



New Zealand Search and Rescue Council Annual Report



2009/2010



Chair's Report



On behalf of the New Zealand Search and Rescue Council, I am very pleased to present this Annual Report for the 2009/10 year. The New Zealand Search and Rescue (SAR) sector plays an important role in ensuring New Zealanders and guests to our country are able to use and enjoy the many outdoor activities on offer.

As in past years, your SAR sector has been very busy. Through improvements to our reporting and measurement systems we are able to report that, collectively, the SAR sector saved 280 lives within our region of responsibility during the 2009/10 year. Additionally, the Sector was responsible for rescuing and assisting many hundreds of others.

This is a remarkable achievement. Saving one life is extraordinary but saving 280 lives affects a huge number of families, communities and workplaces throughout New Zealand and beyond. The 13,000 people who make up our SAR sector are dedicated to saving lives, and the Council is pleased to be able to quantify and explain the work they do and what they achieve in this report. As you read this document, it is also worth bearing in mind that for each search and rescue incident there is a story that often includes elements of danger, bad weather, remote location, risk, alarm, selflessness and heroism.

Over the past year, the SAR sector has made considerable progress in working cooperatively and collaboratively together, both in developing our organisations and improving our processes and responses. This process of continual improvement and progress is important to the on-going health and effectiveness of the Sector. The Council was pleased to have a role in this evolution through sponsoring a number of SAR workshops, developing SAR specific skills training, enabling information to be shared more readily, supporting education and preventative initiatives, and by assisting the many SAR organisations to achieve their goals.

The Council and I have been particularly impressed by the energy and dedication of the 13,000 people within our SAR sector, over 90% of whom are volunteers. Behind every hour spent on SAR operations there are many, many more spent training, organising, exercising and otherwise preparing people for when they are needed. This dedication is remarkable and it is what enables us to produce a world class search and rescue system.

The Council and I are very proud to be involved in this Sector and I trust you will enjoy reading more about it, and our work in this report.

*Martin Matthews
Chair
New Zealand Search and Rescue Council*



NZSAR
New Zealand Search
and Rescue

**Front cover photo credits:
Air lift by Stephen Jaquiere, ODT.
Helicopter by Barry Harcourt**



Secretariat Manager's Report



The New Zealand Search and Rescue (NZSAR) sector has had an action packed 2009/10 year. While it is always eventful for the men and women who go out in all weathers to look for and rescue people in distress, SAR organisations have had more than their fair share of action this year, with some undergoing significant changes. As a result, real progress has been made to improve the delivery of SAR services throughout our search and rescue region.

The NZSAR Secretariat, comprising of Carl van der Meulen and myself, successfully delivered many new SAR initiatives in addition to our 'business as usual' functions. We were greatly assisted by the direction and encouragement of the NZSAR Council and the active and enthusiastic support provided by the members of the NZSAR Consultative Committee. We are also very grateful for the huge amount of assistance we received from a wide range of SAR experts across the country during the year.

The NZSAR Core Curriculum involved hundreds of hours of work from a wide range of people across the Sector. Ted Preston did great work bringing this all together. The Core Curriculum was approved by the Council in late 2009 and provides a good foundation for the Sector to consider its training needs. The NZSAR documentation framework accompanies the curriculum and gives guidance about how our documentation does and should look.

Considerable thought was given to getting the best from our search and rescue exercises (SAREXs) during the year. Some funding was made available to Police Districts to enable them to improve the quality and measurement of their SAREXs. With the assistance of the Sector, the Secretariat established a national SAREX calendar and sponsored the development of SAREX guidelines to assist planners and managers to better plan, prepare and monitor their exercise(s). A system to capture and share SAR 'lessons' was also established with the intent of enabling our people to learn from the experiences of others. These products are available to the whole sector on the refurbished NZSAR website www.nzsar.org.nz.

The Secretariat also supported or conducted a wide range of SAR related research during the year. Carl produced the NZSAR volunteer study, which gives a detailed overview of the important voluntary segment of our sector. The Mountain Safety Council was engaged to research the estimated rates of people participating in land-based outdoor activities. We also supported research into the use and effectiveness of distress beacons, and had a close look at the spread and location of SAR incidents using graphical information systems. These pieces of SAR related research are of great use for considered strategic and operational decision-making.

To support SAR preventative strategies, we worked with the Mountain Safety Council, Department of Conservation and other organisations in the development and production of the Outdoor Safety Code. This is a very successful campaign and we are looking at producing something similar for other environments. We also engaged specialists to conduct an independent review into the Tafadzwa search and rescue operation, and to have an external look at the effectiveness and value of our communications. This information is also available on the NZSAR website.

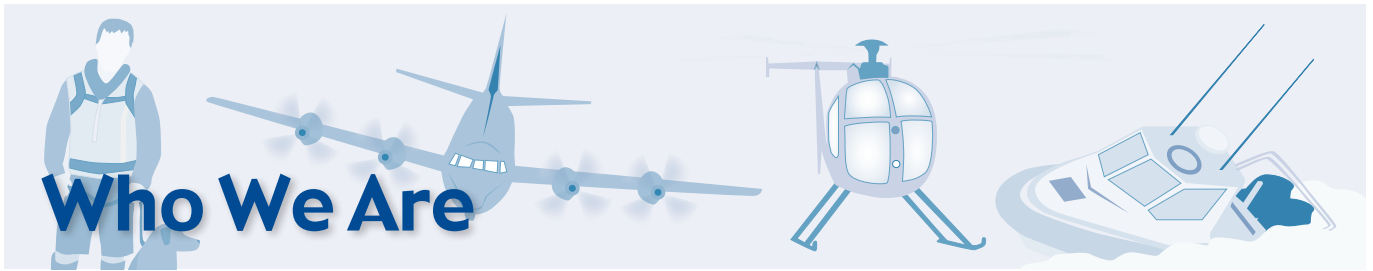
Perhaps the largest piece of work for the year was running six SAR workshops, each targeted at a part of the SAR sector that required a collective approach to addressing specific issues and risks.

Overall, 403 people attended the workshops and feedback was positive, as is the ongoing benefit of bringing SAR people together, leading to a positive culture shift within the SAR sector. Each workshop has been documented – and each one has led to a sizable amount of follow-up action. You can read more about these workshops on page 18 of this Annual Report.

The Secretariat managed to accomplish its many 'business as usual' functions, on behalf of the Council, during the year. These included setting up and running Council and Consultative Committee meetings (four of each), conducting the annual stock-take of SAR assets, and capturing, updating and analysing our SAR statistics. We also monitored and reported on the four Service Level Agreements, managed a number of contracts, assisted in the preparation of the Link newsletters and this Annual Report, represented the SAR viewpoint to others (such as the Defence Review team) and ran the NZSAR Awards along with a host of other functions.

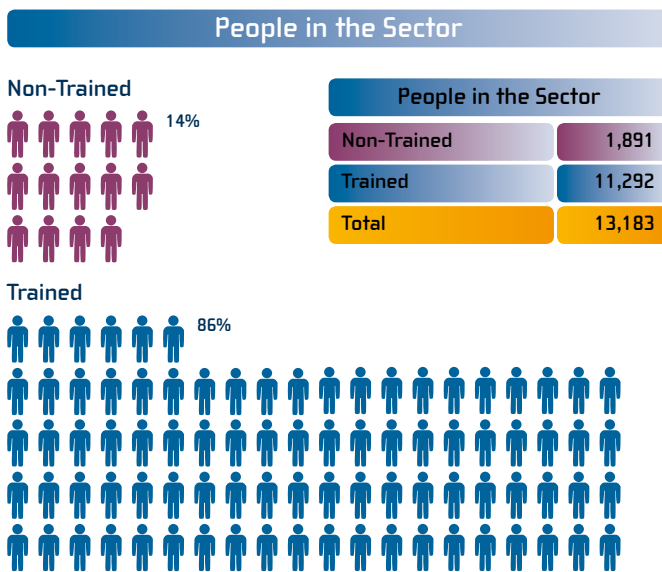
Looking ahead to the 2010/11 year: we are analysing our expenditure to ensure we achieve the best possible value for money; planning the roll out of the National SAR Support Programme; making the reporting and monitoring mechanisms more efficient, and; consolidating many of the gains made during this year. 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*

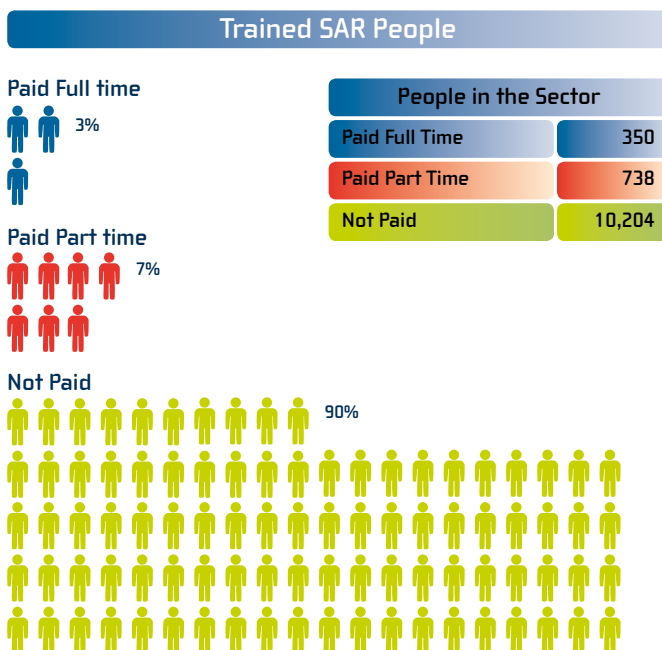


SAR People

There are 13,183 people involved in the NZSAR sector. 86% of these are trained for SAR roles including coordinating a SAR response, flying a search aircraft, crewing a marine rescue vessel, or being part of a team searching the bush. 14% 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. 90% of the people who provide the operational SAR response in New Zealand are volunteers.



SAR People by Mode/Activity

The 13,183 people 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.

