
NZLSAR News

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UN Year of the Volunteer Medallion Presentation

More than 11,000 volunteers who help the Police are to be presented with a commemorative medallion.

As part of their observation of the United Nations sponsored Year of the Volunteer

Police Commissioner Rob Robinson recently stated "people from throughout New Zealand help Police in various roles. Volunteers help in search and rescue operations, civil emergencies, supporting victims of crime, as Coastguards, firearm trainers, through Maori

focus groups and Neighbourhood Support or by lending a hand at their local Police station".

He went on to say "volunteer assistance is invaluable in building safer communities. We are proud to acknowledge the contribution of volunteers through the presentation of these special medallions".

A presentation was made at the Office of the Commissioner by the Deputy Commissioner Steve



which runs from 5 December 2000 to 5 December 2001, Police are to issue a medallion to volunteers who assist them. The medallion bears the United Nations symbol for the International Year of Volunteers with the Police crest and an inscription on the reverse. The rim of the medallion will be engraved with the recipient's name and it will come in a presentation case.

Long to local representatives of several organisations including Anita Benbrook of the Wellington SAR Organisation. Anita has been a Team Member or Leader on numerous occasions and more recently been involved in SAR management as a Field Controller. Presentation ceremonies are to be held around the rest of the country over the next few months.

Some thoughts on computer mapping

Below is a recent email discussion which is covered in greater depth in an article further on in the News.

Steve

I am looking for some answers in relation to maps on CD. As some other SAR groups have done around the country, we have a laptop on which we can download Garmin GPS data onto maps.

The problem I am experiencing is that the GAR Trip programme which downloads the data from the GPS, only reads maps that are in Tiff format. From what I understand there must be other maps on

CD which are in other formats. If this is so can someone tell me which map CD they are using with the above system. I have looked at a couple and both are in Tiff format.

I have considered saving the maps in another format which GAR Trip reads, but that will be a rather long way round. Any advice will be appreciated.

Thanks Phil.

Hi Phil.

TIFF, or GEO-TIFF is pretty much the standard, and NZ Topo Maps are available in this format through the Police for SAR use, or through myself for SAR groups that want a copy. See

<http://www.nzlsar.org.nz/comms/mapping.html> for some details.

I do not know about the Garmin software, but all mapping software that uses images require some sort of a reference so they know the position of the image. In the case of the GEO-TIFF files available to us these files are TFW files. These files reference the pixels of the image to Lat/Long positions.

Depending on the application (program) a similar file will be required, and you may need to do some maths to convert the TFW file to a suitable format for your application. You need to convert the TIFF image to a format suitable to your application as well as the reference file.

Some of us on the list have been doing this sort of thing for a while for application such as APRS, UI-View, OziExplorer etc.

The Geo-TIFF format is directly readable by ArcExplorer and Fugawi 3. I believe that Fugawi may also be able to take in Garmin waypoints, but I have not seen this in actual operation. I have a demo disk for Fugawi that I will have a look at and report back.

See

http://www.geosys.co.nz/development/fugawi_description.html for a description of Fugawi from the local agents. I believe Fugawi 3 is about \$250, so it may be a good for what you are trying to achieve.

Also as mentioned some mapping software such as the MapWorld TopoCD can support GPS data directly onto their maps. However there is a cost for these maps, whereas the Geo-Tiff maps are pretty well free. I will try and have a look at the Garmin software and get an idea of what is required for conversion.

So in summary there is no easy way with the free maps available to us, and other systems that may work to some extent have a cost.

Cheers Steve.

Waikato Area SAR Competition Sunday 28th October 2001

The Hamilton SAR Group is hosting the second annual Waikato SAR competition which is a fun event designed to improve the skill levels of SAR personnel. SAR groups are invited to enter one or more teams although the total number of teams competing may be limited to 10.

Venue: Hakarimata Ranges, near Ngaruawahia.

Times: Registration 1000 hours. Briefing of Team Leaders and Assessors 1030. Competition Start. 1100. Expected finish. 14 to 1500 hours.

Questions: For more information contact John Twizell at 07-856-2844

John P Tristram
NFO

PLB details to be aware of

The Personal Locator Beacon (PLB) is a safety net, to be used when all else (radio or whatever) has failed. For remote activation to work on a PLB:

1. It has to be switched on in order to receive the "wakeup" signal.
2. Someone has to buy a suitable transmitter and fit it to their aircraft. This may or may not have happened in your neighbourhood.
3. The activating aircraft has to pass close enough to the PLB. This presupposes knowledge of where the PLB actually is.

