



**ALTA SKI AREA  
AVALANCHE RESCUE PLAN**

November 27<sup>th</sup> 2023

**This rescue plan is broken down into 3 stages.**

Stage 1: Locate and excavate victims.

Stage 2: Provide first aid and evacuation.

Stage 3: Provide support for prolonged operations if necessary.

**These are the positions that may need to be filled during an avalanche rescue.**

1. Hasty Team (Beacon, Recco, Dog, Spot Probing, ect)
2. Accident Site Commander
3. Assistant Accident Site Commander
4. Rescue Leader
5. Scribe
6. Column Recorder
7. Column Leader
8. Site Briefer
9. Avalanche Guard

## **Stage 1 (LOCATE AND EXCAVATE VICTIMS)**

- Dispatch makes radio call to “sound the alarm”. Confirm that Avalanche Office and Ski Patrol leadership copy and Alta Base copies.
- Initial search team (hasty search) responds and relays situation to dispatch. If continued response is necessary this hasty team performs beacon search, visual search, Recco and dog searches. If further searching is necessary, outside help and organized probe lines may be assembled.
- As we move into Stage 2 (first aid/evacuation) consider putting the following resources on standby; Clinic staff, Air Med/Life Flight, Snowbird Patrol, Powderbirds, UDOT. If after hours contact Alta Avalanche Office by phone: Grom **801-556-5615**, Jonathan **801-647-2817**, Pete **801-244-2170**

## **Stage 2 (FIRST AID AND EVACUATION)**

- Have the AED, Oxygen, and nurse and/or doctor from Alta Medical Clinic in route. Contact Station 113 ambulance from Snowbird and have them dispatched to Alta. Request medical helicopter(s) if weather conditions allow.
  - Alta Medical Clinic **801-742-2273**
  - Dr. Ken Libre cell **801-244-2203**
  - Station 113 cell 801-381-5411 **801- 278-9987**
  - Daytime-- Hidden Peak **801-933-2117**
  - Night -- Snowbird Security **742-2222 ext. 4037**
  - Air Med **801-581-2500**
  - Life Flight **801-321-1234**

## **Stage 3 (SUPPORT PROLONGED OPERATIONS)**

- Contact additional rescue help as needed. Ski School, Snowbird Personnel, WBR dogs.
- Arrange for food and beverage needs from Buckhorn, Alf's, Watson's.
- If it is getting dark, arrange for headlamps, rescue lights, and generators from Alta Vehicle Maintenance.
  - Alta Central **742-2033 OR 742-3522**
  - USFS Polly Popala **801-870-7686**  
Ben Kraja **801-815-7145**
  - UPD Day Ed Twohill **801-231-2031**
  - UPD Nights Mike Hill **801-554-3138**
  - Mike Maughan **801-971-7016**
  - Coleman Worthen **801-560-0033**
  - Dave Richards **801-556-5615**

**When an avalanche is reported, a patroller needs to be sent to the scene to assess and report over the radio what the next steps will be.**

**This patroller and the next 3 to 4 personnel who reach the site comprise the Hasty Search Team. The purpose of this team is to quickly search the area, focusing efforts on what they feel are the most likely places a victim could be. If an initial rescue was not made and there is still concern that someone may be involved in this avalanche, further steps can be taken. The following are instructions for the Hasty Search Team.**

## **Instructions for Hasty Search Team**

The hasty search begins with at least one patroller investigating the scene of the reported avalanche. Once the location and magnitude of the event are confirmed, appropriate resources can be sent to the scene. Most Hasty Teams will consist of at least 4 or 5 patrollers that will perform a beacon search, visual search, Recco search, Dog search, probing likely areas and conducting interviews of witnesses if possible. This is the team that has the best chance at making a live find(s). Below are some of the important steps for the team to follow.

- **HOLD THE WITNESS. Make sure the witness stays with Alta personnel.**
  - What was the last seen point?
  - How many possible victims?
  