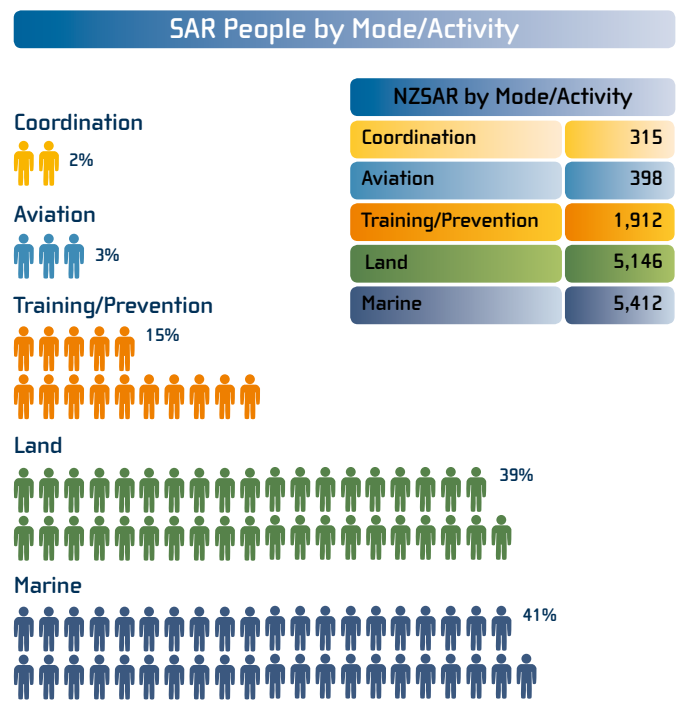
Marine: People who are active in marine based SAR. Most of these people are volunteers from Surf Life Saving New Zealand and Coastguard New Zealand.

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).

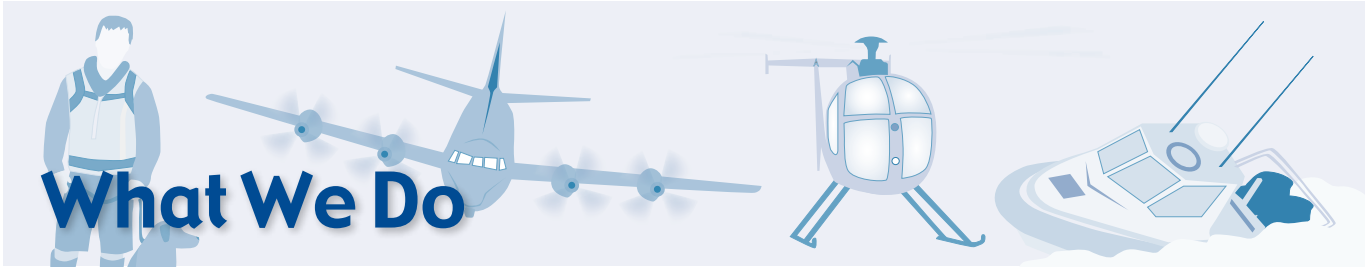
Training/Prevention: People involved in providing training and prevention services. Most SAR training is carried out in-house by each of the SAR organisations. The NZ Mountain Safety Council and Coastguard Boating Education Service are the main organisations that provide preventative education services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

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 – 12 trained as avalanche search dogs, and 15 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

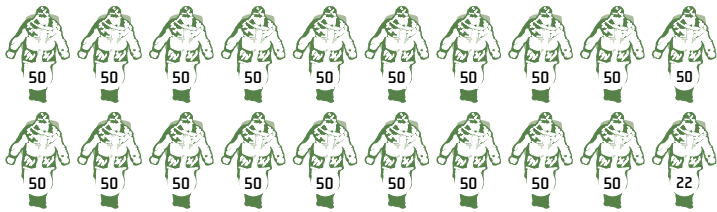
During the 09/10 year the Police coordinated 1,784 Category 1 incidents, and RCCNZ coordinated 592 Category 2 incidents. This is a total of 2,376 incidents, which is an average of 6.5 per day.

There were 1,047 land based, 996 marine based, and 266 aviation based SAR incidents during the year. There were also incidents that

are classified as undetermined. These are caused by distress beacon activations of a short duration. The new 406MHz digital beacon technology has reduced the rate of these undetermined alerts from an average of 430 per year to just 67 in 09/10.

SAR Incidents in 2009/10

POLICE Land



POLICE Marine



RCCNZ Aviation



RCCNZ Marine



RCCNZ Land



RCCNZ Undetermined

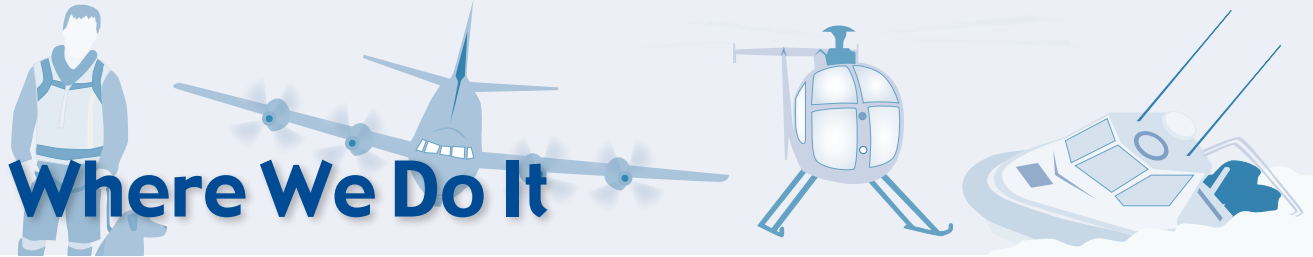


POLICE Land	972
POLICE Marine	812
RCCNZ Aviation	266
RCCNZ Marine	184
RCCNZ Land	75
RCCNZ Undetermined	67
TOTAL	2,376

Incidents by Coordinating Authorities

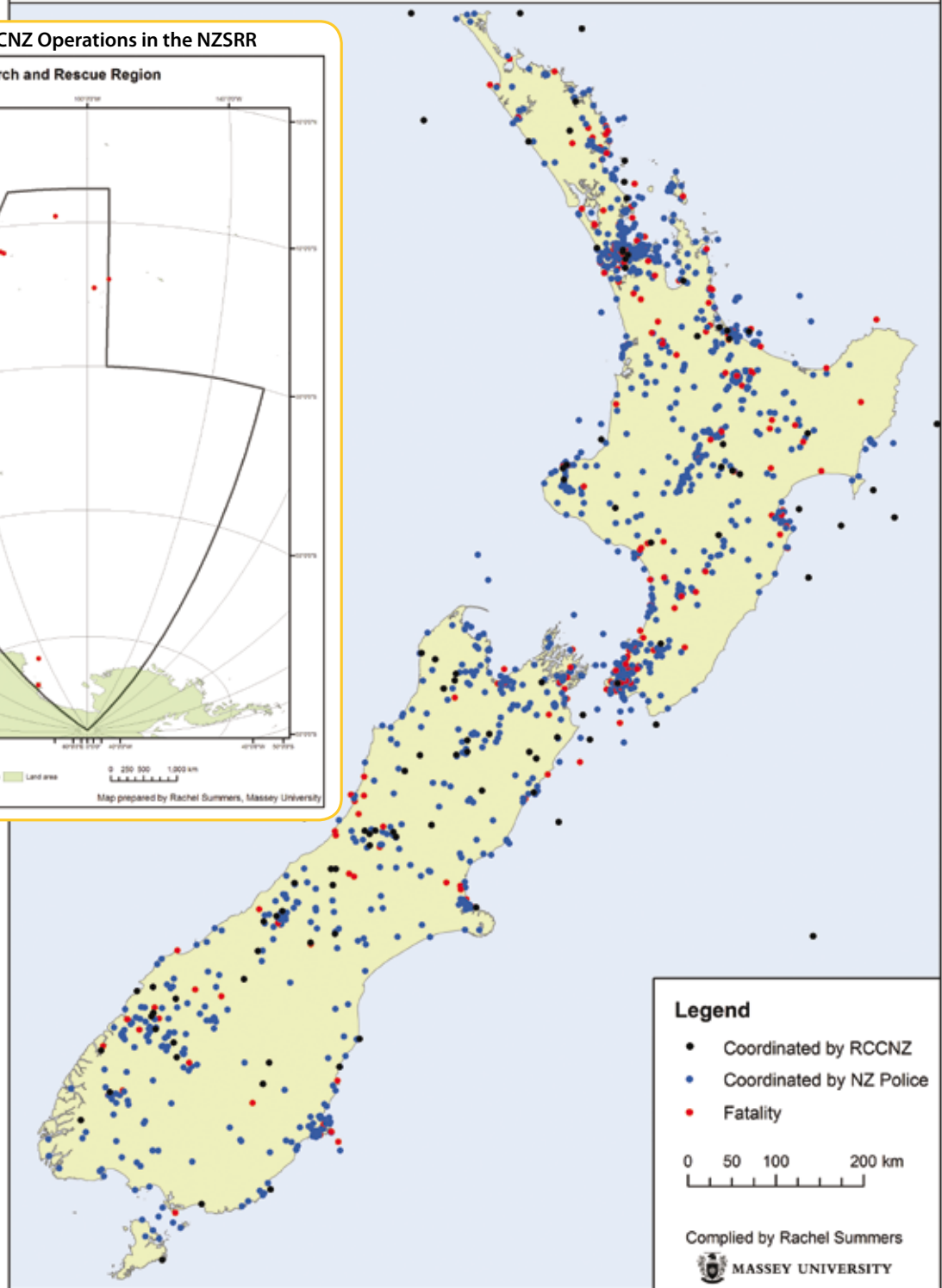
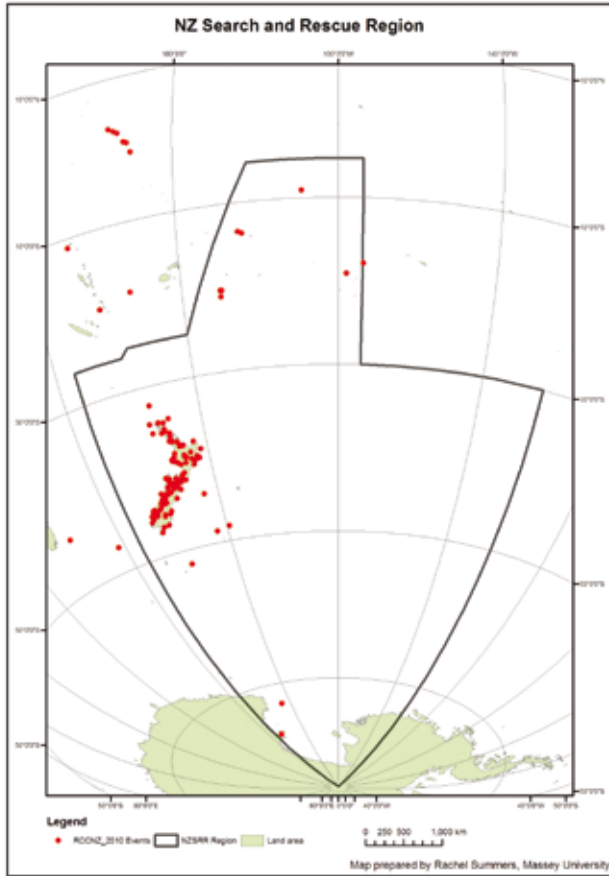
Mode	POLICE – Category 1	RCCNZ – Category 2	Total
Land	972	75	1,047
Marine	812	184	996
Aviation	...	266	266
Undetermined	...	67	67

