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NEW ZEALAND SEARCH AND RESCUE (NZSAR) STOCKTAKE

Background. A stocktake of all SAR providers and enablers within the New Zealand Search and Rescue Region was conducted in mid 2007. The stocktake acknowledges that for significant parts of the sector, the SAR role represents only a small part of their work and that many key SAR assets exist primarily for other purposes. For the purposes of this stocktake, individuals or assets who were able to be identified as being actively involved with SAR in some form or capacity during 2007 were included.

Aim. The aim of the NZSAR stocktake was for the sector and its stakeholders to gain an understanding of the dimensions and capacity of the entire NZSAR sector.

Purpose and use. The NZSAR stocktake is intended to be available as an important information resource for use by key SAR stakeholders and decision makers. It offers a coherent, unified picture of the sector and provides a measure of the sector's scale within New Zealand society. The stocktake is public information and it will be updated annually in order to maintain accuracy and identify trends.

The stocktake describes the size of the NZSAR sector, the elements that comprise it and its key capabilities. It is intended that future stocktakes will include other measures such as funding levels and expenditure.

Summary

People in the sector: 10161

- Full Time 469
- Part Time 460
- Not Paid 9232

Major Assets:

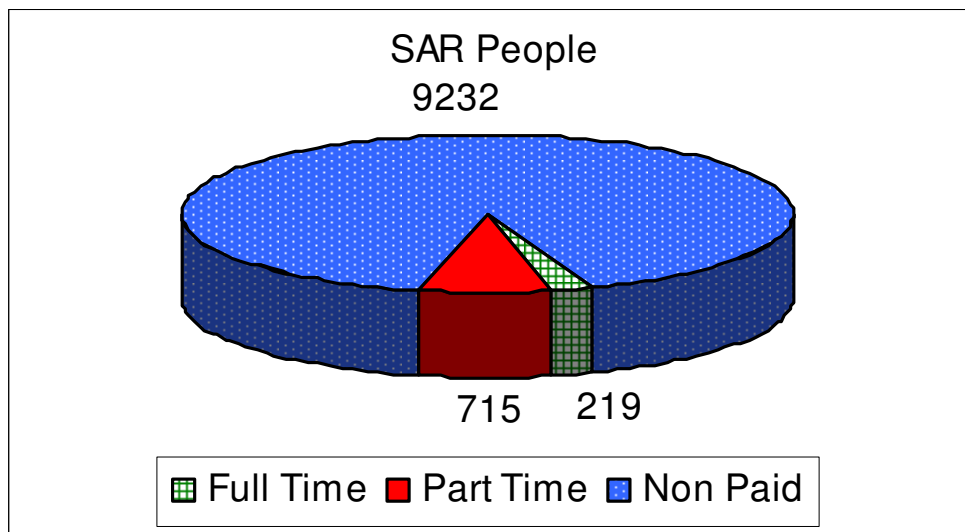
- Helicopters 19
- Aeroplanes 19
- Boats (all sizes) 264

SAR People

10,161 people are involved in the New Zealand SAR sector. In addition to this number, there are also many others who enable these SAR individuals to perform their role. There are also many thousands of other individuals such as New Zealand Defence Force personnel and those within the wider NZ Police Force who are only occasionally required to assist with search and rescue operations and therefore are not part of the totals presented.

Paid and non-paid. Over 90 percent of New Zealanders involved with SAR are volunteers who receive no remuneration for their involvement. Less than 10 percent do receive some form of remuneration in either a full or part-time basis. Figure 1 illustrates the dimensions of the sector. Previous studies have identified that New Zealand has one of the highest rates of volunteer involvement in SAR in the world.

