

Exercise Evaluation Report

2019 CNI SAREX OP MUSTERBRUSH

Location: Central North Island

Date: 07/09/19

Report version: 1

Evaluator(s): *Kip Mandeno – IMT Evaluator*

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Executive Summary

The regular Central North Island SAREX was held over the weekend of the 7th and 8th of September 2019. Unlike previous SAREXs in this area, it was externally organised by LandSAR Training rather than by local SAR volunteers. This approach was taken to allow all volunteers to participate in the training and assessment opportunities.

This approach was modelled on the previous one run by Police & LandSAR in the CNI last year and revised for to incorporate the competencies. This SAREX was also used as an opportunity to assess all participants against Land SAR competencies through a model of evidence gathers and SMEs.

The objectives of the SAREX were well met and provided an enjoyable and safe SAREX.

1. Recommendations

1. Continuation of SAREXs that incorporate the wider Taupo region and nearby SAR groups to improve operational readiness.
2. Development of singular aim for a SAREX that that is delivered by the objectives. These objectives could be reduced in quantity and improved in quality.
3. Look at developing objectives for SAREXs that engage with Iwi.
4. Communicate the Aim and Objectives at the briefings to engage participants

2. Introduction

The Taupo SAREX is an annual feature on the SAR calendar and is typically open to LandSAR groups from the Central North Island Alliance & other groups who often provide support to Taupo / Turangi Operations.

The Taupo SAREX is typically a well-supported and well-run event that has good volunteer engagement. The format of this event was a rogaine style programme scheduled so that a 3-hour scenario could occur for a field team to engage with an operational IMT.

The Taupo – Turangi SAR area faces a vary wide-ranging skillset and maintaining this would be a challenge. This SAREX provided an opportunity to use the LAND SAR competencies as assessment tools to measure operational readiness.

3. Background

3.1 Background to the Exercise

SAREXs have been conducted by Taupo Police District to test and maintain readiness for SAR events that may occur from bush to alpine terrain.

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

- **Date of Exercise**

07/09/19

- **Location**

- Hautu Rangipo Whenua – Turangi

- **Exercise Director**

- Barry Shepherd (NZ Police)

- **Exercise Field Team:**

- Ed Halson
- John Fookes
- Blake McDavitt
- Cliff Jones
- Gary Clearwater

3.3 Participating organisations

- NZ Police
- LandSAR Groups, Taupo, Turangi, Hawkes Bay, Taihape, Ruapehu & Hamilton
- NZ Police
- LandSAR Training

3.4 Exercise aim

The purpose of the event was to exercise IMT and Field members and upskill and assess abilities with external SME's providing training, skills assessment against the competencies and/or feedback.

3.5 Exercise objectives

- To allow assessment against the competencies by SME's/Assessors of the Field Team Member competencies.
- To give team members the opportunity to revise skills in search methods, tracking, navigation, VHF radio communications, first aid, Stretcher and Rope Management.
- To give Field Team Leaders an opportunity to refresh skills and demonstrate their leadership and be assessed against the field Team Leader Competencies.
- To give IMT members the opportunity to test SARtrack and establish an ICP.
- To allow IMT roles assessment against the current or future IMT competencies
- To allow the NZ Police personnel confidence that there is a competent capability to respond to a SAR event
- That the IMT is measured against NZSAR response guidelines
- To set up, operate and assess the new Optus satellite internet link
- Maximise skills uptake or reinforce learnings

3.6 Exercise Scenarios

Several various scenarios occurred during the SAREX on the Saturday to Sunday Morning. This was set up to keep various groups active and reduce numbers of participants to assessable levels and be relevant to typical call out size teams and to meet the Exercise Aim.

<i>Activity 1</i>	Nav	<i>Map and Navigation</i>
<i>Activity 2</i>	SM	<i>Mobile Unresponsive Search Methods</i>
<i>Activity 3</i>	TaC	<i>Track and Clue</i>
<i>Activity 4</i>	SRM	<i>Stretcher and Rope management</i>
<i>Activity 5</i>	Clue Pro	<i>Clue site processing – Car with placed receipt per individual team campsite.</i>

Alongside this 3, 3-hour Search Scenarios ran over the course of Saturday this provided the learning opportunity for the IMT & Field Teams to operate in a “normal SAR mode”. Each scenario was unique in content and missing person response needs so meant IMT was starting with a fresh problem on each rotation. IMT roles were rotated throughout the course of Saturday so learning and assessment of each were carried out for each person.

Note:

On Sunday the activities were curtailed due to weather and only completed the Campsite processing this did not have an effect on the overall SAREX outcome.

The complete Scenario Plan is attached due to the detail and complexity.

4. Evaluation Methodology

4.1 The agreed outcomes of the evaluation activity

Carry out observation of the IMT and field activities over the course of the SAREX.

4.2 Evaluation scope

The evaluation of the SAREX was carried out in both the IMT & the field as all aspects were easy to travel between quickly.

4.3 Aspects of the exercise observed, what was not observed

All aspects of the IMTs function was observed during the course the SAREX and measured against the relevant KPIs of the IMT in relation to the field outcomes. Prior to the event, the IMT carried out a team briefing and general discussion of the function of the IMT in an event of this nature, this formed an important part of the assessment process.

Field observations were carried out and review of assessment documents and assessment tasks in field were reviewed against competency requirements.

4.4 The process followed in preparing and submitting the report

LandSAR Training provided a comprehensive and detailed plan for the exercise reviewing activities on the day against this document provided a clear and detailed assessment process.

There was no need to follow up or carry out investigations outside of the SAREX.

5. Findings

The exercise met the desired outcomes of the SAREX and all KPIs through good planning and staging. The exercise in its design was relatively complex and without due care and attention it could become unwieldy. A key result of the design of the SAREX meant that all participants of the SAREX were engaged throughout the weekend. This is a challenge in all SAREXs and was well met by the modular design of the weekend.

The SAREX was well briefed at the start of the weekend with key outcomes presented and safety plan discussed. The roles of the assessors and responsibilities were clear to participants and the requirements of them to be engaged was well briefed. Delivering the aim and objectives to the wider group at the start would assist in getting all participants to engage in the desired outcomes.