Where We Do It



Category 1 and 2 Search and Rescue Operations 2009/2010

Category 2 RCCNZ Operations in the NZSRR

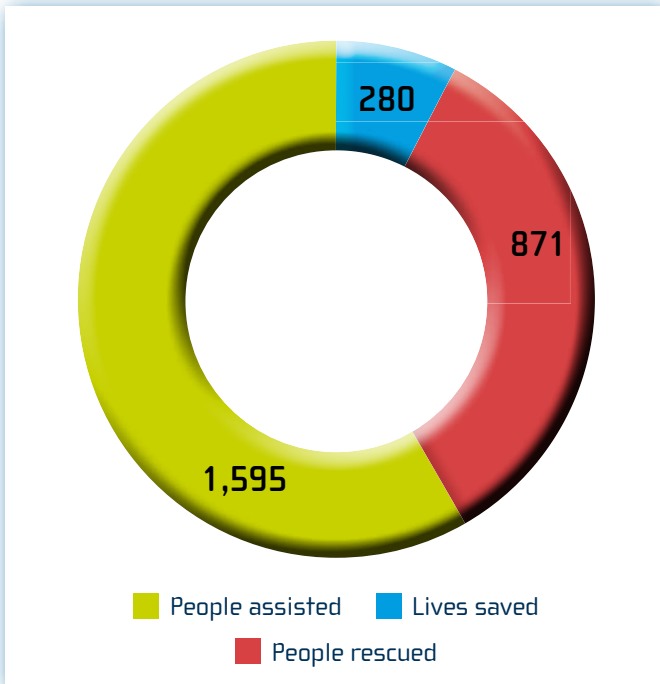


The Secretariat is working with the Geographic Information Systems (GIS) team at Massey University to produce various maps such as this which assist in making robust strategic decisions for the sector.



New Zealand's search and rescue sector saved 280 lives, rescued 871 people, and assisted a further 1,595 people during the 2009/10 year.

A total of 2,376 SAR operations were carried out, and 3,603 people were identified as being at risk. These are very significant numbers. They illustrate the major impact that the SAR sector has on communities throughout New Zealand and on visitors to our region.



Unfortunately there are also incidents that include the loss of life. The most notable during the last year was the sinking of the Princess Ashika with the loss of 74 lives. This tragedy occurred within the NZSRR. Regrettably a number of people die before SAR services are notified or despite our best efforts. A total of 281 fatalities were recorded during the 09/10 year.

Participation

To understand how we are performing at search and rescue, it is important to put SAR into the context of overall participation in the three modes of activity. Using this year's SAR data, the relationship between SAR incidents and participation is shown in the table below.

Participation in 3 Modes			
Mode	Participation	SAR Incidents by Mode	SAR per 1,000 by Mode
Land <small>Number of people engaged in outdoor recreation activities</small>	1,336,383 Participants ¹	1,047	0.783 Participants
Marine <small>Number of people involved in pleasure boat activities</small>	1,500,000 Participants ²	996	0.664 Participants
Aviation <small>Number of flights</small>	1,000,000 Flights ³	266	0.266 Flights

¹ NZSAR & MSC Outdoor Recreation Participation Study

² MNZ Boating Safety Strategy

³ Airways New Zealand

Definitions

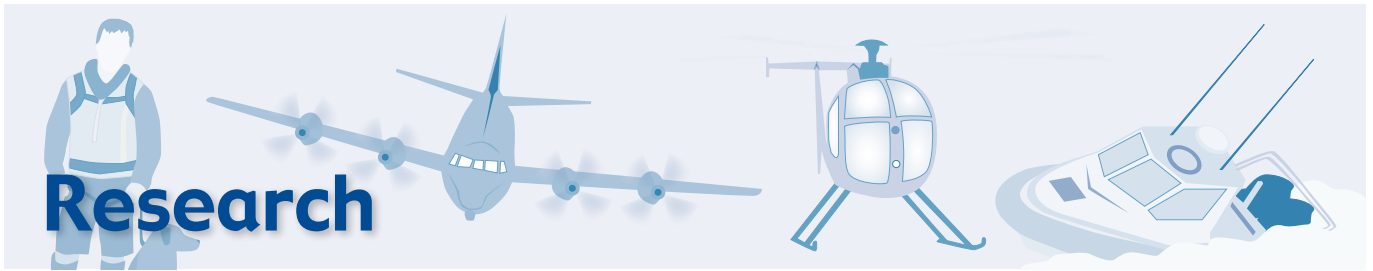
New definitions were adopted during 09/10 to improve the precision of information used to measure the effectiveness of the NZSAR sector. At the start of each SAR operation, it is assumed that there is a person, or people, at risk and that they require the assistance of New Zealand's SAR services. These new definitions measure how these people have been assisted. The new definitions include:

Lives Saved: Where, if SAR agencies had 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.

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).



During the past year the Council has either commissioned or supported a number of research projects and refined our reporting systems in order to gain a more concise picture of the successes and challenges facing our sector. Other SAR organisations are also contributing to this body of knowledge on which the NZSAR council and SAR organisations can make evidence based, robust decisions.

NZSAR Volunteer Study

The SAR sector relies heavily on volunteers to effectively carry out its work. A study of volunteer issues within New Zealand's Search and Rescue (SAR) sector, undertaken by the NZSAR Secretariat's Carl van der Meulen, shows of the 13,183 people involved in SAR 11,962 (91%) are volunteers. In fact, of the 13 countries surveyed for benchmarking purposes, New Zealand had the highest level of volunteer involvement in SAR.

Who are our volunteers?

The study found that volunteers in the NZSAR sector are generally older males – for Coastguard and LandSAR 82% of their volunteers are male, and 67% are over 40 years old. The major exception is Surf Life Saving NZ, which reported that 54% are less than 20 years old, and 40% are female. This illustrates the need for voluntary organisations to recruit both younger and more female volunteers.

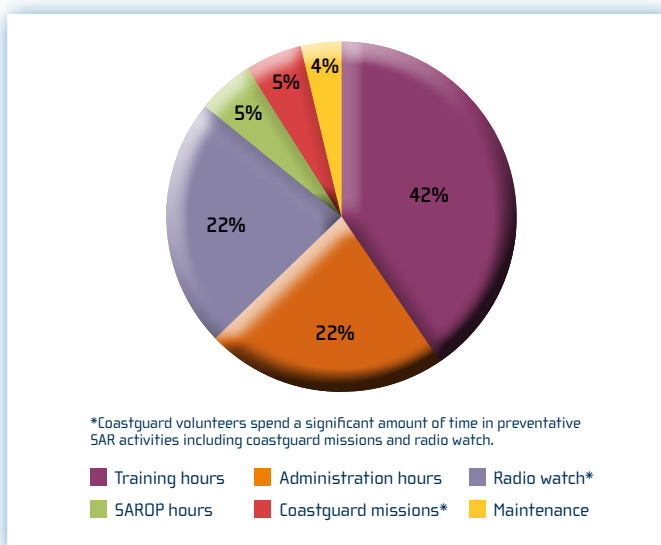
What do they do?

Volunteers carry out a wide range of activities to ensure that they are ready to respond to a SAR incident.

Over the period 1 July 2009 to 30 June 2010, volunteers provided 549,785 hours of their time to the NZSAR sector. This is the equivalent of 264 people working 40 hours a week.

This chart shows how volunteers across the sector spend their time.

How the volunteers' time is spent



64% of the volunteers' time is spent in training and administration activities. Only 5% of the volunteers' time is spent being engaged in active SAR operations! This shows the commitment that is required and provided by SAR volunteers.

Why do they do it?

The study found that the common reason for volunteering in the SAR sector is to help others. A secondary motivation is the enjoyment volunteers get from the activities they are engaged in. This plays a role when a volunteer decides which voluntary organisation to join, and is also a very important factor in keeping volunteers actively engaged within a voluntary organisation.

What are some of the issues?

The study identified four main issues for volunteers. These are:

- 1. Time** – volunteers feel they spend too much of their time on training and administration tasks.
- 2. Relationships** – volunteers say that relationships between local groups and national offices, and local groups and government agencies still need to improve.
- 3. Recruitment and Retention** – specific to some local groups. This can mean that volunteer numbers during search operations may be affected.
- 4. Costs** – some volunteers expressed concern about reimbursement for expenses and about income related issues.

How are we addressing these issues?

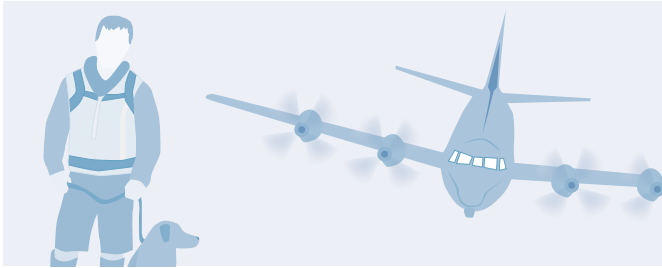
Various Sector voluntary organisations and government agencies are already working to address the concerns raised by the volunteers. Over the last 18 months the Sector has created a training core curriculum which should help to streamline training pathways for volunteers.

Over the last two years there has been an increase in administration tasks due to new reporting requirements. However, the information is providing robust data that is being used in numerous ways and is of great benefit to the Sector. Voluntary organisations have also been improving their IT systems to ease the burden of the reporting requirements.

