

Whanganui River SAREX 19 November 2016 - Evaluation

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Executive Summary

Operation Mangapurua was a scenario based SAREX in the Whanganui National Park on 19 November 2016. The exercise simulated a Cat1 SAROP resulting from a hand-off from the RCCNZ following a PLB activation by a family on the Mangapurua track in the region of the Bridge to Nowhere. The weather was represented as being unsuitable for helicopter operations necessitating the use of DoC and commercial jet boat operators to transport personnel and equipment.

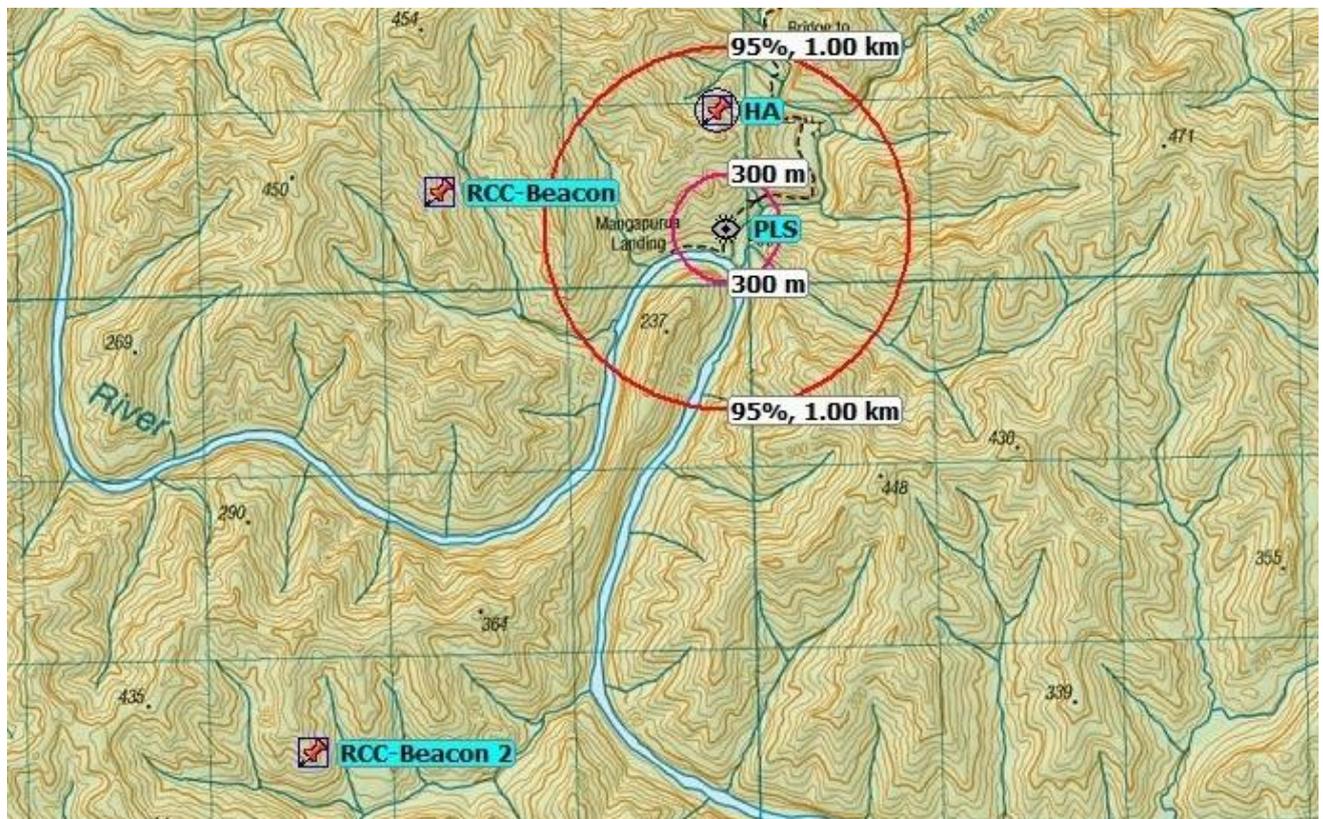
An ICP was established in the Whanganui River Adventures offices at Pipiriki at 0730 hours. A NZ Fire Service command vehicle provided Sat phone and VHF communication, internet access, local area network and a VOIP phone facility.

Rescue teams from RARO and Whanganui Fire Service supported by a St John paramedic, were deployed to the Mangapurua Track, in the vicinity of the bridge to nowhere, by DoC and Whanganui River Adventures jet boats. These teams set up vertical rope rescue equipment and recovered two “injured persons” from below the track. One of these persons was carried to the Mangapurua Landing on a wheeled stretcher, and the other walked.