The key field scenarios were well resourced with a local high school delivering lost party roles to a high standard. This relationship has been used in the past and they were well briefed on their requirements and provided an “as realistic as possible SAR client”.

Throughout the Saturday constant hot debriefs were held between rotations with groups which meant any learnings could be responded to by the individuals and implemented in the next activity. This outcome was strongly evident in the IMT which was able to develop and enhance their performance throughout the day.

The IMT section was well resourced with a dedicated onsite caravan and the communication established via satellite link (a key KPI of the SAREX). Both Police & volunteer SAR members staffed the IMT throughout the day. Each person operated a different role through each scenario.

A typical SAREX issue and IMT performance issue was noted of being stuck in reflex tasking and not developing a strategy to move into a “*planning for the next 24 hours mindset*”. This is not unique to this group or SAREX and could be made to most IMTs throughout NZ. SAREX planning should aim to develop scenarios or methodologies to move IMT quickly from reflex taskings to Extended Search Planning. This point should also be picked up by training organisations that carry out SAR management training.

The typical challenges of the IMT were noted and discussed by the assessor on the day of people sticking to their roles in IMT and not running a committee style IMT. This was picked up by the IMT participants and worked on through the day.

Field competency was generally high with good assessment techniques used by trainers and sites were chosen well to allow fair assessment and fresh terrain for each group.

Some minor start-up glitches occurred that did not affect the overall programme and were noted by the programme lead and will no doubt be part of the refinement of the programme.

There was strong engagement with local Iwi throughout the SAREX which is an import direction of the incoming CIMS V3. This could have been an objective of the SAREX and should be a key objective of nearly every SAREX.

This SAREX had many objectives to achieve and did so well but they could be reduced and refined to a tighter more concise list. These objectives should relate to a need within the group that year or a target to improve operational competency. That need should be the aim of the SAREX.

6. Conclusions

The SAREX was well run and well-coordinated by LandSAR Training with a reasonably new programme and direction for them. The challenge into the future will be developing a wider number of SAREX programmes and meeting the individual groups' needs at that time.

A key risk to these types of SAREX is that it is run by a group due to it being easier to have it delivered by a provider than it is to develop a SAREX that targets the operational needs of a group. This comment is not a reflection on this SAREX or provider but is something to be mindful in all SAREX delivery when delivered by external providers.

7. Appendix

REFER: Planning documents attached

TAUPO POLICE AREA

SAREX MUSTER-BRUSH

Exercise Plan

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Overview

LandSAR groups from the Central North Island Alliance will conduct an annual SAREX involving all groups personnel available for a two day combined exercise and training event. The purpose of this event is to exercise IMT and Field members and upskill and assess abilities with external SME's providing training, skills assessment against the competencies and/or feedback.

SAREX Review

Kip Mandeno will provide a review of the SAREX for NZSAR and this will be made available to CNI and NZ LandSAR.

Location

The SAREX will be conducted in the area known as Hautu Rangipo Whenua, situated between the Tongariro River and Whitikau Stream at Rangipo, south of Turangi, formerly known as the Rangipo Prison Farm. See *Appendix 1* for maps and satellite pictures.

Objectives

- To allow assessment against the competencies by SME's/Assessors of the Field Team Member competencies.
- To give team members the opportunity to revise skills in search methods, tracking, navigation, VHF radio communications, first aid, Stretcher and Rope Management.
- To give Field Team Leaders an opportunity to refresh skills and demonstrate their leadership and be assessed against the field Team Leader Competencies.
- To give IMT members the opportunity to test SARtrack and establish an ICP.
- To allow IMT roles assessment against the current or future IMT competencies
- To allow the NZ Police personnel confidence that there is a competent capability to respond to a SAR event
- That the IMT is measured against NZSAR response guidelines
- To set up, operate and assess the new Optus satellite internet link
- Maximise skills uptake or reinforce learnings

Friday Program

- Exercise brief to IMT members
- Establishment of the IMT, SARtrack and ICP as required
- Briefing for all Competency Assessors

Saturday program: for full details see page 13

- Formation of Field Teams for the weekend
 - Teams of 3 people per team
 - Teams numbered consecutively from 01 upwards.
 - Teams will be grouped into Instruction/Assessment groups as follows:
 - Group A – Teams 1, 4, 7, 10, 13
 - Group B – Teams 2, 5, 8, 11, 14
 - Group C – Teams 3, 6, 9, 12, 15

Activity 1 **Nav** *Map and Navigation*
 Activity 2 **SM** *Mobile Unresponsive Search Methods*
 Activity 3 **TaC** *Track and Clue*
 Activity 4 **SRM** *Stretcher and Rope management*
 Activity 5 **Clue Pro** *Clue site processing – Car with placed receipt per individual team campsite.*

	0930-1100	1100-1230	1300-1430	1430-1600	1730-1900	1900-2030
IMT	Scenario 1		Scenario 2		Scenario 3	
Group A (field)	Scenario 1		Nav	SM	TaC	SRM
Group B (field)	Nav	SM	Scenario 2		SRM	TaC
Group C (field)	SM	Nav	TaC	SRM	Scenario 3	

Each field session will consist of two sessions of 90 minutes (3 hours total) and 30 minutes between blocks to move to next session/training block location. Refresh and sustainment can occur during this time.

Sunday program: for full details see page 14

IMT continues to operate to ensure overview and safety monitoring. Whilst monitoring, the IMT review and debrief occurs.

	0730-0900	0900-1030	1100	1030	1215	1300
IMT	<i>IMT review and debrief</i>	<i>IMT pack down</i>	Debrief	Continuous BBQ lunch for teams	Pack up /clean up	Departed by
Group A (field)	<i>Clue Pro 1</i>	<i>Clue Pro 2</i>				
Group B (field)	<i>Clue Pro 1</i>	<i>Clue Pro 2</i>				
Group C (field)	<i>Clue Pro 1</i>	<i>Clue Pro 2</i>				

Sunday Clue-site processing will occur in two stages.

Session one commencing at 0730 and be conducted around Camp sites. This will end at 0815.

Session two commences 0815 and be vehicle processing and with a receipt dropped. This will end at 0900.

