

Exercise Evaluation Report

Tauranga Land SAR Ex 2018

Operation: Motutapere

Location: Tauranga

Date: 18 – 20 May 2018

Report version: 1.2

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Executive Summary

The Multi-Agency Land SAREX, Operation Motutapere was conducted in the Kaimai Ranges in the vicinity of Motutapere Hut on 18th May 2018.

The key aim of the exercise was to conduct Extended Search Planning for the 2nd Operational Period of a SAR event.

Most of the objectives were met to an acceptable standard.

The IMT and Field teams were tested in a realistic setting where they were able to learn and develop their skills and abilities.

A number of improvements can be made to future operations and similar SAR Exercises as outlined in the recommendations.

Health and Safety management stood out as an area requiring immediate improvement across all areas.

1. Recommendations

Most of the objectives were met to an acceptable standard.

Following a review of the KPIs there are some areas where I believe improvements can be made to future Operations and similar SAR Exercises:

1. There was a lack of focus on Health and Safety management throughout the exercise. Changes need to be made to address this issue and implemented straight away before teams are deployed again. Land SAR Safe Management System forms should be used. Health and Safety should be a standard part of every briefing from IMT to team members. <https://nzsar.govt.nz/Resources/LandSAR-SMS-Forms>
2. Handovers and briefing of teams should follow the GSMEAC format with key information displayed if available. Eg. IAP and Situation should be displayed. This will ensure all key information is covered in the briefing. It will also allow people arriving at the SAR Base to quickly come up to speed with what has happened to date and intentions of IMT.
3. The exercise could be improved by having an outgoing IMT prepare a handover to a completely new incoming IMT. This will assist in creating a realistic handover where the outgoing IMT are only available for a limited time. It will also assist the outgoing IMT prepare a more informed and realistic briefing.
4. The scenario analysis/weighting, segmenting/prioritising search areas forms should be displayed, or made easily available. Other members involved in the search effort should be encouraged to add their views/scores. This in turn would have provided confidence to the IMT that they were on the right track or challenge their thinking. These forms should also be reviewed regularly by the IMT as new information comes to hand or as time progresses with little new information.

2. Introduction

The Tauranga SAR Ex was a two phase operation with a 'conditioning phase' taking place on the 12th May and the SAR Ex proper occurring on the weekend 18th May 2018.

The planning team have identified that surrounding Areas and Districts have managed a number of Extended SAR Operations over the past 12 months. Some of which made National Headlines. Given this apparent trend they recognised that their SAR teams, specifically IMT members had not run a SAR Operation requiring Extended Search Planning.

Given the SAR Topography surrounding Tauranga; increase in population; popular holiday spot and the Marine environment it is only a matter of time before an extended search will be required.

To address support the recent refresher training in Extended Search Planning the Land SAR members have worked with Police to prepare a SAR Exercise to test and practice Extended Search Planning.

Police were designated as the lead agency to run the Operation with strong support from Land SAR members and AREC.

3. Background

<This section explains the context within which your evaluation was undertaken.>

3.1 Background to the Exercise

Tauranga SAR area covers a large portion of the Kaimai Range. The Kaimai range attracts a variety of people from inexperienced tourists, visitors to the region, locals and hunters.

The terrain is varied from easy walking to difficult and dangerous terrain to navigate. It has a number of hazards, including open mine shafts and points of interest, such as Sentinel Rock which attract people.

Given the risk posed by the terrain and the large number of people that use this area it is inevitable that an Extended SAR operation will be required at some point.

As a result it is essential that SAR members are well trained and tested in running an effective Extended SAR operation. Efficient procedures and relationships to do this effectively are critical.

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

Saturday 12th May 218

Tauranga

NZ Police, Land SAR Volunteers, Local Rescue Helicopter

Sgt Craig Madden – Tauranga Area SAR Coordinator

Constable Andrew McCarthy – SAREX IC/Facilitator

Ian Newman (Land SAR) – SAREX Organiser/Facilitator

Friday 18th May to Sunday 20th May

Tauranga Police Station is Operations Base

Kaimai Range – Moututapere – Area of Operations

Sgt Craig Madden – Tauranga Area SAR Coordinator

Constable Andrew McCarthy – SAREX IC/Facilitator

Ian Newman (Land SAR) – SAREX Organiser/Facilitator

Constable Kurt Waugh – I/C

Constable Dan Matthews – Intelligence

Grant Nordick – (Land SAR) Planning

Lisa Brownles - (Land SAR) Operations

Constable Jen Wright – Logistics/PIM/Welfare

3.3 Participating organisations

NZP – Tauranga Police SAR members

Land SAR Volunteers

AREC Volunteers

Rescue Helicopter

3.4 Exercise aim

IMT

Aim: To conduct Extended Search Planning for the 2nd Operational Period of a SAREX