If a beacon is continuously switched on, its battery life and charging will need to be carefully managed, no matter how small the current drain i.e. it has ceased to be a safety net and has become only as reliable as the person looking after it. By the time you resort to remote activation the casualty will have been unconscious for at least a day, otherwise they could activate the beacon for themselves. In all probability all that you will achieve is the fast location of a dead body. This limited benefit must be balanced against the danger of a tired battery failing to function when it would have saved a life had it functioned for four or more hours.

Matthew Lloyd
NZLSAR Communications Subcommittee

Electronic Topo Maps for SAR

There are now a number of sources and forms of electronic topographical (topo) maps with possible applications for SAR.

Seamless Maps

Seamless maps are packages that incorporate digital maps with software that has been developed to add value to the maps, and provide a user friendly and "seamless" interface to the map data. As such these are a commercial software package covered by commercial copyright.

A 1:250000 seamless map series on CD has been available for some time in the form of Atlas of New Zealand by Polymedia. It was reasonably priced and had some limited use for SAR. It has been promoted at NZLSAR Adviser Workshops.

The first commercial seamless 1:50000 Topo map system was "TopoMap New Zealand" distributed by MapWorld. This is available as either a CD covering all the topo maps of the area of a single 262 series map for \$99, or a single CD covering the whole of either the North or South Island for \$299 each, or \$499 as a pair.

See <http://www.mapworld.co.nz/topocd.pdf>

The quality and resolution of these maps while adequate is not as good as it could be, as it has been reduced so that all maps for an Island fit on a single CD.

[Note: I have heard that there is a newer version of this package, which has a number of enhancements. More details are to follow in a future article.]

The more recent seamless 1:50000 topo map system on CD is "NZMapped" by Polymedia, the same developer of the original Atlas of New Zealand. This system is not only cheaper, but is also better quality than the TopoMap NZ set from MapWorld (first edition anyway).

These are available in 3 CD sets for each of the North and South Islands at a cost of \$149.95 per set, (A special price of \$249.90 may be available to SAR for both sets) or also available on a single DVD disc for \$279.95. See <http://www.polymedia.co.nz/nzmapped/default.htm>

Image Files

Recent changes to the copyright of New Zealand maps have made basic image files of individual topo maps available, at a reasonable cost commercially, or to some Government agencies for free. These are not a great deal of use on their own, as they need to be used in conjunction with some form of software for them to be of any real value.

The NZLSAR Communications (and Technology) Sub-Committee has copies of these through the Police. Note that at present there are a few missing from the set, mostly the small coastal sections but a couple of inland North Island maps are also missing. These may not be the most recent versions of the printed maps in some cases; new versions of some of the digital maps are expected later this year.

Commercial versions are available from Geo-Systems. They have a set of 16 CDs, with about 13 - 27 maps per CD for, I believe, \$99 per CD.

See http://www.geosys.co.nz/development/cd_map_description.html

They are originally in TIFF format, with a geo-reference file. Together these files can be used with various Moving Map software programs such as Fugawi, and with various GIS packages such as ArcExplorer, ArcView, ArcInfo. The image files can also be viewed with normal graphics software for basic planning and documentation use. ArcExplorer is free and again can be used for some basic planning and documentation aspects of a SAROp, but it is not ideal for use for plotting the progress of a search electronically. See <http://www.fugawi.com> for more details about Fugawi moving map and Fugawi Tracker

See <http://www.esri.com> for more details about the ARCEXplorer, View, Info, Pad range of GIS programs

The image files can also be converted to other graphics formats and with some work on the Geo-reference files can be used with other mapping software such as APRS, OziExplorer, and GPSS to name a few that are readily available from the Internet.

The image files and their Geo-reference file are available to bona fide SAR groups for a cost of \$5 per CD to cover the cost of materials and shipping. They are available in the original TIFF format or in other graphics formats, such as GIF or JPG. Send a request to sarmaps@z12ucx.gen.nz for the maps that you want. Send a list of the 260 series map numbers and the image format that you would like. Confirmation of availability of the requested maps and a calculation of the number of CDs required will be made and the cost determined. The CDs can then be produced and sent on receipt of payment.

On-Line Maps

LINZ is working on an On-line map system for Government agencies at this stage, and eventually for public access. It is anticipated that you will be able to print out map segments directly from the Internet. This will obviously be limited by your printer, and by your Internet connection speed. This may be available later this year.

Also Digital Ortho-Photos are available for downloading from LINZ, however they do not cover that much of NZ, and they are very very large files (around 45M per ¼ of a 260 series map sheet)

A number of local government agencies also have on-line map/GIS systems, or have them internally and can possibly assist with maps or aerial photographs of search areas.