Team Composition

IMT make-up will be as required and dictated by the local organisation to allow assessment and observation for each competency subject as per provided competency assessment sheets. Preferably the personnel will revolve through roles to allow uptake of learnings as well as assessment to the competencies.

Administration Unit will be as per local requirements and is expected to work seamlessly alongside the IMT roles. This will be broadly overviewed for efficiency and areas of improvement where applicable by SME/Assessor and senior local members.

Field teams

As per local norms for callouts but recommended 3 person teams who are combined into an Instruction Group of no more than 5 three person teams per group.

It is for the local organisation as to whether they wish to “test” new or developing Team Leaders or utilise existing Team Leaders.

Instruction Groups

Each LandSAR provided SME/Instructor/Assessor is expected to have **groups** no larger than 5 x 3 person teams. The group will stay with the LandSAR Instructor for the duration including the Scenario phase to allow the LandSAR instructor to mentor/assess to provide feedback on the search phase as well as the various tasks.

LandSAR Instruction and Assessment Individuals

This is to comprise of holders of NZQA 4098, accredited subject Instructors or SME’s proficient and Competent and Current in the requisite competencies being assessed.

The LandSAR Instructional/Assessment team will convene Friday evening and review all facets of the weekend ensuring fairness, consistency and familiarity with the requirements and recording process to ensure maximum benefit for all SAREX participants.

Search Activities

Missing person scenarios 3 x on Saturday

The SAREX will consist of three separate missing party scenarios using 1 Missing Subject per Scenario for each during the Saturday allow teams to conduct a "Search" designed to practice and demonstrate knowledge of key skills.

By conducting three separate search scenarios for the search teams throughout the day, this will allow the IMT and Field Teams to practice the skills and competencies they would encounter during a Search and Rescue operation.

Timings of the search scenarios will allow each team **3 hours** to complete their search task and will be arranged so once they have completed their scenario, they will then enter a "round robin" learning and skills demonstration with SME's who will provide assessment against competencies.

Scenario 1

Overview of each scenario – full details refer Appendices.

Duration *3 hours total including brief and debrief*

Missing Autistic boy/girl walking with family on local trail. Fascinated by water and very low level of communication. Only responds to female voices, scared of males.

Informant Mother – Joanie Golightly
Age 39
Address: 13 Hukatea Place, Turangi
Cell 0220045791
Current Picture available on cell phone.
Number in party 3

Missing person details

Name: Johnny Golightly
Age: 14
Wearing: As volunteer is wearing on day
Last seen 2 hours prior
Family On scene trying to search also.
Media: At Base inquiring and photographing
LKP To be provided but within access to waterway with bush edge.
Injuries/found state: Mild hypothermia...needing rewarming and dry clothing

Refer details sheet in addendum 4 for full scenario details

Scenario 2 *3 hours total including brief and debrief*

Missing fisherman overdue 2 hours - wife in car reading.

Informant Wife
Informant Name Maria Anglier
Age 63
Address: 13 Houghton Bay Road, Wellington
Cell 027465109
Current Picture available on cell phone.
Number in party 1

Missing person details
Name: Arno Anglier
Age: 67
Wearing: As volunteer is wearing on day
Last seen 0700
Cell-phone Number To be provided
Family Wife
Media: At Base inquiring and photographing
LKP To be provided but within access to waterway with bush edge.
Injuries/found state: Mild heart attack, dehydrated – has own medication

Refer details sheet in addendum 4 for full scenario details

Scenario 3 *3 hours total including brief and debrief*

Missing Mountain Biker riding Trail, Flipped off and wandering in confused state.

Informant Partner
Informant Name Verity Pedley
Age 27
Address: 62 Wakeman Road, Acacia Bay, Taupo
Cell 021291581
Current Picture available on cell phone.
Number in party 1

Missing person details
Name: Serena Crashinburn
Age: 28
Wearing: As volunteer is wearing on day
Last seen 0700
Family None – but friends looking
Media: At Base inquiring and photographing
LKP To be provided but within access to waterway with bush edge.
Injuries/found state: Concussion and broken wrist

Refer details sheet in addendum 4 for full scenario details

Skills based learning, demonstration and assessments

Where practicable, the teams will rotate through the skills stations enhancing or reinforcing the skills required for the Search scenarios and then be assessed in alignment with competencies.

During this period an IMT will maintain an overview of all scenarios, teams, subjects, and safety.

To allow the IMT to imbed and reinforce skill requirements they will "run" **the search scenario** for each field search and conduct the normal functions of the IMT/MSU(AU) for each search scenario.

Mentoring/Assessment by appropriate group SME's

Also, to allow evaluation, skills and knowledge sharing, local SME's may be assigned to groups to allow knowledge to be shared from experience garnered over their time in SAR.

This will allow the Mentors/Management to view skills and abilities for succession or development of appropriate personnel and by spending the day with the groups, observe better the skills and knowledge being assessed.

Each LandSAR Instructor/SME/Assessor will have a **15 people maximum** and assess all on combined assessment/competency sheets as provided.

Skills session and assessments

The host group has chosen 4 the following options for the Saturday. TaC, Nav, SM and SRM. Each should run for 1.5 hours and then seamlessly roll over into the next subject.

Timings between the full 3 hour sessions should have ½ hour break at 1230 for transition and or rest/refreshment between. At 1600 the SAREX will halt for an early combined group evening meal. At 1730 the final activity commences and finishes at 2030 when teams establish campsites for the night.

Sunday At 0630 teams will be briefed on mornings tasks and timings and commence morning activities until 0900 when all personnel will regroup at ICP.

Navigation 1.5 hours

Plan using map and compass a route off track calculating distances and approximate times.

Identify hazards off map and contours

Create "Searchers" briefing for task

Identify throughout route position

Demonstrate "Boxing"

Using provided Map Roamer* provide LOCSTAT

Navigate using GPS by setting waypoint, go to and using Trac-bac functions.

Project waypoint and go to.

Record and prepare communication for broadcast.

Provide 6 digit LOCSTAT or SITREP and communicate this.

Mobile Unresponsive Search Method demonstration (SM) 1.5 hours

Average Range of Detection in area to be searched

Conduct a search through bush area covering minimum 3 full sweeps using Purposeful wandering for 10 items placed in search area. These to be spread out.