There has been a noticeable improvement in relationships across the Sector over the last two years. This is both within groups and between voluntary organisations and crown agencies. The NZSAR Secretariat is striving to ensure that relationships keep on improving across the Sector.

Retention issues are being addressed by ensuring that volunteers understand the workloads they will face in the Sector – particularly the training requirements. Induction programmes are proving to be extremely useful.

Finally, there are a number of initiatives underway across the Sector to reduce the costs faced by the volunteers.



Participation Research

The Mountain Safety Council, sponsored by the NZSAR Council, completed a study on outdoor recreation participation rates and incidents in New Zealand. This study will form a baseline by which the sector can measure the rate of SAR incidents on a year by year basis.

Geographic Information Systems (GIS)

This is an ongoing project that uses GIS mapping to depict and analyse patterns of SAR incidents. Various maps have been produced (including the maps on page 6), from the national to the Police District level. The School of People, Environment and Planning at Massey University, Palmerston North, carry out this work, on behalf of the NZSAR Council. The maps are available from the NZSAR website www.nzsar.org.nz

Beacons Research

The purpose of this research is to gain an understanding of the comparative usage, performance and costs of distress beacons in the New Zealand Search and Rescue Region. This piece of research is in progress.

SAR in 2030

This research is being carried out independently by the Search and Rescue Institute New Zealand (SARINZ), with the aim of looking forward 20 years to identify some patterns and trends in SAR through to 2030.

The NZSAR Council was pleased to support the Mountain Safety Council develop the Outdoor Safety Code during the year. This preventative initiative aimed to unify the many and varied outdoor safety messages into a single “code” that could then be promoted nationally in a consistent manner. LandSAR NZ, the Department of Conservation, Tourism NZ and a number of other organisations were involved in the development of the Outdoor Safety Code.

The Outdoor Safety Code is a set of five generic safety rules that can be used across any land based adventure activity to reduce risks (see below). The messages were devised using technical expertise from across the sector and an analysis of past land based incidents in New Zealand. The Code encourages people to take responsibility for their own safety through good planning and effective preparation before people undertake an adventure activity. The messages in the Code are aimed at both kiwis and international visitors to New Zealand.

The strength of the Code lies in its consistency across activities and organisations, allowing the key messages to cut through to those undertaking land based outdoor recreation. The Outdoor Safety Code has received significant media coverage since its launch and has been very well received by the outdoor sector.

The Mountain Safety Council has prepared a formal “Accord” to support the Outdoor Safety Code. The Accord asks organisations to agree to use and promote the Outdoor Safety Code as the primary set of safety messages for land based adventure activity. The Mountain Safety Council will continue to encourage widespread adoption of the Code with tourism operators and those in the outdoor adventure sector over the coming years.

With NZSAR Council support, the Mountain Safety Council has also produced a set of five two-minute videos – a video for each of the points of the Code. These will be distributed as DVDs to youth organisations, Department of Conservation centres, i-SITES and made available online. These videos will be more accessible, both physically and mentally, to younger generations and are more likely to reach and be understood by international visitors to New Zealand than traditional communication methods.



The Outdoor Safety Code 5 Simple Rules:

1. *Plan your trip*
2. *Tell someone*
3. *Be aware of the weather*
4. *Know your limits*
5. *Take sufficient supplies*

For more information visit:
www.outdoorsafetycode.co.nz

What We Use



Maritime Search and Rescue Assets



Coastguard New Zealand CRV – Coastguard Rescue Vessel

- Northern Region CRV: 31
- Eastern Region CRV: 19
- Central Region CRV: 13
- Southern Region CRV: 15



Surf Lifesaving New Zealand IRB – Inflatable Rescue Boat

- Northern Region:
Clubs: 17, IRB: 59
- Eastern Region:
Clubs: 19, IRB: 43
- Central Region:
Clubs: 19, IRB: 57
- Southern Region:
Clubs: 18, IRB: 40

- Dunedin Marine SAR personnel: 30
- RCCNZ Rescue Coordination Centre New Zealand personnel: 22
- MOC Maritime Operations Centre personnel: 20
- Auckland International Airport Rescue vessel: 2 Hovercraft: 1
- Wellington International Airport Rescue vessel: 2



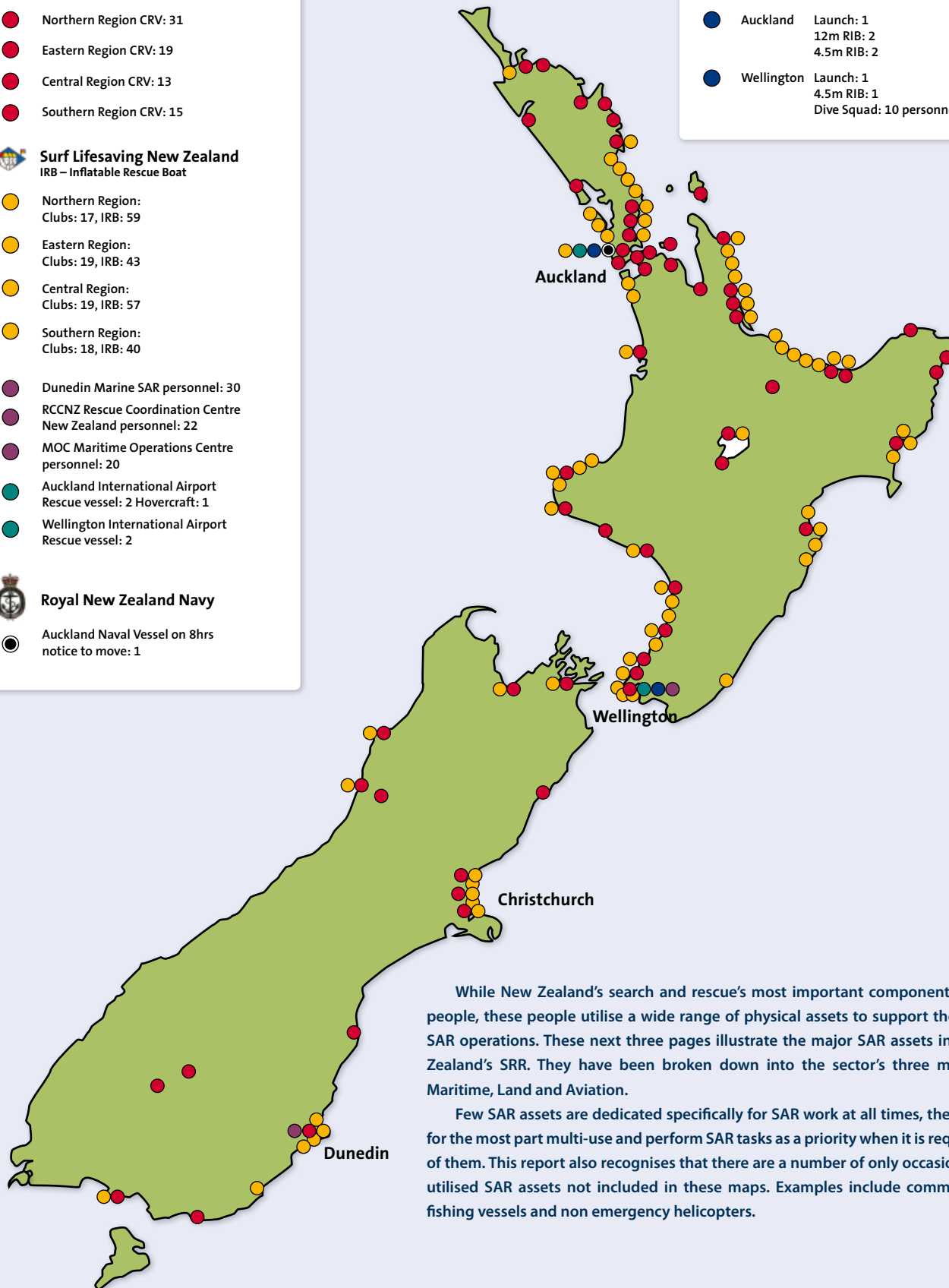
Royal New Zealand Navy

- Auckland Naval Vessel on 8hrs notice to move: 1



New Zealand Police RIB – Rigid Inflatable Boat

- Auckland Launch: 1
12m RIB: 2
4.5m RIB: 2
- Wellington Launch: 1
4.5m RIB: 1
Dive Squad: 10 personnel



While New Zealand's search and rescue's most important component is its people, these people utilise a wide range of physical assets to support them in SAR operations. These next three pages illustrate the major SAR assets in New Zealand's SRR. They have been broken down into the sector's three modes; Maritime, Land and Aviation.

Few SAR assets are dedicated specifically for SAR work at all times, they are, for the most part multi-use and perform SAR tasks as a priority when it is required of them. This report also recognises that there are a number of only occasionally utilised SAR assets not included in these maps. Examples include commercial fishing vessels and non emergency helicopters.



