

Exercise Evaluation Report

Waikato SAREX 2021

Location: Pauanui, Coromandel. Waikato Police District

Date: 12th -13th March 2021

Report version: V1

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Final

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Executive Summary

The purpose of this SAREX was to give participants the opportunity to refresh and practice search and rescue skills. Four objectives were established to achieve this and each objective had KPI's that either related to the LandSAR competencies or course standards.

Features of the Waikato Police SAR District are the number of distinct SAR groups involved, remote but populated areas and the wide range of geography. This presents unique challenges and a variety of SAROPS.

There were over 70 participants ranging from those with little experience to those whose involvement spanned many years. The evaluator established that all participants learnt new knowledge and ways of doing as well as being refreshed on previous learning. Given the number attendees who joined LandSAR recently the training output is notable for immediately increasing the District's urban search capacity.

The SAREX design allowed it to be satisfied by having local input (tutors and other resources). It provides an exemplar for other groups who wish to conduct a SAREX in this manner.

The aim of the SAREX and its objectives were met however 7 recommendations are made that could enhance outcomes.

Further comment is made that is outside the agreed objectives but support the SAREX aim.

1. Recommendations

Consider:

- 1) Trainers are given support by way of physical resources and concepts to use in maximising engagement, participant learning and outcomes
- 2) Maintaining and furthering the Police SAR Squad involvement in training volunteers
- 3) Lesson plans involving rope work should only focus on 'bombproof' anchors
- 4) Following up with urban search training that includes interviewing techniques, using recording forms and conducting debriefs
- 5) A greater use of whiteboards for briefing
- 6) Using this and similar SAREX's to record competencies
- 7) Promoting follow up training around the learning presented on this SAREX.

2. Introduction

The Waikato Police District annual land based SAREX for 2021 was held at Pauanui on the Coromandel Peninsula. A conference centre at the Pauanui Glades motor camp that included a bunk house was used as the main venue, control point and assembly area. The conference centre was used for formal tutoring sessions with practical applications taking place with in the Pauanui Township and at the southern beach area.

This SAREX was a drill /functional styled exercise with a focus on people within the responding groups (including the Waikato Police SAR squad) being able to socialise and train together.

Personnel attending were a mix of new and more experienced people with training centred on 3 of the 4 outcome objectives.

To learn and refresh navigational knowledge, using GPS and map and compass

- To learn and refresh stretcher carrying skills including ropes and knots.
- To learn and refresh skills and knowledge on shoreline searching

The fourth objective was functional and used knowledge and skills to conduct an urban search for a subject with the early onset of Alzheimer's. A small IMT was established to facilitate this.

The overall aim of the exercise was to provide the opportunity for participants to refresh and practice search and rescue skills.

3. Background

3.1 Background to the Exercise

The Waikato Police SAR District is distinguished by the number of Land SAR groups that operate semi independently of each other by way of organising committees and identity. The District has 2 coast lines open to the sea, numerous harbours including the Hauraki Gulf, rivers and significant urban, rural and wilderness areas. It is one of the busier SAR Districts due not only to population size but also to the types of recreation available.

Partly as a function of travel distances and isolated communities a number of LandSAR groups have formed, namely Waitomo, Hamilton, Thames, Kuaotunu, Pauanui /Tairoa, Waihi and Te Aroha/Paeroa. Many of the groups undertake monthly training.

In order to monitor readiness, provide a uniform observable training output along with an ability for the different groups to work together, a well-attended annual SAREX assumes some importance. The exercise focus was to have search field responders that could perform in a useful manner during a SAROP. There is also currently a generational change with groups reporting between 25-40% new members.

In the most recent period the style of land SAREX's have rotated annually between 2 or 3 modular styled exercises interspersed with a full functional exercise.

The content for the SAREX was decided by a committee that looked at what had been trained previously and what has been observed as operational shortcomings and needs.

The Police SAR Squad contributed significantly to the training.

A total of 72 people attended which represented all the groups except Waitomo.

3.2 Dates, location, organising agency(s), key people

The exercise was conducted between Friday 11th to Sunday 13th November, 2021. It was located within the Pauanui town ship and its environs. The Pauanui Glade Motor camp was used as a control point and staging area. The evening of the 12th was a meet and greet with the actual exercise occurring on Saturday the 12th and Sunday the 13th.

It was organised by personnel within the Waikato Police and the greater Waikato LandSAR groups.