See an example from the Canterbury Regional Council – Environment Canterbury at http://www.ecan.govt.nz/echome/gis&database/gis_databases.htm

General Comments

While ArcExplorer is not ideal for use operationally due to its limited functionality, ArcPad could have some applications on a handheld computer for field teams and both of these are free. Also the commercial versions of ArcInfo/ArcView may be usable at Search HQ, however again the cost of licenses becomes an issue. We need to get some more experience in the use of mapping and GIS technologies for SAR operations.

Steve Davis

Chairman Communications (and Technology) Sub-Committee

Heat and Eat Foods - Heat and Eat Foods - Heat and Eat Foods

Following discussion between Portion Pack Food Pty Ltd and NZLSAR, their **Hungerbuster Combo Meal Packs** are available as bulk orders at a considerable discount to that paid when purchased retail. They have an extensive and interesting looking set of menu options for evening meals in single and two serve packs. These can also be purchased as a component of day ration packs. With a museli breakfast, what looks to be wholesome lunch and a number of snacks plus the dinner meals these seem to be ideal to keep in the cupboard for that 0200 hours call to be at the local Police Station in 45 minutes. Price lists, minimum quantities and contact details have been sent to each **Regional Secretary** for dissemination to the **District** and **Local** SAR Organisations.

John P Tristram, NFO

Thames SAR and a game of hide a seek

A middle aged female left her Auckland home in her car leaving behind a note suggesting deep despondency and possible suicide. Some days later the vehicle was located in a rest area just east of the summit of the Kopu Hikuai Road. The area is a very old volcanic landscape with 60 vertical waterfall from which other desperate people have been known to jump.

I was contacted by Sergeant Jim Corbett of the Thames Police SAR and our assessment was to quickly get people to the vehicle site and start a search. The humour in the Thames Fast Initial Response Search Team speeding to the rescue in a rather tired prison van that seemed in danger of dying at any stage was not lost on us. However in transit as Adviser I was able to go through a briefing with Rob Duncan as Field Controller and make a general assessment of the situation, so by the time we reached the intended

to 80 year old regenerating native bush on extremely steep slopes rising to a bit under 600 metres. From the rest area there is an unmarked track that leads to a trig and lookout point. There is also an old track that leads down to the remains of an old Kauri dam, below which is a 100 metre search base at the rest area we had a number of tasks sorted out.

It was decided that a TCA team would view the vehicle then the track. Myself and one other would cut cross country directly to the top of the falls as we felt this had the highest POA for finding some clues. We did some TCA to find marks on both sides of the creek which were radioed back. At the falls I abseiled out and over the edge to find - nothing. Our task was to then clear the base of all the cliffs leading up the valley.

The TCA team after sign-cutting around the vehicle continued along the track and located

a recently made bivvy. Jim Corbett cautiously removed a set of car keys which were later confirmed as the subject/victims. Care was taken in retrieving the keys to not contaminate the site, as we wanted to keep the option open of using a search dog.

Our task complete we climbed up onto the ridge and came out and joined the others at the bivvy which was under a huge flat Kauri log. I asked Jim if I could take a look inside. He agreed and so from the rear I crawled in a little way to find an extended umbrella, water bottle, rope and a cheap carry bag. The rope was removed. When I took a look at the front entrance what I saw was a rain coat hanging up at the entrance, a mat to sit on just inside the door, a big pile of flax on one side of the mat and a half woven object on the other. The last item changed everything in my thinking as to what the missing person may have done. Would she have set herself up in reasonable comfort, be weaving an article, put it down and say now its time to do the deed. So my gut instincts were the person was still alive, we had spooked her and now she was on the run or hiding from us.

It was decided the TCA team was to continue with their task up the ridge then, if nothing found, to move 10 metres south and sweep back. A hidden observation post was set up on the bivvy along with another observation post on a high point and the rest of us moved out to the rest area to brief the newly arriving searchers. They were then deployed in strategic places to contain and close in on the subject.

On the TCA teams back sweep, possibly with the aid of a different light angle they detected a body covered with fern in a small hole. Only on speaking directly to the person did they get a response whereupon she said, "I knew you would get me". The whole search turned out for the better and it was a big buzz for all to go from a possible suicide (two days after been reported missing) to finding the missing person alive and well. All credit should go to the TCA team Jason Donald one of our finest tracking people and Nadina King. As well having a female on site was valuable and Brother Geoff from the local Catholic Order was another huge resource under the circumstances. There was a lot of other background work done and not mentioned here.

Lost Person Behaviour for suicides or attempted suicides were applied here with the missing subject being found within a 500 metre radius of where the car had been parked. She stated she was going to do the deed but was disturbed by a busload of Japanese tourists then got second thoughts and changed her mind.