Discuss boundary marking with Paper marking tape or Crepe paper** in 1 m lengths for visibility

Purposeful Wander through area and resets to get good coverage and used to boundary marking.

Track and Clue (TaC) 1.5 hours

**Draw and Acetate of a footprint as a team noting all relevant details

**Demonstrate using acetate to identify footprint amongst contamination

Use SBS, markers and to obtain direction of travel

Demonstrate contamination control around footprints

Locate placed item in DOT and display contamination control clue site processing methods

Process the clue for both DOT and maximum information from clue, recording and reporting the item by radio

Stretcher and Ropes (SRM) 1.5 hours

Basic knot craft and low angle belay and backup

Loading a patient and making comfortable and secure for transport.

Carry over distance utilising full team with changes, side-swaps and various methods.

Use and demonstrate correct calls for lifting, lowering, uphill and downhill movement.

Stretcher attendants roles assigned, calls made correctly and patient care with Obs completed.

Sunday morning

Will consist of a series of 2 clue site processing modules, campsite processing and vehicle processing and clue site. Each Instructor/SME/Assessor will also place heavy emphasis on recording and note taking correctly ensuring time, 14 digit GPS reference and notes are recorded accurately and communicated correctly over radio.

Activities cease at 0900 followed by debrief and brunch.

Locations

Map in Use

Topo50 BH35 Turangi

Exercise Locations

Location	GPS Ref.	Comment
ICP	E1843434 N5670758	Caravan and Trailer at South Camp
VHF Repeaters: Taupo (CH4 - ES58) Turangi (CH3 – ES57)	E1843464 N5670595	South Camp
VHF Fixed Repeater Pihanga (EE122)	E1839586 N5674901	Summit of Mt Pihanga

Key Personnel (to be completed by CNI personnel)

Function	Name	Contact Number
Exercise Controller	Barry Shepherd	██████████
Incident Management Team		
Police Personnel		
Iwi	Bubs Smith Patrick Nepia	██████████ ██████████
Search Scenarios	Missing person	
Scenario A		
Scenario B		
Scenario C		
Assessment Modules	SME/Assessors	Contact Number
IMT	Snr Sgt John Fookes	██████████
Field	Tony Wells	██████████
	Blake McDavitt	██████████
	Cliff Jones	██████████
LandSAR coordinator	Ed Halson	██████████
Lost Party Liaison		
Safety Officer		

Logistics and Responsibilities

Function	Responsibility	Comment
Action Based Scenarios	Barry Shepherd	Briefing at 0830 Saturday - Facilitators will have VHF radios
ICP Set Up	Management Team, Base Support + Logistics	To be set up Friday afternoon/evening Briefing for Team Composition and Safety Assessment, SARTrack implementation to be done
Team Boxes		LandSAR Taupo and Turangi gear
Portaloo	Barry Shepherd	From hire company
Lost Party Comms	Shanan Harrington	VHF channel ES58 base set at ICP
VHF Hand held radios	Police	Taupo Turangi
VHF Repeaters	Police	Taupo (ES58) Turangi (ES57)
GPS Hand held Receivers	Police	Taupo based sets Turangi based sets Datums set and plot trails cleared
Laminated Maps and Photos	Police	Maps for lost parties, search teams and ICP use
Computers and Printers	Mark Poots	Onsite support for SAR laptops, printer and IPstar
First Aid Equipment	Police	At ICP and carried by teams
Accommodation	Individual	Exercise participants to provide personal equipment for overnight accommodation in the field. The location for the overnight camp will be given at the conclusion of the days scenarios.
Transport	Individual	Transport to and from the exercise venue to be an individual responsibility, but the Police minibus will be available from Taupo. Police 4WD vehicles will meet transport requirements during the SAREX
Catering	Mark Poots	Individuals will provide their own food for Friday, Saturday and Sunday breakfast. Lunch will be provided on Sunday at the SAREX ICP for all participants
Land Manager Liaison	Barry Shepherd Patrick Nepia	Police Lake Taupo Forest Trust

Communications

Within Exercise

Exercise activities	VHF EE122
Lost parties	VHF channel 4 – ES58
Facilitators	VHF channel 3 – ES57

External

Optus Communication

Police radio

Cellular telephones

Emergency and Hazard Management Plan

Injury to Personnel

First Aid facilities will be maintained at the ICP. A register of exercise personnel with First Aid Certificates is held in the ICP. External assistance will be through normal emergency services.

Hazard Identification

Task hazard identification will be carried out by individuals continuously during the exercise. Existing hazards and the proposed controls are as follows:

Hazard	Risk	Control	Method of Control
Slippery or loose surface roads (Vehicle damage, Injury)	Medium	Minimise	<ol style="list-style-type: none"> 1. Vehicle movement in the exercise area to be restricted to exercise vehicles only 2. Exercise vehicles to be suitable for off road use 3. Be aware of traffic on public roads
Uneven Ground (Injury)	Medium	Minimise	<ol style="list-style-type: none"> 1. Personnel to wear suitable footwear at all times
Waterways, Lakes (Drowning)	Medium	Minimise	<ol style="list-style-type: none"> 1. Activities should not occur on or next to waterways, unless it is absolutely essential or necessary to the scenario. 2. Safety persons and throw bags to be readily available where an activity occurs around river and or lake edge. 3. Suitable floatation devices to be available and used when activity is based on water.
Inclement Weather (Exposure)	Medium	Minimise	<ol style="list-style-type: none"> 1. Personnel to be suitably clothed and prepared for cold, wet conditions 2. Exercise teams to be equipped with suitable overnight shelter 3. Individuals to carry sleeping bags and wet weather gear 4. Shelter provided at the ICP
Steep and Difficult Country (Injury)	Medium	Minimise	<ol style="list-style-type: none"> 1. Teams to be suitably equipped and led by experienced persons 2. Teams to carry first aid kits
Lost Persons (Exposure)	Low	Minimise	<ol style="list-style-type: none"> 1. Teams will be supplied with GPS and maps of the area 2. Individuals to carry compasses 3. Area bordered by distinctive geographic features 4. Teams to carry VHF radios and cellular phones.
Giardia organism in streams (Sickness)	Low	Minimise	<ol style="list-style-type: none"> 1. Boil all water taken from streams in the area before drinking 2. Fill catering trailer tank before leaving Taupo