3.5 Exercise objectives

The aim and objectives for the Tauranga SAREX are;

IMT

Aim: To conduct Extended Search Planning for the 2nd Operational Period of a SAREX

Objectives:

1. Complete a handover
2. Review the 1st Operational Period file, whiteboard information and timelines
3. Complete Extended Search Planning to include, scenario analysis/weighting, segmenting/prioritising search areas and appropriate tasking of field teams
4. Conduct additional investigation as appropriate
5. To safely deploy, manage, and recover field teams conducting a search and rescue exercise in difficult terrain
6. Provide effective communications in the search area

Field Teams

Aim: Safely conduct off track SAR taskings in difficult terrain and locate and recover a lost party

Objectives:

1. Conduct helicopter familiarisation and deployment (weather permitting)
2. Sign cut Decision Points, huts, tracks and travel routes and follow any sign located
3. Navigate and conduct search techniques in difficult terrain and vegetation
4. Communicate effectively with the IMT
5. Complete a stretcher recovery of an injured person to a suitable helicopter winch or landing point

The SAREX to be conducted in 2 phases:

12 May - Helicopter Safety, GPS, Tracking, Comms and Stretcher Management revision.
IMT Extended Search Planning in preparation for Operational phase of SAR Ex

18 May - IMT planning phase and formal handover to “incoming IMT”

19 May - SAREX Briefing, team taskings, deployment and conduct of team tasks

20 May - Locate LP and conduct rescue plan

3.6 Exercise Scenario

On Wednesday 16th May 2018 'Jeremy' has entered the Kaimai Range off Hot Springs Road Car Park, Katikati. His intentions were to explore the area and spend the night in the Range. He planned to be picked up the following day by his partner at a road end. He would call his partner via cell phone to confirm when and where he would need to be picked up. Jeremy is new to the area and has never tramped/explored in the Kaimai Range. Jeremy has previous tramping experience and is described as someone who is very careful and plans his adventures well. He is well equipped.

At about 2100hrs on Thursday 17th May 2018 Jeremy's partner has contacted Police to report her husband as missing/overdue. Initial Missing person report taken.

SAR operation commences Friday 18th May 2018 at 0800hrs.

This operational period is paper based with all associated inquiries, clues located, people spoken to, search teams tasked and debriefed being prepared and documented by Constable Andrew McCarthy.

The file was given to IMT members on 12th May who had 5 hours to read and prepare an Incident Action Plan and extended search plan for the incoming IMT on Friday evening 18th May 2018. They added segmentation, scenario weighting sheet and POA to the file. They were told not to prepare any tasks for the Search effort on Saturday. The plan being for the incoming IMT to complete these on Friday evening.

Friday 18th May 2018:

1800hrs - Outgoing IC, Constable Kurt Waugh prepares and delivers handover to incoming IMT members. Constable Kurt Waugh was also the incoming IC with other members of the outgoing IMT being moved to different roles.

There were three new IMT members who were not familiar with the Scenario.

The incoming IMT had until 2200hrs to plan tasks for Operational Search phase due to commence Saturday morning. They were responsible for calling SAR members out, preparing a Health and Safety Plan, appropriate tasks, Comms support, associated logistics and briefings for incoming teams. They also had the opportunity to complete further inquiries relevant to the scenario. Of note a Helicopter was available with limited flying time for IMT to utilise.

Saturday 19th May 2018

0750hrs Field teams gathered, equipped and briefed by IC.

0900hrs Teams deployed to Operational Area.

No Duff: 1400hrs a group of lost tourists located by search teams. The four ill equipped tourists were assisted by search teams – taken to Motutapere Hut for the night and walked out the following day – avoiding a real Search later. Incident handled really well by IMT whilst still being able to effectively run SAR Ex Operation.

