Exercise Evaluation Report Avalanche Search and Rescue Exercise (AVOEX)

Exercise PARAWHENUA

Location:	Mount Ruapehu, Tongariro National Park
Date:	7-8 September 2025
Report version:	Final
Evaluator(s):	Brandon McCarthy - Contract Evaluator for NZSAR

Contents

Executive Summary

Exercise PARAWHENUA was conducted in September 2025 on the slopes of Mount Ruapehu and simulated a large-scale avalanche requiring a coordinated multi-agency response. Led by NZ Police SAR with support from NZSAR, Ruapehu Alpine Rescue Organisation (RARO), Land Search and Rescue (LandSAR), Hato Hone St John, Police CIB, and RTB Helicopters. The exercise tested IMT performance, inter agency collaboration under CIMS, avalanche field skills, and the use of Survey123 for reconciliation of victims (role players).

The exercise successfully met its primary objectives. Agencies demonstrated professionalism, adaptability, and growing interoperability. Field teams displayed solid technical avalanche rescue competencies, and showing integration of RECCO technology. The IMT matured as the exercise progressed, handling complex decision-making, documentation, and tasking processes with increasing cohesion.

Two real time role player incidents added realism and tested resilience: role players suffering a medical event, and a member of the public stranded on a cliff face. Both were managed effectively by Excon and the IMT, though the medical incidents highlighted the need for structured role player safety protocols. Field teams reported communications limitations stemming from the exercise radio channels, and there was early disconnect between RARO radio tasking and the Ops Room created challenges, underlining the importance of early activation of an Operations Manager and improved secondary comms.

The evaluation identified several improvements: strengthening role player safety monitoring, embedding Survey123 as a District reconciliation and safety tool, developing communications redundancies, and formalising self-tasking reporting protocols. The strong partnership between Police, RARO, and RTB Helicopters was a definite highlight as an outstanding working model for alpine SAR and should be sustained through continued joint training.

Exercise PARAWHENUA reinforced the importance of regular joint training for avalanche SAR. While such incidents are rare in New Zealand, their consequences are severe, and the lessons identified through this exercise provide a solid platform to further strengthen national avalanche response capability

1. Recommendations

1. Strengthen IMT Operations Oversight

To avoid early disconnects between Planning and Operations, the Operations function should be staffed from the very start of an incident. Assigning a dedicated Ops Liaison to monitor RARO radio tasking and log deployments (White Board) in real time will ensure that all taskings are captured, shared, and prioritised effectively. This provides the IMT with a live operational picture, avoids duplication of effort, and allows the Incident Controller to make informed decisions quickly.

2. Embed Survey123 Digital Dashboards

Survey123 proved useful during PARAWHENUA but was inconsistently applied. Future exercises should standardise its use as the primary system for casualty reconciliation where possible. Each field team should have a trained Survey123 operator, while the IMT Intel/Planning Managers maintains a live dashboard projected in the Ops Room. Over time, integration with SARTrack or IMT System could create a single digital source of truth for tasking, reconciliation, and safety.

3. Introduce a Role Player Safety Protocol

The NO DUFF medical incident demonstrated the importance of structured role player monitoring. A clear Role Player Safety Protocol should be adopted nationally for alpine SAREXs. This should include check-in/out logs, maximum exposure times, and scheduled welfare checks. Dedicated Safety Officers should be appointed in each role player group, supported by potential Survey123 forms, dashboards, to provide Excon and the IMT with real-time visibility of welfare.

4. Improve Communications Resilience

Radio coverage was generally effective but not always reliable, leading to delays in reporting and occasional self-tasking by field teams. To strengthen resilience, a pre-planned secondary comms tool should be developed, which could include portable repeaters, satellite messengers (inReach), and where appropriate Starlink Mini for data/cell comms. Integration of a communication personnel could be appointed to oversee radio discipline, manage fallback channels, and ensure task completions are reported promptly.

5. Integrate RECCO into National SOPs and Training

The RECCO system was used successfully during PARAWHENUA to locate simulated avalanche victims, demonstrating its operational value. To ensure consistent application, RECCO should be formally integrated into Police and LandSAR avalanche guidelines. Both IMT and field personnel should be trained on how to request, deploy, and record RECCO operations. Including RECCO in national doctrine will ensure its benefits are embedded into future avalanche responses.

6. Maintain and Grow Agency Partnerships

The collaboration between NZ Police SAR, RARO, and RTB Helicopters was one of the strongest aspects of PARAWHENUA. This tri-agency partnership resulted in seamless alpine tasking, professional aviation integration, and high levels of trust between agencies. It should be maintained through regular joint training, shared SOP development, and integrated tasking rehearsals, using it as a model of best practice for alpine SAR cooperation at both district and national levels.

7. Embed Safety and Reconciliation Injects in Future Exercises

While PARAWHENUA successfully tested multiple aspects of avalanche response, future exercises should deliberately include injects designed to stress-test safety and reconciliation processes. These could involve simulated role player welfare concerns, incomplete reconciliation lists, or unexpected communications failures. Embedding such injects will help confirm that systems are robust, ensure lessons are captured, and provide controlled opportunities to refine IMT and field practices before they are tested in real incidents.

2. Introduction

Exercise PARAWHENUA was conceived in response to the limited opportunities for practical avalanche response training in the Central North Island (CNI). Although avalanche incidents in New Zealand are relatively infrequent, they carry significant risk due to their sudden onset, the remote alpine environments in which they occur, and the complex technical skills required for a safe and effective response. PARAWHENUA was designed to ensure that search and rescue (SAR) agencies remain prepared for these rare but potentially catastrophic events.

The exercise built on lessons identified in previous national and regional SAREXs, particularly around inter-agency coordination, documentation standards, and the integration of modern IT tools such as Survey123. By focusing specifically on avalanche rescue, PARAWHENUA provided a valuable opportunity for Police SAR, LandSAR, RARO, and supporting agencies to rehearse specialist avalanche response tasks while confirming that the Incident Management Team (IMT) could manage a complex alpine incident within the CIMS framework.

Avalanche response is recognised as a low-frequency but high-consequence activity, and capability must therefore be tested and validated regularly. Periodic training prevents skill fade in both technical rescue and incident management, ensuring personnel can operate effectively when called upon. In recent years, Police SAR squads from CNI, together with Police CIB and RARO, have had limited opportunities to train jointly. This created a clear need to revalidate readiness and strengthen interoperability between the agencies most likely to respond to an avalanche emergency.

The design of PARAWHENUA placed particular emphasis on confirming that the IMT was operating in accordance with best practice. Key areas of focus included communications, documentation, safety management, fatigue monitoring, accurate recording of decisions, and the trial use of Survey123 for reconciliation processes. From both IMT and field perspectives, the exercise also provided an opportunity to build trust and rapport through shared experience. Establishing a common approach to incident management, field operations, and communications supports the development of a shared model across organisations, strengthening cohesion during real avalanche incidents.

The key drivers for Exercise PARAWHENUA included:

- Limited practical avalanche training opportunities in the CNI district.
- The need to test IMT readiness for avalanche scenarios, with emphasis on reconciliation and documentation.
- Building trust and rapport between specialist alpine responders and IMT personnel.
- Reinforcing safety management systems.