Key people were-

SAREX Planning team: Sargent Vince RANGER (Waikato Police SAR Coordinator), Mike MORRISON (Waikato Land SAR), Kip MANDENO (Waikato Land SAR)

Exercise Coordinators: Sargent Vince RANGER and Mike MORRISON

Instructional team: Members of the Waikato Police SAR squad and Waikato Land SAR

Logistics Manager: Sargent Vince RANGER

3.3 Participating organisations

NZ Police, LandSAR and FENZ.

3.4 Exercise aim

To give participants the opportunity to refresh and practice Search and Rescue skills.

3.5 Exercise objectives

Four broad 'outcome' objectives were established:

- To learn and refresh navigational knowledge, using GPS and map and compass
- To learn and refresh stretcher carrying skills including ropes and knots.
- To learn and refresh skills and knowledge on shoreline searching
- To use knowledge and skills in urban search.

3.6 Exercise Scenario

There were 5 workshops, tutorial styled. The first 2

- GPS
- Map and compass

were held at the venue.

- Stretcher, ropes and knots
- Comms and radio
- Searching coastal areas

were held at south Pauanui beach area. This area offered appropriate terrain with a rocky foreshore subject to the tides, steep embankments and an open grassy area.

The urban search had a Saturday evening and a Sunday morning component. The scenario was for a missing fit, healthy 38yr old male with early onset of Alzhiemers. He was a visitor to Pauanui staying at the motor camp with a relative. He had established a morning walking routine in Pauanui since arriving with a rest period in the afternoon. His relative noticed him missing from the accomodation at 1700hrs and a search response was initiated soon after.

4. Evaluation Methodology

4.1 The agreed outcomes of the evaluation activity

A report with recommendations based on the objectives and their KPIs. See appendix. Request was also for comment on value and alternative training ideas.

4.2 Evaluation scope

To measure how well the exercise meet the stated purpose through its supporting objectives and KPI's.

To give an informed opinion on value given and present alternative ideas on ways to achieve similar outcomes.

4.3 Aspects of the exercise observed, what was not observed

All training modules and the urban search scenario were observed either in totality or in part.

Also observed was the social interaction on the evening prior to the SAREX commencing.

Directly linked post SAREX activity such as competency assessment is outside the scope of this report.

4.4 The process followed in preparing and submitting the report

The planning document was supplied prior to the SAREX from which KPIs were developed. The KPIs were submitted to the planners and agreed they would be used to help give measurement against the objectives and the SAREX purpose. Evidence was collected against these KPI's by interviews, observation, voice recordings, notes taken at the time and photographs.

A review of previous SAREX reports were also undertaken.

A draft report was submitted for comment to the Police SAR Coordinator. The final version contains what the evaluator and the acting Police SAR Coordinator consider appropriate.

4.5 Other information

Nil

5. Findings

In a review of previous SAREX reports the evaluator found many noted the good working relationship between the LandSAR volunteers and the Waikato Police SAR squad. This positive relationship continues with all but 2 squad members attending. Many of the workshops were tutored by Police who were able to impart invaluable practical experience. This was particularly apparent in the shoreline search.

Outcomes and comment on meeting the objectives

a) Participants learnt and refreshed navigational knowledge, using GPS and map and compass.

This objective was split in to 2 training workshops. Map, compass and GPS. Both workshops included formal instruction followed by a practical session. The KPI's involved were on providing opportunity for learning and refreshing. The workshops and practical's achieved this. However the evaluator felt better learning would have come from:

- Arranging the tables for participants in a U configuration so the instructor could monitor progress and have better interaction.
- Using a whiteboard with the lesson plan available for participants to see. The GPS lessons could have been enhanced with a whiteboard or PowerPoint slides. There are some very good resources on the LandSAR website for these subject areas.
- Separating the groups so the voices of each didn't conflict and participants could hear tutors clearly. There was opportunity for this within the complex.

These suggestions do not reflect on the subject knowledge of the tutors or the design of the lessons. Those aspects were excellent. Much of what was missed by participants during the classroom sessions was captured during the practicals.

Lesson plans were cognisant of the competencies and covered the majority of the elements.

Suggest trainers are given support by way of physical resources and concepts to use in maximising engagement, participant learning and outcomes.

b) Participants learnt and refreshed skills and knowledge on shoreline searching

These were police lead who provided a briefing on safety, equipment, enhancing detection techniques, subject factors and environmental conditions. The latter being further explored as to the effect of tide and wind on where items of interest would be found. The imparting of practical experience was invaluable which often went beyond what is available on formal courses. Opportunity to learn and refresh was provided and learning outcomes complete.

