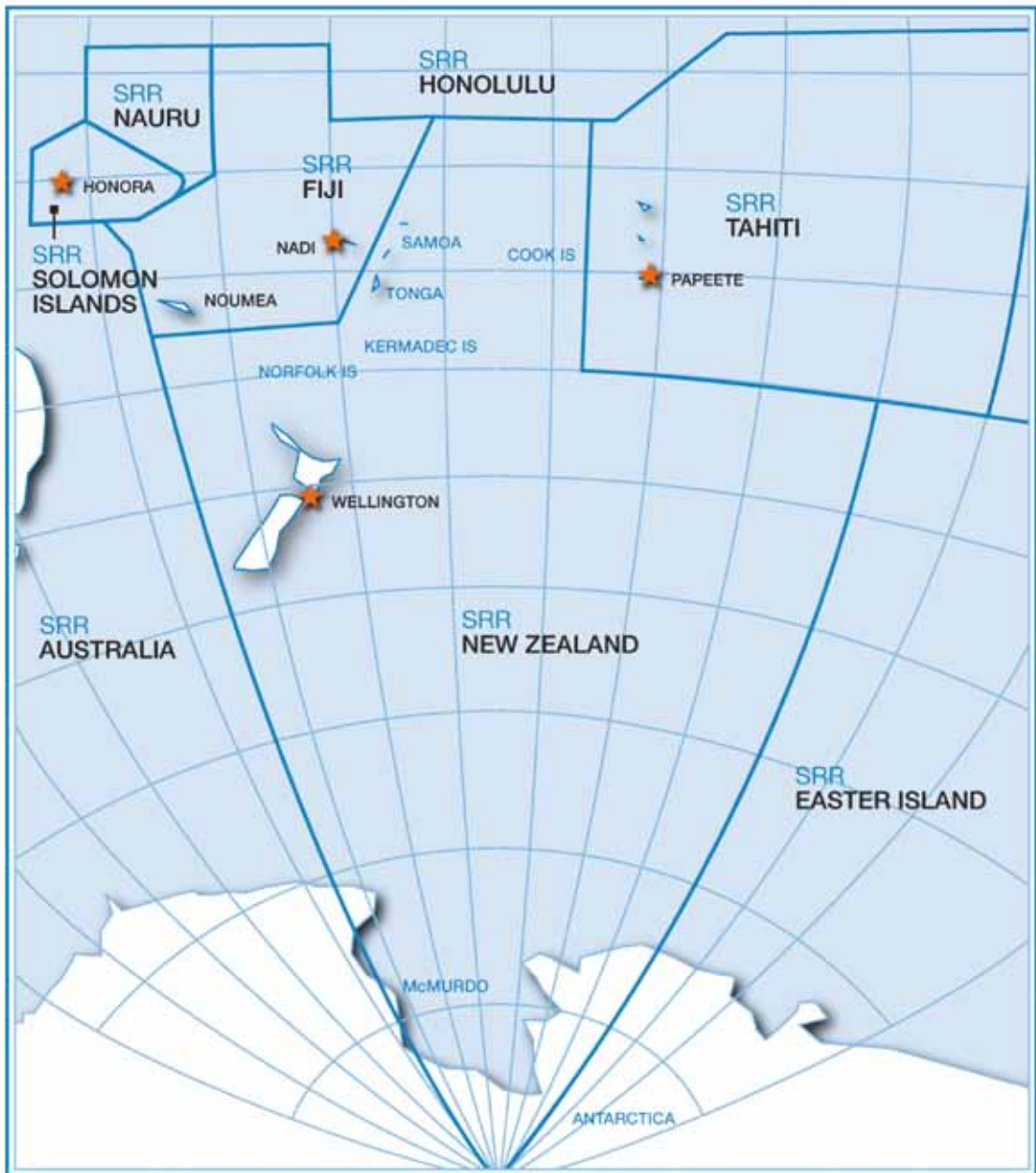
- Antarctica NZ
- Aviation Industry Association
- Civil Aviation Authority
- Department of Conservation
- Federation of Commercial Fishermen
- Land SAR New Zealand
- Maritime New Zealand
- Maritime Operations Centre
- Ministry of Transport
- New Zealand Defence Force
- New Zealand Police
- NZSAR Secretariat (Chair)
- Rescue Coordination Centre New Zealand
- Royal New Zealand Coastguard Federation
- Surf Life Saving NZ
- The New Zealand Mountain Safety Council
- The New Zealand Fire Service

The Council, Secretariat and Consultative Committee operate cohesively to ensure their objectives are successfully delivered.





## New Zealand Search and Rescue Region



- ★ Rescue Coordination Centre
- Search and Rescue Region boundary of SSR

### New Zealand Search and Rescue Council

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Level 6 Novell House  
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Wellington

[www.nzsar.org.nz](http://www.nzsar.org.nz)

[www.adventuresmart.org.nz](http://www.adventuresmart.org.nz)

[www.beacons.org.nz](http://www.beacons.org.nz)