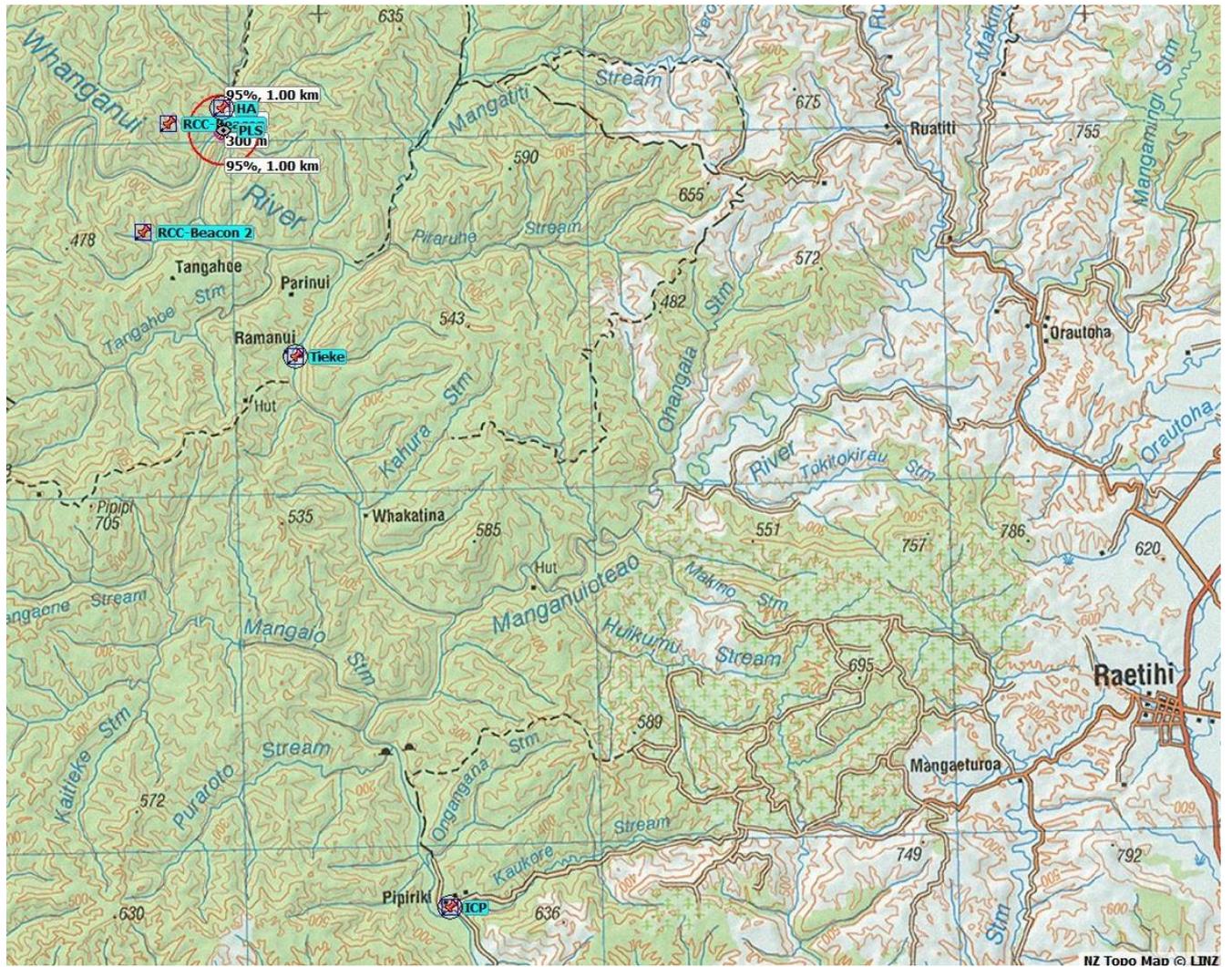
The patients were transported downriver to the Tieke Kainga campsite where they were transferred to a helicopter which flew them to Pipiriki.

The rescue teams were recovered to Pipiriki by jet boat and a hot debrief conducted at the ICP. The SAREX concluded at 1600 hours.