1450hrs Voice contact made with missing person (Jeremy)

1600hrs Jeremy located with a broken leg in difficult terrain near Sentinal Rock

1620hrs IMT discuss medical condition of Jeremy and start planning extraction. They also consider demobilisation plan. Of note Helicopter is unavailable to extract patient.

The plan was for the injured party to be looked after where he was found overnight.

Other teams were tasked to start moving towards Injured Party with a view to stretcher carry him out. Teams also tasked to find suitable camp sites.

Sunday 20/05/2018

1000hrs: All teams making their way to stretcher carry site. It was decided the terrain was too steep/dangerous to practice a stretcher carry. Patient walks to a location on track near road end, where the MP was stretcher carried out the last section of the track.

1400hrs: All teams safely back at Police Station – Hot debrief run by IC Constable Kurt Waugh.

1500hrs Exercise ends.

4. Evaluation Methodology

4.1 The agreed outcomes of the evaluation activity

A professional report outlining observations of how teams worked together towards achieving the SAR Ex Objectives. There was a strong focus on the conduct and procedures of the Incident Management Team and the learning and development that took place.

Of note most of the IMT was made up of people with limited IMT experience but a wealth of operation experience.

4.2 Evaluation scope

- Look for strengths and limitations of current training in extended search planning
- Identify Strengths and limitations of operations room in Tauranga Police Station
- Recommend improvements and strategies for future SAR Ex of this nature.

4.3 Aspects of the exercise observed, what was not observed

Observed:

- Event management/coordination.
- Interaction of Facilitators with IMT and Operation of SAR Ex
- Actions of IMT from Friday 18th May until end of SAR Ex Sunday 20th May
- Team briefings prior to the deployment of searchers
- Communications between SAR base and Field teams
- Sar Ex Hot Debrief

Not Observed:

- Pre Conditioning training Saturday 12th May 2018
- Teams actions in the field (I was able to observe progress of searchers via SAR Trac)
- Use of Air Asset

4.4 The process followed in preparing and submitting the report

There was limited interaction with the exercise planners prior to the SAR Ex.

The Aims and key objectives were forwarded a week or so prior.

Instructions from Tauranga SAR Coordinator was to undertake an evaluation of the Land Sar Exercise with a focus on the Key Objectives and how the IMT performed and developed during the exercise.

Activity from the evaluator during the SAR Ex included:

Obtaining a brief from the two SAR Ex facilitators prior to commencement of SAR Ex

Observing the IMT and their interactions

Reviewing the SAR file and associated documents/whiteboards/charts
Discussing with IMT the their decision making process

4.5 Other information

Operational activity in the field was not observed.

5. Findings

IMT

Aim: To conduct Extended Search Planning for the 2nd Operational Period of a SAREX

Complete a handover:

A handover was completed.

The Incident Controller gave a confident handover and utilised the whiteboards very well. The IAP was referred to ensuring the intent of the outgoing IMT was shared with incoming IMT. Other members of the outgoing IMT gave excellent briefings on Comms Plan, actions taken during first operational period and assets available. There was some confusion regarding the availability of the helicopter and how it could be used within the rules of the SAR Ex.

There were some critical areas within the briefing that were not covered:

LPB was briefly referred to and was based on information the missing persons partner had provided. LBP was not elaborated on and there appeared to be no reference to LPB research. IMT did not have knowledge of previous self-rescue attempts made in the past by lost person.

The Segmentation and likely scenarios the outgoing IMT had prepared were not shared or discussed during the briefing. This information is critical for incoming IMT to understand the search plan and intentions of IC and how to task accordingly.

Following the briefing these points were raised with the outgoing IMT. They had completed the following prior to the briefing:

- LPB based on Hiker
- prepared circles of probability around hut
- Scenario weighting sheet
- Segmentation
- POA for segmentation
- These critical items were not displayed or discussed with incoming IMT

This information may not have been shared because the outgoing IMT was practically handing the search over to themselves. There were only three new members who were not familiar with the scenario. Ideally the handover should have been to a completely new Incident Controller and key IMT members. This could have created more questions from the incoming IMT and would have assisted the IC in preparing a more detailed briefing – as they were no longer briefing themselves.

Review the 1st Operational Period file, whiteboard information and timelines

This objective was complete very well.

