



North Otago Land SAR ex – Op Dragonfly 2021

Exercise Evaluation Report

Location: Huxley Valley, Omarama, Southern Police District

Date: 15-18 May 2021

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Executive Summary

No formal assessor was available on the weekend of the exercise, but objectives were outlined for the exercise and this report is an overview in an impartial and objective.

The purpose of this SARex was to give those participating the opportunity to refresh and practice search and rescue skills and knowledge over the duration of the exercise and also gain new experiences. Five objectives were established to achieve this that could be reasonably be expected to experience in a real operation and test those participating in it.

The exercise was multi day and land based in a area that a high number of call outs are experienced in. This is a very useful tool for new members to experience and also offer area familiarisation.

The exercise was made up of members from several different policing districts and well as three neighbouring LandSAR groups. This provides a very good platform to establish a number of shared resource responses as well as well as establishment of standard operating procedures amongst those groups.



Recommendations

Consider:

1. Solid relationships between Police SAR groups and all related partner agencies such as LandSAR are fundamental to the successes of any operation. This exercise extended beyond policing and LandSAR boundaries with all groups involved now the better for it. Relationship building takes a significant amount of work by all involved. My challenge to those who participated in this exercise to continued to build on what you have now started. Have members or representatives attend each others meetings and training exercises so that when the need arises and we need to deploy in an operational setting, we can do so in a friendly and more efficient manner.
2. Continue to allow members the opportunity to experience both IMT and the field environment, particularly during training or exercise. This provides a sound platform to build knowledge and experience, but also plan for succession as other members look to move on as this ensures a seamless transition within the group.
3. This exercise provides the opportunity any pre plans for the area to be updated or created to allow for the most practical group to respond. It should include all details of the local Police and LandSAR resources available. It should include other relevant information such as heli providers and land owner details.



Introduction

The key objectives for the exercise were;

1. To build better partnerships within the three neighboring LandSAR groups, namely Omarama, North Otago (Oamaru based) and Twizel and also police associated in the same areas.
2. To give all LandSAR members an insight into the process used in Extended Search planning process and techniques. The idea is to show those attending the process so that they understand the taskings that result.
3. All SAR members to be familiar and aware of hazard identification and safety considerations in the use of Helicopters, including the correct way to embark and disembark from a Helicopter during a SAROP.
4. Learning / Strengthening the correct search technique choice and when to use them in the field.
5. Choosing the correct location for a campsite, being self sustainable for 24 hours ensuring sufficient gear and food is available.

Safety

Safety was a key consideration for this exercise due to the steep terrain in which the search component was being held (North Huxley Valley). Following a vigorous assessment it was decided that the majority of the terrain was suitable to allow teams to safely operate in and ensure we could hold the exercise in that region.

To better ensure safety of the Teams the IC was flown into the area by Helicopter by Omarama SAR volunteer Bryan PATTERSON so that safe landing zones could be identified prior to sending teams in. The landing zones were then given a number and teams were briefed that this was where they would be searching ensuring they stayed in Sub Alpine areas.

Prior to deployment, group leaders were asked to provide a list of members for each team. The IC then discussed each team member's capability ensuring that the less experienced were with the most experienced. Team leaders were also chosen by experience with terrain and LandSAR safety expectations.

Team Leaders were given a separate safety briefing by the IC ensuring that they understood their responsibilities as Team leader and the safety of their team, it was also explained to them that should they not believe the pre designated Landing zone was safe (due to new snow ice night before) to instruct the pilot to land elsewhere at an area of their choosing.

A group safety briefing was also given to all involved, this included a second Heli safety briefing.

Team Leaders were also tasked to give their own team a separate safety briefing.

Background

The location selected for this exercise borders between three Police SAR territory, being Otago Coastal, Otago Lakes and South Canterbury. It has four separate LandSAR groups within easy reach, being Omarama, North Otago, Twizel and Wanaka/Queenstown SAR. The area is made up of a significant mountain ranges with a large number of valleys that contain walking tracks and huts, popular with walkers, trampers and hunters. There are large numbers of SAR incidents in this area.

This particular SARex centres around the Dragonfly aircraft that went missing in 1962, believed to have crashed somewhere in the Hopkins or Huxley Valleys. The crash is a well-known local mystery with previous SAR Advisors and other locals putting significant time and effort into locating the wreckage.

With the number of SAR groups within close proximity, it is rare that the groups come together to work on an operation jointly as the same time. This exercise presented a very good opportunity to get some of the groups together to train with a common purpose and share experiences and knowledge.

Follow the link below for more on the Dragonfly.

<https://www.rnz.co.nz/news/national/434090/family-see-mountaineers-after-12-year-search-for-missing-plane>



Evaluation Methodology

No formal exercise assessor was engaged for this exercise. The following discussion points were discussed post exercise.

- The agreed outcome

An evaluation report to be submitted to NZSAR.

- Evaluation scope

To measure how well the exercise meet the stated purpose through its supporting objectives. To give an informed opinion on value given and present alternative ideas on ways to achieve similar outcomes.

- Aspects of the exercise observed and what was not observed.

I was able to get an appreciation of the majority of the exercise, though I was not physically on the water, and assessed those that were, through the quality of their radio communications and information passed combined with their own subjective feedback.

- The process followed in preparing and submitting the report.

I have compiled my report from my discussions with the exercise organisers, information notes from the post exercise debrief, photographs, evidence collected and notes taken at the time by the event organiser, S/Const Nayland Smith.