- **First member of Hasty Team investigates and communicates over the radio:**
  - The exact location of the avalanche.
  - Scene safety. What is the safe route in/out?
  - Is an avalanche guard needed?
  - Are there tracks in? Tracks out?
  - Describe the size of the avalanche and resulting debris.
  - Do you see a possible witness or clues from where you are?
  - Communicate if you are beginning a transceiver search.
  
- **Searching begins. Other Hasty Team members arrive on scene:**
  - Clear the path for beacons and communicate beacon status.
  - Search the debris for any visual clues.
  - Spot probe likely areas. Trees, terrain traps, debris at the toe.
  - Get to the toe.
  - Search the debris with Recco and dogs.
  
- **If victims are recovered; interview them:**
  - Names?
  - Do they have all their gear?
  - Unaccounted gear = another victim.
  - Skiing with anybody else? Did you see anybody else?
  - Where in relation to the victim were these people?

**Depending on the information gathered during the hasty search, rescue efforts may or may not continue. If the decision is made to continue with the rescue, organized probe lines may be formed.**

**Organized probe lines are when groups of ~10 people with avalanche rescue probes form a straight line and systematically probe the avalanche debris with the hope of finding a victim. These lines may use a Guidon Cord to keep spacing consistent. If cords are not used, probers line up with outstretched arms, wrist to wrist.**

**Probe center, left, right giving a 50cm spacing. Organizing the personnel to facilitate this process is labor intensive and this is the point where the other positions of this rescue plan will most likely be filled. What follows are descriptions of each of those positions.**

## **INSTRUCTIONS FOR ACCIDENT SITE COMMANDER**

**The Accident Site Commander may be a member of the Initial Search team. This person has the primary responsibility for the on-site coordination of the rescue. Eventually a senior patroller/manager or preferably a member of the Avalanche Office will take on the role as Accident Site Commander. If you take on this role, think about the following:**

- Acquiring a bullhorn.
- Get an assistant to stand beside you and help with decisions and communications.
- Evaluate the initial hasty search and determine what has been done to this point.
- Do you feel good about the beacon, Recco, and dog searches so far?
- Position yourself to see the entire debris field if possible.
- Ensure that a good verbal interview of the witness has been conducted.
- Do you like the safe route in?
- Has an avalanche guard been placed?
- Does perimeter of slide need to be flagged?
- Have proper flags been used. Last seen point? Clues? Dog interest? Recco signal?
- What medical gear should be heading toward site?
- Relay pertinent information to the Rescue Leader.
- Make sure the rescue leader is up to date on names on scene and other details of rescue.
- Upon arrival of the first column, decide if you will disperse them to probe likely areas or form the first organized probe line.
- Do you want the guidon cords used?
- When primary duties of the initial Hasty Search Team have been completed, use these people as runners between yourself and probe lines, etc.
- Keep probe lines progressing efficiently.
- If it appears that the search will have to continue for a considerable time, arrange with the rescue leader for more resources; food, drink, lights and generators, more people...
- Arrange for the removal of exhausted rescuers. Be certain that they check out.
- At the conclusion of the search, direct personnel, and equipment to base in groups. Make sure all personnel and equipment are accounted for.

## **INSTRUCTIONS FOR RESCUE LEADER**

**As the Rescue Leader you will be positioned as the person in charge of the rescue. While the Accident Site Commander will be in charge at the scene of the avalanche, the Rescue Leader will be the individual orchestrating operations outside of the immediate search area. The most likely place for the Rescue Leader to be positioned will be Dispatch. This position will initially be filled by the dispatcher, and eventually taken over by a senior patroller or patrol supervisor. Further duties of the Rescue Leader may include:**

- Communications with outside resources; Snowbird, Alta Central, UDOT, ect...
- Assign Column Recorder.
- Assign Column Leaders.
- Assign Site Briefer.
- Decide where Site Briefer will be located.
- Communicating with the Accident Site Commander as to needs at the search area.
- Organizing outside medical care such as AirMed, Life Flight, or Station 113.
- If the rescue becomes long in duration, organize for food and beverage.
- Prepare for nightfall with lights and generators if necessary.
- Communicate with USFS and law enforcement.
- Communicate with Alta Upper Management concerning outside media.
- Notify Grom and Leri by phone if they are not present that day.
- Notify Mike Maughn and Coleman Worthen by phone. Keep information brief and accurate.