Figure 1



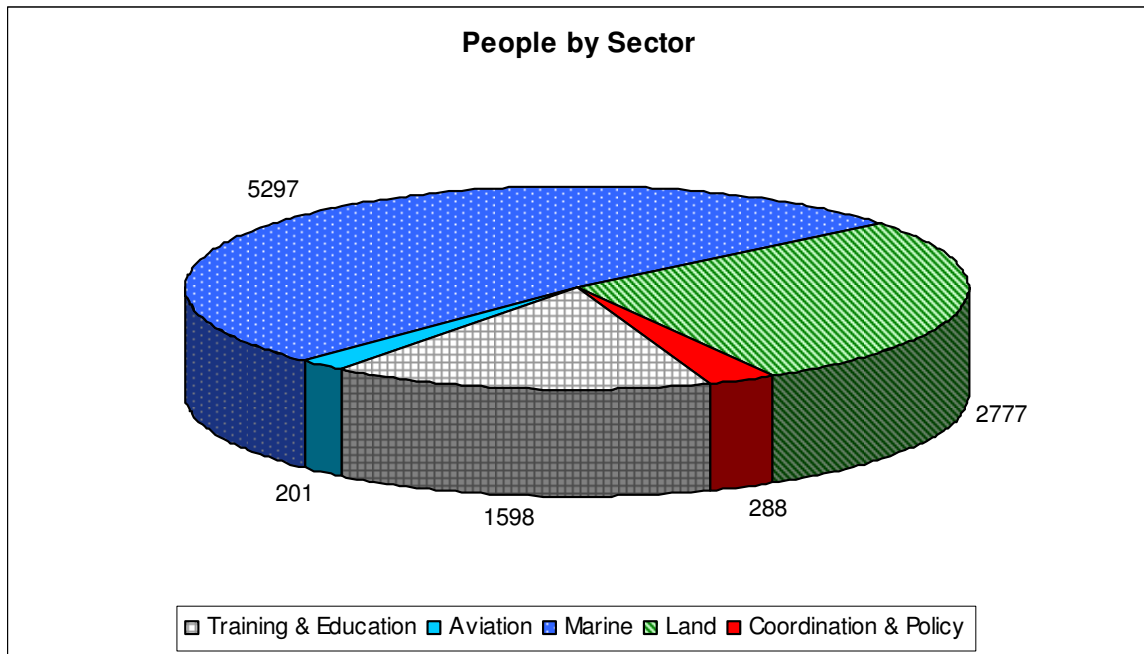
Numbers in each sector. The largest segment of the SAR sector is marine search and rescue which represents just over half of all people involved at almost 5300. The organisations primarily involved are Surf Life Saving New Zealand and the New Zealand Coastguard. The land sector is the next largest segment with approximately 2780 people involved. These are primarily drawn from NZ Land Search with a smaller number from Amateur Radio Emergency Communications.

The training and education segment of the SAR sector is surprisingly large with nearly 1600 people involved. Many of these people are involved with the Mountain Safety Council and the polytechnics who provide training for both the land and marine SAR environments.

While the aviation segment is relatively small with over 20 people involved, it is very flexible and is involved with a large number of SAR incidents in all three SAR modes, land, sea and air.

The bulk of the nearly 300 people involved with coordination and policy belong to either the NZ Police or Maritime New Zealand's Rescue Coordination Centre. The New Zealand SAR sector is operationally focussed with only small numbers being involved at the strategic and executive levels.

Figure 2



SAR People by Organisation.

Table 1

| Organisation | Full time | Part time | Volunteer | Total |
|------------------------------------|-----------|-----------|-----------|---------------|
| NZSAR Secretariat | 1 | | | 1 |
| Rescue Coordination Centre (MNZ) | 17 | | | 17 |
| New Zealand Police | 5 | 255 | 10 | 270 |
| New Zealand Defence Force | 31 | | | 31 |
| Land Search and Rescue | 3 | 1 | 2773 | 2777 |
| New Zealand Coastguard | 25 | 6 | 1768 | 1799 |
| Rotary Aviation | 52 | 32 | 86 | 170 |
| Department of Conservation | 4 | 4 | 4 | 12 |
| Ruapehu Alpine Rescue Organisation | | | 38 | 38 |
| The NZ Mountain Safety Council | 10 | 4 | 1507 | 1521 |
| SARINZ | 5 | 35 | 7 | 47 |
| EMANZ | 7 | 20 | | 27 |
| Maritime Operations Centre | 20 | | | 20 |
| Surf Life Saving New Zealand | 34 | 358 | 3036 | 3428 |
| Civil Aviation Authority | 1 | | | 1 |
| Ministry of Transport | 2 | | | 2 |
| TOTAL | | | | 10,161 |

In addition to the numbers described in table 1 above, a number of additional individuals work directly with, or in support of, SAR operations in the New Zealand search and rescue region. Such organisations include (but are not restricted to):

- Amateur Radio Emergency Communications
- BoP Polytechnic
- Tai Poutini Polytechnic
- Dunedin Marine SAR

As the number of people from these organisations who are involved with SAR become more accurately known, they will be added to the stocktake.

