

Search & Rescue ... *An Overview*

To Quote from "Mountain Travel and Rescue" (chapter 16, page 132);

“Although much diversity exists in the extent to which ski area patrols become directly involved with Search & Rescue, it is worthwhile for backcountry travelers and NSP members to become familiar with Search & Rescue procedures, since all searches follow a standard format”

It has been our experience as Instructors - given the short amount of time we have for familiarization: that, this diversity is cause for much confusion and lack of understanding of the ICS (Incident Command System) and operational procedures of conducting a search & rescue operation/exercise. It is our hope that this brief overview, along with a thorough review of chapter 16 of the MT&R manual will help you in understanding and participating in search & rescue operations.

“SEARCH & RESCUE IS AN EMERGENCY”

Whether responding to an actual S&R callout, or participating in a planned exercise your attitude, actions and conduct must reflect this statement. The life of someone else may very well be depended upon your level of participation, or lack thereof.

As an S&R resource you are working under the auspices of a local regulatory agency (in the State of California this is usually the County Sheriff of incident), and assigned management personnel within the structure of the ICS system. The MT&R manual covers the primary positions and responsibilities of ICS management.

Two Key factors must always be kept in mind during the entire process of conducting S&R operations ...

- 1. Minimizing the risk to S&R personnel**
- 2. The Welfare of the subject.**

A couple points worth emphasizing:

- **Rescue Leader** – This is the first trained response person notified of a lost person. This person takes on the immediate leadership responsibilities of the search until relieved by authorized local regulatory management personnel.

This Persons Immediate Responsibilities include:

- Holding the **RP** (Reporting Person –Witness).
- Notifying appropriate authorities.
- Establishing a working communications system.
- Assigning immediate roles of responsibilities.
- Making the decision whether to begin a “**scratch or bastard search**” and a “**hasty search**” of the **PLS/PLK** (Point last seen/Point last known)

Formulation of the ICS builds as the S&R operation continues:

- **Scribe** –
 - Records all pertinent information
- **Search “Team Leaders”** –
 - Responsible for communicating between the Rescue Leader & Team members.
 - Completing an assigned task.
 - Safety of their team members.
- **Team Members** –
 - Responsible for they’re own preparedness ... proper clothing, equipment, food & water and physical abilities and well-being.
 - Effectively participating as a search team member.
- **Field Leader** –
 - This position may be added to provide on scene leadership assistance to the Rescue Leader ... who will be operating from an established “**Base**” location.

Review the MT&R Manual (page 136) for additional pertinent roles of responsibility that may be filled as the search continues.

Search Strategy:

As the MT&R Manual states ... “This section is intended to provide some guidelines on how to proceed with a search, **but must remain slightly abstract because of two factors**”.

Variable Factors – which determine the type of search undertaken:

- The characteristics of the lost person.
- Gathering as much information as is possible about the lost person.
- Environmental conditions and terrain characteristics of the search area.
- Survival & Rescue Equipment availability.
- The numbers and status of searchers available, their experience.

Search Dynamics:

- Establishing initial search boundaries.
- Initial Search techniques established.
- Media and Family influence.
- Search strategy reviewed and revised as information and conditions change.
- Expanding search boundaries as the search progresses.
- Expanding search techniques.
- Equipment resource changes.
- Personnel resource requirements change with expanded boundaries and clue finds.
- Regulatory Management changes.
- Shutting down the search.

Search Types and Techniques:

These additional notes, along with your review of pages 132-133 of the MT&R Manual should help with your understandings of being a competent search team member.

Scratch or Bastard Search:

This is usually the first search technique conducted - using immediately available personnel.

It involves an immediate search of the most likely locations. I.E. Cafeterias/ café, lodge, bathroom, bars, shops, home, friends, etc. It is of the utmost importance that throughout this initial effort and throughout all of the search operation that immediate contact/availability be maintained with the RP (Reporting Party).

Hasty Search (Type-I):

This is the second technique, usually followed in an organized search. If resources area available, it may be conducted at the same time as the Bastard Search.

This search technique engages immediate resource availability of a trained, capable small team (3 – 6 searchers) to **conduct an expedient, high detection probability search of the PLS, and other known high probabability locations. Emphasis is on speed and effectiveness without destroying clue/tracking and dog scent possibilities.** This is a visually close spacing search (25-50 feet), usually following established trails or roads. The Team Leader may be part of this search formation, or may monitor in the “float” position, (behind the team). The team must stop and call “base” with any clues or tracks they come upon, and wait for “base” instructions before continuing.

This team may be asked to establish an immediate confinement perimeter, if possible and practical. This can be done by using marking ribbon across likely routes of travel or by stationing searchers at likely intersections and at trail heads, (also referred to as “Passive Techniques” – waiting for the lost person to come to you).

Saturation Search’s (Type-II and Type – III)

As the name implies, these are systematic, efficient, well-defined, segmented search area “clearings”. **The object is to “clear an area”,** to ascertain that the lost person is not with-in the assigned search area. *Emphasis is on “efficiency”*

In this type of search it is important to understand that *“efficiency” means* you are, with due urgency, looking for anything that could conceal or lead to the lost person, (production is for a high **“POD”** (Probability of Detection) per search-hour effort) ... **searchers must look-up,look-down, and look-all-around”.** Mental concentration should not be on looking for a person, but rather for clues that can lead to the persons location or their direction of travel.

The Saturation type search is considered the most difficult type of search pattern ... incorporating either an “open” or “closed line” formation of 3 or more searchers. In the **Type-II (open-line)** formation searchers are **spaced depending upon terrain variations, while maintaining visibility with the searchers on either side of them.** The line-search team will guide either left or right ... determined by the Team and Search Leaders. The guide person (either left, right or center) maintains a direction of travel by either a compass bearing or by use of a “handrail” (*a handrail is any existing terrain characteristic that will allow the guide person to follow a given direction ... roads, trails, fence line, rivers etc*) to maintain a given direction of travel. The far person(s), (furthest away from the guide) in the line usually marks their teams search boundary by tying survey ribbon in the trees, (or other suitable means to mark and identify the search area just covered).

Line formations, in both the Open and Closed search patterns are often staggered ... *leading off of the guide person* ... with each searcher following 2-3 feet behind the person they are guiding off of. The Team Leader usually remains in a “float position”, following at the rear of their search line where they can monitor the entire line. Communications between members should be minimal throughout the line search process. Regularly and loudly calling out the lost persons name should be done at the team leaders discretion. Any team member can stop the search line by calling “Team Halt”, but only the Team Leader can resume the line by calling out “Team Advance”.

The Type-III (closed-line) formation is the most “thorough”, with team members only 10-15 feet apart (*or closer*). ”Critical Spacing” must be close enough, with assured overlap, so that small clues are not overlooked. This type of search is often done on hands and knees. While this type of search pattern will result in the “Highest Clue Probability” percentages, it is conversely very slow and consuming - is extremely destructive to clues, - and is usually reserved for evidence search’s or when all other search efforts have been exhausted.

Tracking:

Tracking is an acquired skill that takes determination, patience, and a willingness to learn - and should be left to those who have been trained in these particular specialties. However, as searchers it is our responsibility to always be “**track aware**”. It is of the utmost importance that physical track as well as scent articles not be destroyed or contaminated by a careless searchers intrusion or contact. In the event a searcher sense’s that they have encroached upon a possible “track” or a potential “clue”, they must immediately call a “team halt” and advise their Team Leader, and in turn the Search Operations Leaders. The search team does not continue the search pattern until instructed to do so by their team leader.