Land Search and Rescue Assets

Land SAR New Zealand

- Northern Region Land SAR personnel: 151
3 groups located within the region
- Midland Region Land SAR personnel: 672
12 groups located within the region
- Eastern Region Land SAR personnel: 249
3 groups located within the region
- Central Region Land SAR personnel: 691
10 groups located within the region
- Tasman Region Land SAR personnel: 648
13 groups located within the region
- Canterbury Region Land SAR personnel: 452
10 groups located within the region
- Southern Region Land SAR personnel: 788
11 groups located within the region

Alpine Cliff Rescue Teams

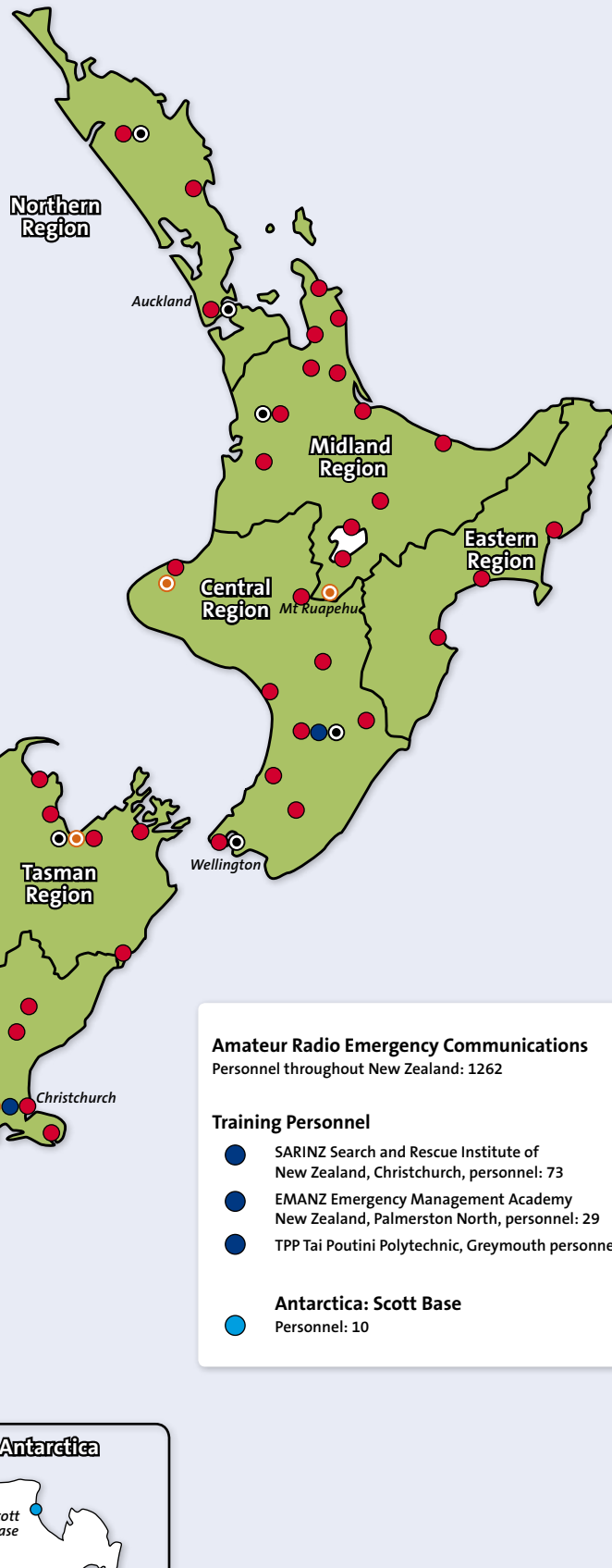
- Ruapehu Alpine Rescue Organisation
SAR personnel: 40
- Taranaki Alpine Cliff Rescue
SAR personnel: 36
- Christchurch Alpine Cliff Rescue
SAR personnel: 62
- Aoraki/Mt Cook ACR (DOC)
SAR personnel: 10
- Tasman ACR
SAR personnel: 28
- Wanaka ACR
SAR personnel: 19
- Southland ACR
SAR personnel: 40
- Wakatipu ACR
SAR personnel: 16

Cave SAR

- Northland: 9
- Auckland: 20
- Hamilton/Waitomo: 25
- Manawatu: 15
- Wellington: 15
- Nelson: 50
- West Coast: 27
- Canterbury: 24
- Southland: 6

Land SAR Search Dogs

- Wilderness: 15
- Avalanche: 14



Amateur Radio Emergency Communications
Personnel throughout New Zealand: 1262

Training Personnel

- SARINZ Search and Rescue Institute of New Zealand, Christchurch, personnel: 73
- EMANZ Emergency Management Academy New Zealand, Palmerston North, personnel: 29
- TPP Tai Poutini Polytechnic, Greymouth personnel: 2
- **Antarctica: Scott Base**
Personnel: 10

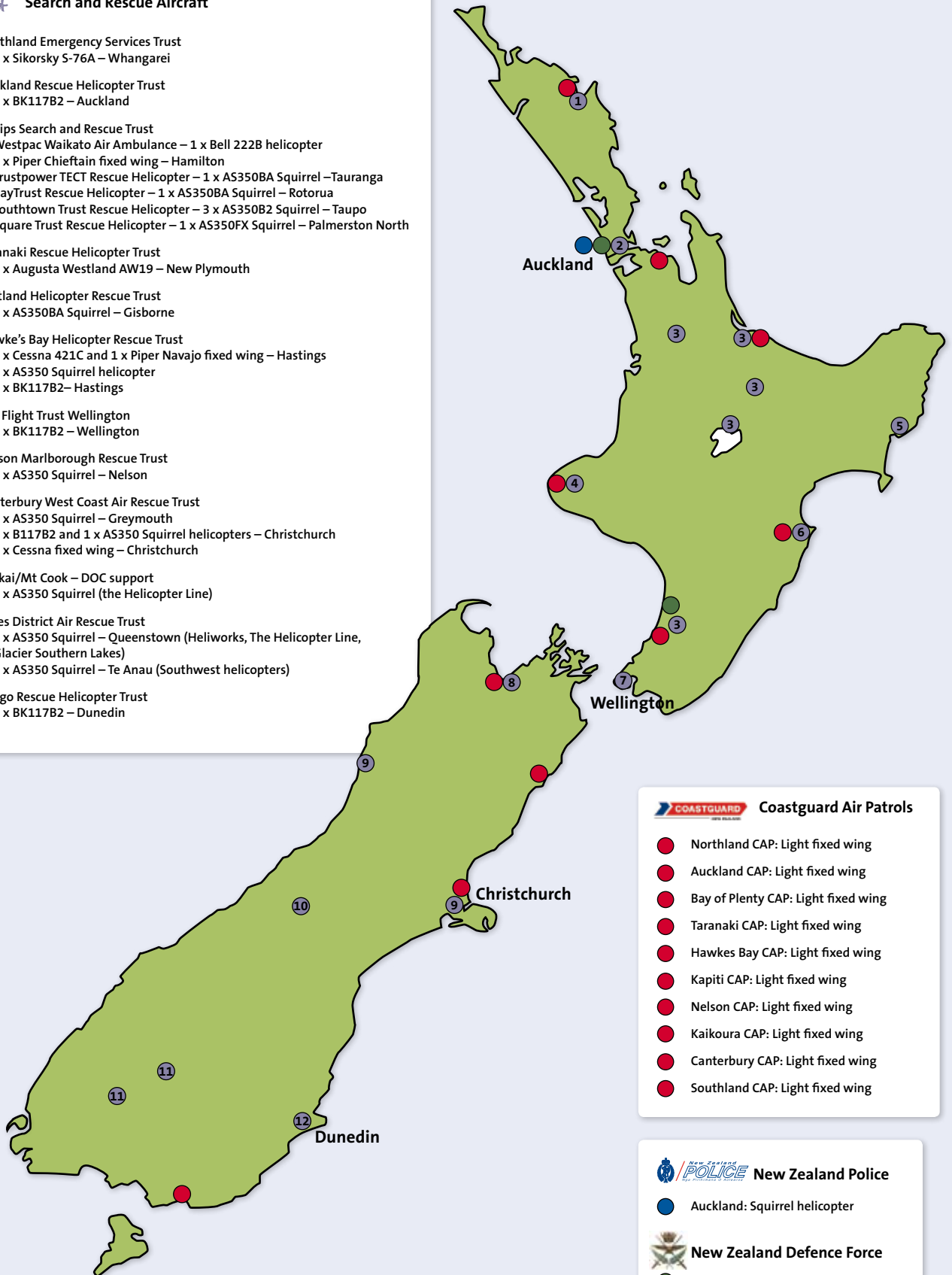


Aviation Search and Rescue Assets



Search and Rescue Aircraft

- 1 Northland Emergency Services Trust
 - 2 x Sikorsky S-76A – Whangarei
- 2 Auckland Rescue Helicopter Trust
 - 2 x BK117B2 – Auckland
- 3 Philips Search and Rescue Trust
 - Westpac Waikato Air Ambulance – 1 x Bell 222B helicopter
 - 1 x Piper Chieftain fixed wing – Hamilton
 - Trustpower TECT Rescue Helicopter – 1 x AS350BA Squirrel – Tauranga
 - BayTrust Rescue Helicopter – 1 x AS350BA Squirrel – Rotorua
 - Youthtown Trust Rescue Helicopter – 3 x AS350B2 Squirrel – Taupo
 - Square Trust Rescue Helicopter – 1 x AS350FX Squirrel – Palmerston North
- 4 Taranaki Rescue Helicopter Trust
 - 1 x Augusta Westland AW19 – New Plymouth
- 5 Eastland Helicopter Rescue Trust
 - 1 x AS350BA Squirrel – Gisborne
- 6 Hawke's Bay Helicopter Rescue Trust
 - 1 x Cessna 421C and 1 x Piper Navajo fixed wing – Hastings
 - 1 x AS350 Squirrel helicopter
 - 1 x BK117B2 – Hastings
- 7 Life Flight Trust Wellington
 - 1 x BK117B2 – Wellington
- 8 Nelson Marlborough Rescue Trust
 - 1 x AS350 Squirrel – Nelson
- 9 Canterbury West Coast Air Rescue Trust
 - 1 x AS350 Squirrel – Greymouth
 - 1 x B117B2 and 1 x AS350 Squirrel helicopters – Christchurch
 - 2 x Cessna fixed wing – Christchurch
- 10 Aorkai/Mt Cook – DOC support
 - 3 x AS350 Squirrel (the Helicopter Line)
- 11 Lakes District Air Rescue Trust
 - 6 x AS350 Squirrel – Queenstown (Heliworks, The Helicopter Line, Glacier Southern Lakes)
 - 2 x AS350 Squirrel – Te Anau (Southwest helicopters)
- 12 Otago Rescue Helicopter Trust
 - 2 x BK117B2 – Dunedin



COASTGUARD Coastguard Air Patrols

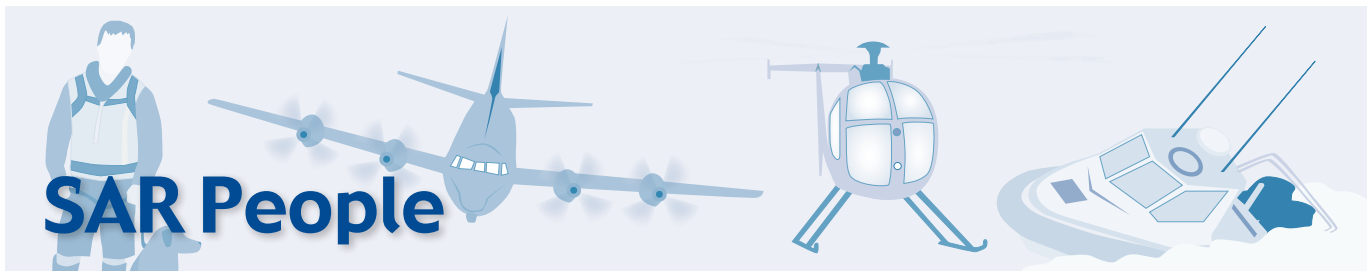
- Northland CAP: Light fixed wing
- Auckland CAP: Light fixed wing
- Bay of Plenty CAP: Light fixed wing
- Taranaki CAP: Light fixed wing
- Hawkes Bay CAP: Light fixed wing
- Kapiti CAP: Light fixed wing
- Nelson CAP: Light fixed wing
- Kaikoura CAP: Light fixed wing
- Canterbury CAP: Light fixed wing
- Southland CAP: Light fixed wing

New Zealand Police

- Auckland: Squirrel helicopter

New Zealand Defence Force

- Auckland: P3K Orion
- Ohakea: UH-1H Iroquois



Working Together

One of the NZSAR Council's five goals is to Achieve a Culture of One SAR Body – so how does this work in practice? We asked SAR people in Canterbury and Taranaki to tell us.