## **INSTRUCTIONS FOR COLUMN RECORDER**

**As the column recorder you will be located at the top of the lift nearest the avalanche site and will record all information relating to personnel and equipment going to the rescue. Duplicate carbon copy forms (column recorder sheets) are used to record the names of people in each column. One copy is kept by the Column Recorder, the other copy is given to the Column Leader.**

- You may begin by helping screen the volunteers available to work as probers. Preference goes to local avalanche workers, Alta Lift Company employees, and “known” lodge employees. Volunteers may need to have beacons.
- Once you have an available Column Leader, record the names of the 10 people assigned to that leader.
- Assign all column leaders a number.
- Give one of the Column Recorder Sheet copies to the Column Leader.
- Send out and record additional equipment, as needed, with the columns.
- Advise the Accident Site Commander as to the personnel and equipment in transport to the site.
- Have Column Leaders report to the Site Briefer.
- Get copies of the Column Recorder Sheets and names of any additional personnel who were at the search site to the Accident Site Commander. This allows all people who were on site to be checked out and accounted for.

## **INSTRUCTIONS FOR COLUMN LEADERS**

**Column leaders are responsible for managing individual probe lines comprised of around 10 people. Column Leader positions will most often be filled by patrollers. The people probing may be patrollers, Alta employees, or even the public. This process will likely start at the top of the nearest lift to the avalanche. These people may be assigned to you, or you may be involved in the selection process.**

- Depending on the remaining avalanche hazard, your probers may need to have beacons.
- Column Recorder writes down the names of the people in your group.
- Column Recorder assigns your column a number.
- Column Recorder gives you a copy of the duplicate form with names and number.
- Have shovel pack with flags. You'll need a probe for each of your probers.
- Keep probes in bundles during transport and have the strongest skier carry these.
- Get pertinent information from the Site Briefer on your way into the search area.
- Before entering the search area, explain to your probers what is expected of them.
  - Give your name and column number which they will need to check out of the slide.
  - Everyone should remain quiet.
  - Explain probing sequence and what a strike might feel like.
- Be aware of beacon status once on scene.
- Have your probers take their skis off outside of the debris.
- If you are the first column to the slide, your team may be dispersed to spot probe likely areas and help finish the Hasty Search.
- If your probe column is directed to form an organized probe line by the Accident Site Commander, determine if you will be using the guidon cord. Probe uphill if practical.
- If you see a prober who is too tired, ask them to leave and check out of the search area.
- Give good praise to your team and be sensitive to the pace.
- Make sure that everyone checks out when finished!

## **INSTRUCTIONS FOR SITE BRIEFER**

**As the Site Briefer your job is to brief Column Leaders and any other personnel traveling to the avalanche site. Check with the Accident Site Commander as to where they want you to stand to direct people into the search area. If possible, locate yourself in a place where a number of probe lines (approx. 40 people) can stand and wait. Information you need to communicate to personnel moving into the search site may include:**

- What the current beacon status is at the search site.
- What is the safe route in as well as the safe route out.
- Where the Accident Site Commander would like each column to begin probing.
- Communicate with the Accident Site Commander concerning:
  - Combining probe lines when more efficient.
  - Holding probe lines until needed.
  - Directing Column Leaders as to where their probe line should start.
  - Transceiver status.

## **INSTRUCTIONS FOR SCRIBE**

As the scribe you position yourself next to the Rescue Leader. This will most likely be at Dispatch. This position may be filled by the dispatcher on duty if all lifts are shut down. If the ski area is still operating, it will be filled by someone else.

Your job, like the Column Recorder, will be to write down and keep track of all equipment and personnel going to the search area. You may also aid the Rescue Leader in keeping track of progress at the rescue site with notes or perhaps a hand drawn map of the search area including location of clues, last seen points, probed areas, recovered victims ect...