Program

Friday 06 September 2019

1300	Assemble Taupo Station	Organise gear
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1400	Depart Taupo Station	Travel
1530	Arrive Rangipo	Set up
1600	Instructors/Assessors convene and set up	Scope scenario settings and instruction/facilitation sites
1800	ICP set up for occupancy	Available personnel to assist. Generator and computer equipment set up and running.
1930	Briefing for IMT/AU by LandSAR	Team structure explanation, Enter early arrivals, SARTrack entry and Safety Forms, taskings to be produced complete by 2100

Saturday 07 September 2018

Time	Event	Comment
0700	Mini bus departs Taupo Station	Passengers to be at station by 0650
0730-0900	SAREX participants arrive	Travel to the venue individuals' responsibility. All participants must complete Tcard on arrival.
0900	First Scenario to be set up by 0830 hrs	Subject placement to occur after safety briefing at 0900
0900	Welcome, Exercise outline, Safety Briefing. Search teams established	Barry Shepherd All exercise personnel Using Tcards
0900	IMT to develop teams for the day.	Teams to be created and assigned using SARtrack
0900	Briefing for Scenario Based Activities	
0930	Scenario Based Activities begin Each activity will run for 3 hours, with 1/2 hour for changeover. Each facilitator will have a VHF radio and be able to give directions for teams to find the way to the next activity location.	
1600	SAREX Combined evening meal	
1600 to 1730	SAREX early dinner	All regroup at ICP for early evening meal, refresh and socialise before recommencing final session at 1730.
1730	Final Activities for evening	

		<i>Group B (field)</i>	<i>SRM</i>	<i>TaC</i>
		<i>Group C (field)</i>	<i>Scenario 3</i>	<i>Scenario 3</i>
2030	Stand down for night	IMT – All teams redeployed to Final waypoint for overnight camp close to final finishing point		
2045	Check in	IMT - All participants to check in with IMT on arrival at overnight camp		

Sunday 08 September 2019

Time	Event	Comment
0630	Briefing by radio	IMT
0715	Clue site processing scenarios	Clue site processing, 35 mins Tent site – each team 35 mins Vehicle – whole group 35 mins Receipt – each team
0900	All teams return to ICP	IMT
1030	Debrief and Brunch	
1130	Pack up and Depart	All

Appendix Table

1.1 Maps of SAREX location

Scenario Sheets

- 1.2 Missing Person Scenario 1
- 1.3 Missing Person Scenario 2
- 1.4 Missing Person Scenario 3

Activity Sheets

- 1.6 Round Robin Activity 2 – Navigation – Map and Compass and GPS
- 1.8 Round Robin Activity 4 – Search Methods/Techniques - unresponsive
- 1.9 Round Robin Activity 5 – Track and Clue site processes
- 1.10 Round Robin Activity 6 – Stretcher loading, Securing for carry, Patient care, Hypothermia Burrito Wrap, calls and carry
- 1.11 Clue Site processing 1- Tent Site
- 1.13 Subject briefs

Equipment Sheets

Equipment requirements per activity summarised
Catering Requirements



Appendix 1.2

Scenario 1

Duration *3 hours total including brief and debrief*

Missing Autistic boy/girl walking with family on local trail. Fascinated by water and very low level of communication. Only responds to female voices, scared of males.

Informant Mother – Joanie Golightly
Age 39
Address 13 Hukatea Place, Turangi
Cell 0220045791
Current Picture available on cell phone.
Number in party 3

Missing person details

Name Johnny Golightly
Age 14
Wearing As volunteer is wearing on day
Last seen 2 hours prior
Family On scene trying to search also.
Media At Base inquiring and photographing
LKP To be provided but within access to waterway with bush edge.
Injuries/found state Mild hypothermia...needing rewarming and dry clothing
Details for scenario
Number : alone
Age 14
Medical conditions autism spectrum autism and suspected narcolepsy.
Fitness very fit
Experience None
Reliability unreliable
Clothing As per the volunteer on the day.
Equipment None
Weather Existing on day
Terrain Hazards As per area...
Length of time missing 3 hours

Other details.

Known wanderer. Lost Wandertrak pendant and waiting for new one. No tracker device otherwise. Mother was walking with friend talking and Johnny was with them one minute then not the next. They were walking on track with zigzags and mother and friend moved to side of track to let 5 mountain b kers past. Johnny was not far ahead with friends dog. Friends dog came back wet 15minutes later but no Johnny. They searched for ½ an hour around LKP but no sign. Worried about water and that Johnny can sleep anywhere and through noise.

Equipment required for scenario

Stretcher
Hypothermia gear, dry clothing

Missing Person Scenario 2

Appendix 1.3

Scenario 2

3 hours total including brief and debrief

Missing fisherman overdue 2 hours - wife in car reading.

Informant Wife
Informant Name Maria Anglier
Age 63
Address 13 Houghton Bay Road, Wellington
Cell 027465109
Current Picture available on cell phone.
Number in party 1

Missing person details

Name Arno Anglier
Age 67
Wearing As volunteer is wearing on day
Last seen 0700
Cell-phone Number To be provided
Family Wife
Media At Base inquiring and photographing
LKP To be provided but within access to waterway with bush edge.

Injuries/found state: Dehydrated – has own medication. Twisted his knee and having extreme pain standing. Will respond if called to and found of waterway in bush trying to make a walking stick/crutch. Will need stretcher extraction.

Details for scenario

Number alone
Age 67
Medical conditions Has previous heart condition -carries pills
Fitness Over weight and not very fit
Experience Fished here 30 odd years ago once...wanted to fish here again
Reliability usually reliable and punctual but never this late
Clothing As per the volunteer on the day.
Equipment Fishing vest, Wide brimmed hat (fawn) rod and net
Weather Existing on day
Terrain Hazards As per area...
Length of time missing 3 hours

Equipment required for scenario

Fishing gear
Stretcher

Appendix 1.4

Scenario 3 3 hours total including brief and debrief

Missing Mountain Biker riding Trail, Flipped off and wandering in confused state.

