

APRES SAR action plan

This plan is to be kept in a folder at the front desk of the Arthur's Pass Visitor Centre. Its goal to provide a simple and easy to follow guide for anyone initiating a search or rescue from the village, and to provide some useful forms and templates. This draft version is a work in progress, any suggestions are welcome and can be sent to hreid@apres.org.nz.

Initial action

Ascertain whether the subject is **missing** or in need of a **rescue**?

1. **Interview any informants** using the **Missing Person** or **Rescue** questionnaires in this folder and gather any other information you feel may be of help.
2. **Contact Arthur's Pass Police** or in their absence, dial 111. Provide the police with the **information you have gathered**, and inform them that you can alert Arthur's Pass SAR personnel if required (using the **APRES contact list** in this folder).
3. **If the police ask you to begin a search or rescue operation, follow the steps in this plan.** These guidelines are based on experience from previous SAR operations and follow good SAR practice. **Keep records of all communications (by radio, phone or in person) and all actions taken** by you and SAR personnel using the log sheets provided. These records are important, no matter how trivial they may seem at the time. Good SAR management is reliant on good up-to-date information.

Missing person

The following guidelines can help to quickly establish a search. They are based on a simplified version of the CIMS model for SAR. For a more involved situation or one that continues beyond 2 - 4 hours refer to the NZ Land Search and Rescue Field Guide (2006) which is kept in the back of this folder.

1. **Start a SAR log** (using sheets in this plan)
2. **Call in search team members** (using APRES contact list)
3. **Identify an experienced person to be Operations Manager.** The Operations Manager normally stays at base and oversees the search from there, where they can access information and communications easily. Ensure they are fully briefed and understand their responsibilities (see CIMS Roles page). The operations manager reports to the Police (or whoever is the Incident Controller) and must seek authority from them to act if authority has not already been given):
4. **Assess the information at hand.** Useful things to consider:
 - Subject's experience, intentions, resources and state of mind. Begin building a profile (Identity, behaviour, location)
 - Last known point (LKP)
 - Direction of travel (DOT)
 - Likely speed of subject
 - Terrain, vegetation and hazards
 - Decision Points sheet for the particular track or route (if one exists)
 - Outcome of previous searches in the area
 - Time elapsed since subject became overdue and time available to searchers
 - Weather (past, present and forecast)
 - Resources you have at hand
 - Any other relevant information to hand
5. **Make a Search Plan.** The goal is to check all of the likely/high priority areas that can possibly be eliminated with the remaining daylight and weather opportunities. The plan can be very simple but needs to take into account the following:
 - Profile and lost subject behaviour (LSB)
 - A defined search area and search strategy
 - Areas of high probability (AHP) and Decision Points (DPs) to check (refer to Decision Point sheet for the track or route if one exists)
 - Safety of searchers and likely hazards to be encountered
 - Appropriate Team leaders and members for each search team
 - Defined tasks (times, teams, areas and search methods)

- Resources available such as radios, helicopters (Police must authorise their use), tracking equipment, vehicles, specialist teams (dogs, Alpine Cliff Rescue, victim support etc) first aid kits, food and camping equipment, thermal imaging etc

6. Implement the plan.

- Keep track of all resources and people that enter/leave the field, or join/leave the search (implement flight following for helicopters)
- Brief the Team Leaders (or the whole team if appropriate), you can use the briefing sheet in this folder if a more detailed briefing is needed
- Get Search Teams into the field
- Keep up communications with everyone involved. Monitor the progress of the search teams and provide feedback to the Police as often as required
- Process clues and assign a Relevance of Clue %
- Modify the Search Plan if required, especially if you get new information, if the weather or situation changes or if it is no longer possible to keep the search teams safe
- Get the teams back from the field
- Debrief the teams and thank them when they get back
- Hand over the information you have gathered to the Police seek instructions from them as to what to do next

Search methods

You can use any or all of these methods depending on the situation. It is always useful to establish containment and start with Recce searches as these methods help you to quickly exclude or confirm the most likely areas, reduce the search area and hopefully find the subject quickly.

In order (approximately) of decreasing speed/increasing Probability of Detection (POD)

1. **Containment** – ensure subject does not slip out of the search area
2. **Hasty search** – fast, and concentrated on car parks, tracks, huts, hut books, could be on foot or helicopter
3. **Sound line** – following linear features using regular calls/whistle blasts
4. **Sound sweeps**
5. **Light and sound sweep/line** – Using torches as well as sound
6. **Purposeful wandering** – Wandering search following a compass bearing
7. **Contact search** – Disciplined search with close spacing following a compass bearing/natural boundary
8. **SAR dogs**
9. **Track and clue teams** - Sign cutting, processing areas around clues (inc 300m radius circle method) and tracking

CIMS Roles for APRES

Operations Manager

- Managing the operational activities related to *safely* solving the incident
- Providing input to the Search Plan
- Setting the operational structure
- Implementing the Search Plan
- Briefing and tasking search personnel (task briefings)