Excellent use of whiteboards in Operations room throughout the SAR Ex
(Refer attached photos)

Complete Extended Search Planning to include, scenario analysis/weighting, segmenting/prioritising search areas and appropriate tasking of field teams

The scenario analysis/weighting, segmenting/prioritising search areas was completed to a very good standard. The appropriate forms were used and the segmentation of the search area was well informed and practical. The scenarios used were realistic and fitted within the

missing person's profile. One improvement would be consideration given to an unconscious missing person. All scenarios assumed an alert person.

To add weight to the search these forms could have been reviewed during the search and as new information came to light. The forms and segmented search area could have been displayed and other members involved in the search effort encouraged to add their views/scores. This in turn would have provided confidence to the IMT that they were on the right track or challenge their thinking.

The incoming IMT struggled with producing 4 to 5 tasks on Friday evening. It took several hours for them to produce the tasks following much discussion, debate and differing views.

The key reason for this was because the IMT roles and responsibilities had not been established by the IC following the briefing. IMT members were uncertain as to who was in charge of each function. As a result no one was willing or enabled to make a final decision as to what the tasks would be. However, the discussions were very informative and some excellent ideas were produced.

IMT roles and responsibilities were formalised mid Saturday morning after teams were deployed into the field. Following this tasks were quickly identified, prioritised and actioned. This resulted in the missing person being located that evening.

Conduct additional investigation as appropriate

There was very little investigation until Saturday.

The Information Collection plan prepared 'during the first operational period' was not utilised. It took some time for IMT to assign responsibility for reviewing the search to date and looking for information gaps. Again, this was compounded by a lack of clarity in IMT roles. Once someone was given the task of gathering more information on the missing person key clues were located as to the missing person's intentions and points of interest.

To safely deploy, manage, and recover field teams conducting a search and rescue exercise in difficult terrain

From a Health and Safety perspective this objective was not met. However, in practice the teams were deployed, monitored and safely returned home.

The briefing of the Field Teams needed some work.

There was very little information displayed for teams to read or see to familiarise them with the Situation and IMT objectives.

Refer photo: 01 "Team Briefing Board"

There was no ***No OSH Brief, hazard ID, risk mitigation and instruction for teams to 'take 5'***

The only team to have any sort of safety briefing was the team being deployed by Helicopter. The safety brief related to reporting no duff situations. It was not indepth.

Following the team briefings I spoke with a team leader regarding health and safety. The key points of the discussion were:

- Confirmed no OSH brief
- Ops manager discussed mine shaft hazard only
- No Take 5 Book or thought to discuss hazards and risk mitigation – but did once prompted
- No discussion re what if? Eg. Extraction

- Team has a river to cross but not discussed risk or what do – decision making re river crossing, that is are they comfortable to make decision not to cross river because they believe it is too dangerous and inform IMT of decision?
- The team leader had received training in the use of the Land SAR Take 5 process and understood the importance of discussing hazards and risk mitigation.

There needs to be a strong focus on encouraging a culture that discusses health and safety, risk identification and risk mitigation. This starts with the IMT and flows through to individual team members. Operational teams need to know the hazards within the area of operations. They need to be empowered to make sound decisions in the field when they come across a hazard. That they can refuse a task if it is too dangerous and look for alternative solutions. The MUST acronym sums this up:

Me – I have to look after me, ensure I am equipped, skilled and prepared for my task

Us – If I am prepared I can then look out for my team so that together we can look after

Them – We can't help them if we are not squared away.

Changes need to be made to address this issue and implemented straight away before teams are deployed again.

Provide effective communications in the search area

The Comms plan was well thought out with multiple contingencies should one system fail. Communication between field teams and IMT was excellent.

SAR Trac was utilised well – team movements and current locations were kept up to date and displayed on a large screen in the Operations room.

All messages received and sent were logged electronically. A TV screen was set up in Operations room displaying all messages. A colour system was used to identify priority messages.

Field Teams

Aim: Safely conduct off track SAR taskings in difficult terrain and locate and recover a lost party

Not observed, however all teams conducted their tasks without incident. IMT were kept well informed of team progress.

Conduct helicopter familiarisation and deployment (weather permitting)

Helicopter familiarisation was conducted prior to SAR Ex.

Only a small number of teams were able to utilise the Helicopter during SAR Ex. The two key reasons for limited use of the helicopter related to weather (High wind in area of operations and low cloud). The IMT were not given the freedom to use the helicopter as they saw fit. To avoid confusion the IMT should have been given clear parameters. E.g. "You have 3 hours fly time. Once these are used up the helicopter will no longer be available." At times the SAR Facilitators confused the IMT regarding when and how they could use the helicopter.