Suggest maintaining and furthering the Police SAR Squad involvement in training volunteers

c) Participants learnt and refreshed stretcher carrying skills including ropes and knots.

This workshop was FENZ lead with oversight by an SME. The briefing included 1 piece and split stretchers. The lesson had participants packaging a patient, carrying and passing. The rope and knots component was carried out on a steep wooded slope and included the selection of anchor points, figure eight and a friction knot. These were then used in a patient loaded stretcher raise. Some concern was expressed by SME's on site about the anchor points being suggested. It appears unsafe anchor points were to be demonstrated prior to those that are 'bombproof'. The evaluator strongly suggests this part of the lesson plan is dropped and only 'bombproof' anchors shown and demonstrated. This will avoid confusion amongst onsite SME's and participants as well as enhancing safety.

Those LandSAR members who were already familiar with the tools and skills appreciated refreshing on them as well as learning apt communication techniques when working as a team.

Suggest lesson plans involving rope work only focus on 'bombproof' anchors

d) Participants used knowledge and skills in during the urban search scenario.

Participants used prior knowledge during the search scenario. The briefing from the IMT orientated the teams to the subject type and the search area. While the objective was meet when measured against the KPI's the training modules prior to the scenario could have covered topics (if there were not time constraints) such as: find locations, search strategies to maximise detection and minimise risk, managing the subject, legal constraints re searching property, interviewing skills including interacting with those who may contain information (property owners, public, workers etc), and the recording and reporting of search data for debriefing which would have included identifying areas to be researched.

The above does not detract from the value given in experiential learning opportunities as many of the team leaders and members mentioned going on to properties and knocking on doors was one of the hardest search tasks they have done.

Wander Search direction finding equipment was used during the scenario. 2 teams were deployed with this equipment. In the team observed there was a mix of experienced and inexperienced members. There was a concentration on providing learning opportunity for those less familiar with techniques. An innovative technique was shown in producing a likely location by triangulation using a single unit. This involved establishing the initial signal direction (compass bearing) then relocating the DF unit to intersect that at right angles. This was done twice in order to produce a triangular area drawn on the map for the transmitter location.

There was a missed opportunity to utilise SARTrack during the scenario. There was an SME attending that was capable of setting up, demonstrating and training others. This would have required further resourcing and planning.

Suggest following up with urban search training that includes interviewing techniques, using recording forms and conducting debriefs.

Training that was outside the objectives but contributed to the exercise aim.

A radio training module was presented by way of presentation and practice. This included familiarisation with the commonly used radios in SAR (I Com and the Tait models x 2) and the setting up and taking down of a repeater. In transmitting messages the emphasis was on avoiding inaccuracies by maximising signal clarity and recording the message.

The tutor used the LandSAR Radio module as a basis for the lesson. He noted there is a need for this to be updated by a 1 page insert to cover other Tait models now in use.

One relevant point made to all was do not assume familiarity with radios and other technology just because a member has been involved for a period of time. IMT members may be unfamiliar when involved in a field role.

Further comment related to the exercise aim

Having whiteboards readily available and being used to write up the main points and attach documents would help transfer information in briefings and the tutorial classes. This was a large group but of a size that could be expected on a search. Some at a distance from the speaker would have found it hard to hear and take notes. Briefings and the accurate transfer of information is critical. The SAREX would have been an opportunity to refresh these skills on using visual aids.

The lesson plans in the tutorials along with the experiential learning would have satisfied many of the team member competencies. If evidence had been collected at the time signing off by an assessor or SME would have been possible. This would have given a verified training result.

While not applicable to this SAREX in that the objectives were achieved informing the instructors of the KPI's for evaluation would help how they delivered.

Consider a greater use of whiteboards for briefing and using this and similar SAREX's to record competencies.

Comment on value and alternative training ideas

Value

A quantitative and qualitative approach has been taken to make comment. However with a proviso comparisons are difficult particularly when training dollars / participant are influenced by number attending, what costs are included/excluded and there being no written feedback forms distributed. However with the cost difference it is reasonable to assume category validity. The following information has been taken from annual reports and feedback from various SAR sector sources.

Quantitative		
Waikato SAREX 2 day 72 attendees	A professionally administrated and executed SAREX 2 day 54 attendees	LandSAR National training 2 day (excludes administrative support and program design) 11.5 average attendees
\$83/ person	\$342/person	\$180 - 200/person est.
Qualitative		
Experienced members reported getting value and new learning. Those new to LandSAR reported positively	Positive outcomes. Some program complexity with individuals reporting frustration when planning glitches occurred.	72% strongly positive/28% neutral to positive

Alternative training ideas should rest on the following principles used in adult education.