Also, some people work only very occasionally with SAR typically on an as needed basis. Due to this variability their numbers have not been included in this report. Such organisations include:

- Ambulance New Zealand
- The New Zealand Fire Service
- Federation of Commercial Fishermen
- Antarctica NZ

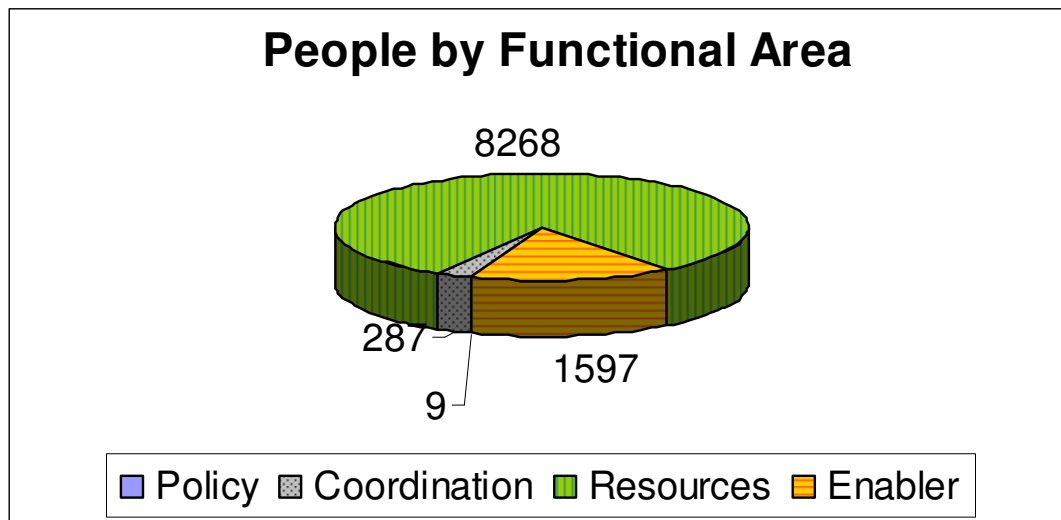
Functional

While it is recognised that a many SAR organisations contribute to SAR in multiple ways, for the purposes of this exercise, input to the sector can be categorized in four ways: policy, coordination, resources and enabling. Table 2 and figure 3 illustrate the numbers of people involved in each functional area.

Table 2

| Category | Description | Number |
|--------------|---|--------|
| Policy | SAR policy development | 9 |
| Coordination | possessing formal SAR coordination responsibility | 287 |
| Resources | personnel and equipment | 8268 |
| Enabler | education, training and prevention | 1597 |

Figure 3



These figures clearly illustrate that the SAR sector is a lean one with the predominance of people involved with SAR operations and relatively few in administrative roles.

SAR Assets

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.

The major physical SAR assets based in New Zealand include:

- Helicopters (all types) 19
- Aeroplanes (all types) 19
- Vessels (all sizes) 264

Almost no SAR asset is 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. An example is the New Zealand Defence Force P3K Orion fleet. While one aircraft and crew remain on SAR alert at all times, most of their work relates to military and other surveillance tasks. This report also recognises that there are a number of only occasionally utilised SAR assets not included in this stocktake. Examples include commercial fishing vessels and non emergency helicopters.

Major search and rescue assets are located throughout New Zealand and are operated by a variety of organisations. Annex A describes the major marine assets, annex B describes the major aviation assets and annex C describes the major land search and rescue groups reported in the 2007 stocktake. Note that New Zealand's land search and rescue is people rather than asset based.

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Manager
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Annexes:

- A. Major Marine Assets
- B. Major Aviation Assets
- C. Major Land Assets

MAJOR MARINE ASSETS

| Organisation | Location | Type | Number | Special Equipment |
|--------------|-------------------|----------------|--------|---|
| SLSNZ | Northern Region | IRB | 48 | Oxy/Defib |
| SLSNZ | Bay of Plenty | IRB | 32 | Oxy/Defib |
| SLSNZ | Gisborne | IRB | 7 | Oxy/Defib |
| SLSNZ | Hawkes Bay | IRB | 8 | Oxy/Defib |
| SLSNZ | Taranaki | IRB | 18 | Oxy/Defib |
| SLSNZ | Western Districts | IRB | 11 | Oxy/Defib |
| SLSNZ | Wellington | IRB | 12 | Oxy/Defib |
| SLSNZ | Canterbury | IRB | 27 | Oxy/Defib |
| SLSNZ | Otago | IRB | 14 | Oxy/Defib |
| Coastguard | Northern Region | Boat (variety) | 23 | Oxy/Defib, RDF, TI, Night Vision |
| Coastguard | Eastern Region | Boat (variety) | 16 | Oxy/Defib, RDF, TI, Night Vision |
| Coastguard | Central region | Boat (variety) | 22 | Oxy/Defib, RDF, TI, Night Vision |
| Coastguard | Southern Region | Boat (variety) | 20 | Oxy/Defib, RDF, TI, Night Vision |
| NZ Police | Auckland | Launch | 1 | TI, stabilised bino, side scan sonar, radar |
| | | 12m RIB | 2 | |
| | | 4.5m RIB | 2 | |
| NZ Police | Wellington | Launch | 1 | TI, stabilised bino, side scan sonar, radar |
| | | 4.5m RIB | 1 | |
| NZ Police | Wellington | Dive Squad | 1 | 10 members |