Signcut DP's, huts, tracks and travel routes and follow any sign located

Not observed, however critical clues and DPs were located by field teams. There was clear evidence of good tracking skills by field teams.

They were hot on the trail of the missing person.

Navigate and conduct search techniques in difficult terrain and vegetation

This objective was achieved. The two main search techniques included track and clue awareness and sound lines. The missing party was located using sound. The IMT and field teams worked extremely well together to coordinate and locate the missing party using sound. It took them one hour from first sound contact to having a team with the missing party. The challenges were multiple teams hearing the missing party, the terrain and how the sound was bouncing around.

Communicate effectively with the IMT

Communication between the IMT and Field teams was very effective.

Complete a stretcher recovery of a injured person to a suitable helicopter winch or landing point

Teams did get to practice a stretcher carry. The management of the injured party was carried out very well. Field teams used their skills to identify what was wrong with the missing person, who was injured. (Broken Leg) IMT sought and provided good advice on treating the patient and organised a recovery plan. Due to the terrain the missing party quickly recovered and walked to a nearby hut for the night. On Sunday the patient was carried along a marked track for a suitable distance.

6. Conclusions

The SAR ex was well planned and executed allowing for the AIM of the SAR Ex to be met. A lot of work had gone into preparing the missing person file and documentation supporting the first operational period. There was enough information for the incoming IMT to interpret what had happened and create an IAP and extended search plan.

The following objectives were achieved to a very good standard: Review the 1st Operational Period file; whiteboard information and timelines; Complete Extended Search Planning to include; scenario analysis/weighting; segmenting/prioritising search areas and appropriate tasking of field teams; Conduct additional investigation as appropriate; Provide effective communications in the search area.

All of the field teams KPIs were achieved.

The KPI relating to conducting a handover was achieved, however critical information relating to the search plan were not discussed or shared as outlined in the findings. The handover could have been improved by the IMT writing a GSMEAC brief to ensure all key information is shared.

In terms of safely deploying, manage, and recover field teams conducting a search and rescue exercise in difficult terrain – this KPI was not achieved to an acceptable standard. There was not a strong emphasis on Health and Safety during this SAR Ex. This is an area that needs to be addressed with a view to enabling a culture that is focussed on identifying, discussing and mitigating potential hazards/risks.

The appointment of IMT roles, namely who is responsible for each role, needs to be established quickly by the IC. This will ensure accountability for completing key tasks and enable faster decision making, thus avoiding long discussions that do not lead to action.

The SAR Ex was a success in relation to the development of IMT members. All members of the IMT were keen to learn and develop in their roles, which was very evident as the exercise progressed.