- Allow a degree of self-direction- adults need to know the value and be enabled to explore the relevance of their learning
- Enable learning through direct experience
- The learning has to be meaningful for the role- training needs to be contextualised and draw on past experience
- Cater for all of the senses ie audio, visual, reading/writing, kinaesthetic, dependent and independent learning preferences
- Practice- apply the knowledge in a controlled environment
- Cater for their motivation to learn
- Enable a sense of responsibility, control and decision-making over their learning.

There are a wide range of learning options that acknowledge these principles already existing for the SAR sector such as:

- Training modules for group and individuals on the LandSAR website
- LandSAR formal courses
- LandSAR Refresher program
- NZSAR management courses
- LandSAR conferences and workshops
- SAREX's – Rogaine, learning stations, scenario based etc. Either professionally or district run.

Past Waikato SAREX's and trainings have had variable attendances. Some analysis on why the high attendance for this SAREX would be beneficial and if possible replicated appropriately. The evaluator suggests for those participants who acquired mostly new knowledge a need has been created for further learning on those topics and cement that in place by practice eg navigation, interviewing. Subject areas could be based on a survey of the participants.

Consider promoting follow up training around the learning presented on this SAREX.

6. Conclusions

This was well run, successful SAREX within the capacity of any group using local resources. The plan had few 'moving parts' and organisational structure. It was appropriate for new and the more experienced members. Participants when questioned reported positively and this was reinforced during the SAREX debrief.

Training was based on Waikato Police and LandSAR input. The emphasis was on socialising and giving or refreshing skills that could be used at any time to give capacity to a search. Both aspects are important because of the number of groups in the Waikato.

Using members of the Police SAR squad as trainers helps impart valuable experience to the volunteers.

Any recommendations are suggested to enhance what was valuable 'hands on' training.

7. Appendix

7.1 Waikato District SAREX Plan

WAIKATO DISTRICT 2021 SAREX

March 13th and 14th 2021.
Pauanui Glades Motor Camp.
PAUANUI

The Waikato District annual SAREX is being held on the weekend of the 12th and 13th March 2021. The venue is the Pauanui Glades Motor Camp, Vista Paku Road, Pauanui.

The goal of this SAREX is to give participants the opportunity to refresh and practice Search and rescue Skills.

To achieve this goal the objectives of the SAREX are.

- (1) To learn and refresh navigation knowledge, using GPS and Map and Compass.
- (2) To learn and refresh stretcher carrying skill including ropes and knots.
- (3) To learn and refresh skills and knowledge on shoreline searching.
- (4) To use knowledge and skills in urban searching.

The exercise will run over the two full days.

The exercise is based on workshop style learnings during the daytime, Saturday 13th. Participants will be divided into 4 groups, A, B, C, D.

The workshop includes:

GPS	at venue	1 hour
Map and Compass	at venue	1 hour
Navigation	along harbourside	2 hours
Ropes and knots	south Pauanui Beach	2 hours
Comms and radios	South Pauanui Beach	1 hour
Searching coastal areas	south Pauanui Beach	1 hours

See attached Agenda.

Schedule

Saturday 13th
0800
briefing

0830 to 12.30
Groups A and B will rotate between communication and coastal searching, for 1-hour sessions, and then combine to complete the ropes/stretcher for 2 hours

Group C and D will rotate between GPS and map and compass, for 1 hour sessions, and then combine to complete the Navigation course

12.30 to 13.00
Lunch at Venue

1300 to 1700
Group C and D will combine to complete the ropes/stretcher
Group C and D will then rotate between communication and coastal searching, for 1 hour sessions.

Groups A and B rotate between GPS and map and Compass for 1-hour sessions, and then combine to complete the navigation exercise.

17.30 to 18.30
Tea

18.30 to 20.00
Scenario based exercise

20.00
Social gatherings

Sunday 14th
0700
Breakfast

0800
Scenario based exercise.

11.00
Exercise finish
De-brief
Lunch
Clean-up Pack up.
Depart

Schedule Day 1						
Time	Comms	Coastal search	Ropes stretchers	GPS	Map Compass	Navigation
0830-0930	Group A	Group B		Group C	Group D	
0930-1030	Group B	Group A		Group D	Group C	
1030-1230			Groups A&B			Groups C&D
1230-1330	Lunch					
1330-1430			Groups C&D	Group A	Group B	
1430-1530				Group B	Group A	
1530-1630	Group C	Group D				Groups A&B
1630-1730	Group D	Group C				

Accommodation

The accommodation is provided at the conference centre of this camping ground. The conference centre is booked for our exclusive use.

The Friday 12th, the accommodation is open from 1600 hrs with a meet and greet option available during that evening.

The sleeping accommodation is way of multi bunk style rooms with mattresses. Participants will require their own bedding and linen, including towels.

Meals are provided for from the morning of Saturday the 13th with breakfast and until and including lunch on Sunday.

Car parking is available within the campground. Once gear is dropped off, cars can be angle parked along the entrance driveway to the camp.

Note however the full campground is open to the public

The exercise itself begins as per the schedule.

Radio channel will be ESB57, using the repeater.

7.2

SAREX Objectives with KPI's

Obj. 1	To learn and refresh navigational knowledge, using GPS and map and compass	Notes Appropriate competencies.
1.1	Opportunity is given for SAR members to refresh the commonly used SAR functions on hand held GPS's	Team member competencies
1.2	Opportunity is given for SAR members to learn the commonly used SAR functions on hand held GPS's	Team member competencies
1.3	Participant's knowledge and ability is increased for commonly used SAR functions on hand held GPS's	Team member competencies
1.4	Opportunity is given for SAR members to refresh knowledge in the use of map and compass for navigation	Team member competencies
1.5	Opportunity is given for SAR members to learn how to navigate using map and compass	Team member competencies
1.6	Participant's knowledge and ability is increased in the use of map and compass for navigation	Team member competencies

Obj. 2	To learn and refresh stretcher carrying skills including ropes and knots.	Notes Appropriate competencies
2.1	Opportunity is given for SAR members to refresh knowledge in stretcher carrying skills and the use of appropriate anchors, the use of ropes and knots.	Team member competencies
2.2	Opportunity is given for SAR members to learn stretcher carrying skills and the use of appropriate anchors, ropes and the tying of appropriate knots.	Team member competencies
2.3	If a casualty is used on the stretcher they are handled in a safe and stable manner	Team member competencies
2.4	Participant's knowledge and ability is improved for appropriate stretcher management	Team member competencies
Obj. 3	To learn and refresh skills and knowledge on shoreline searching	Notes Appropriate competencies.
3.1	Opportunity is given for SAR members to refresh skills and knowledge for shoreline searching	Team member competencies
3.2	Opportunity is given for SAR members to learn skills and knowledge for shoreline searching	Team member competencies
3.3	Participant's knowledge and ability in conducting a shoreline search is improved	Team member competencies
3.4	Skills and knowledge should include environmental, subject and searcher factors to enhance detection and the maintenance of searcher safety	Team member competencies

WAIKATO DISTRICT 2021 SAREX

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Pauanui Glades Motor Camp.

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- (4) To use knowledge and skills in Urban searching.

The exercise will run over the two full days.

The exercise is based on workshop style learnings during the daytime, Saturday 13th.

Participants will be divided into 4 groups, A, B, C, D.

The workshop includes:

GPS	at venue	Mike Morrison	1 hour
Map and Compass	at venue	Mike Morrison	1 hour
Navigation	along harbourside	Const Keeley	2 hours
Ropes and knots	south Pauanui Beach	S/Const Connors	2 hours
Comms and radios	South Pauanui Beach	A Hodgson	1 hour
Searching coastal areas	south Pauanui Beach	Sgt Bell	1 hours

See attached Agenda.

Schedule

Saturday 13th

0800

briefing

0830 to 12.30

Groups A and B will rotate between communication and coastal searching, for 1-hour sessions, and then combine to complete the ropes/stretcher for 2 hours

Group C and D will rotate between GPS and map and compass, for 1 hour sessions, and then combine to complete the Navigation course

12.30 to 13.00

Lunch at Venue

1300 to 1700

Group C and D will combine to complete the ropes/stretchers

Group C and D will then rotate between communication and coastal searching, for 1 hour sessions.

Groups A and B rotate between GPS and map and Compass for 1-hour sessions, and then combine to complete the navigation exercise.

17.30 to 18.30

Tea

18.30 to 20.00

Scenario based exercise

20.00

Social gatherings

Sunday 14th

0700

Breakfast

0800

Scenario based exercise.

11.00

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SAREX Planning team

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