Informant Partner
Informant Name Verity Pedley
Age 27
Address: 62 Wakeman Road, Acacia Bay, Taupo
Cell 021291581
Current Picture available on cell phone.
Number in party 1

Missing person details

Name: Serena Crashinburn
Age: 28
Wearing: As volunteer is wearing on day
Last seen 0700
Family None – but friends looking
Media: At Base inquiring and photographing
LKP To be provided but within access to waterway with bush edge.
Injuries/found state: Concussion and broken wrist

Details for scenario

Number : was in group but now alone
Age 28 – other
Medical conditions Has had previous concussion, Type 2 diabetic
Fitness Fit
Experience not experienced but has b ked here once before
Reliability reliable and punctual
Clothing Bike shorts (black), B ke shirt and bike jacket (yellow) no warm gear
Equipment Bike Helmet, gloves, Mountain Bike (make supplied on day)
Weather Existing on day
Terrain Hazards As per area...
Length of time missing 3 hours

Additional Information

Mountain biking on trail in the area and was riding at back of group of 5 very fit and enthusiastic riders. They ride together most weekends and are training for an endurance race in November.
Misper has a cell phone but no other comms devices.
Carries barley sugars and energy drink for fluid in Came bak.

Equipment requirements

1 x Mountain B ke
1 x b ke helmet
Came bak (or) similar

Appendix 1.6

Navigation 1.5 hours

“SEARCHERS” risk assessment completed

Plan using map and compass a route off track calculating distances and approximate times.

Identify hazards off map and contours

Identify throughout route position

Demonstrate “Boxing”

Using provided Map Roamer* provide LOCSTAT

Navigate using GPS by setting waypoint, go to and using Trac-bac functions.

Project waypoint and go to.

Record and prepare communication for broadcast.

Provide 6 digit LOCSTAT or SITREP and communicate this

Equipment Requirements

Personnel

Appropriate Map

Functional compass (checked)

GPS

VHF radio and/or accessories

LandSAR notebook

Writing implement(s)

Map “Roamer” (supplied?)

Assessor/Instructor

Appropriate Map

Functional compass (checked)

GPS

VHF radio and/or accessories

LandSAR notebook

Writing implement(s)

Map “Roamer” and spares (supplied?)

Assessment sheets - **Navigation**

Clipboard and waterproof cover

Appendix 1.8

Mobile Unresponsive Search Method demonstration 1.5 hours

“SEARCHERS” risk assessment completed

Instruction on RD (AROD)

Average Range of Detection in area to be searched

Conduct a search through bush area covering minimum 3 full sweeps using Purposeful Wandering for 10 items placed in search area. These to be spread out.

Discuss boundary marking with Paper marking tape or Crepe paper** in 1 m lengths for visibility

Purposeful Wander through area and resets to get good coverage and used to boundary marking.

Equipment

Personnel

GPS
Map and compass
Eye protection
Gloves (if carried/available)
Hand Torch
Tracking stick/walking pole
Marking Tape (crepe paper roles)

Instructors/Assessors

Clues for area
Subject
Marking tape (\$2 shop crepe)
Assessment Sheets – **Apply Search Techniques**
Clipboard and waterproof cover

Appendix 1.9

Track and Clue Processing

Track and Clue

1.5 hours

Draw an Acetate of a footprint as a team noting all relevant details
Demonstrate using acetate to identify footprint amongst contamination
Use Step By Step, markers to obtain direction of travel
Demonstrate contamination control around footprints
Locate placed item in DOT and display contamination control clue site processing methods
Process the clue for both DOT and maximum information from clue, recording and reporting the item by radio

Equipment Requirements

Personnel

Track Markers
Tracking Sticks or similar
**Acetates
**Appropriate Acetate pen(s)
Lighting Source
Flagging Tape
GPS
Map and Compass

Assessor/Instructor

Track Markers
Tracking Sticks or similar
Acetates
Appropriate Acetate pen(s)
Clues for Placement in field for activity
Assessment Sheets for – **Basic Tracking and Clue Awareness**
Clipboard and waterproof cover

Note:

Acetate drawing is used for footprint recognition and sometimes communication in this case. Where an acetate is able to be obtained of the MISPER's footprint, a digital photograph can be relayed to IMT and an acetate can be used for real-time footprint recognition when searching at track traps, decision points or sign holding areas to confirm passage of subject.

Appendix 1.10

Stretcher and Rope work

Stretcher and Ropes

1.5 hours

Basic knot craft and low angle belay and backup
Loading a patient and making comfortable and secure for transport.
Carry over distance utilising full team with changes, side-swaps and various methods.
Use and demonstrate correct calls for lifting, lowering, uphill and downhill movement.
Stretcher attendants' roles assigned, calls made correctly and patient care with Obs completed
Appropriate materials and demonstration for Hypothermia burrito wrap

Equipment Requirements

Personnel

Edge Kit per team
Gloves if carried
Eyewear
LandSAR Notebooks
Appropriate Writing implement(s)
SAR Radio
GPS
Map and Compass
Patient Assessment form
Baseline Observations recording sheet (notebook if not available)
Basic first aid kit (Tri-Bandages, No.14 Wound dressings, Israeli bandage??,)
Stretcher (Ferno)
Sleeping Pad for Ferno

Instructor/Assessor

*Spare ropes as necessary
Spare Webbing tape – various sizes
Spare Auto-lock karabiners
Components for Burrito rap – Clothing, Beanie, Sleeping bag, Survival Blanket, Waterproof tarp, Hot water bottles x 3
Sleeping Pad
Bothy Bag
Assessment Sheets for – **Ropes and Stretcher**
Clipboard and waterproof cover

Note:

- . * This is a learning module with only two assessments
- . ** Instructor to leave all equipment at site for other teams

Appendix 1.11

Clue-Site Processing - Tent site

SME/Instructor/Assessor notes:

Overnight group tent-sites to be packed and teams rotate to another groups site:

Group A to Group B site
Group B to Group C site
Group C to Group A site

Method:

Revise S.T.O.P.P.E.R. and contamination control process.

Assign overall leader for task.

Clue-Pro map to be created by Team.