Ryan O'Rourke is Canterbury's Police SAR Coordinator. He believes working across all SAR organisations is the key to success.

"It all comes down to the question 'what is in the best interests of the lost or injured party?' People involved in SAR are very good at recognising that. We cut through a lot of the bureaucracy that can occur between, or even within, organisations when the operation is everyone's focus. Sometimes it pays to remind ourselves of that, but generally we are pretty good at it."

In true collaborative fashion Ryan quotes Senior Sergeant Martin Paget, who is in charge of the Auckland Maritime Unit.

"Martin talks about a virtual SAR organisation, which is where all the SAR organisations come together for an operation (SAROP). During that time, an individual organisations' goals, command and control lines etc, become subsidiary to the overriding requirements and goals of the SAROP. I think it is a very accurate metaphor and a good way to explain how such incongruous organisations can be thrown together at the drop of a hat, night or day, to mount an operation where lives are at stake – and do a good job of it."

Taranaki no longer has individual groups providing SAR services to the Police; instead they've established a single group for Land SAR operations. Alongside them is a similar structure for the Marine SAR group.

Taranaki's Police SAR coordinator Bruce Irvine says the benefits of this are many and varied.

"When the volunteers and Police work together they all contribute different skills to the team. They also feel more included and have some ownership of the operation. It is not uncommon to have a volunteer leading a team that includes Police SAR squad members."

"Tolerance of others' ideas, listening, and patience with other people forms the basis for effective working relationships," says Jill O'Donnell, an 18 year communications veteran with AREC.

"There will always be personalities to deal with – especially in the volunteer world. People volunteer because they have a passion. Differences in personalities must not be brought into SAR. People's lives are at stake and that is what we must focus on."

Allan Pritchard is Chair and a volunteer of Christchurch LandSAR. He says it is vital for his team to know what is happening across the SAR sector "as you never know when the phone is going to ring and you could be working alongside Coastguard or RCCNZ. We need to know their capabilities and systems so we are completely focused on the missing person and not how we are going to communicate and work together"

Allan places great emphasis on building one-on-one relationships with people at local levels.

"Even though New Zealand is very small we all have slightly different ways of working. Even within LandSAR, Canterbury is different to Otago and both are different to Tasman. So it's important to build relationships through training to ensure seamless integration during an operation. Consistent training and cooperation mean that relationships are easy to form and maintain. After operations we try to debrief the event, with the aim to improve and learn from mistakes."



Relationships within SAR can be both formal and informal. Allan's team is city based so they are often searching for missing autistic or Alzheimer sufferers, as well as the occasional lost child.

"We are now involved with the WandaTrak Tracking System and have formalised a relationship with Alzheimers Canterbury which spells out who is responsible for what. We have also recently been working alongside Police Detectives, under the direction of the Police SAR squad, where there is a possibility of criminal activity and, apart from a missing or deceased person, there could be physical evidence that must be located but left undisturbed.



SAR People continued

"Informal relationships are based around our skill sets. We have a greater pool of volunteers because we are city based; they may not have the backcountry experience of rural towns, but they are computer and IT experts, office workers, etc, so we use them to help run searches in those circumstances."

Assisting St John to transport a school girl with a suspected spinal injury from Quail Island, or a multi-day search for missing people – two of many examples of successful collaboration that happen every year, according to Canterbury Coastguard President and Senior Crew Member Gavin Mitchell.

Gavin agrees with Allan that building relationships and having an understanding of the various SAR roles through training is vital.

"A major event happened two years ago that involved several units working with the Police, Coastguard Air Patrol, Waimakariri-Ashley Lifeboat, Sumner Lifeboat and ourselves, where we were all actively searching for two people missing from a commercial vessel off Brighton. This event highlighted the need for continuous integrated training activities among all SAR organisations. In this case the coordination of units and communication among all parties was greatly enhanced through the prior SAREX activities."

South Taranaki Coastguard Skipper, Gary Darnell, points out that one SAR body extends to sharing assets: "Because of our large coverage area we've just bought a mobile command vehicle that enables us to take our communications and rescue equipment with the boat. It could be called by other SAR units and one of our operators could take the vehicle to where ever it is wanted.



Although the Department of Conservation's Aoraki/ Mt. Cook National Park team is in a unique position – they are employed to carry out SAR work – Senior Team Leader SAR, Dave Winterburn, holds the common position that practising one SAR body is effective. He says they have put a lot of work into establishing good relationships over the last three years.



"Good communication is a key component, both within our own organisation and with others. We encourage a 'solution' based culture here at Aoraki/Mt. Cook. We do like to help but we do not show up uninvited. We encourage local groups to set up their own teams and be responsible for their training, admin, etc. We use them, we don't just talk about it, and we keep them informed about what we are up to. We're certainly not above asking for advice or getting assistance from others."

One SAR body is demonstrated by Taranaki LandSAR Chairman Mike Johns, who is also treasurer of the Taranaki Alpine Cliff Rescue team. Mike was part of the NZSAR award winning Operation All Whites team which found and rescued two brothers from Mt. Taranaki last winter. He believes being one big group – with no smaller club politics – is certainly an asset. He is an advocate for having people belonging to more than one organisation as that breaks down barriers at all levels. Mike says working together constantly either in SAREXs or operations is crucial.

"Operation All Whites is a great example. We used five different groups on the one operation, and because most had worked together before we could rely on each other's high training and skill levels –including using the Air Force at night during winter."

Gary Darnell says it is imperative that a one SAR body culture becomes the norm. "It is extremely important that different organisations work and train together to understand what each other does. We have to spend time together face to face, because that is the beginning of the trust and respect thing – if you're going to put your life in someone else's hands you have to know and trust them."



The 2009 NZSAR awards showcased the great abilities and the diversity of everyone that makes up our search and rescue sector. The Associate Transport Minister Nathan Guy presented six awards at this year’s ceremony. Helicopter crews, Defence Force personnel, Surf Lifesavers, LandSAR volunteers, Police, committed, passionate and long-serving individuals – and a dog – were amongst those honoured.

NZSAR Gold Award for the most significant contribution to search and rescue in the New Zealand Search and Rescue Region during 2009 was presented to:

Rob Berry, Murray Chong, David Manduell, Noel Watson
 From the Taranaki Rescue Helicopter Trust – for a Rescue at Patea on the 11th of February 2009.

Five NZSAR Certificates of Achievement for an important contribution to search and rescue in the New Zealand Search and Rescue Region, either during 2009, or over an extended period, were awarded this year to:

Zane Baker, Murray Dix, Peter McInnes, Dave McNeish
 From the Managawhai Heads Volunteer Lifeguard Service – for a Rescuat Mangawhai Heads on the 1st of March 2009.

Dave Krehic and his dog Stig from LandSAR New Zealand Dogs – for the recovery of Irina Yun in November 2009.

Don Bogie from the Department of Conservation – for services, leadership and dedication to Alpine Search and Rescue in New Zealand.

Ross Gordon from the Search and Rescue Institute of New Zealand (SARINZ) – for services, leadership and dedication to Search and Rescue in New Zealand.

AREC Taranaki
Taranaki Alpine Cliff Rescue
Taranaki LandSAR
Taranaki Police SAR Squad
3 Squadron, RNZAF

For their participation in Operation All Whites on the 10th of October 2009.

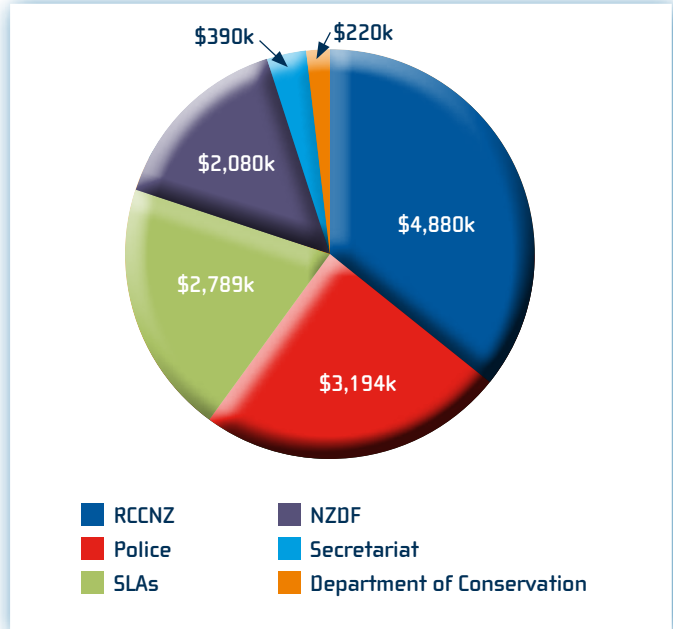
Government SAR Expenditure

The Government’s investment in search and rescue increased to \$13.554m for the 2009/10 financial year. The increase can be attributed to a very large increase in New Zealand Defence Force (NZDF) search and rescue activity during the year and a general increase in SAR costs.

Much of the Government’s expenditure is variable operating costs that change in relation to the number, length and type of SAR operations conducted. There are also overhead and capital costs, which make certain that coordinating services are available on a 24/7 basis and ensure SAR people are trained and equipped for SAR operations.