Map showing locations of scenario events



SAREX Location Map



Key findings and Commentaries

Incident Control

1. The exercise was based upon a very plausible scenario, given the increasing numbers of persons walking and biking the tracks in the Whanganui National Park.
2. The steep terrain, uncertain and changeable weather, access difficulties and communication challenges make this region worthy of the development of specific response plans.
3. There was some initial uncertainty regarding the scenario and roles persons were required to undertake in the IMT. A SAREX plan outlining roles and responsibilities would have helped resolve these issues. This plan could also have contained an exercise safety plan. This would have avoided the necessity to have an observer create and present one prior to exercise commencement.
4. The Fire Service Command vehicle provided excellent communication facilities. Unfortunately, it was not possible to call out on the VOIP phone as the account had insufficient funds. Inwards calls could be accepted.
5. Satellite phones worked satisfactorily in the area as did DoC VHF channels 2 and 7.
6. With the exception of the person managing the SARTrack network, there was no LandSAR involvement in the IMT, all roles being filled by Police personnel.
7. The PLB activated by the subject party did not resolve the position to closer than 1.5km and, for the second location given, on the opposite side of the Whanganui River. The finite location of the subject party was given by an inject to the IMT of a fictitious cell phone call from a trumper who had observed the incident. This inject also gave details of the incident and directed the response to that of rescue and recovery.
8. The laptop computer used as the server for SARTRack required a Windows update which took about 45 minutes to complete. This delay rendered the system of little use to the IMT and all documentation was produced manually.
9. An overhead projector was used to display maps from SARTRack and other information for the IMT on a portable screen.
10. Communication with the subject party immediately prior to the start of the SAREX was achieved via HF through the Police phone link. Although HF was listed in the communication plan, there was no ability to receive a call initiated by the subject party or rescue teams.
11. Laminated wall charts were used to good effect to display the Incident Action Plan, Timeline and IMT structure. Rescue parties' compositions were maintained and displayed with T cards.
12. The basis of response plans for both on and remote from the river scenarios was discussed during the exercise.
13. The facility made available by Whanganui River Adventures was an excellent location for the SAREX and would be a good choice for a SAROP in the area.

On Scene

Following is the after exercise report provided by Snr Const Conrad Smith who provided the scenario and observed the rescue and recovery of the subjects:

Scenario / Scene:

The scene was the cycle trail at the bottom end (south of) the Bridge to Nowhere approximately 10 minutes walk from Mangapurua Landing on the Whanganui River.

Two cyclists had gone off the track and fallen approximately 30 metres below the track which included about an eight metre near vertical bank surrounded in heavy native bush.

Both patients suffered an array of skeletal injuries rendering them immobile but responsive.

Initial Action:

A hasty team of three RARO members made their way up the track ahead of the rest packing the gear. This was a good decision as they located the patients quickly and were able to get an appreciation of the scene and patients injuries, provide verbal reassurance to the patients and brief the incoming RARO and Fire teams when they arrived.

They also had the foresight to bring hand held DF gear. Although not needed in this scenario this could have proved valuable especially when travelling to a remote location and requesting additional gear once arrived would be time consuming had they been unable to locate the beacon.

Rescue – RARO:

Due to the transient nature of RARO members in the area and staff turnover within the four agencies bound by the MOA it is common to have members come together who do not always know each other that well as well as others who know each other very well. Both was the case for this exercise and knowledge and ideas were readily shared amongst the team to build the most suitable system to recover the patient.

Appointed a member to interview the witness and obtain a lot of information and this was shared with the Fire team about their patient in particular some very relevant medical history around allergies to anaesthetics.

The team worked well together appointing a team leader, safety officer and allocating various tasks. They worked well alongside the Fire team prioritising tasks and assisting them with manpower for their raise.

The RARO team travelled with minimal but adequate gear to get the job done as per their day to day jobs in an alpine environment that required lighter loads.

Appeared very much at home in this remote bush location. Identified and used good solid anchor systems. A 2:1 raise was used. This decision was made due to simplicity and the fact that enough manpower was onsite to safely raise the patient using this system.

Personal clothing thermals, fleece etc very good for the environment should unforeseen circumstances require them to spend an extended period of time in this environment in poor weather.

The wheel for transporting the stretcher worked very well in this environment and was an asset to use. A face shield was used on the stretcher to protect the patient.

Good skill base, good team work, great attitude and communication with the patient and between themselves.

The team appeared to have decided that raising the stretcher vertically would be the best idea in this situation and prepped the stretcher for this prior to fully assessing the patients injuries. Whilst a vertical raise was the easiest means to get the stretcher up through the bush the patient had to bear weight on her injured legs which would have been painful in real life. A horizontal stretcher whilst harder to raise would have been more comfortable for the patient or maybe a more robust harness inside the stretcher to keep her weight off the injured legs.

Rescue – Fire:

The team appeared to be very well structured and had very obvious good relationships within the team. They appear to have worked together and know each other well.

The team leader was knowledgeable about rope systems and had a good oversight of the team working and provided instruction where required and roles were clearly allocated.

A good safety overview of the site with people double checking work, helmets, harnesses..... Very efficient and professional.

Great communications within the group and with RARO members, the system was erected quickly and a medic was able to get down to the patients in very good time and provide initial treatment to both.

A 6:1 system was used for the raise which easily/safely lifted the patient in the stretcher with little manpower.

Good communications with Pipiriki Base.