Being positioned beside the Rescue Leader will allow you to aid in communications as necessary, answering the phone or radios.

## **INSTRUCTIONS FOR ACCIDENT SITE COMMANDER ASSISTANT**

As the Accident Site Commander Assistant your job will be to position yourself next to the Accident Site Commander.

The two of you should be in a location to have a good overall view of the search area. You will be filtering radio communications for the Accident Site Commander so most of their time can be spent organizing and directing the rescue.

As the assistant your input should help in important rescue decisions. If additional decision-making help is needed, utilize the hasty search team.

## Flags and Guidon Cords

### Colors and Spacing

#### Flags

BLUE = CLUE

BLUE AND GREEN = DOG ALERT

YELLOW = DEBRIS PERIMETER (15-20' spacing)

RED = EACH END OF PROBE LINE (every 5 advances)

YELLOW W/ BLACK CROSS = CENTER OF EACH PROBE LINE (every 5 advances)

ORANGE = LAST SEEN POINT

RECCO FLAG = RECCO SIGNAL

#### Guidon Cords

Green and Pink markings

50cm spacing

Stand on Pink = probing left, right, center

Stand on Green = probing center only

Use end of cord to measure 50cm probe line advancement.

10-person capacity on pink markers per cord

30-person total capacity with probers both colors

Red flags mark each end of probe line (every 5 advances)

Yellow flags w/cross mark center of probe line (every 5 advances)

\*If Guidon cords are not used, space between probers is side by side, outstretched arms wrist to wrist. Probe center, left, right. (50cm spacing)

## AVALANCHE ALERTING AND RESCUE FLOW SHEET (IN AREA)

For use by Alta Ski Patrol Dispatch and  
AVALANCHE RESCUE LEADER

Date \_\_\_\_\_ Time \_\_\_\_\_ Dispatchers \_\_\_\_\_  
Slide Reported by \_\_\_\_\_

1.) Location of avalanche \_\_\_\_\_ Time \_\_\_\_\_

2.) # of people involved \_\_\_\_\_ Witness name(s) and location \_\_\_\_\_

3.) Names of people involved;(1) \_\_\_\_\_ (2) \_\_\_\_\_  
(3) \_\_\_\_\_ (4) \_\_\_\_\_ (5) \_\_\_\_\_

4.) Notify Snow Safety via Radio; Time \_\_\_\_\_

5.) Radio Fleet Call; (inform people about avalanche, staging area, lift & area closures, etc.) Time \_\_\_\_\_

6.) Safe Route In? \_\_\_\_\_ Who: \_\_\_\_\_ Time \_\_\_\_\_

7.) Are Beacons Required on Rescuers? \_\_\_\_\_ Time \_\_\_\_\_  
Status of Beacons at Site? \_\_\_\_\_ Time \_\_\_\_\_  
Status of Beacons at Site? \_\_\_\_\_ Time \_\_\_\_\_

8.) Avalanche Guard Needed? Who? \_\_\_\_\_ Time \_\_\_\_\_  
Location? \_\_\_\_\_ Time \_\_\_\_\_

6.) Initial Search Team; (1) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_  
(2) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_  
(3) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_  
(4) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_  
(5) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_

7.) Dog(s) & Handler(s); (1) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_  
(2) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_  
(3) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_  
(4) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_

8.) RECCO DETECTOR (1) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_  
(2) \_\_\_\_\_ From \_\_\_\_\_ Time \_\_\_\_\_

12.) Alta Patrol Doctor Contacted; Name \_\_\_\_\_ Time \_\_\_\_\_

13.) Clinic Nurse & Medical Pack in route; Name \_\_\_\_\_ Time \_\_\_\_\_

14.) Alta Clinic Doctor **742-2273**; Name \_\_\_\_\_ Time \_\_\_\_\_  
113 Capt. On Duty cell **381-5411**; Name \_\_\_\_\_ Time \_\_\_\_\_