The graph shows the breakdown for \$13.554m spent by the government for SAR purposes in the 2009/10 financial year. The full cost for the provision of SAR services is much greater than this figure as the non-governmental agencies involved in SAR receive funding from a wide variety of sources.

For the 2010/11 year a significant component of the Government’s SAR funding will come from fuel excise duties paid by recreational boat users.



Notes:

- New Zealand Defence Force (NZDF) costs are marginal costs only, reflecting fuel and other operational expenses but not including the costs of wages, asset maintenance or training.
- Rescue Coordination Centre New Zealand (RCCNZ) costs are subject to final auditing.
- The NZSAR Council has Service Level Agreements (SLAs) with Coastguard NZ, Surf Life Saving NZ, LandSAR NZ and Amateur Radio Emergency Communications.

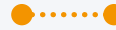
Service Level Agreement Partners



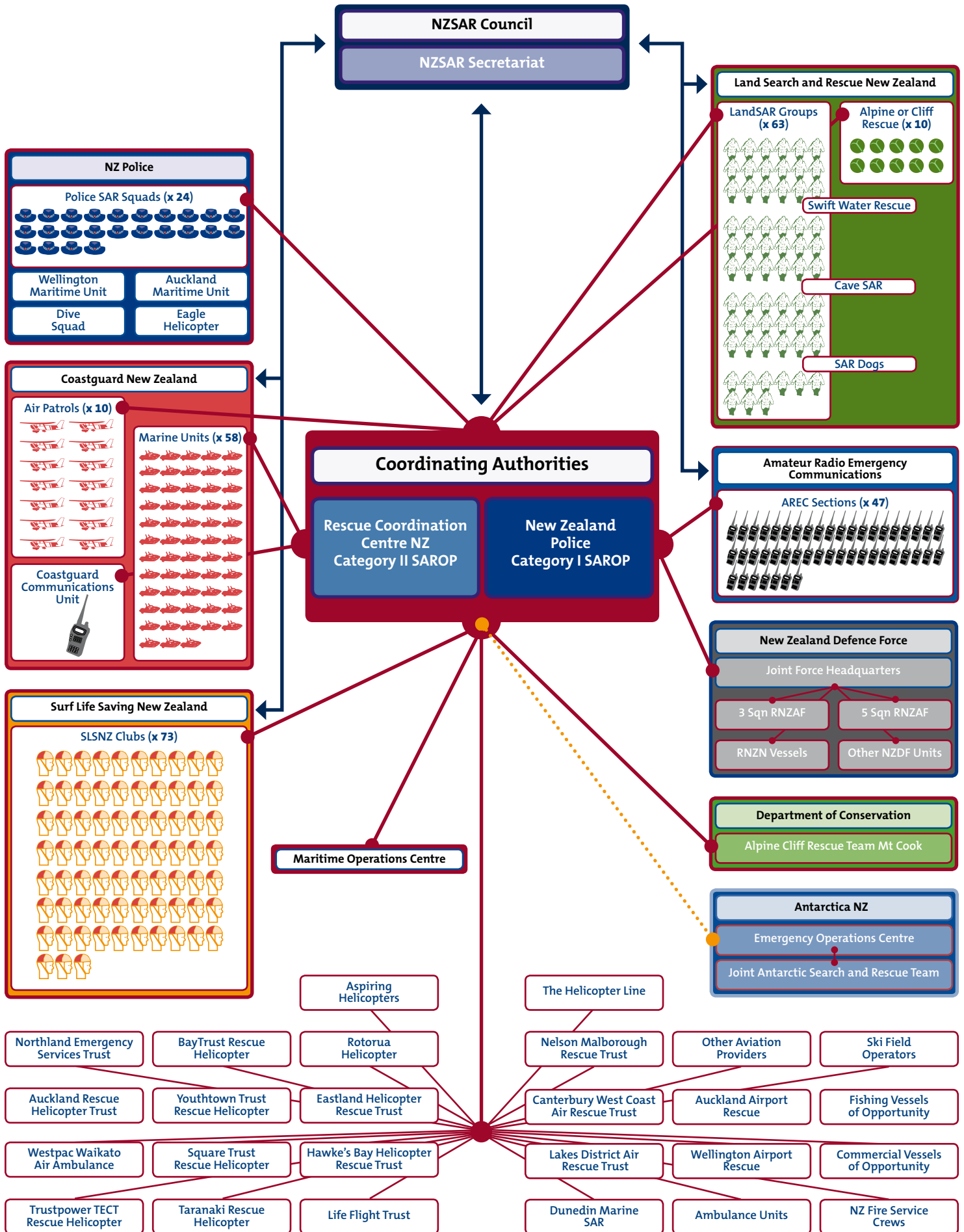
Monitor/Report



Coordinating Authorities



Liaise



Guidelines For SAR Exercises

Each year, the two recognised coordinating authorities, NZ Police and the Rescue Coordination Centre NZ, are responsible for running a number of major search and rescue exercises (SAREXs) involving many different SAR organisations. Additionally, large organisations such as Coastguard or LandSAR frequently run SAREXs themselves, some of which involve partner organisations.

The NZSAR Core Curriculum Review described the SAREX as a crucial part of training as it allowed individuals, teams and organisations to practice and confirm their skills in a controlled learning environment. It identified the need for the Sector to generally improve the planning, execution and analysis of SAREXs, as higher quality SAREXs should lead to higher performance SAR operations.

Following these observations, the NZSAR Secretariat initiated a project to develop a set of national SAREX guidelines for all SAR agencies to use. The aim of this project was to enhance the quality and ease of running generic SAREXs. Search and Rescue Institute New Zealand (SARINZ) was asked to develop the guidelines.

In consultation with a wide range of SAR experts, and input from all SAR organisations, SARINZ produced a set of SAREX guidelines that are practical, pragmatic and simple to use. They can be applied in land, air and marine SAR environments and include analysis, planning, conduct, monitoring and debriefing of SAREXs. The layout and terminology works effectively with the NZSAR Core Curriculum.

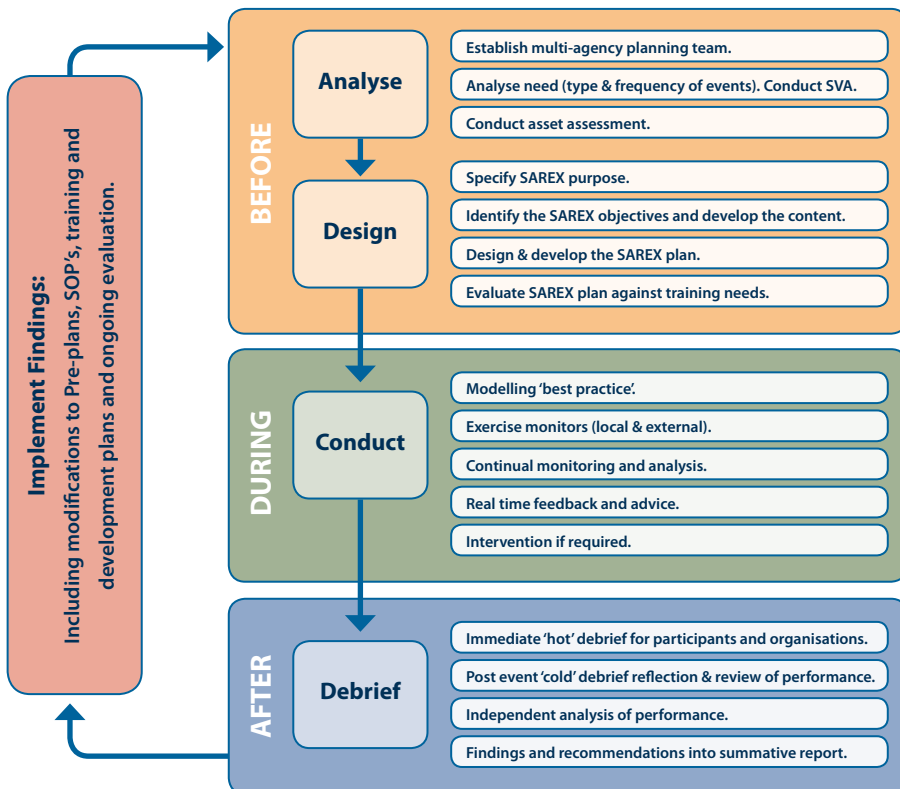


The SAREX guidelines are partially based on the NZ Civil Defence Emergency Management exercise template to ensure our sector remains in line with the wider emergency management environment. They also make good use of existing search and rescue templates.

The intent is for the exercise planner or significant exercise contributor to use the guidelines. Early feedback suggests this is happening and that they are a welcome addition. The guidelines

have many benefits; they have enabled SAR organisations to improve their understanding of each other by establishing common knowledge and a set of expectations, and they emphasise the need for SAREXs to be planned and monitored effectively. They also stress the requirement to not only conduct good debriefs but also ensure any lessons identified are fed back into training, procedures and pre-plans so those lessons are learnt by everyone who needs to know.

The SAREX guidelines are available at www.nzsar.org.nz. All New Zealand SAR organisations are encouraged to use them when they are planning search and rescue exercises. A national SAREX plan, where all major SAREXs and their proposed objectives are planned ahead of the training year, is also now in place to support the SAREX guidelines. This advance planning assists national level organisations in their activities and ensures that resources can be shared effectively. The SAREX plan is also available on our website.



Bringing SAR People Together

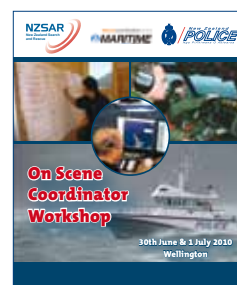
This year the NZSAR Council sponsored six workshops across the country. Each one focussed on specific issues that have concerned the SAR sector. For the most part, the participants were either from the sector or experts in their field and others were invited to ensure all the necessary voices were heard. Facilitated discussions and working groups tackled the problems, worked through practical solutions, and agreed upon plans to tackle any unresolved issues.