MAJOR AVIATION ASSETS

| Organisation | Location | Type | Number | Special Equipment |
|---|--------------------|--------------------------|---------|--------------------------------|
| NZ Police | Auckland | Squirrel Helicopter | 1 | FLIR, Nitesun, moving map, |
| NZDF | Auckland | P3K Orion | 1 avail | Radar, Electro optics, DF |
| | Ohakea | UH1H | 1 avail | |
| Coastguard | Northern Region | Light fixed wing | 1 | |
| Coastguard | Eastern Region | Light fixed wing | 2 | |
| Coastguard | Central Region | Light fixed wing | 3 | |
| Coastguard | Southern Region | Light fixed wing | 8 | |
| Heliworks (LDART) | Queenstown | Squirrel | 4 | Trackplus/DF |
| Lion Foundation Rescue Helicopter (PSRT) | Taupō | AS350B2 Helicopter | 1 | NVG/FLIR/DF/Winch |
| Helicopters Otago (Lion Foundation Rescue Helicopter) | Dunedin | BK117B2 Helicopter | 1 | NVG/DF/Winch/Nitesun/Trackplus |
| Life Flight Trust | Wellington | BK117B2 Helicopter | 1 | FLIR/DF/NVG/Nitesun |
| Waikato Air Ambulance (PRST) | Hamilton | Misubishi MU2 Helicopter | 1 | FLIR/DF/Marine SAR Radar/NVG |
| Waikato Air Ambulance (PRST) | Hamilton/ Taupō | Piper Chieftan Aircraft | 1 | FLIR/DF/Marine SAR Radar/NVG |
| Westpac Waikato Air Ambulance (PSRT) | Hamilton | Bell222B Helicopter | 1 | DF |
| Palmerston North Air Ambulance (PRST) | Palmerston North | AS350B2 Helicopter | 1 | Nitesun/DF/ |
| Bay Trust Rescue Helicopter (PRST) | Rotorua | AS350BA Helicopter | 1 | NVG/FLIR/DF/Winch |
| TrustPower TECT Rescue Helicopter | Tauranga | AS350BA Helicopter | 1 | FLIR/DF/Winch/Nitesun |
| Taranaki Rescue Helicopter Trust | New Plymouth | A119 Koala Helicopter | 1 | NVG/Winch/DZM Tracking/DF |

ANNEX B (Cont)

| Organisation | Location | Type | Number | Special Equipment |
|-------------------------------------|-----------------|----------------------------|---------------|---|
| Garden City Helicopters | Christchurch | BK117B2 Helicopter | 1 | NVG/Winch/Nitesun/DF |
| Hawke's Bay Helicopter Rescue Trust | Hastings | AS350BA Helicopter | 2 | NVG/Winch/Nitesun/FLIR/DZM Tracking/DF |
| Hawke's Bay Helicopter Rescue Trust | Hastings | Piper Navajo Aircraft | 1 | DF/liferaft/NVG |
| Hawke's Bay Helicopter Rescue Trust | Hastings | Cessna 421C Aircraft | 1 | Liferaft/NVG |
| Northland Emergency Services Trust | Whangarei | Sikorski S76 Helicopter | 2 | NVG/Liferaft/Winch/DF |

MAJOR LAND ASSETS

| Organisation | Location | Type | People |
|----------------------------|-------------------|-------------|---------------|
| NZ Police | Wellington | Dive Squad | 10 |
| Department of Conservation | Mt Cook | Alpine SAR | 4 |
| Department of Conservation | Mt Ruapehu | Alpine SAR | 38 |
| NZ LandSAR | Northern Region | Land SAR | 119 |
| NZ LandSAR | Midland Region | Land SAR | 475 |
| NZ LandSAR | Eastern Region | Land SAR | 250 |
| NZ LandSAR | Central Region | Land SAR | 479 |
| NZ LandSAR | Tasman Region | Land SAR | 401 |
| NZ LandSAR | Canterbury Region | Land SAR | 433 |
| NZ LandSAR | SouthernRegion | Land SAR | 616 |