In summary, Exercise PARAWHENUA addressed both local and national priorities for avalanche preparedness. It reinforced the need for ongoing training in high-risk alpine environments while also serving as a platform to integrate evolving practices and digital tools into SAR operations.

3. Background

3.1 Background to the Exercise

Exercise PARAWHENUA was conceived as part of New Zealand's ongoing programme to strengthen national readiness for low-frequency, high-consequence avalanche incidents. While avalanches in New Zealand are relatively rare compared to other alpine nations, when they do occur, they present significant operational challenges: difficult terrain, time-critical survival windows, and the need for seamless coordination between specialist alpine rescuers, local Police, and wider SAR partners.

Recent developments, including the introduction of new technologies such as RECCO detection systems and Survey123 for digital reconciliation, created a timely opportunity to test how these tools could be integrated into operational practice.

PARAWHENUA also built on lessons learned from previous avalanche SAREX nationally and internationally, ensuring that New Zealand SAR personnel remain aligned with NZSAR standards. The exercise provided a realistic platform for refreshing avalanche-specific SAR skills and validating multi-agency coordination under the Coordinated Incident Management System (CIMS).

3.2 Dates, Location, Organising Agency(s), Key People

The exercise was conducted on the 7-8 September 2025 (learning on the 7th and the exercise on the 8th) in the vicinity of Mount Ruapehu, Central North Island. This location was chosen for its alpine terrain, history of avalanche risk, and accessibility for multi-agency training.

The exercise was led by New Zealand Police Search and Rescue (SAR), with support from Ruapehu Alpine Rescue Organisation (RARO) as the principal alpine specialist partner. Key Police SAR staff from CNI–BOP SAR squads contributed to both IMT operations and field deployment.

The Incident Control Point was situated at the new SAR Operations facility situated in Waimarino.

3.3 Participating Organisations

Participants included:

- NZ Police SAR Squads – providing IMT staff, field responders, and incident control.
- Police Criminal Investigation Branch (CIB) – supporting investigative and evidential considerations.
- Ruapehu Alpine Rescue Organisation (RARO) – delivering alpine expertise, leading field operations, and managing specialist avalanche responses.

- LandSAR Volunteers – augmenting field capability in search teams and providing ground-level support.
- St Johns – Providing medical oversite and responsiveness
- Helicopter Support (RTB Helicopters) – assisting with aerial reconnaissance, deployment of teams, and safety response.
- NZSAR Evaluator – providing independent evaluation, observation, and recommendations.

These agencies worked together in both IMT and field environments, ensuring a representative test of interagency cooperation.

3.4 Exercise Aim

To train and prepare SAR personnel for effective avalanche incident management and field response in the event of an avalanche in Tongariro National Park.

3.5 Exercise Objectives

1. Demonstrate effective collaboration between SAR partner agencies following an avalanche incident.
2. Ensure the Incident Management Team (IMT) can effectively manage the avalanche response under the CIMS framework.
3. Provide SAR operational personnel with the opportunity to refresh and practise avalanche-specific SAR skills.
4. Test Police and SAR reconciliation processes through the operational use of Survey123 as a digital accountability tool.

3.6 Exercise Scenario

The exercise scenario simulated a large-scale avalanche event on the slopes of Mount Ruapehu following significant snowfall and unstable alpine conditions. The avalanche was assumed to have affected multiple recreational users in the backcountry area, requiring the immediate deployment of specialist alpine rescue teams.

The IMT was activated under Police SAR leadership to manage incoming information, develop an Incident Action Plan (IAP), and coordinate multi-agency taskings. Field teams were deployed to conduct a search, and casualty extractions under realistic alpine conditions.

Excon introduced scenario injects to challenge the IMT and field teams, including victim reconciliation complexities. The scenario roll-out was deliberately designed to escalate in complexity, testing not only technical avalanche skills but also the capacity of agencies to adapt, communicate, and coordinate under operational stress of what and avalanche would bring.

4. Evaluation Methodology

4.1. The agreed outcomes of the evaluation activity

The evaluation aimed to determine whether Exercise PARAWHENUA achieved its objectives of strengthening interagency collaboration, testing IMT performance, refreshing avalanche SAR field skills, and trialling technology for reconciliation. Outcomes were agreed with NZ Police SAR and exercise planners in advance. An Evaluator was tasked with identifying strengths, areas for improvement, and practical recommendations for both future avalanche SAREX and broader SAR practice in New Zealand.

4.2. Evaluation scope

The evaluation focused on:

- In scope:
    - Interagency coordination and adherence to CIMS principles.
    - IMT decision-making, documentation, and use of Survey123.
    - Avalanche-specific SAR field skills (RECCO, patient extraction).
    - Communications effectiveness across IMT and field teams.
    - Role-player reconciliation processes.
- Out of scope:
    - Catering, accommodation, and logistics.
    - Broader organisational readiness outside of the exercise context.
    - Financial costings or resource budgeting.

4.3. Aspects of the exercise observed, what was not observed

Evaluation data was collected throughout:

- Direct observation of IMT activities, including briefings, tasking, communications, documentation, and safety management processes.
- Field observation of avalanche SAR operations of RARO, focusing on technical skill demonstration, teamwork, and integration of RECCO.
- Hot debriefs conducted with IMT members, field teams, and role players immediately following the exercise.
- Analysis of IAPs, safety plans, tasking logs, and Survey123 outputs.
- Discussion with Exercise Control (Excon) during and after the exercise to verify intent and inject management.

What was not directly observed included every field deployment in detail (due to terrain and spread of taskings) and every radio exchange across communication channels. Instead, sampling attendees such as RARO, Role Players that had critical taskings, and replay of logs provided evaluative evidence.

4.4. The process followed in preparing and submitting the report

Evaluator engaged with exercise plans before PARAWHENUA to clarify objectives, develop evaluation criteria, and agree on the methodology. During the exercise, evaluator liaised with Excon and IMT leaders to confirm access and observation protocols. Draft findings were compiled into a structured report and reviewed internally by NZ Police lead. Feedback was incorporated, and the final report will be submitted to NZ Police SAR and NZSAR in accordance with national exercise reporting protocols.

4.5. Other information

The evaluation acknowledges that certain aspects could not be observed due to the realities of alpine conditions, including intermittent communications blackouts, weather constraints, and safety restrictions that limited continuous field observation. These gaps were mitigated by triangulating evidence from multiple sources (IMT logs, Survey123 entries, Excon inject records and hot debrief feedback). Future evaluations may benefit from additional digital monitoring tools (e.g., Survey123, live dashboards, IMT systems) to increase visibility across dispersed alpine environments.

5. Findings

5.1 Multi-Agency Collaboration (KPI: Interoperability & CIMS Compliance)

Positive: A notable strength of Exercise PARAWHENUA was the excellent operational relationship between NZ Police SAR, Ruapehu Alpine Rescue Organisation (RARO), and RTB Helicopters. Pre-existing trust and strong professional respect were evident throughout the exercise. Taskings were quickly translated into clear field objectives, with RARO coordinating effective alpine specialists in planning the response.