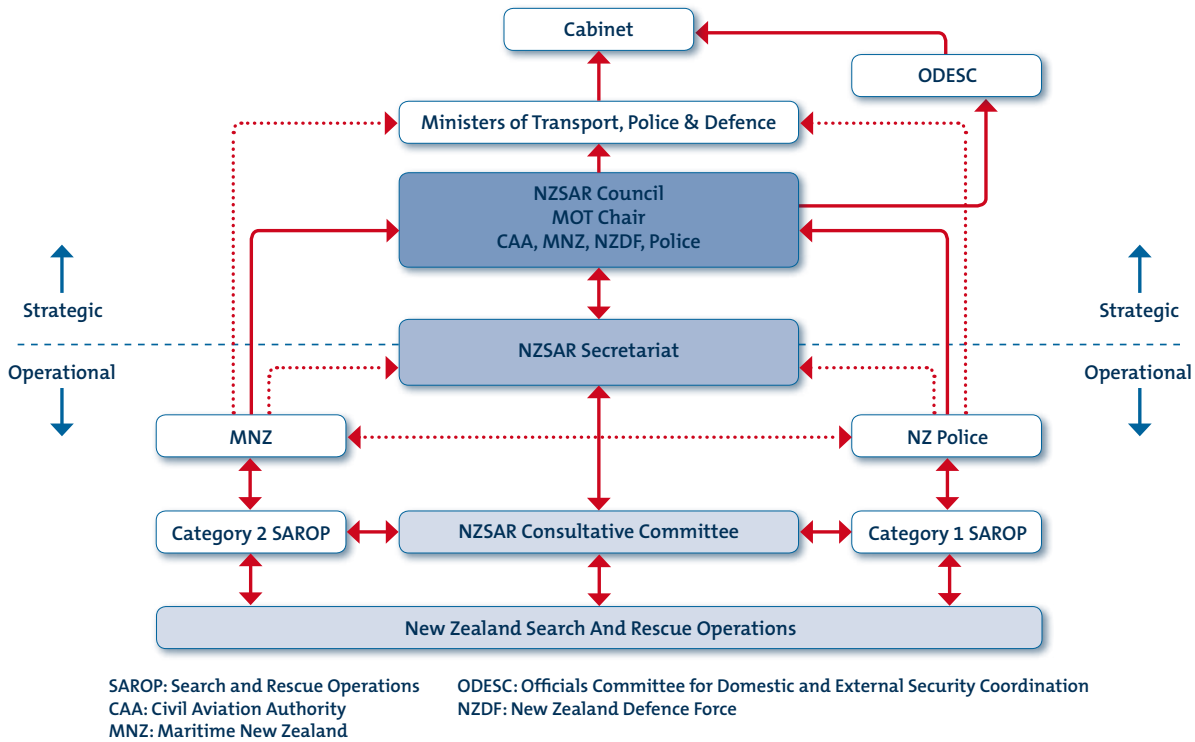
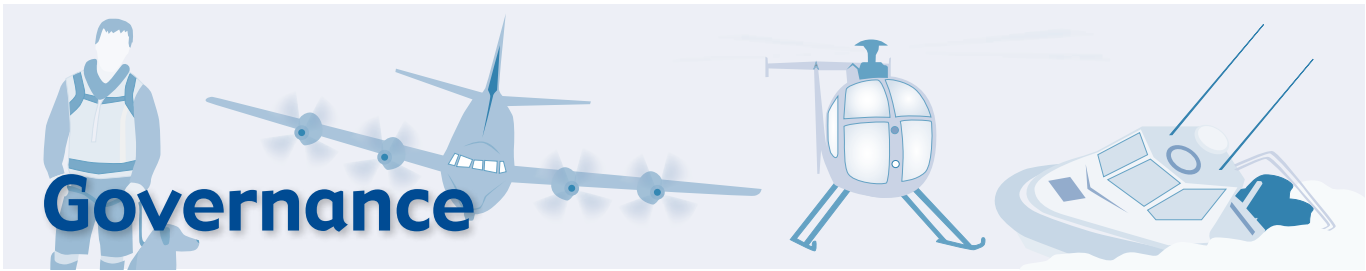
- **Land Communications.** The Land Communications Workshop discussed sector management of land-based SAR communications on an ongoing basis and produced a joint capability statement. This was a relatively technical workshop which highlighted the significant differences in the way land-based SAR communications are operated and managed around the country.
- **Hoist Operators.** The Hoist Operators Workshop aimed to help standardise the training, safety and operating procedures for helicopter hoist operations, and examined night vision operations and search techniques. This was a large workshop that included a number of helicopter hoist operator “users” to ensure issues around the top and bottom of the winch, or long-line, were considered.
- **Wander Workshop.** The Wander Workshop’s purpose was to share ideas and improve the conduct, management and coordination of SAR incidents for people who wander in New Zealand. We were very pleased to have representatives from a wide range of organisations at this workshop including IDEA services, Alzheimer’s New Zealand, Autism New Zealand and a senior representative from the New South Wales Police Force. This breadth of participation greatly aided the Wander Workshop to achieve its aims.
- **Marine SAR.** The Marine SAR Workshop focused on improving the management and coordination of marine SAR incidents in and around New Zealand. This was a large-scale workshop as it had a number of issues to deal with due to the fact marine search and rescue services are delivered and coordinated in a variety of ways around New Zealand. This proved to be an excellent forum for marine SAR experts to discuss issues, agree, occasionally disagree, and chart our path to improved marine SAR services.



- **Avalanche SAR.** The Avalanche SAR Workshop sought to improve the management and coordination of SAR avalanche incidents in New Zealand. The workshop covered a wide range of related topics including: avalanche SAR case studies; Coordinated Incident Management System for avalanche SAR; risk management during avalanche SAR; electronic aids and new technology to assist avalanche SAR; avalanche SAR communications; avalanche SAR individual training & standards; and, avalanche rescue team training and exercising. The workshop culminated with an in-depth look at pre-plans for avalanche SAR.
- **On Scene Coordinator.** The On Scene Coordinator Workshop was organised by the Rescue Coordination Centre and aimed to reach agreement about the role, purpose, required skills and training of On Scene Coordinators. The comprehensive discussions provided a very good platform for the development of an On Scene Coordinator training package, which is due late 2010.

Bringing SAR people together in this workshop format has been particularly successful not only because it allowed participants to acquire and share knowledge but also because it developed a common understanding about planning for and delivering an effective search and rescue response in a variety of environments. They also provided a good networking opportunity for the 403 attendees, most of whom have significant search and rescue responsibilities. The material from all of the workshops, including the presentations and notes from the discussions, is available online at: <http://www.nzsar.org.nz> in the *Training and Workshops* section.





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, 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:

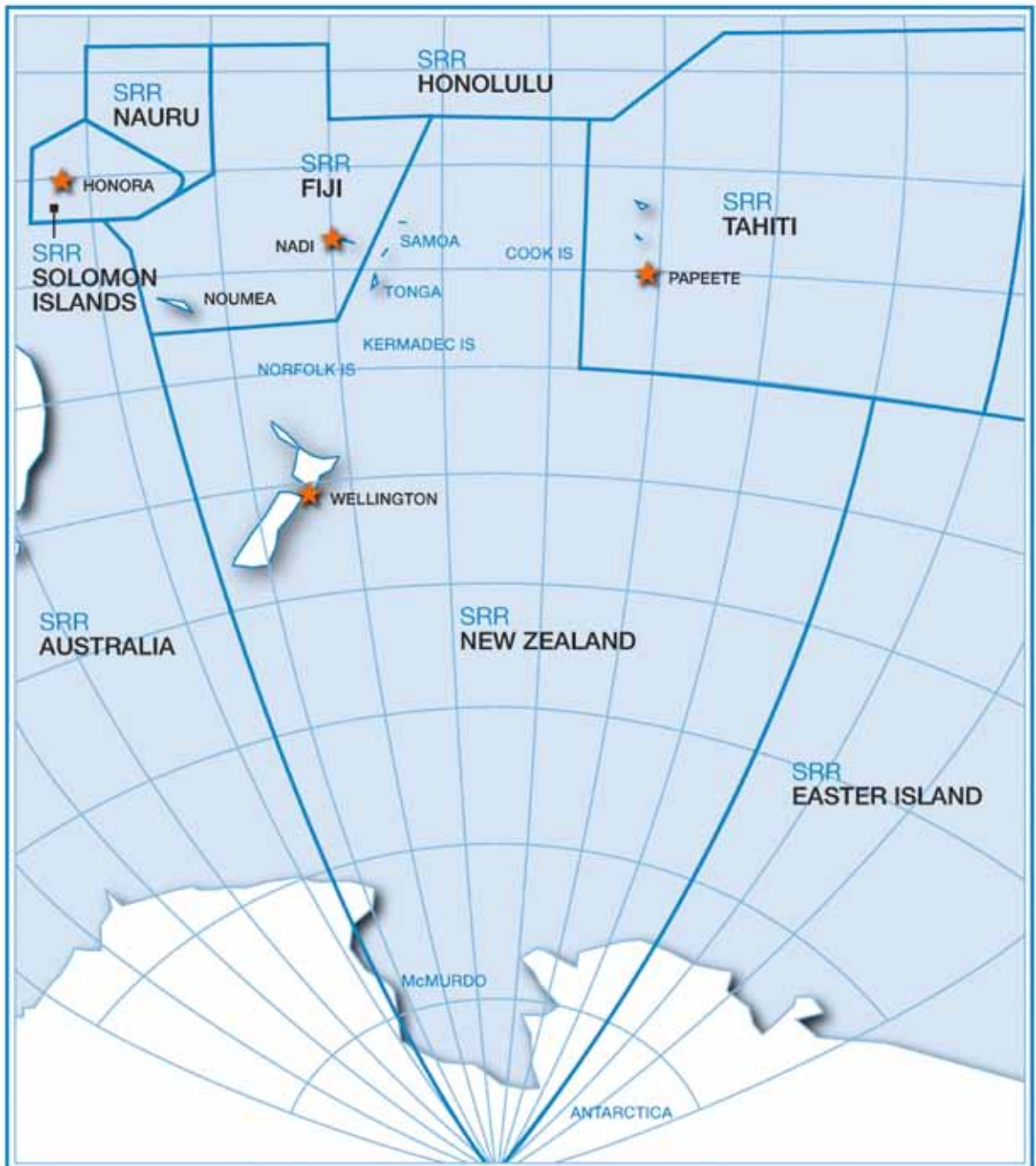
- Amateur Radio Emergency Communications
- Ambulance New Zealand
- Antarctica NZ
- Aviation Industry Association
- Civil Aviation Authority

- 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
- Search and Rescue Institute New Zealand
- 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

NZSAR Secretariat

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