Findings

1. To build better partnerships within the three neighboring LandSAR groups, namely Omarama, North Otago (Oamaru based) and Twizel and also police associated in the same areas.

This was done by initially taking everyone out of their comfort zone and shifting them to tables where they had to sit with people unknown to them. They also had to introduce the person sitting beside them to the rest of the group. The remainder of the day they then worked together as an IMT getting to know each other better. At the end of the second day they all camped together and had a quiet social gathering on the valley floor around a campfire. They also got to see Police in a SAR role rather than an enforcement one. This was especially good for the 6 new SAR volunteers who have had little contact with police prior to the exercise.

2. To give all LandSAR members an insight into the process used in Extended Search planning process and techniques. The idea is to show those attending the process so that they understand the taskings that result.

This was undertaken by breaking into smaller groups of 5-6 members, they were then all given a briefing with all relevant information pertaining to the missing aircraft "Dragonfly" they were also given a briefing pack with photographs, maps, summary of sightings and other information plus the relevant SAR forms. They were then walked through the process starting with the search urgency form, (for the sake of the exercise they were informed the pilot was on his own). The scores were then discussed and each table asked to explain their perceived risk analysis. It was interesting to note that there were varying degrees in scores, but all declared an emergency response was required. It was then explained what an IAP was and how this was developed for the ESP. They were then given an IAP to complete. Following that they were given the scenario weighting worksheet and Probability of Area consensus worksheet, the science behind these were also discussed as was LPB. The groups were then tasked to complete these using the information they were given and come up with a search area. Breaking the area into segments small enough to search was also explained.

3. All SAR members to be familiar and aware of hazard identification and safety considerations in the use of Helicopters, including the correct way to embark and disembark from a Helicopter during a SAROP.

This was achieved by a thorough safety briefing being held by Captain Bryan PATTERSON who is a pilot for Central South Island Helicopters. He showed the group the Squirrel Helicopter and explained the correct procedures to get on and off the Helicopter. He identified the hazards before explaining how to mitigate these. A thorough safety briefing was also held and it was reiterated that safety from a Crew Resource Management (CRM) perspective was the entire team's responsibility. For some field members this was the first time that they had been in a Helicopter or worked around one. Teams were assessed as they loaded and unloaded from the heli as they were picked up or dropped off from taskings during the exercise.

4. Learning / Strengthening the correct search technique choice and when to use them in the field.

This was undertaken using a session explaining / refreshing with field team the different techniques that are available with a view to team that it was more frequently expected for the Team to decide

the appropriate search technique that they would use in the field so team leaders can discuss within their team rather than being told by IMT who don't have the current terrain overview, other than what they see on a map. The missing person matrix was displayed and explained to them how this then dictates on the search technique used.

The Teams themselves were tasked an area to search, they were to bring back as many man made items that they could carry, whichever team brought back the most objects would be the holder of the coveted DRAGONFLY certificate. The teams brought all sorts of items back including a registration plate (from on top of Broderick Pass!) to metal clips and a fence post which the team candidly argued was part of a wing spar of an aircraft. Teams returning with such items provided a very good indication of the thoroughness of their searching.

5. Choosing the correct location for a campsite, being self sustainable for 24 hours ensuring sufficient gear and food is available.

Teams spent the night in the north Huxley Valley. The members had to choose their own location to erect shelters and set up camp. Though the forecast was for fine weather, teams experienced persistent rain throughout the night, choosing the correct location was very important. Also important was team leaders checking members kit and ensuring everyone had sufficient kit to be out overnight. This only went to prove that they must be prepared for any eventuality. There were no issues with everyone having a good night.

A SAREX hot debrief was held following the exercise conclusion of the exercise. Each team was invited to discuss their involvement from the tabletop exercise held on Friday through to the search itself on Saturday concluding with the overnight stay.



Conclusions

Overall there were 27 attendees. Included in these numbers were 5 that are new to LandSAR having only recently joined, making this their first proper SAR experience. This exercise proved valuable to them. Also involved were LandSAR GSO's Kelly Hosking (Southern) and Amy Penketh (South Canterbury).

The area the team's were searching was extremely steep in some sections. Safety remained a key consideration, which resulted in specific areas being pre designated to each Team rather than searching areas identified by their tabletop exercise. Although this did detract from the initial intention to physically search for the missing dragonfly, everyone agreed that due to the hazardous conditions the right decision was made not too.

Feedback regarding the exercise was positive. The group mainly consisted of field team members who all voiced the opinion that it was good to see the "other side" of a search, meaning the process used by the IMT.

The new members were especially appreciative to have been involved in a SAREX and stated they were impressed in which worked collaboratively to achieve the best possible outcome for the missing person.

Discussion was held about ensuring that the younger or more exuberant field members had to be reined in when they began to stray or linger from their team. It was also discussed by the IC about familiarity around Helicopters, explaining that being familiar with something can cause complacency. As it played out, a newer member who works daily with helicopters appeared to be lackadaisical in his approach to the aircraft. Although there was no danger, the team leader wanted it brought to everyone's attention without identifying the actual member.

One point of learning was identified by the group who believed that every helicopter pilot appears to have a different approach or varying sets of rules about safety, in that some prefer the team members to crouch beside the heli, while others prefer teams to be further away. It was thought that perhaps a SOPs page could be created for this. However it was agreed that the pilot is in charge of the aircraft and has the final say on air craft safety and while every pilot is different the fundamental safety message is the same.