Areas assigned and processed and information collated

Clues listed along with 14 digit location, full details and assumption recorded for relay by radio.

Notes should include assumptions on:

No of campers/occupants

Toileting site location and sexes??

Cooking area

Water Collection area and method(s)

Cleaning area

Personal hygiene area

D.O.T. to and from site

Other relevant information

Maximum time 45 minutes – 5 minute debrief

Appendix 1.12

Clue Site Processing – Vehicle

SME/Instructor/Assessor notes:

IMT to organise 1 vehicle per team to be in-situ no later than 0745.

Method:

Revise S.T.O.P.P.E.R. and contamination control process.

Assign overall leader for task.

Approach vehicle from least likely angle and check vehicle for occupant(s)

Process vehicle for number of occupants.

Ascertain direction of travel from vehicle

Where possible ascertain purpose/activity subject was moving for

Clue-Pro map to be created by Team.

Areas assigned and processed and information collated

Clues listed along with 14-digit location, full details and assumption recorded for relay by radio.

**Drivers note*

Where possible take 2 or 3 passengers to site.

Congregate at boot/rear of vehicle and put different footwear on.

Revisit side doors and put footwear or other item inside vehicle.

All walk away from vehicle in same direction to common pathway or egress route.

Drop one receipt on route out 10-15m from vehicle.

Maximum time 45 minutes – 5 minute debrief

Summary of Equipment

requirements for activities and scenarios for weekend

Scenario 1

Stretcher
Hypothermia gear, dry clothing

Scenario 2

Fishing gear
Stretcher

Scenario 3

1 x Mountain Bike
1 x bike helmet
Camelbak (or) similar

Activity 1 Nav

Appropriate Maps
Spare Functional compasses
GPS's
VHF radio and/or accessories

Activity 2 SM

Clues for area
Subject
Marking tape (\$2 shop crepe)

Activity 3 TaC

Acetates
Tracking sticks
Clues (receipts -multiple)

Activity 4 SRM

Edge Kit per team
SAR Radio
GPS
Map and Compass
Patient Assessment form
Baseline Observations recording sheet (notebook if not available)
Basic first aid kit (Tri-Bandages, No.14 Wound dressings, Israeli bandage??,)
Stretcher (Ferno)
Sleeping Pad for Ferno

Activity 5 Camp Site Processing

Nil

Activity 6 Vehicle processing

Vehicle x 3
Receipt x 3

Clipboard and waterproof cover x 4

Assessment Sheets – ***Apply Search Techniques***
Navigation
TCA/TCS
Ropes and Stretchers

LandSAR GSO to supply SAR Notebooks

Appendix 1.13
Missing Person Notes

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Scenario One

Your name is Johnny Golightly and you have an autism spectrum disorder which means you do not communicate well, are not logical in normal person terms, are afraid of males you do not know and love sensory stimuli such as water or ice.

Your role is to be "difficult".

You have wandered off to the waters edge and at the scene where you will stay until found, throw rocks, sticks and make splashes when you here any teams coming towards your direction.

The groups may be using whistles but you do not understand what these mean....you should only respond to female voices when they call your name.

If any male searchers approach you feel free to run off as you are scared/afraid of people you don't know, especially males.

Ultimately you are mildly hypothermic and when the team/teams arrive you should be huddled under some brush shivering.

They will need to stretch you back (mainly to stop you running away) and wrap you warmly to warm you up.

Only cooperate with the females and repel any males except when wrapped up and being loaded on the stretcher.

You will have a radio set on the correct channel to be able to communicate with your "handler". This is for your safety and to help us if necessary.

To use the radio, ensure you keep it on, the channel will be locked to avoid accidental channel changes.

To operate: Press and hold Tx button 1sec, then talk stating your message across the front of the radio – not into the front, then once finished keep holding one more second then release. Continue doing this using short messages of no more than 10 – 15 seconds long.

If you have an emergency follow the above but state "No Duff", No Duff! Once someone responds, state your emergency calmly and clearly.

Scenario Two

Your name is Arno Angliere, you are a fisherman and you have hurt your knee and had a mild heart attack.

You will lay up in your scene and reply weakly if you hear a team/teams nearby.

You will have medication but it is on your person but you can't find it. (This will be a TicTac or similar)

If the teams find it you must self-administer it, they cannot give you it.

They will then treat you for hypothermia and carry you out.

Once you have had your "medicine" you will recover quickly but remember you are cold...shiver and mumble. As you warm up you can become anxious about your wife Maria who is waiting at the car and get stropky about ta king to her to put pressure on the team

You can calm down when you feel the team have done a really good job.

You will have a radio set on the correct channel to be able to communicate with your "handler". This is for your safety and to help us if necessary.

To use the radio, ensure you keep it on, the channel will be locked to avoid accidental channel changes.

To operate: Press and hold Tx button 1sec, then talk stating your message across the front of the radio – not into the front, then once finished keep holding one more second then release. Continue doing this using short messages of no more than 10 – 15 seconds long.

If you have an emergency follow the above but state "No Duff, No Duff!" Once someone responds, state your emergency calmly and clearly

Scenario Three

You were Mountain biking on trail in the area and you were riding at back of group of 5. You are very fit and an enthusiastic rider. You ride with the same friends most weekends and you are training for an endurance race in November.

You are carrying a cell phone but no other comms devices.

You are type 2 diabetic and carry barley sugars and energy drink for fluid in Camelbak.

Your name is Serena Crashinburn and you were out riding with your partner Verity Pedley and some other riders.

You have fallen over the handle bars and hit your head and now don't know where you are or how you got here. You have hurt your wrist so nurse it tenderly and be reluctant to let anyone touch it.

You are a Type 2 diabetic and are in the first stages of Diabetic shock...on top of normal shock. This means you are confused, grumpy, stroppy and lost. You have sweets in your came back and the teams must give you one of these to take promptly and then ascertain what your other problems are.

(concussion and sprained wrist!)

You will be sitting off the track in the bush holding your head when the team(s) arrive but slur your speech and sound drunk.

To add to the fun, you prefer talking to female team members.

You will be placed on a stretcher – make sure you are COMFORTABLE, if not try and get off.

Once you come "around" after having your medicine, start worrying about Verity Pedley and who and where she is.

You will have a radio set on the correct channel to be able to communicate with your "handler". This is for your safety and to help us if necessary.

To use the radio, ensure you keep it on, the channel will be locked to avoid accidental channel changes.

To operate: Press and hold Tx button 1sec, then talk stating your message across the front of the radio – not into the front, then once finished keep holding one more second then release. Continue doing this using short messages of no more than 10 – 15 seconds long.

If you have an emergency follow the above but state "No Duff", No Duff! Once someone responds, state your emergency calmly and clearly

Information for IMT

Scenario 1

Missing Autistic boy/girl walking with family on local trail. Fascinated by water and very low level of communication. Only responds to female voices, scared of males.

First feed

Informant Mother – Joanie Golightly
Age 39
Address: 13 Hukatea Place, Turangi
Cell 0220045791
Current Picture available on cell phone.
Number in party 3

Missing person details

Name: Johnny Golightly
Age: 14
Wearing: As volunteer is wearing on day
Last seen 2 hours prior
Family On scene trying to search also.
Media: At Base inquiring and photographing
LKP To be provided but within access to waterway with bush edge.
Injuries/found state: Mild hypothermia...needing rewarming and dry clothing

Second feed (used 45mins after search brief given and teams dispatched if no progress)

Passer-by thought they heard splashes in the river to the side of the track, sounded like rocks being thrown into the water and splashes. Location was approximately

Called out but no-one responded and thought the noise must have been deer running away. Is available for interview but do not know any more than is reported.

Third Feed (75 minutes after search begins)

A fisherman, Arno Angliere, of Wellington, was fishing up the stream and saw someone by the river throwing objects into the water scaring the fish. He called out angrily and waved his fist.

The person, he couldn't make out much due to light and dark polarised glasses, ran into the bush. He didn't think anything more of it and moved past the area he saw the person. Someone called out to him on the river and he called the information in. Location was approximately

Fourth Feed (last feed)

A mountain biker has phoned in to say that she almost ran into a boy alone on the track and nearly came off the bike.

She stopped to talk to the child to ask where his parents were but the child ran off into the bush. She thought it odd, rode until she found coverage and called it in. Her name is Serena Crashinburn of 62 Wakeman Road, Acacia Bay, Taupo. Cell number not connecting currently.

Information for IMT

Scenario 2

Missing fisherman overdue 2 hours - wife in car reading.

Informant	Wife
Informant Name	Maria Anglier
Age	63
Address:	13 Houghton Bay Road, Wellington
Cell	027465109
Current Picture available on cell phone.	
Number in party	1

Missing person details

Name:	Arno Anglier
Age:	67
Wearing:	As volunteer is wearing on day
Last seen 0700	
Cell-phone Number	To be provided
Family	Wife
Media:	At Base inquiring and photographing
LKP	To be provided but within access to waterway with bush edge.

First Feed (45 minutes after search starts)

Maria informs interviewer that the subject has a heart condition (angina) and has Nitro pills in his pocket. He is known to have had events in the past but manages them with the pills. An event may come on if he gets agitated or angry but she doesn't know of any reason he should get this way as he is fishing which is his passion and his quiet happy place. Being late is very out of character.

Second Feed (75 minutes after search starts)

A female police constable interviewing Joanie Golightly and Johnny Golightly find out from Johnny that Johnny was scared by a man shouting at him beside the river. Johnny is scared of men generally and had run away when he was yelled at. This was near where he was found his mum said.

Third Feed (If required)

Verity Pedley, a mountain biker in the general area thought she had heard a voice call out but when she stopped on her bike and listened, she didn't confirm any noise and there were paradise ducks calling and didn't investigate. She only thought of it after she saw a policeman in the car park who asked if the group had seen anyone. The location was

Information for IMT

Scenario 2

Missing Mountain Biker riding Trail, Flipped off and wandering in confused state.

Informant Partner
Informant Name Verity Pedley
Age 27
Address: 62 Wakeman Road, Acacia Bay, Taupo
Cell 021291581
Current Picture available on cell phone.
Number in party 1

Missing person details

Name: Serena Crashinburn
Age: 28
Wearing: As volunteer is wearing on day
Last seen 0700
Family None – but friends looking
Media: At Base inquiring and photographing
LKP To be provided but within access to waterway with bush edge

First Feed (45 minutes after search commences)

A fisherman – Arno Angliere of Wellington – has reported seeing a female mountain biker riding along the track. He noticed that she was riding alone but had seen a group of people riding in front of her. They were about 3 minutes apart. This was around ...E.....Nwhere he first entered the Stream to fish. He is now driving but heard a broadcast on local radio and called in on his cell phone.

Second Feed (75 minutes after search commences)

A female police Constable has radioed in whilst interviewing Joanie Golightly and her son Johnny Golightly. During the interview Johnny told his mother that he had nearly been crashed into by a “lady on a mountain bike”! He was frightened by the sudden appearance and ran away and hid. This was near the site he had been found. E.....N.....

Third Feed (Final Feed)

A trail runner, John Ogger, and his German Wire Haired Pointer “Phew”, were running down the track and the dog stopped suddenly on the track almost causing the runner to fall over the dog. He had been over taken by a group of 4 mountain biker earlier and seen no one else on the track but had been following bike tracks most of his run. He did notice a place where it looked like someone had come off their bike around where the dog stopped and called out but got no reply. He doesn’t know if it is of any use but he thought he would call up because he saw people on the track an hour later saying they were looking for someone. John Oggers’ cell number is 0274451144.

Stretcher and Rope Management

Refer SRM booklet for minimum requirements.

Navigation

Refer Navigation PowerPoint for minimum requirements and reinforcement of what is being taught currently.

Track and Clue

Use of acetates, use of Track Markers, Use of Tracking stick, Sign cutting, Cluesite processing, S.T.O.P.P.E.R, These will be reviewed Friday.

Non-responsive Subject and Clue Search Methods.

Purposeful Wandering. Average Range of Detection, multi-legged P.W, Boundary marking/removal, resetting for next leg. These will be reviewed on Friday

Clue Site Processing

Camp Site Processing, Vehicle Processing, Clue Site processing and recording, Contamination Control methods.