The obvious difference between the teams was the gear. The Fire team had a lot more gear carried in and some nice kit to use although had the scenario been some distance up the track I anticipate that would have proved more time consuming / tiring to carry in.

The stretcher did not have a face shield for the raise as has been recommended by the Back Country Technical Rescue Advisory Group nationally, but a Fire helmet was placed on the patients head.

Anchors were good for the main system, however edge kits were secured to the base of a punga on two occasions which I would deem to be marginal.

The team all had (cotton?) overalls on and wet weather gear was taken however the question maybe asked if they were to spend an extended period of time in this location in poor weather due to unforeseen circumstances is this the best clothing to be wearing in this environment?

DOC:

Very good, very professional and outstanding local knowledge and direction to passengers on board their vessels.

Remember extra lifejackets for patients getting picked up.

Conclusion:

A very worthwhile exercise testing our response to a remote location with very real possibility for future jobs of a similar nature with several different agencies involved as would be required in a real SAROP.

Great to get some eyes on the terrain in terms of what gear would be required to take in to a job here, it is imperative that we get it right the first time due to the time required to get there. An example of this would be long ropes and portable anchors for the large cliff areas that have no trees to anchor from.

Fingers crossed we can get a helicopter in there when it happens for real!

Key Recommendations

1. The SAR response plan for the area to be finalised and made readily available to SAR Coordinators in the area.
2. Given the uncertainty of obtaining a definitive position from a PLB activation, consideration be given to having access to a hand held DF with persons competent in its use identified.
3. If HF communications are considered to be vital to an operation in this area, HF communication capability should be identified to be made available for use in an IMT.
4. Experienced LandSAR members in the area should be trained, assessed and employed in the IMT.
5. If SARTRack is to be used in the IMT, a cell of MSU persons competent in its use should be established. Procedures regarding the manner in which SARTRack is used to enhance the functioning of the IMT should be developed.
6. Computers held in readiness for use in an IMT need to be regularly turned on to enable soft and firm ware to be kept updated.
7. In preparation for a SAREX produce and distribute to participants a SAREX Plan covering:
 - Roles
 - Responsibilities
 - Resources
 - Safety
 - Locations
 - Communications
 - Program

Background

A SAREX planning meeting held at National Park on Wednesday the 21st September 2016 to discuss possible and or probable risks which could lead to a Category 1 search and rescue operation in the Whanganui River National Park. Four main risks were identified.

1. A jet boat mishap involving multiple casualties (a Mass Rescue Operation)
2. Kayakers or canoeists coming to grief.
3. A mountain biker falling over a bluff on the Mangapurua Track
4. Campsite bushfire

Objectives for the Exercise

1. To provide an opportunity for all the agencies involved to work together (Police SAR/LandSAR/ACR/NZ Fire/DoC/St John Ambulance/RCCNZ/Ruapehu DC and Various River users) – Networking
2. To test the SAR response to such an incident. For the Incident Management Team, this will largely be in the form of a mentored exercise.
3. Enable an opportunity for Police SAR and SAR partners to familiarise themselves with the area and local resources.
4. To test and map the Comms options in this area.
5. To Test the use of SARTrack.
6. To provide an opportunity for commercial adventure tourism operators to learn how SAR operations are conducted.
7. To gather information for the preparation of a Whanganui River SAR response plan.

Observation

Observation of the SAREX was conducted by Snr Const Barry Shepherd and Dave Comber at the ICP in Pipiriki and Const Conrad Smith at the incident location. The scenario preparation and pre SAREX organisation was carried out by Sgt Bill Nicholson.

Scenario

At 0730 hours RCCNZ receive an alert from a PLB located in the Whanganui River National Park. Phone investigation identifies the beacon as being held by a family of three cycling the Mangapurua Track. As the weather was unsuitable for helicopter operations the location was passed to Police and the SAROP reclassified as Category 1. At 0750 hours a cell phone call is received from a person on the Mangapurua Track in the vicinity of the Bridge to Nowhere advising that two people had gone over the edge of the track and were lying injured down a steep bank. A subsequent pass of a satellite receives a new position of the PLB on the opposite side of the Whanganui River.

Summary

This was a SAREX representing a scenario which has a high probability of occurring in an area of special challenges which would need to be addressed. The scenario presented to the IMT removed any search element and made it a rescue and recovery event only. There

was a lot of value gained in having high angle rescue teams from two different organisations working alongside of each other.

The activation of a PLB highlighted the probability that a definitive location may not be obtainable for some time by the RCCNZ and either airborne or ground operated DF may be required to locate the subject of an operation.

If SARTRack is to be introduced into the area as a tool in the IMT, there will need to be a realisation of the need for a cadre of competent MSU persons to be trained in its use and processes developed to ensure that its use enhances the functioning of the IMT.