Police were directed to keep away from the vehicle until the area had been checked by trained TCA searchers. Two notes were found, one with the family and one in the

car apologising to us the searchers for having to clean up the mess. It seems that some of the victims do think about us after all.

Brian Connors
Adviser Waikato District

ICOM Aerial Care

The ICOM aerial connector centre is held in place by a "plastic (nylon?)" pin through the centre connector. If it is over-tightened to the radio the pin will shear and it is then difficult to get the connection to a satisfactory tightness thereafter! Be warned against over tightening the aerial.

Ross Thompson
Communications Subcommittee

NZLSAR AGM

NZLSAR held its seventh Annual General Meeting on Saturday 18 August at the Kilbirnie Police Station Conference Room. The Annual Report, Financial Report and Performance Audit were submitted by the Committee to NZLSAR for comment and approval. Other business included an amendment to the Constitution allowing for a Deputy Chairman's position to be created.

Two salient points taken from the Annual Report, which has been distributed to all Regional Chairmen and Secretaries for circulation and Subcommittee members (a copy is available upon request) were:-

- The Police continue not only to fund the activities of NZLSAR but take an active and appreciated role in its affairs. Amongst the comments in the Police Report, mention was made of the MoU signed last year and the week long joint NZLSAR/Police Controllers course which was described as "*a significant milestone in the Police/NZLSAR relationship*".
- The Regional Committees continue to provide a point of liaison for some widespread areas and are a valuable fora for informing the Regional Representatives of problems that require being taken to the National Committee.

Notable achievements by the Subcommittees over the last year included:-

- The Communications Subcommittee Business Case recommendations to Police for the purchase of VHF equipment has now been completed. This, over a three year purchase programme, has

provided VHF hand held radios, repeaters and base sets, at or within a few hours request, at key locations throughout the country.

- The Specialist Subcommittee seems to have hardly lost a beat with the replacement of its Chairman Peter Cameron by Tric Moller. Two well attended search dog and handler courses were financially supported, one in each Island. As well two dog handlers were assisted to attend an avalanche search dog course. Steady progress is being made in the drafting of a Standard for search dogs and handlers. The Medical Group continues with its deliberations on things medical, fully aware that the second big word in SAR is rescue. The Specialist Subcommittee continues to work with a number of leading exponents of technical rescue on the drafting of Standards in the high angle and alpine sphere and good progress is being made on this document.
- The Training Subcommittee's achievements are also notable. On its recommendation the Committee requested funding to enable EML to hold 30 weekend courses and three five day MSO courses. An Advisers Standard Workshop with 20 plus attendees was also held.
- The Underground Subcommittee with funding through NZLSAR held its biannual deep cave SAREX with around 80 people in attendance. Of special note were the increased skills of the management team following the

attendance at a MSO course by some of them.

The Committee which also met that day confirmed the appointment of Tric Moller as Chairman of the Specialist Subcommittee during the absence of Peter Cameron. Tric, a resident of Dunedin and a Southern District Adviser has a background of tramping and climbing in both the North and South Islands as well as overseas. A heavy involvement with Red Cross and in particular their Emergency Response Unit, a close liaison over several years with a number of search dog people plus readily apparent management skills makes her a very good choice to pull together the disparate strings of this extensive portfolio.

The Committee nominated Roscoe Tait, an Auckland District Adviser, to the newly created position of Deputy Chairman. Roscoe has a wide knowledge of NZLSAR being Chairman of the Training Subcommittee with an involvement in a number of training weekends each year. He is a member of the Review Group that takes a close look the problems that have beset the organisation and is a member of the group that compiles the Annual Business Case. He was until recently the Region One Representative but has relinquished that role while still holding the position of Regional Secretary.

John P Tristram
National Field Officer

Two one week long Managing Land Search Operations (MLSO, was MSO) will be held in March 2002 at the Police College, Porirua. A letter will be sent to each Region Secretary calling for nominations.

John P Tristram
National Field Officer

Editors Comments. A big thank you to **Gerard, Matthew, Steve, Brian and Ross** for your articles. To those who proof read and check the spelling and grammar, thank you also. Copy for the **December News** is most welcome and the close-off date is **Monday 26 November**. Articles on gear, SAR training or operations are most welcome. Please either mail as neatly hand-written, printed hard copy or on a disc to **NZLSAR, PO Box 12081, Thorndon, Wellington**. Alternatively email it to **tristram.nzlsar@xtra.co.nz** Even if you have some thoughts on an article but are diffident in putting pen to paper, feel free to give me a ring on **04-470-7247** and we can talk it through. Regards **John P Tristram**, National Field Officer