Additional roles that the Operations Manager can undertake or that can be delegated as required

Planning/intelligence

- Gathering and disseminating information
- Analysing incident data – developing time lines and likely scenarios
- Identifying future resource requirements (assume search operation and search area will continue or intensify over next 24 hours)
- Undertaking further planning
- Keeping track of the status and location of resources

Logistics

Providing/seeking and maintaining:

- Personnel
- Materials
- Facilities
- Services

Communications

- Providing/maintaining radios, satphone etc
- Allocating, recording and collecting radios issued to Search Teams
- Ensuring correct communication procedures are used
- Monitoring and replenishing batteries
- Monitoring the condition of the communications equipment and maintaining as required

Search assistant/s

- Establishing and maintaining IT systems
- Accurate logging all communications and incident related information
- Compiling and reporting information to other CIMS roles as needed

APRES Team Leader

Role

- To safely and efficiently lead the search team to complete its assigned task

Responsibilities

- Report to Operations Manager
- Seek all the information needed to undertake your tasks, such as search area, search methods, known hazards, radio channels, missing person details etc (task briefing from Operations Manager)
- Brief your team before entering the field
- Know the experience, skill and fitness level of your team and manage your task appropriately
- Allocate roles, including but not limited to radio operator, first aider, navigator and note taker
- Discuss and have a plan for what to do if the subject is found to be badly injured or deceased
- Ensure the team has required equipment before entering the field (see the list in this folder). It pays to physically check the most important items, such as the Radio, GPS, stove and shelters, to ensure they are complete and working
- Keep your team safe
- Search as thoroughly as possible
- Communicate within your team and also with base regularly
- Keep your team fed, hydrated and allow for adequate rest breaks
- Record any clues you find, and where appropriate protect them for further analysis
- Call for specialist help such as search dog or cliff rescue teams where appropriate
- Keep an accurate record of where you have and have not searched, estimate and note the Probability of Detection (POD) for your search Area
- Debrief your team on returning and report to Operations Manager

APRES SAR gear list

The full complement of gear below should be carried any time that search teams are expected to overnight, or where there is even a small chance that they could be un-expectedly left in the field due to change in weather, nightfall or lack of helicopter availability.

Personal

- Waterproof jacket
- Waterproof pants
- Warm hat/balaclava
- Warm gloves/mittens
- Thermal top (longsleeve)
- Thermal longjohns
- Sun hat and sunscreen
- Fleece or wool top
- Compass
- Map
- Whistle
- Toilet paper (both for personal use and clue marking)
- Plastic bags/pack liner
- Notebook and pencil
- Sleeping bag
- Foam pad/Thermarest ®
- Small fly or bivvie bag (optional/depending on group shelter)
- Headlamp with spare batteries
- Leather gloves (optional for nasty terrain or vegetation)
- Food for 48 hours
- Small personal first aid kit
- Lighter/matches in waterproof container
- Harness and helmet (if required)
- Ice axe and crampons (if snow will be encountered)

Group

- Billy/s
- Stove (or 2 depending on group size, check that they work and have spare parts, lighter and enough fuel)
- Tents (enough to sleep entire team, check poles and pegs!)
- Group map (can write on it as required)
- Radio and spare batteries (check it works before entering the field)
- GPS and spare batteries
- Group first aid kit
- Plastic bags (for maps, radios etc)
- Notebook and pencil (for recording task, clues, radio channels etc)
- Rope and technical climbing hardware (if required)
- Digital camera (if available)

APRES Search Team Leader Briefing template

Use this template as a reminder, or fill it out and provide a photocopy for the team leader.

Team details

Date: _____ Team name/number: _____
Team Leader: _____ Radio callsign: _____
Team members: _____

Team equipment issued (radio number, GPS number, tracking equipment, climbing gear etc):

Task details

When Team is to enter the field:
When Team is expected to leave the field:
Search area (also note on Team Leader's map):

Weather forecast and known hazards in the Search Area:

Search methods to be used (attach where possible the relevant Decision Point sheet):

Radio channels and schedule times:
Base phone numbers:
Any special code words for communicating sensitive subjects:

Missing person details (continue overleaf or staple a copy of questionnaire to this briefing):

APRES Search Team Leader Debriefing template

Use this template as a reminder, or fill it out and provide a photocopy for the team leader.

Team details

Date: _____ Team name/number: _____
Team Leader: _____ Radio callsign: _____
Team members: _____

Team equipment returned (radio number, GPS number, tracking equipment, climbing gear etc):

Task details

When Team entered the field:
When Team left the field:
Search area:

Weather conditions experienced and hazards found in the Search Area:

Clues found (note in detail on another sheet if necessary):

Other relevant observations:

Search measurement (can draw overleaf or note on a map; note estimated search range and POD over time/search area for responsive or unresponsive subject, based on environmental, subject and searcher factors):