The integration of RTB Helicopters into both training and operational taskings provided a realistic and highly professional aviation component. The helicopter pilots demonstrated not only technical proficiency in alpine operations but also a deep understanding of SAR safety protocols and the operational needs of Police and RARO teams.

This tri-agency partnership resulted in:

- Seamless task planning and execution, particularly during patient extractions and rapid deployment of teams into alpine terrain.
- Shared situational awareness kept IMT planning aligned with field conditions.
- Mutual confidence in decision-making, ensuring that safety and efficiency were prioritised under challenging alpine conditions.

Joint taskings were executed efficiently, and Excon facilitated smooth integration of operational injects. Despite the complexity of a simulated large-scale avalanche, the IMT structure matured as the exercise progressed, with roles and responsibilities becoming clearer.

Challenge: At the outset, there was some disconnect between initial radio planned taskings and the Operations Manager, leading to gaps in situational awareness and delays in Operations. This created a temporary division between Planning and Operations oversight. While lives at risk justified some self-tasking in the moment, this highlighted the need for structured protocols requiring immediate reporting back to IMT Operations Manager

Evidence: Direct observation of IMT, field radio operations, post-exercise debrief feedback.

Summary:
A major strength of Exercise PARAWHENUA was the excellent operational partnership between NZ Police SAR, RARO, and RTB Helicopters. Trust and professional respect allowed taskings to be translated quickly into clear field

objectives, with seamless coordination during patient extractions and alpine deployments. RTB Helicopters added realism and professionalism, demonstrating strong technical skill and an understanding of SAR safety requirements. This tri-agency cooperation fostered shared situational awareness, efficient decision-making, and smooth integration of operational injects.

The main challenge occurred early in the exercise, where a disconnect between initial radio taskings and the Operations Manager created gaps in situational awareness and delayed oversight. While self-tasking was justified in lifesaving contexts, it reinforced the need for clear protocols requiring immediate reporting to IMT Operations.

5.2 Incident Management Team Performance (KPI: Documentation, Decision-Making, Information Flow)

Positive: The IMT demonstrated adaptability under pressure and made increasingly confident use of CIMS tools. Documentation improved steadily across the operational period, with Incident Action Plans, use of white boards and screens all leading to taskings becoming clearer. Excon injects were well-handled, and the IMT coordinated effectively, especially during the two unfortunate NO DUFF incidents, maintaining control and ensuring clear prioritisation of resources to affect the medical/rescue extractions.

Challenge: Initial IMT formation lacked an active Operations Manager, which left a gap in the oversite of coordination of early deployments. Communications management was also limited by reliance on DOC radio channels alone, with no designated communications coordinator within the IMT or redundancy. This delayed Operational decisions and could cause information bottlenecks in the field.

Evidence: Review of IAP drafts and task logs; observation of IMT decisions; participant debrief notes highlighting comms overload.

The following is a possible method to address this observation.

An improvement identified during PARAWHENUA was the need for better integration of the initial RARO radio tasking of assets with the incoming IMT Operations Manager.

In the beginning, RARO deployed teams over radio without Ops Room visibility, creating gaps in situational awareness. The recommended solution is to assign a dedicated Ops Liaison over and above a Radio Log person/one in the same within the IMT to monitor RARO’s planning/deployment and immediately log all deployments onto a tasking board or perhaps in the future a preformatted Survey123 form for deployment or IMT System.

This ensures Operations maintains a live picture of current team movements, reduces duplication, and allows rapid reprioritisation of assets. In the longer term, the adoption of a shared digital tasking dashboard (e.g., Survey123 or IMT System) would synchronise field tasking with Ops Room awareness, embedding a robust, real-time system of coordination.

Summary:
Future avalanche exercises and real incidents could assign a dedicated Ops Liaison to monitor initial RARO tasking and log all deployments. In the longer term, digital dashboards could be integrated to synchronise field tasking and Ops Room awareness of deployment, improving oversight, reducing duplication, and enabling better reprioritisation of resources.

5.3 Avalanche Field Skills (KPI: Technical Proficiency & Safety Standards)

Positive: Field teams executed their searches with competence. Extraction drills were completed within expected timeframes, and RECCO technology was used effectively to locate simulated buried casualties. Demonstrating the potential of integrating advanced tools into alpine SAR. Technical teamwork between RARO and agency personnel was strong, with clear task sharing and mutual support.

Challenge: Some field teams had trouble maintaining reliable comms with IMT due to radio channel limitations. While this was partially mitigated by strong team autonomy, it posed risks of duplication and delayed reporting of task completions.

Evidence: Field team feedback. Evaluator involvement in RECCO deployment and hot debrief feedback of its usage.

Summary:
Field teams demonstrated strong technical competence, completing searches and extractions within expected time limits. The use of RECCO technology proved effective in locating simulated casualties, highlighting its value for alpine SAR. Teamwork between RARO and agency personnel was notably strong, with clear task sharing and mutual support. The main challenge arose from unreliable radio communications with the IMT, which risked duplication and delayed reporting, although this was mainly offset by team autonomy. These findings were confirmed through field team feedback, evaluator observations during RECCO deployment, and comments provided in the immediate debrief.

5.4 Reconciliation & Use of Digital Tools (KPI: Accountability & Record Accuracy)

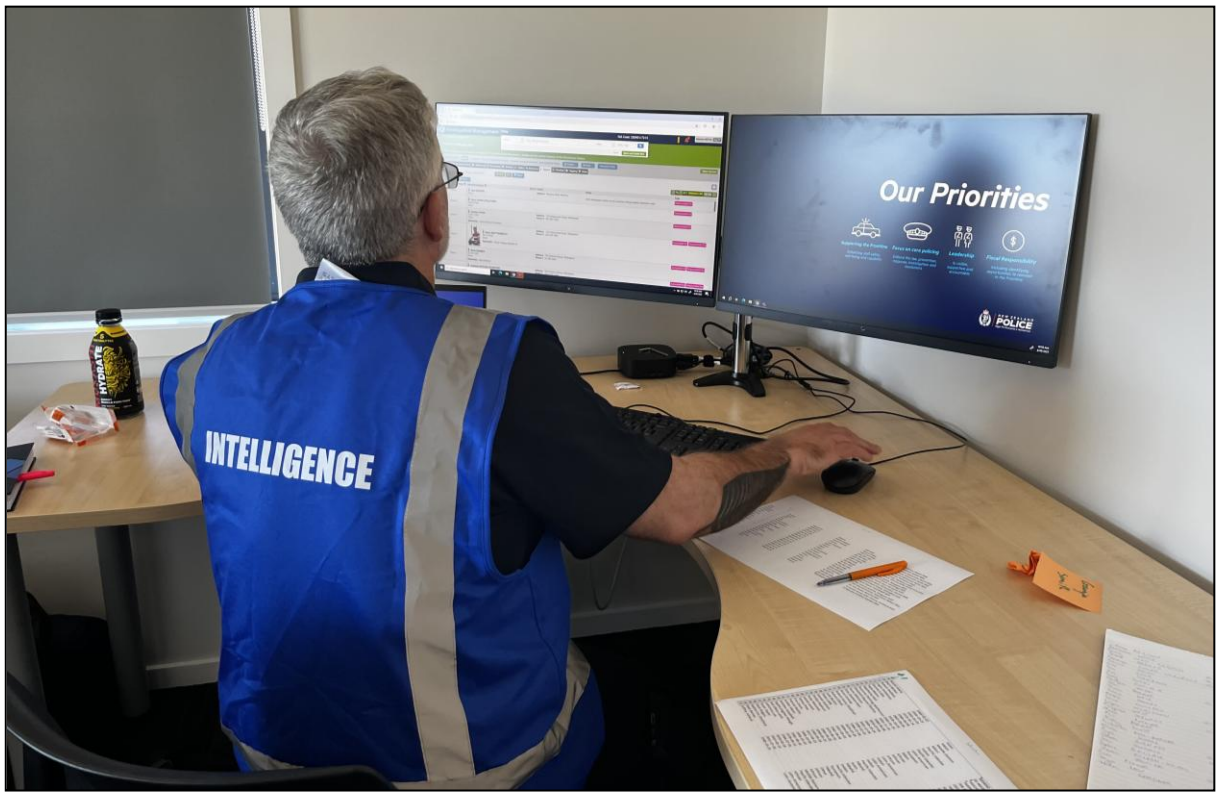
Positive: Survey123 was trialled for casualty reconciliation, showing promise as a tool for maintaining a live and accurate picture of “who is missing, who is found, and

who remains at risk." IMT Intel Manager began incorporating Survey123 data to improve situational awareness.

Challenge: Survey123 was not yet fully embedded into IMT tasking or safety management processes, and its use varied. Training of the application was rushed with an only a 'Logon How To'. With the expectation that all parties were competent. Lack of the Application understanding did have data entry delays reducing its effectiveness in live monitoring. This indicates the need for future exercises to formally assign Survey123 training and operators at both IMT and field levels.

Evidence: Review of Survey123 dashboards and data exports; feedback from IMT Intel officers; notes on dashboard use during operations.

Summary:
The Survey123 application was tested by Police SAR for casualty reconciliation, demonstrating its capability to provide a real-time and accurate record of individuals who are unaccounted for, located, or at risk. IMT Intel Manager began using Survey123 data to strengthen situational awareness. However, this was stopped because of the NO DUFF incidents. Future exercises should allow for formal Survey123 training and designate operators at both IMT and field levels to maximise the applications value.



5.5 Safety & Role Player Monitoring (KPI: Exercise Control & Duty of Care)

Positive: Both NO DUFF incidents - miedical incidents of two role players and the rescue of a stranded member of the public - were managed effectively. Excon and IMT prioritised safety and coordinated resources well, preventing escalation into major emergencies.

Challenge: The medical incident demonstrated the vulnerability of role players in alpine environments. Monitoring systems were perhaps informal, and there appeared to be no structured log of entry/exit times or welfare checks. This represents a gap that can be filled in planning. For example, a dedicated Role Player Safety Protocol and Manager.

Evidence: Direct observation of NO DUFF response; medical incident; role player feedback.

The following is a possible method to address this observation.

The Potential of Survey123 for Role Player Monitoring

Survey123 provides a simple, reliable way to track role players during avalanche exercises (If available to link with Police Survey 123 and the exercise area is in clear coverage). It ensures every participant's exposure time, welfare status, and location are logged in real time, giving Excon and the IMT a live picture of safety. This prevents role players from being left in the snow too long and creates a digital record of all safety checks.

How to use it best:

- Before the exercise: Build a role player safety form with fields for role player ID, safety officer ID, check-in/check-out times, exposure duration, welfare status, and optional GPS location. Preload the form and offline maps onto devices.
- In the field: Safety Officers log each role player when they go "IN" and "OUT" of exposure, adding welfare checks (e.g., normal, shivering, hypothermia signs).
- In the Excon: A live dashboard shows which role players are active, how long they've been exposed, and any red-flag welfare alerts. This allows Excon to intervene immediately if limits are exceeded.

Benefits:

- Provides real-time safety assurance by flagging role players who exceed exposure limits.
- Creates a clear log of welfare checks with accountability for Safety Officers.
- Supplies automatic data for debriefs, showing exposure times, check-ins/outs and welfare checks
- Standardises monitoring across all alpine SAREXs, reducing risk to participants.

Simple digital tools like Survey123 could help reduce the risk of exposure-related incidents and strengthen duty of care.

Future for NZ AVOEX/IMTEX:

- Develop a Survey123 role player monitoring template.
- Assign a Safety Officer in each role player group to log check-in/out in real time.
- Require Excon/IMT to monitor the dashboard as part of the Safety Management.

Summary:

Both NO DUFF incidents - the medical incident of two role players and the rescue of a stranded member of the public - were managed effectively, with Excon and the IMT coordinating resources quickly to prevent escalation. However, the medical incidents highlighted the vulnerability of role players in alpine environments and the absence of a structured safety monitoring system for entry/exit times and welfare checks.

Survey123 offers a practical solution for role player monitoring by providing real-time tracking of exposure times, welfare status, and location. With a simple digital form and live dashboard, Excon could identify risks early, enforce safety limits, and generate automatic records for debriefs. To embed this, future exercises should develop a standard Survey123 monitoring template, assign Safety Officers to log role player exposure in real time, and require Excon to actively monitor dashboards as part of safety management.

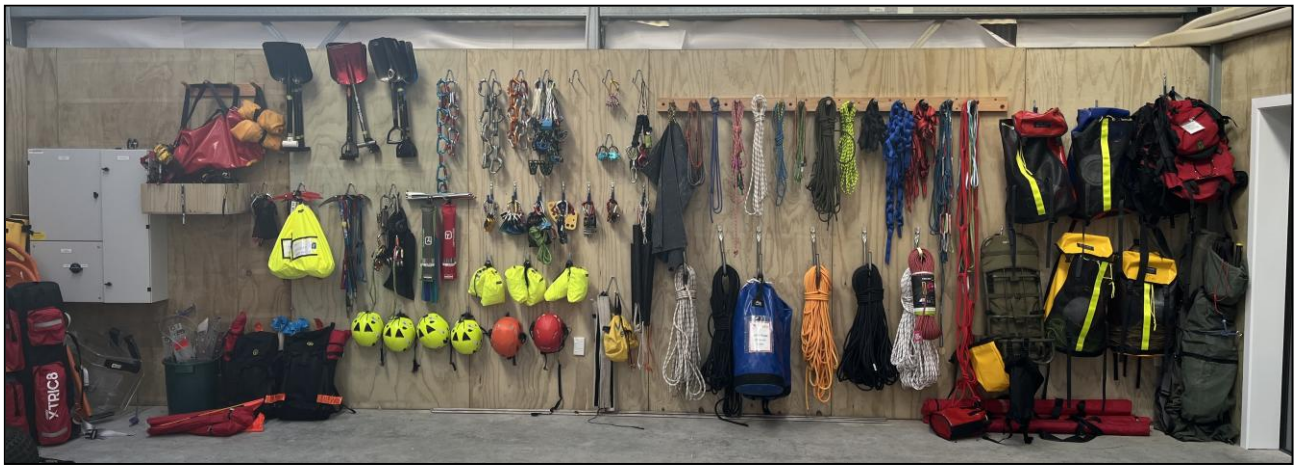
6. Conclusions

Exercise PARAWHENUA successfully demonstrated that New Zealand's SAR sector can mount a coordinated and effective response to a large-scale avalanche incident. The four in-scope objectives were largely met. Multi-agency collaboration under CIMS was evident, with Police, RARO, Land Search and Rescue, St John, and RTB Helicopters working together professionally and with increasing cohesion as the exercise progressed. The Incident Management Team grew into its role, eventually delivering sound planning, tasking, and documentation processes in a rapidly evolving incident, although early activation of the Operations function to gain situational awareness of planning and improved communications redundancy were identified as areas for development.

Avalanche field teams performed competently, demonstrating strong technical search and rescue skills, and patient extraction. The integration of RECCO technology showed its value as a supplementary detection tool. Police SAR reconciliation processes were trialled through Survey123, and while the system showed promise, its inconsistent application highlighted the need for standardisation and national adoption.

The two NO DUFF medical incidents among role players and the rescue of a member of the public – were well managed and reinforced the resilience of the responding agencies, while also underlining the importance of structured role player monitoring systems.

Overall, PARAWHENUA provided a realistic and challenging test of Central North Island avalanche response capability in Tongariro National Park. It confirmed that objectives were achieved to a strong degree, while identifying practical areas for improvement that, once addressed, will further enhance national preparedness for rare but high-consequence avalanche events.



7. Appendix

Appendix A – NZSAR SAREX Guidelines for Exercise PARAWHENUA

Appendix B – Photographs of IMT boards and screens

NEW ZEALAND
SEARCH AND RESCUE
Rapu Whakarauora Aotearoa

Correct as at 4 March 2021

New Zealand Search and Rescue
SAREX Guidelines

Analyse SAREX Need

completed ✓

1 Establish SAREX Planning Team. (See Appendix A on page 6 for instructions and Appendix C and D on pages 8-13 for examples)

Police - Senior Constable Conrad SMITH, Senior Constable Barry SHEPHERD, DSARAC Aimee DAWSON
Land Search and Rescue - TBC
NZSAR Evaluator - TBC

Updated 16 Jun 25

2 Identify trends and predictions, response needs and asset assessment. (See Appendix B on pages 5-6)

There is a need to test and assess current capability in Avalanche Response periodically. Central (Ruapehu) and Bay of Plenty (Taupo) Police SAR and CIB, and SAR partner agencies (RARO) have had limited opportunities to conduct practical avalanche training exercises (AVOEX) together in recent years.

We intend to confirm the current IMT setup is following current best practice for communication and documentation (including safety, fatigue and recording decisions and reconciliation efforts using modern programmes such as Survey123).

From the field and IMT perspective, it is critical that the agencies and personnel involved build trust and rapport during training opportunities; and that relevant personnel are trained and experienced in incident management, field response, and communication to ensure a shared mental model of the event.

3 Summarise need.

To plan and execute an AVOEX to train and prepare search and rescue personnel for effective and efficient Incident Management and field response in the event of an avalanche in Tongariro National Park.

Request funding from NZSAR, via PNHQ, and one NZSAR evaluator to support this AVOEX.

4 Specify the purpose of this SAREX.

A Police led AVOEX will be conducted in vicinity of Mount Ruapehu (dates TBC in August/September) 2025 to confirm the objectives identified below.

5 Determine specific SAREX objectives: (Refer to nzsar.govt.nz/training-resources/collective-training/sarex-guidelines/)

i. SAR partners collaborate effectively following initial report of avalanche.

ii. IMT effectively manages the Avalanche Response.

iii. SAR operational personnel refresh and practise avalanche search and rescue skills.

iv. Learn and test Police/SAR capability in reconciliation efforts using Survey123 - IMT utilises appropriate IT systems to support the demands of the exercise.

v.

vi.

6 Select exercise name:

Exercise PARAWHENUA (Maori for AVALANCHE)

7 Establish a budget:

NZSAR requested to fund SAREX up to $10,000 (excluding GST).

8 Obtain lead/joint agency authority:

Lead agency - Police

9 Seek multi agency participation:

Police SAR Squad (Ruapehu and Taupo)
Police Criminal Investigators
Ruapehu Alpine Rescue Organisation
Helicopter (organisation TBC)
NZSAR Evaluator

Design SAREX

completed ✓

10 Set key Performance indicators (KPI's):

i. 1. Appropriate agencies participate
2. Agencies collaborate and liaise effectively
3. Agency response is coordinated
4. Agencies coordinate resource organisations

ii. 1. Good IAP and safety plans
2. Taskings documented appropriately
3. All communication recorded appropriately
4. Improved understanding of capability of Survey123 system for SAR

iii. 1. SAR teams apply appropriate search techniques
2. Field support resources perform to the standard of their speciality
3. Missing parties are located
4. Teams provide accurate and timely information to the IMT
5. Safety of search team members is maintained

iv. 1. IT systems are set up and operational capability is completed in a suitable timeframe
2. IMT personnel can operate the IT systems in use for the incident
3. IT systems support situational awareness
4. IT systems remain operational throughout the response period

v.

vi.

11 Develop exercise scenario:

Developed by EXCON (Police Search and Rescue), with input from Evaluator
Scenario will involve searching for, tracking, and locating persons buried in an avalanche
Avalanche training will be conducted prior to commencing scenario
Injects as required to maintain engagement and training for field teams

12 Evaluate plan against training need:

The plan is in alignment with the exercise objectives

13 Determine exercise controllers, participants and resources required:

Exercise Controller - in accordance with SAREX planning team paragraph 1
Participants - in accordance with multi-agency participation paragraph 9, personnel numbers approximately 50
Resources - communications and technology; IMT and CIMS; field and specialist equipment and vehicles; catering; messing/accommodation; safety; security; liaison; documentation of briefings, events, decisions, debriefs, lessons identified

14 Confirm and announce exercise date/time location:

In vicinity of Mount Ruapehu, date TBC

15 Develop detailed events:

Day 1 morning: EXCON and IMT personnel travel and convene
Day 1 afternoon: IMT refresher and field set-up
Day 2 morning: AVOEX (briefings and administration, scenario)
Day 2 afternoon: Conclude scenario; pack down and debrief over shared lunch; return travel

16 Develop exercise safety plan:

In accordance with Police Search and Rescue Safety Management System and Safety Plan from NZSAR website

17 Develop exercise 'control rules':

In accordance with Service Level Agreements/MOU with search and rescue partner agencies. NZ Police are the coordinating authority for this SAREX

18 Appoint exercise evaluator (local and external) and define their role:

RARO Team Leaders: Evaluate and coach field teams
NZSAR Evaluator: IMT evaluator; evaluate against objectives, assist with planning and objectives

19 Confirm multi agency participation:

In accordance with multi-agency participation paragraph 9

20 Set up SAREX

Conduct

completed ☑

21 SAREX's are run under CIMS, IAMSAR, or other recognised structure. ☐

22 Evaluation systems/real time feedback processes are in place. ☐

23 Start the exercise. ☐

24 Sustain and control exercise activity. ☐

25 Intervention (if required) to keep on track. ☐

Debrief

26 Hot debrief immediately after SAREX includes:

- All personnel/agencies, written or verbal. ☐
- Preliminary feedback from evaluator. ☐
- Provide appropriate exercise closure. ☐

27 Cold debrief within appropriate time frame:

- Key performance indicators are evaluated. ☐
- Internal review and analysis of SAREX systems, performance and processes. ☐

28 Evaluation report analysis and findings completed. ☐

29 SAREX report completed. ☐

30 Report circulated to participants and agencies. ☐

Implement learning

31 Implement report findings into Readiness-plans, SOP's and training and development. ☐

32 Ongoing evaluation. ☐

33 Develop 'lessons learned' and distribute as appropriate. ☐

Appendix A

1. Instructions

- The guidelines are designed to provide a generic framework for running SAREX's.
- The extent to which they are used and completed depends on the size and complexity of the SAREX. This may vary from a local three hour exercise to a national two day multi agency SAREX.
- Support to complete the guidelines can be sought from experienced personnel in the key SAR agencies.

2. References

- The Ministry of Civil Defence publication "CDEM Exercises – Directors Guidelines for Civil Defence Emergency Management Groups (DGL 010/09) provides in depth detail of how to run exercises: www.civildefence.govt.nz.
- The Annex provides the following useful checklists:
  - **Annex A:** Exercise development checklist
  - **Annex B:** Exercise Coordinating Instruction
  - **Annex C:** Communications and media management plan
  - **Annex D:** Exercise General Instruction
  - **Annex E:** Standard message/inject template
  - **Annex F:** Exercise control and evaluator rules of play
  - **Annex G:** Sample master schedule of events
  - **Annex I:** End of exercise report
- The NZ Police system is utilised to apply for RNZAF support.
- Resources and guidelines for using the Coordinated Incident Management System are available at: www.civildefence.govt.nz.

Appendix B

1. Identifying trends, predictions, response needs and asset assessment using SAR Vulnerability Assessment (SVA)

SVA means establishing the operational trends:

- what has happened historically in an area or district
- what is happening
- predicting what is going to happen

The purpose of the SAREX can then be customised to meet the predictions. The depth and degree this process is followed will vary depending on the intended SAREX size and complexity.

2.1 Identify Operational Trends

Identify operations that have happened locally and in adjacent areas/region over last five years with an emphasis on the last year:

- Type
- Number
- Debrief information/notes
- Issues in the readiness plan/standard operating procedure/ systems/processes and equipment for IMT's and in the field

Identify predicted trends locally and in adjacent areas/regions over the next five years. Consider:

- Demographics
- Activities
- Terrain/ease of access
- Existing assets
- Facility changes
- Type of operations
- Research and development
- Anticipated issues in the readiness plans, standard operating procedures, systems, processes and equipment for IMT's and in the field

2.2 Informal trends and incidents

Survey key local or regional SAR or related persons and organizations for near misses, unreported incidents and in house incidents to develop an overall picture.

2.3 Organisations/groups/individuals to consider consulting

- Government and local body
- SAR Council and SAR Secretariat
- Rescue Coordination Centre NZ (RCCNZ)
- Police
- LandSAR
- Department of Conservation (DOC)
- Coastguard
- Surf
- Defence
- NZ Water Safety Council
- NZ Mountain Safety Council
- Outdoors New Zealand (ONZ)
- Coroners
- Advisers
- Local SAR Committee
- Related recreational and commercial groups
- Medical services
- Fire
- Helicopter operators
- Media
- Industry newsletters
- Cultural groups
- Educational and representative organizational bodies
- Other

2.4 Research, Developments and Training

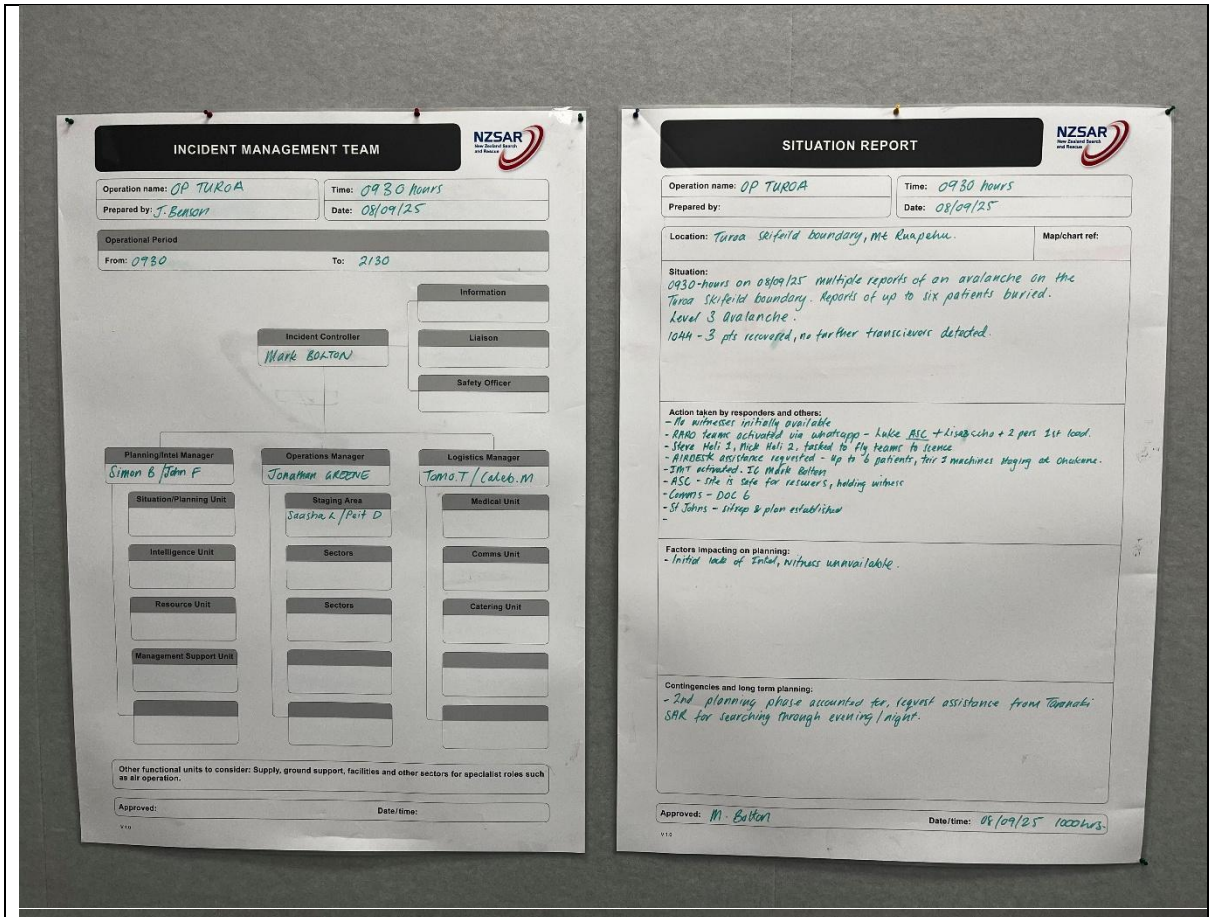
Survey key individuals and partner organizations and industries globally for:

- New research and developments
- New equipment
- Technology
- Internet/literature search
- Related industries
- Research reports

Review:

- Local/regional and national goals and training plans
- Past SAREX training and exercise recommendations

Appendix B



INCIDENT MANAGEMENT TEAM

NZSAR New Zealand Search and Rescue

Operation name: OP TUROA
Time: 0930 hours
Prepared by: J. Benson
Date: 08/09/25

Operational Period
From: 0930 To: 2130

Incident Controller: Mark BOLTON
Information
Liaison
Safety Officer

Planning/Intel Manager: Simon B / John F
Operations Manager: Jonathan GREENE
Logistics Manager: Tomo.T / Caleb.M

Situation/Planning Unit
Intelligence Unit
Resource Unit
Management Support Unit

Staging Area: Saasha K / Pait D
Sectors
Sectors

Medical Unit
Comms Unit
Catering Unit

Other functional units to consider: Supply, ground support, facilities and other sectors for specialist roles such as air operation.

Approved: Date/time:

V10

SITUATION REPORT

NZSAR New Zealand Search and Rescue

Operation name: OP TUROA
Time: 0930 hours
Prepared by:
Date: 08/09/25

Location: Turoa Skifield boundary, Mt Ruapehu. Map/chart ref:

Situation:
0930-hours on 08/09/25 multiple reports of an avalanche on the Turoa Skifield boundary. Reports of up to six patients buried.
Level 3 Avalanche.
1044 - 3 pts recovered, no further transceivers detected.

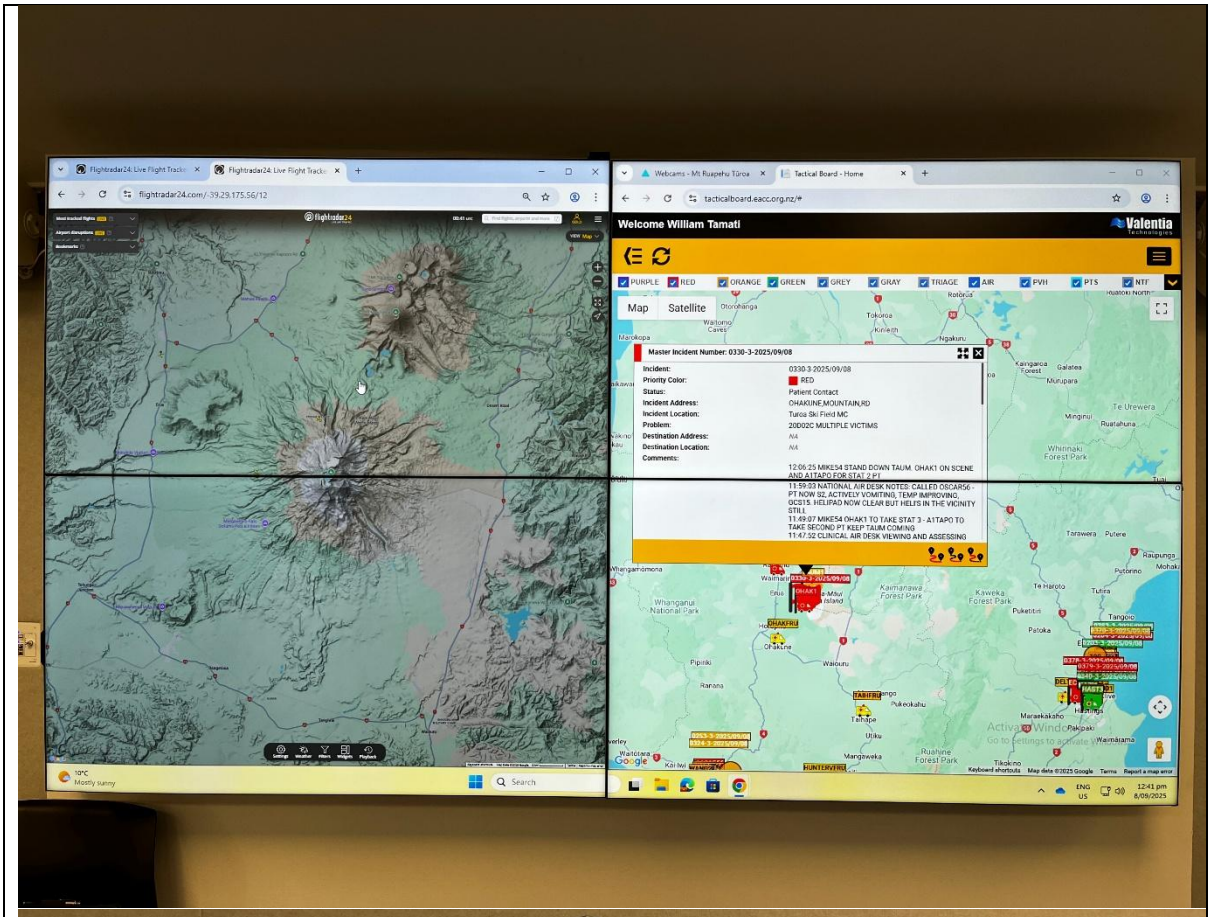
Action taken by responders and others:
- No witnesses initially available
- RARO teams activated via whatsapp - Luke ASC + Lisa Cicha + 2 pers 1st load.
- Steve Heli 1, Nick Heli 2, tasked to fly teams to scene
- AIRDESK assistance requested - up to 6 patients, for 3 machines staging at Chateau.
- IMT activated. IC Mark Bolton
- ASC - Site is safe for rescuers, holding witness
- Comms - Doc 6
- St Johns - sitrep & plan established
-

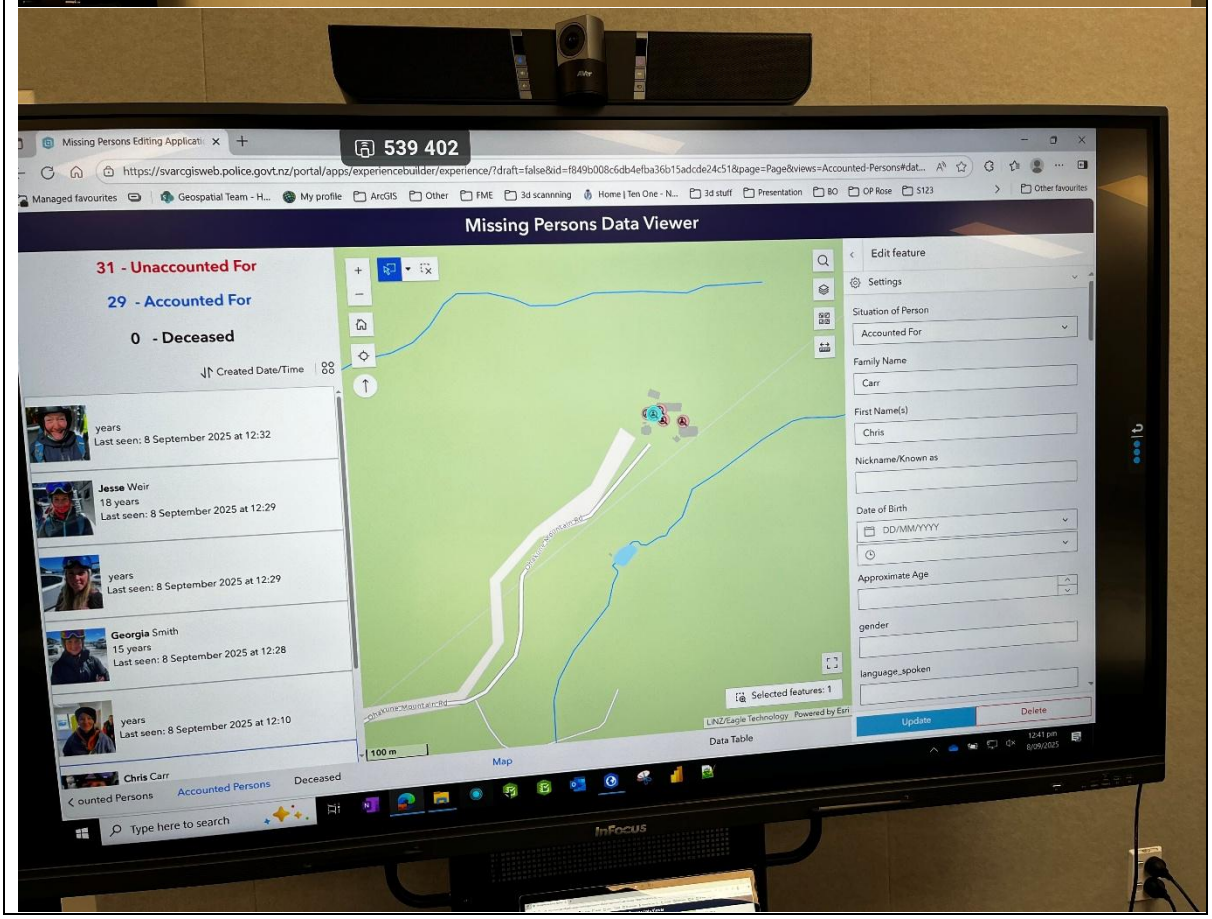
Factors impacting on planning:
- Initial lack of Intel, witness unavailable.

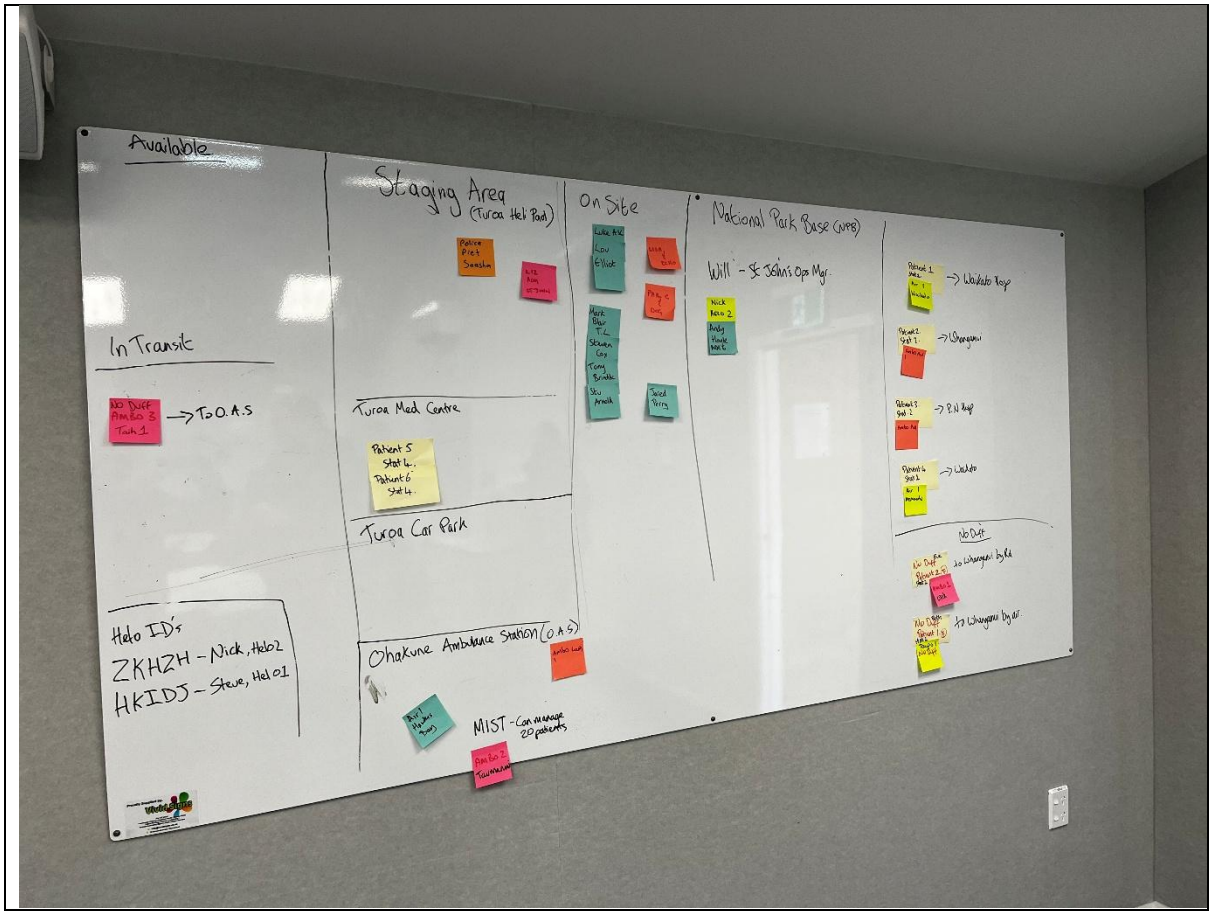
Contingencies and long term planning:
- 2nd planning phase accounted for, request assistance from Taumaki SAR for searching through evening / night.

Approved: M. Bolton Date/time: 08/09/25 1000hrs

V10


Welcome William Tamati
Valentia
Map
Satellite
Master Incident Number: 0330-3-2025/09/08


539 402
Missing Persons Data Viewer
31 - Unaccounted For
29 - Accounted For
0 - Deceased
Edit feature
Settings
Situation of Person
Accounted For
Family Name
Carr
First Name(s)
Chris
Nickname/Known as
Date of Birth
Approximate Age
gender
language_spoken
Update
Delete
Jesse Weir
18 years
Last seen: 8 September 2025 at 12:29
Georgia Smith
15 years
Last seen: 8 September 2025 at 12:28
Chris Carr
Accounted Persons
Deceased
Map
Data Table
InFocus


Available
Staging Area (Turoa Heli Pad)
On Site
National Park Base (NPB)
Will - St John's Ops Mgr
In Transit
-> T.O.A.S
Turoa Med Centre
Patient 5
Stat 4
Patient 6
Stat 4
Turoa Car Park
Heli ID's
ZKHZH - Nick, Heli 2
HKIDJ - Steve, Heli 1
Ohakune Ambulance Station (O.A.S)
MIST - Can manage 20 patients
-> Waikato Resp
-> Whanganui
-> P.N Resp
-> Waikato
No Diff
to Whanganui by Ht
to Whanganui by dif.