7. Appendix

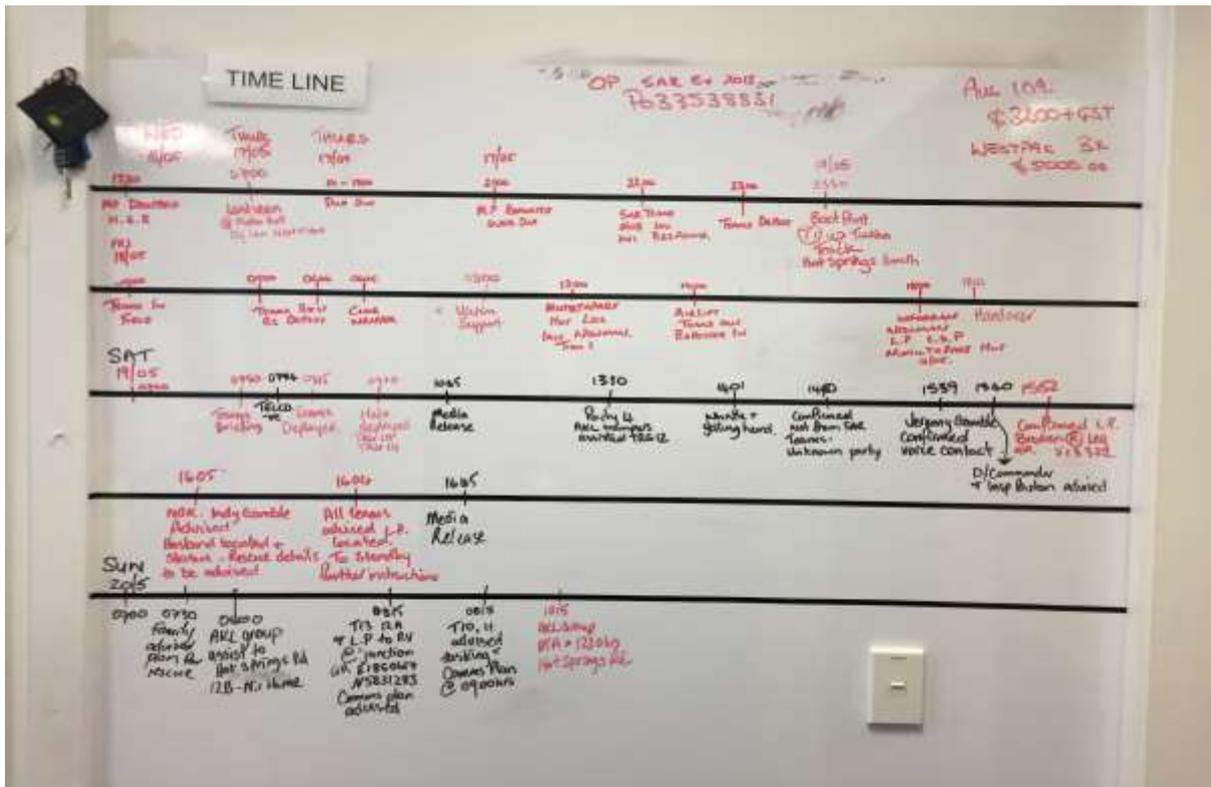
01 Team Briefing Board:



02 IAP Board:

INCIDENT ACTION PLAN			NZSAR
Situation: <i>Male Transporter overdue in Kaitake Ranges</i>		Phase/Operational Period: <i>Sat 17/06/20 @ 0600 to 17/06/20 @ 1700hrs</i>	
Mission/Goal: <i>Return missing persons to family in a safe manner</i>		Done: <i>5/18/20</i> <i>Responder at Mt Asgard Hut</i> <i>Planned by: Liza, Lisa, Grant</i>	
Date/Time Missing: <i>Thurs 21/06 17/06/20</i>	OBJECTIVES FOR OPERATIONAL PERIOD (Keep it SMART): <ul style="list-style-type: none"> <i>Complete search of highest probability areas</i> <i>Continue phone calling and text messaging</i> <i>Locating resources for ongoing work</i> <i>Complete IAP for next OP period</i> 	STRATEGIES TO ACHIEVE IT: <ul style="list-style-type: none"> <i>Search using Search sweep technique</i> <i>Contact neighbours (New Zealand Central Bank, New Zealand Police, local neighbouring SAR groups, transport, catering)</i> <i>IAP with ZPT</i> 	Done: <i>5/18/20</i> <i>Responder at Mt Asgard Hut</i> <i>Planned by: Liza, Lisa, Grant</i>
Missing Person and NOK: <i>Jeremy Alexander Joly</i> <i>Indy Alexander (wife)</i>	Weather: <i>Shower, max 15° min 10°</i> <i>Windy, gusty, Sd / -8 MFS</i>	Safety/Hazards: <i>Mountain terrain/2000</i> <i>low visibility</i> <i>Shower possibly high</i> <i>Blinds + misting</i> <i>Helm - Safety - CSAT</i> <i>Rescue</i>	Next Step: <i>Helm available</i> <i>LSAR - Teams</i>
SAP: <i>07/06/20</i> <i>17/06/20 @ 0700 hrs</i>	Command Elements To do: <i>Update weather</i> <i>Media Updates</i>		Notes: <i>Helios Weather/Plan</i> <i>Media - other to Hospital</i> <i>Property - gear -</i> <i>Statement if Jon Alexander Indy Alexander</i> <i>What resources to look other relationship?</i>
COMMAND STRUCTURE			
INCIDENT COORDINATOR <i>GRANT</i>		LOGGERS <i>LISA</i>	
PLANNING <i>GRANT</i>		OPERATIONS <i>LISA</i>	
ISSUE <i>JAN</i>		LOGGERS <i>JAN</i>	

03 Time Line:



Search Area Segmentation:



