2020 SAR PLAN

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CHAPTER 1 -- INTRODUCTION

Benton County occupies 679 square miles of the central Willamette Valley and is bordered on the east by the Willamette River and Linn County, on the west by the summit of the Coast Range and Lincoln County, on the north by Polk County, and on the south by Lane County.

The McDonald-Dunn Research Forest is a popular destination for recreational users of Benton County, and consists of approximately 11,250 acres of predominantly forested land on the western edge of the Willamette Valley in Oregon, and on the eastern foothills of the Coast Range.

Another popular destination for outdoor enthusiasts is Mary's Peak, located in the western portion of the County. At 4,097 feet, it is the highest point in Oregon's Coast Range and the most prominent peak viewed westward from Corvallis. On a clear day one can see both the Pacific Ocean to the west and many of the Cascade peaks to the east across the Willamette Valley. There are also several areas of historical, botanical and geological interest on or near Mary's Peak.

Benton County also contains many natural areas, which include extensive foot, mountain bike, ATV and equine trail systems such as Bald Hill, Beazell Memorial Forest, Ft. Hoskins, Finley NWR, Fitton Green and Jackson Frazier Wetland. The Natural Areas and Parks department manages county parks for multiple uses. There are also numerous privately managed forests, which allow for public access such as Starker Forest.

1.1 Scope

"Search and Rescue (SAR) is the use of available resources to assist persons and property in potential or actual distress" The National SAR Plan. (USCG, Pub. 3-50 1 Feb. 1991)

The sheriff of each county has the responsibility for search and rescue activities within the county. Oregon Revised Statute, 404.110.

Recreational users of Benton County must assume a substantial degree of risk and responsibility for their own safety when visiting areas that are natural, cultural, or recreational environments. As described, Benton County encompasses many properties of natural and wild areas. Inherent risks are present in all of these regions. Visitors must be prepared and have a plan for their outings within the County.

The guidelines provided for in this document are intended to aid rescuers in achieving an effective SAR response. They are suggested guidelines; the final decision of ***if***, ***when*** or ***how*** is left to the individual Incident Commander/Search Mission Coordinator and his or her rescue team.

1.2 Purpose

The purpose of this plan is to provide guidance in the management of SAR incidents in a safe, orderly, efficient, and professional manner. This is accomplished through risk analysis, planning, ongoing situational assessment, problem recognition, preventative search and rescue, hazard mitigation, organization, equipment, appropriate training and staffing.
An important element of wilderness-based recreation is self-reliance and personal preparedness. Accordingly, recreational users are expected to assume a high degree of responsibility for their own safety, commensurate with the nature of activities they undertake. While safety related information is available through a variety of

sources (trailhead signs, printed handouts, information stations, published literature, web sites, etc.) outdoor enthusiasts users are ultimately responsible for their own actions.

This plan should be reviewed at least annually, as after missions and after action reviews dictate, and rewritten as necessary. The plan shall conform to the requirements of ORS Chapter 404.120.

1.3 Objectives

- Implement, supervise and maintain a professional search and rescue program to ensure, to the extent possible, the protection and preservation of human life, in the shortest period of time, in a manner that is cost-effective for the County, and that has the least impact on Benton County's natural and cultural resources.
- Coordinate and train with Benton County affiliated search and rescue volunteer groups as outlined in chapter 8: Benton County Amateur Radio Emergency Service, Benton County Crisis Response Team, Benton County Sheriff's Mounted Posse, Corvallis Mountain Rescue Unit, Marys Peak Search and Rescue, Sheriff's Office Search and Rescue Team, Sky SAR, and Region 3 K9.
- Ensure that employees are provided with quality training, equipment, and the supervision necessary to safely implement and achieve SAR program objectives.
- Provide for the prompt, proactive review of incidents. Analyze causal factors and, wherever possible, implement changes that might prevent future incidents or improve SAR safety and response.

1.4 SAR Incident Defined

A "SAR" incident is broadly defined as action taken to locate a missing, stranded, lost, injured or ill person or, in some cases, an animal; stabilize the subject, render such aid as may be needed; and if necessary, evacuate to safety or definitive medical care. A SAR incident may include decedent recovery, assisting law enforcement with aspects of an investigation and non-routine duties subsequent to a SAR response and under the direction of the law enforcement jurisdiction involved.

A SAR incident begins upon the initial notification or awareness of a potential SAR incident or mission.

A SAR incident is concluded following demobilization of all SAR resources, response readiness of equipment reestablished, rehabilitation of rescuers, completion of investigative action and documentation, follow-up incident review and critical incident stress management interventions if/when deemed necessary.

1.5 Search as an Emergency

Search is an emergency. The subject may require emergency care, protection from the environment and in some cases protection from him/herself. Time and weather will destroy clues and decrease the chance of survival for the missing person. An urgent response lessens search difficulty, improves searcher safety and the probability of rescue, and minimizes the search area. The subject may only be responsive or conscious for a limited time, responsive persons are easier to locate because they can answer searchers, and are often upright as opposed to lying immobile.
Benton County Search and Rescue priorities are to:

- Carefully assess the situation, search appropriateness, and relative search urgency
- Respond urgently and search at night when appropriate [Appendix B]
- Aid searchers in any way possible

- Create an atmosphere of safety and positive urgency
- Include non-contiguous areas of search in proper perspective
- Coordinate with other search and public safety resources in the best interest of the subject
- Use initial strategies that insure the maximum chance of locating a responsive, conscious subject

1.6 Safety

Search and Rescue (SAR) operations are conducted at the discretion of the Sheriff. While reasonable efforts will be made to locate, access, and evacuate lost, injured, ill, or deceased persons, **the safety of SAR personnel takes precedence over all other considerations**. A SAR operation may be delayed, suspended, or terminated if, in the opinion of SAR managers, the risk to personnel is unacceptably high or if other considerations warrant.

SAR activities are inherently risky. At all times, incident personnel shall strive to maximize the margin of safety in operations and should practice situational awareness and risk-management concepts during missions and training exercises. It is the right, and responsibility of each SAR participant to speak out when safety concerns are observed or identified. Safety issues shall be addressed through the incident or supervisory chain of command or designated mission safety officer, however, if at any time a participant has response safety concerns or does not feel that they can perform a task safely; this concern should be communicated immediately. Mitigation or the implementation of safety control measures may include a change or delay in tactics, suspension of an activity, or assignment of another person with different skills and experience to the same task. In each case, risks will be evaluated and managed to the extent possible.

Priorities for operational safety:

1. The searcher must take care of him/herself. The **searcher** is the number one priority.
2. **Fellow searchers**/rescuers are the second priority.
3. The **subject** of the search/rescue is the third priority.

A successful emergency operation is dependent upon teamwork, effective leadership, situational awareness, and the ability to anticipate, detect and act upon problems encountered. These fundamental organizational principles shall guide incident operations. Operational risk management (an ongoing process) should include the five following steps:

1. Identify hazards
2. Assess hazards
3. Make decisions (benefits outweigh potential costs)
4. Implement controls
5. Supervise and monitor

Search managers may consider restricting access to search areas for safety and evidentiary reasons. Access to a specific search and rescue area may be restricted by the Sheriff, given that reasonable access to members of the media is accommodated, and that the restriction is imposed for a reasonable period of time.
[ORS 404.115]

1.7 Prevention of Search and Rescue Incidents [PSAR]

The prevention of wilderness accidents (preventive SAR, or PSAR) is the responsibility of each County employee and SAR member. Preventative SAR may be accomplished through personal contacts and group presentations, the availability and distribution of accurate literature, recognition and intervention of hazardous activities, employee training, etc. When accidents do occur, it is the responsibility of the Sheriff, the designated SAR Manager, any appointed mission Safety Officer(s) and the Benton County SAR Council to review the incident and recommend and/or implement preventative measures where possible.

Public preventative SAR efforts should focus on the following four elements:

1. **Self-reliance**: to include personal responsibility, trip planning and emergency preparedness, use of good judgment, and self-rescue skills.
2. **Hazards & risks**: sources of risk and the probability and severity of an adverse effect to health, property or the environment.
3. **Preparedness**: measures by which county users can lessen the probability and severity of risk.
4. **Appropriate response:** steps to be taken should the individual find themselves in trouble, including self-protective actions, signaling or calling for help.

Benton County's PSAR program includes but is not limited too:

1. Deputy Sheriff and other **law enforcement patrol contacts** (proactive patrols) with visitors to the natural use areas. One dedicated **forest patrol deputy** [BCSO], two **park rangers** and several **caretakers** (Parks Department) are also available to make personal contacts with users and assist in information dissemination that is area specific.
2. Proactive **public education** through the County's website, SAR member organizations, signage, maps, informational brochures, and other publications. [Emergency Management, SAR, Natural Areas and Parks, GIS]
3. **Benton County Amateur Radio Emergency Service:** BCARES conducts HAM radio training, seminars and public events that illustrate the valuable application of their hobby in emergency situations, including wilderness search and rescue.
4. **Marys Peak Search and Rescue**: MPSAR assists the Benton County Sheriff's office with emergency preparedness demonstrations as well as providing SAR training to certify more local responders and outdoor enthusiast/community members.
5. **Corvallis Mountain Rescue Unit**: CMRU provides speakers and demonstrations for school, civic, and church groups to educate the public about dangers they may face in wilderness settings and how to better enjoy their outdoor experience. CMRU maintains response force of skilled, and certified professional mountain rescue team members.
6. **Benton County Sheriff's Mounted Posse**: BCSMP services include good horsemanship workshops and public outreach programs regarding local search and rescue participation. The Posse also works to perpetuate the traditions, customs and pageantry of Oregon's early days to include self-reliance and no-tech solutions.
7. **Benton County Sheriff's Office SKYSAR:** Aviation Volunteer Group (AVG) comprised of local volunteer pilots and pilots of the Corvallis Aero Service. The mission of SKYSAR is to provide volunteer air assets whenever reasonable and available in support of BCSO missions. All air assets in SKY SAR are privately owned and operated.

8. County Parks have central parking areas with **informational kiosks**. Kiosks provide information for recreationists in the form of maps displaying boundaries, ingress and egress areas, trails, road routes and services. Some kiosks also have pertinent local wildlife area information such as how to prevent and respond to encounters with black bear and cougar.
9. Trails within the county system are well marked with directional signage. Dedicated work crews (primarily the Mary's Peak chapter of the Sierra Club) rove county trail systems identifying and removing hazards as well as making personal preparedness contacts with visitors in the area.

1.8 Resource Protection

SAR missions will be conducted in a manner that will minimize impact a search operation may have to natural and cultural resources. In the interest of safety and/or patient care priorities, SAR managers have the authority to initiate activities that might otherwise be prohibited or against policy in certain areas (i.e. the use of motorized equipment in a no-motorized vehicle designated area). However, the SAR incident management team will make every effort to remain sensitive to impact issues, respecting the intention of the manager of the property, while ensuring a safe operation for SAR team members and the search subject. Reasonable effort shall be made to use minimum tools and techniques to accomplish the mission in order to preserve the overall integrity of the natural resource. In order to mitigate impacts to natural and cultural resources that may be caused by mission operations, "*Leave No Trace" (*http://www.lnt.org/) principles and practices may be included in mission personnel briefings.

Issues will be addressed during the planning stage of any mission and/or as concerns arise throughout the incident. In some cases it may be appropriate to consult a technical specialist or assign one to the SAR incident management team. If impacts should occur, they shall be identified and discussed during post-mission analysis and documented. Should rehabilitation of an area be necessary, a technical specialist (resource advisor) may be involved to help determine how best to mitigate the impact.

SAR training should consider search mission effects on the natural and cultural resources in the area and be planned and executed in a manner that minimizes impacts.

CHAPTER 2 -- SAR ORGANIZATION

2.1 Search & Rescue Program

Program objectives are primarily achieved through County employees and volunteers who are trained and qualified to perform the tasks necessary to resolve most incidents. It is recognized, however, that outside resources and expertise may be required or desirable to supplement and/or support these efforts. When utilized, outside resources will become members of the County's established Incident Command Structure. While non-county personnel may be assigned to any position or function within an incident organization, final authority and responsibility for incident objectives, strategy, and tactics shall remain with designated County SAR managers unless the Sheriff has specifically approved a delegation of authority for the incident.

When Search and Rescue activities within Benton County expand into a multi-county area, efforts will be made to determine whether one county shall remain in charge of the incident or whether a unified command structure will serve the incident objectives more appropriately. Conversely, when an incident which has originated in another county expands into the boundaries of Benton County, the Sheriff will determine whether to establish a unified command structure or provide mutual aid to the County of incident origin.

All efforts will be determined on an incident basis; will follow the guidelines of ORS 404.315, and adhere to the standards established by the National Incident Management System, Incident Command System established by Homeland Security Presidential Directive 5 of February 28, 2003.

2.2 Roles and Responsibilities

The Sheriff of Benton County accepts responsibility for search and rescue activities under ORS 404.110. Positions and functions related to the SAR program are defined as follows:

***Sheriff**:*

The Sheriff implements applicable aspects of the SAR Plan within his/hers geographic area of responsibility. He/She will extend mutual aid to surrounding jurisdictions that make a formal request for supplemental search and rescue activities. [Chapter 3.2 (a)].

The Sheriff supervises the SAR Program Manager and ensures that SAR caches are equipped, maintained and response ready, and that supplies and equipment are monitored and replaced per industry standards. He observes County patterns and makes recommendations and/or implements actions to achieve overall SAR objectives and provides crucial feedback and support to the SAR Program Manager. The Sheriff will provide for worker's compensation insurance to qualified personnel and SAR members who are injured while engaged in the act of official duties.

The Sheriff also has the authority to initiate a critique of any SAR incident if, in the opinion of the Sheriff, the critique would be useful; or upon request from an individual directly involved in the incident. All critiques will utilize the standard forms provided by the Oregon State Sheriff's Association (OSSA) [ORS 404.125]

***Search and Rescue Program Manager**:*

A Search and Rescue Program Manager will be appointed by the Sheriff. This individual shall be charged with the responsibility to function on the Sheriff's behalf in the administration of a Search and Rescue program including planning, organization, training, documentation, budget administration, equipment procurement and assignment, supervision and all related functions. The Emergency Services Program Manager currently holds this position.

The SAR manager is responsible for ensuring that program objectives and routine administrative functions are achieved. The SAR manager provides support to SAR operations by assisting as needed with Incident Command roles, air and ground operations, and investigative assistance as requested by law enforcement investigators. Additional duties may include but are not limited to: the preparation and update of resource lists, submission of activity reports and summaries, identification of program and equipment needs, purchasing, supervision of employees and volunteers and tracking of financial accounts. The SAR manager coordinates annual trainings and instruction, reviews all SAR incident reports, and reviews agendas for scheduled SAR training. The SAR manager will establish and maintain personnel records, to include training and minimum qualification standards, and conduct background checks on all volunteers. The SAR manager issues volunteer identification cards annually; updates the County SAR plan as needed and serves as liaison with outside programs and agencies. The SAR manager serves as advisor to the Sheriff in matters related to SAR and ensures County equipment caches are in response-ready condition.

The designated SAR manager ensures that County needs are addressed through staffing, funding, delegation of responsibility, and oversight. The SAR manager coordinates with other divisions to promote cooperation, resource-sharing, and incident support as needed.

Mission Coordinator:

A designated mission coordinator is a trained, certified, experienced SAR mission incident commander who is responsible for the SAR mission consultation, assessment, activation, investigation, operations, personnel supervision and safety, documentation, after-action review and demobilization. The SAR mission coordinator is activated through Corvallis Regional Communications Center when any Benton County SAR resource is requested, and assumes responsibility for the mission determination, assets, approach, and liaison with other emergency response assets.

A SAR Mission Coordinator reports to the Search and Rescue Program Manager (Emergency Services Program Manager).

***Volunteer Unit Leaders**:*

Each volunteer unit commonly deployed by the Benton County Sheriff for the purposes of Search and Rescue are independent and function within their own authority. Units are coordinated by their leader, commonly referred to as an elected President or Captain.

All unit members affiliated with Benton County Search and Rescue are required to follow county procedures and are expected to perform in a professional manner suitable for a Sheriff's employee. All SAR members agree to adhere to all applicable policies set out by BCSO, including but not limited to the BCSO Rules of Conduct and the Code of Ethics. See Appendix T for the Letter of Understanding between Benton County Search and Rescue and Volunteer Units. Minimum standards for OSSA Certified Searchers from volunteer units must be met before a volunteer searcher may be deployed on an incident. Support personnel may have separate and distinct requirements. When activated as a County resource, either for in-county response or mutual aid to another location, Search and Rescue volunteer resources become employees of BCSO and are covered by workman's compensation insurance from the moment they respond from their home until they return. See Chapter 8 for more information on volunteer policies.

Public Information Officer:

The BCSO has a standing protocol for responding to requests for public information. This protocol will be followed during SAR incidents. [General Order 16.1 Public Information and Media Relations]

Note: Within the Incident Command System, the normal County supervisory chain of command may be superseded by incident staffing assignments.

2.3 County-wide Program Support

While personnel within the Benton County Sheriff's Office are directly responsible for implementation of the SAR Plan, a long-standing tradition within the service has been the willingness of employees from all divisions to work together in the event of an emergency. This cooperative approach enables SAR managers to call upon valuable resources from other divisions and work units, as needed, to help resolve emergency incidents. Qualified employees from other divisions may be called upon to fill positions within the organization. Participation will normally be subject to supervisory approval. If, however, exigent circumstances exist, employees may be contacted directly with the understanding that they will clear the assignment with their supervisor in a timely manner.

CHAPTER 3 -- PLANNING

3.1 Incident Command System

The Incident Command System (ICS) is a standard management organizational tool and process used to respond to a variety of incident types by the County. It provides the ability to adapt to changing and dynamic circumstances surrounding the event. Its primary attribute is flexibility and the system enables the organization to adjust in size as the incident develops. Every incident has certain management activities that must be performed. ICS standardizes responsibilities and ensures that all activities are achieved within the scope of this system.

SAR operations will be managed by qualified personnel using ICS to the extent necessary for the safe and efficient resolution of incidents. The more complex the mission, the greater the need for individuals with specialized training and experience to carry out each function. The Incident Commander (IC) will assign personnel to overhead and functional positions within the incident organization. Briefings are a mandatory component of the ICS system. Assignments/roles must be communicated to all incident personnel. Span of control will normally be considered five-to-one. Overhead functions should be considered on any SAR mission, including minor ones. If the SAR incident becomes complex, extended, and/or exceeds the capability or staffing ability of County staff, the IC may order needed overhead/personnel.

All SAR operations will adhere to the relevant provisions of the National Incident Management System, Incident Command System, established by the Homeland Security Presidential Directive of February 28, 2003. This includes training objectives established by the same. Benton County has met or exceeded all requirements of current SAR personnel as of October 2007.

Note: In SAR operations, a requirement that is often needed is a family liaison. This function should be assigned to an individual who understands SAR operations in general and is familiar with available resources to assist in crisis intervention. Persons who are trained in CISM (Critical Incident Stress Management) are often useful in this role (BCCRT, BCSO Peer Support Team or Chaplain Services).

3.2 (a) Mutual Aid from Benton County

Benton County Emergency Management, Search & Rescue has access to the volunteer resources of approximately 120 specialized, professional search and rescue volunteers. Specialized capabilities of local teams include, but are not limited to:

- high angle and technical search and rescue
- cave rescue
- high altitude and extended duration search
- mountaineering skills, including glacier travel
- national ski patrol
- 4-wheel drive and road teams
- helicopter, fixed wing aircraft pilots and drones
- metal detection experts
- SUAS (Drones) aerial imaging
- human trackers

- land-based navigation
- wilderness medicine
- communication engineering
- horse-mounted search
- canine search
- crisis support/critical incident peer-counselors
- search management

It is recognized that these individuals are highly skilled in areas that may be of use in a mutual aid request. Further resource identification is located in Chapter 8.

All SAR personnel may be requested for incidents outside of Benton County where their expertise may be of assistance. Because search is an emergency, and realizing that search and rescue incidents are an important tool for maintaining skill levels and interoperability with other SAR personnel, it will be the policy of Benton County SAR to allow personnel to respond to mutual aid requests whenever feasible and desired. Such requests will be filled on a first come, first served, basis. Care may be taken to leave behind qualified SAR personnel to coordinate SAR missions that may arise within Benton County.

An Incident Liaison should be designated to coordinate and oversee assigned resources, serve as the County liaison with the requesting or host agency, and ensure the preparation and submission of incident documentation. The Incident Liaison may designate a crew supervisor to oversee and supervise all personnel responding on the mission. The management of personnel (pay, time, travel, etc.) will adhere to County policies. The crew supervisor should be familiar with these documents and the regulations contained therein. On a daily basis, or as arranged otherwise, the crew supervisor will contact the Incident Liaison to report on the status of the crew and their assignment. Whenever possible, the crew will be identifiable as a Benton County resource by wearing the uniform items suitable for the type of incident.

When Benton County personnel are working as mutual aid resources, they will work within the requesting agencies command structure. County resources will be made available at no charge for the first twelve hours of the incident. After that time, the requesting agency may be requested to share or assume financial responsibility for some or all personnel costs (regular, overtime, hazard, night or weekend pay rates) as well as lodging, meal or transportation costs. If equipment is broken or damaged during these incidents, Benton County will be responsible for the cost of replacement or repair.

A Travel Authorization will be prepared for any SAR employee who responds out-of-County in excess of 50 miles distance and twelve hours duration (to commence upon departure of duty station, and to terminate upon return to duty station). The Incident Liaison should initiate this request as soon as possible.

3.2 (b) Mutual Aid to Benton County

At times, it may be necessary for the BCSO to ask for mutual aid during a SAR. Requests may range from life threatening situations where a cooperator has agency personnel closer than Park staff, to SAR's needing personnel with specialized capability (i.e. swift water rescue, helicopter hoist, etc.) or the need for additional personnel or overhead to manage larger operations.

BCSO SAR is a member of Oregon's SAR Region 3. Members of this Region train together, share resources regularly and are familiar with team capabilities for deployment and mission assignments. Region 3 consists of: Benton, Crook, Deschutes, Linn, Lane, Lincoln, Polk, Jefferson, and Marion County SAR teams. Mission Coordinators from the nine county regions can be notified of the need for mutual aid through a single page under the BCSO SAR call out system. See Appendix A for information.

Benton County is also a member of a six county Mutual Aid Agreement. This Omnibus Agreement was entered into by Polk, Lincoln, Marion, Linn, Benton and Yamhill counties in order to better facilitate a request and provide for emergency assistance, to include assistance with a major search and rescue. A participating member providing resources to Benton County under this agreement will provide for the first 12 hours of assistance costs before Benton County incurs any charges. After that time, Benton County will assume financial responsibility to include personnel costs (regular, overtime and hazard pay), as well as food, lodging and transportation costs. The full draft of the Omnibus is available in Appendix U.

The State of Oregon has designated the Office of Emergency Management (OEM) have a State SAR Coordinator for incidents within the State of Oregon. OEM currently maintains County SAR capabilities and resource lists for SAR teams throughout Oregon. The current function of the State SAR Coordinator is to coordinate federal, state and out-of state resources, to assist local groups in training, and to assign mission numbers to local jurisdictions for the purpose of collecting SAR mission data and creating statewide statistics. The State SAR Coordinator will assist in locating resources for an incident with specific needs, and can be reached at: (503) 378-3338. State Search and Rescue can also activate specific resources such as Civil Air Patrol and the Air Force for certain Distress Alert Searches. [ORS 404.100] See chapter 4.6.7 for more information.

When resources respond to assist on SAR's within Benton County, they will normally work under County Incident Command structures. All responding personnel must be current members (volunteer or otherwise) by his/her sponsoring Sheriff. Benton County will not assume financial responsibility for lost or broken equipment.

3.3 SAR Equipment and Cache Management

The efficiency and success of each SAR operation is dependent on the availability and readiness of well-maintained appropriate equipment accessible to SAR staff. Based upon identified hazards, potential risks, and environmental exposures, appropriate SAR equipment will be provided by the County. The primary SAR cache is currently maintained at the SAR garage located at the Avery Public's Works Complex. Sub-caches are located within the: CMRU truck (primarily high angle and technical equipment), the "mobile command vehicle" (mobile command/communication unit), the Base Camp trailer (food, shelter, etc. for establishing an ICP, base camp, or staging area), and the Benton County Office of Emergency Services (administrative support equipment, i.e. laptops, forms, etc.).

The SAR Program Manager is responsible for ordering and maintaining gear in these caches. Identified volunteer personnel are also responsible for inspecting and repairing their cache equipment to ensure its suitability for SAR. Equipment in these caches is for emergencies and pre-approved SAR training only.

Pre-issued Gear

Some employees may be issued gear and personal protective equipment that will facilitate readiness and response to emergencies. All equipment must be signed out on a property form. The SAR Program Manager will determine what employees will be issued such gear and is responsible for the return of the property. Each employee is responsible to maintain the issued equipment and to notify the SAR coordinator if equipment is damaged or in need of maintenance, repair, or replacement.

SAR Cache Equipment

The following guidelines will apply to all SAR caches:

- Equipment will be issued and used for SAR operations and/or approved training only.
- Personnel authorized to issue cache equipment include the SAR Program Coordinator, Mission Coordinators, identified volunteer personnel responsible for the cache, and Incident Commanders (or their designees). For training, lead instructors shall coordinate equipment checkout with the personnel responsible for the cache.
- Persons issuing equipment are responsible for ensuring that each item is returned, inspected, and properly stored. Any loss, damage, problem, or concern should be noted and communicated to the SAR Coordinator. Deficient equipment should be taken out of service, identified with red flagging, and tagged with a brief explanation of the problem. These items should be repaired or replaced.
- Incident Commanders and lead instructors are responsible for ensuring that SAR caches and equipment are well organized and available for the next incident. Equipment that requires cleaning, drying, or repair will be returned to service as soon as possible, normally the morning after an incident. Overtime is authorized for post-incident cache cleanup and return to response-ready condition.
- Bio-waste materials must be disposed in accordance with County EMS protocols. Current Bio-waste collection sites exist at the Benton County Jail.
- SAR caches are accessible to all appropriate County staff for emergency response purposes only.

Equipment logs, scheduled maintenance, routine gear inspection:

It is vitally important that SAR equipment be usable and ready for emergency response. SAR equipment will be inspected after each incident and before being returned to service. Items such as ropes, crampons, cordage, webbing and harnesses should be inspected regularly for damage and wear. Records should be kept to include date in service, activity logs, pertinent damage and/or routine maintenance. Current technical equipment caches are owned and maintained by Corvallis Mountain Rescue Unit. Logs for the same are housed in a binder in the rear of the CMRU truck.

Webbing, cordage, harnesses, and ropes should be retired based upon manufacturer's recommendations and/or significant damage. Used rope will be retired every seven years. New, unused rope will be retired ten years from the date of purchase. Harnesses and helmets generally have a life expectancy of five years. All technical gear should be retired after a significant hit/fall or when any sign of damage is found upon inspection. Hardware has a much longer life expectancy, but must be inspected regularly and kept clean and away from UV rays.

Use of Equipment:

Equipment will not be used in a manner which is outside of manufacturer's recommendations. Equipment shall be replaced when lost, damaged, destroyed, or rendered unsafe for use.

Personal equipment:

The County recognizes that the use of personally owned gear is often necessary and desirable to SAR personnel. Per OSHA standard 1910.132(b) the employer (Benton County) shall be responsible to ensure the adequacy of equipment not provided by the government. This is primarily met through the ICS, and the chain of responsibility that ensures team members are prepared, including equipment used, for their assigned task in an incident. Employees may file for replacement of personal equipment that is either damaged or destroyed during a SAR incident. Employees seeking repair or replacement of personal equipment should do so through the SAR Program Manager.

CHAPTER 4 – OPERATIONS

4.1 Incident Management

Every SAR incident will be managed by a Mission Coordinator. Responsibilities include size-up, urgency determination, and appropriate response request/deployment. Critical to the success of any operation is determining when to request additional resources and when to expand the ICS system.

Initial Response Guidelines

To clarify the role and responsibilities within the SAR program, the following protocols can help guide incident response:

- If Dispatch (CRCC) receives the initial report, they will notify the appropriate personnel in the area of concern, usually a Sheriff's Deputy. Conversely, if field personnel receive the initial report, they should immediately notify Dispatch of the potential incident.
- The first responder (usually a Deputy) assumes responsibility as IC until relieved by a Mission Coordinator. They should evaluate the report and decide if further investigation or action is needed.
- The IC will determine if a SAR response is necessary, and implement the appropriate actions and notifications. See Chapter 5.1, Activation Procedures and Appendix A: Mission Coordination Activation Procedures.
- In addition to the local cache of helicopter and fixed wing pilots that maintain readiness for a Sheriff response (SKYSAR), if the use of military aviation resources or the Civil Air Patrol are needed or anticipated, OERS should be notified as soon as possible. All non-county aircraft must be ordered through Oregon Emergency Response System. OERS can be reached at 1-800-452-0311, or at (503) 378 6377. The AFRCC will not approve the use of aircraft for a recovery mission.
- Once a decision is made to expand operations, the Incident Command System should become more formalized with resources drawn from county-wide personnel. The size/scope of this team is dictated by the nature of the incident. Requests for resources outside the division will, whenever possible, be cleared through the appropriate supervisory chain of command.
- If the expanded ICS operations extend beyond the capabilities of the initial IC, a more qualified IC will replace the initial as available.
- If multiple operational periods are anticipated or if more than one SAR incident is occurring, plan ahead and order resources early!

Initial Report and Information Gathering – Determining Urgency

Well-organized and successful SAR operations often depend on information. The importance of securing adequate information during an initial report cannot be over-emphasized. County Dispatch and the nearest Sheriff Deputy should be notified upon initial receipt of a report.

The reporting party should not be released until a complete interview can be conducted and re-contact information is obtained! Minimum information should include: Who, What, Where, When, Why and How.

Critical Initial Interview Questions:

1. Subject Point Last Seen
2. Last Known Point
3. Number of subjects
4. Age (s)
5. Medical Conditions
6. Experience
7. Equipment (including cell phone – get carrier and number, and vehicle info)
8. Terrain hazards
9. Weather (present and predicted)
10. History of incidents in this area or of this type
11. Probability of an unfounded search
12. Length of time the subject(s) are overdue

Note: When at all possible, the PLS or LKP should be preserved by keeping people out of the area. This preservation allows for the authenticity of clues left by the missing subject(s). When a hazardous emergency (such as a continuing lightning storm) exists, action should be taken to prevent unauthorized persons from entering or re-entering the area as long as a threat to human safety remains.

The BCSO approved method of evaluating the urgency of an incident is to use Search Urgency guidelines (see Appendix B). The information gathered through this process may be helpful to determine the appropriate response.

Points to remember as the Initial Response Incident Commander (from "*Leading the Initial Response, A Checklist*," by Paul R. Anderson.)

- ✓ Most incidents are resolved by the initial response effort.
- ✓ The initial response IC is a supervisor and a leader.
- ✓ Don't get bogged down in "doing." Delegate and manage!
- ✓ Communicate with your resources and your dispatcher.
- ✓ Think ahead and plan.
- ✓ Keep adequate numbers of resources in reserve.
- ✓ Escalate the response early. If you are not sure you can resolve the incident in the first operational period, call for assistance now.

Initial Actions---Identify Command Structure and Determine Incident Objectives

- **Investigation**
  - Develop Thumbnail Sketch – Maintain Contact with Reporting Party
  - Determine Point Last Seen or Last Known Point (Crime Scene Considerations)
  - Calculate Search Urgency – Determine Strategy – Passive vs. Active
  - Disseminate Initial Information (e.g. flyer, radio, telephone & neighbors)
  - Conduct Interviews(s) – Lost Person Questionnaire, NCIC Checks, Obtain photo
  - Assign dedicated investigator – anticipate additional investigative staffing
- **Confinement**
  - Review the Lost Person Behavior
  - What general category of lost persons are they likely to belong to? (i.e. Alzheimer's patient, children, elderly, hunters, etc.)
  - Limit the subject's movement
  - Set containment at trailheads, the subject's vehicle and other key locations. Initiate road blocks and use attraction techniques.
  - Consider the subject's transportation options, domiciles and voice mail.
- **Hasty Search**
  - Personnel accountability (check-in) in place – check in personnel
  - Deploy competent and efficient search teams following a briefing
  - Personal preparedness for field assignment (e.g. 24-hour pack in backcountry)
  - Teams entering the field should:
    - Have appropriate training considering task assignment.
    - Have adequate communications (a minimum of one radio with SAR/Base communications).
    - Have essential equipment, as well as any specialized equipment needed (i.e. EMS gear).
    - Anticipate need for personal protective equipment for the patient.
    - Relay safety information or hazards they encounter (i.e. terrain, weather).
    - Receive a briefing before entering the field
  - Focus on high probability areas (e.g. travel aids, prior searches and hazard areas)
  - Use appropriate tactics for subject (e.g. responsive, unresponsive or evasive)

Concurrent Actions –Assign Plans function and Identify Incident Command Post

- Establish Search Area
  - Use detailed maps (e.g. 1:24,000 scale)
  - Mark Point Last Seen (PLS) or Last Known Point (LKP)
  - Apply the four common methods of establishing a search area:
    1. Theoretical: Subject's Rate x Time elapsed = Potential Distance traveled
    2. Statistical: Check the probability zone charts, draw your doughnuts
    3. Subjective: Are there limiting factors to the travel (i.e. physical barriers, geographic features)
    4. Deductive Reasoning: Step by step, logical analysis of circumstances.

- Segmentation
    - Segments should be sized to allow effective searching in an operational period.
    - Segment boundaries should be identifiable in the field.
    - Consider vegetation, terrain and obstacles in segment selection.
    - Travel aids (i.e. trails) should be delineated as separate search segments.

- Calculate Initial Probability of Area (POA)
    - Small team with local knowledge and expertise (e.g. investigator, PSC, OSC, etc.)
    - Calculate initial POA

<u>Successive Actions – Project incident overhead and resource needs</u>

- Conduct Planning Meeting (Pre-meeting consensus by OPS and Plans)
    - Situation update (OPS and Investigations) – Analyze updated POA values
    - Review Incident Objectives
    - Weather
    - Complete Operational Planning Worksheet (ICS 215)
        - Plan for Contingencies – Operational Setbacks; Rescue and Recovery
        - Determine resource needs
          Factors to consider include:
            - Location and size of area
            - Threat to life and property
            - Political sensitivity
            - Organizational complexity
            - Jurisdictional boundaries
            - The type of activities involved (i.e. swift water, snow travel, etc.)
            - Safety considerations
            - Number of resources being managed (span of control)
            - Type of resources utilized (i.e. air operations)
            - Additional operational periods
    - Safety—Hazard Analysis (LCES- ICS 215A) – Develop mitigation procedures
    - Approval of Plan and functional comments

- Prepare Incident Action Plan (IAP) – Detailed Division Assignments (ICS-204)

- Briefing
    - Brief a manageable number of participants and limit distractions.
    - Use an organized format and be succinct.

- Deployment
    - Plan for efficient and effective deployment of resources – anticipate problems.
    - Mentally project and sufficiently plan to avoid the “hurry up and wait” syndrome.

- Debriefing
  - Plans section personnel – utilize interviewing skills – Debrief team leaders.
  - Obtain Probability of Detection (POD). Evaluate Accuracy.
    - Ask the searchers returning from the field what they believe their probability of detection was within the search segment. If there had been ten clues in the area, how many would they have found? Some searchers may over-inflate their accuracy. A average ground searcher accuracy should be ~30%, or having found 3/10 clues.
    - Download GPS tracks and cross reference team stated POD and actual log of travel. See section 4.3 for further information.
  - Document Coverage –Plot on map and/or use GPS download.
  - Identify gaps in coverage and operational deficiencies.
  - Update POA values – Prepare for next planning meeting.

4.2 Briefing format

One possible format for initial briefing in SAR operations is provided below (adapted from *South Canyon Revisited: Lessons from High Reliability Organizations* by Dr. Karl E. Weicke, University of Michigan, 1995):

"Here's what I think we face;
Here's what I think we should do, and here's why.
Here's what we should keep our eye on
Now, talk to me…"

A more formalized format for successive operational periods should be: (prepared by Bill Vandergraf and Ken Phillips, Grand Canyon National Park, 2005)

<u>Operational Briefing Format</u>

Turn radios off. . .

- Incident Update (Ops SC)
- Incident Objectives (Plans SC)
- Weather (PSC)
- Review of Assignments (OSC)
- Air Operations
- Communications
- Logistics
- Finance
- Safety
- IC Comments
- Unassigned Resources – See PSC

Turn radios on. . .

4.3 Probability of Detection (POD)

Probability of Area (POA) usually means, "What is the likelihood that the subject is in this particular search segment?" POA changes for each segment after any portion of the total search area is searched. To determine POA, a consensus is taken among a small team with local knowledge and expertise (e.g. the Investigator, Plans Sections Chief, Operations Section Chief, Incident Commander, etc.). This group would traditionally rate the search segments with percentages, which would be averaged and a POA percentage would be assigned to each segment. Allocation of resources was prioritized based on the percentage number of POA in the segment. Nevertheless, problems with this system have been noted, namely, mathematical inaccuracy, numerical subjectivity (numbers mean different things to different people), and remainder bias.

4.4 Suspending Operations

The decision to suspend a SAR mission can be difficult. Each incident is different and must be evaluated against its own specific facts. It may be helpful to answer the following questions when assessing a mission for suspension:

- Does unnecessary or unreasonable risk to searchers or rescuers exist?
- Have your resources been depleted or are they exhausted? Is there any likelihood of replacing resources?
- Has the current and forecasted weather been examined in light of continuing the search/rescue?
- Has the question of survivability been thoroughly researched and studied?
- Has there been a thorough and effective execution of the incident action plan?
- Have all search areas been searched and re-searched?
- Is there a high cumulative Probability of Detection (generally 90% or greater) in all search segments?
- Is there political and/or family pressure to continue or maintain the search/rescue?
- Are there other emergency incidents occurring contemporaneously with current efforts?
- Is the search/rescue effort affordable and/or efficient from a financial standpoint, if no new clues or information has been found after an extended search?
- Are there any unresolved clues?
- The IC, SAR Program Manager, and Sheriff must agree to suspend any mission.

Before suspending operations, a meeting should be held with the subject(s) family, summarizing efforts thus far, entertaining inquiry and consolidating family objectives. If reasonable, family member's concerns should be re-searched or explored through investigative processes. For example, a remote cabin may have been searched three times with no clues discovered as to the subject's whereabouts. Nevertheless, if a family member feels strongly that they simply aren't convinced the subject didn't make their way to that cabin, search it again. Having the family concur that the search efforts were exhaustive is helpful when suspending operations.

Evaluators are available for any search effort suspension. The IC may opt to request this resource as an independent, third party opinion of whether or not to suspend a search.

As an alternative to a complete suspension, a limited continuous search may be conducted at a level determined by the Incident Commander. All pertinent information and documentation should be kept in the incident file.

4.5 Overdue Parties

Experience has demonstrated that recreational users of natural areas routinely underestimate the time needed to accomplish an intended trip. They often return well after the time and sometimes date specified on an official itinerary or with plans left with friends or relatives. It is rare that a late return is associated with an accident or injury; more often it is a result of route finding difficulties, inclement or unforeseen weather, lack of preparedness (i.e. a flashlight), or over-extending personal or group abilities. Previous experience in the county indicates overdue parties will be at the trailhead or even home within 24 hours of being reported overdue.

To minimize the hazards and risks associated with sending SAR personnel on unneeded missions, and to responsibly manage costs associated with such response, a search urgency determination evaluation will be completed on each mission. An overdue party may not require an immediate response. Nevertheless, given the totality of known information, SAR personnel may elect to respond earlier if factors support such a decision. A response will generally be based upon what is known, versus what is not known. This decision is left to the judgment, training, and experience of SAR personnel, and specifically to the Mission Coordinator contacted. If the urgency does not indicate an immediate response, SAR personnel should continue to investigate, monitor urgency factors, and evaluate any updated information. A search urgency evaluation worksheet is located in Appendix B.

4.6 Specific Incident Considerations:

4.6.1 Law Enforcement Incidents

Search pursuant to a law enforcement incident can potentially put SAR team members in physical danger. If the search is for an armed person, fugitive, or a person who is considered dangerous to themselves, all searchers should be law enforcement certified personnel. If the search is for evidence, search team members should be thoroughly briefed on items that they are looking for and potential hazards that may be encountered (i.e. needles, drugs, and bodily fluids). When searching for evidence, consider evidence search procedures, handling of evidence, jurisdictional issues and chain of custody. A Sheriff Deputy may accompany a team of searchers to provide for evidentiary issues.

The Sheriff's Office Search and Rescue Team (SOSAR) is comprised of sworn personnel who can respond to search and rescue incidents. The unique asset this team brings to response is law enforcement certification (either corrections, parole and probation, or patrol certified).

Every search has an investigative aspect. Is the subject actually in the search area? Mission Coordinators should opt to assign a Detective to the Investigations Branch when searching for a missing person. This creates a comprehensive approach to determine the question of why the individual(s) is missing and where else he/she might be.

4.6.2 Technical Incidents

Technical incidents are defined as any incident that has a higher than normal potential for risk to rescuers. Technical incidents might include helicopter operations, nighttime operations, technical climbing/mountaineering, swift water rescue, avalanche rescue or activities conducted in extreme weather. For technical incidents, consideration should be given to assigning a technical specialist to the incident command staff if no such expertise is already represented among overhead personnel. This functional assignment will facilitate decision making and risk management processes at the incident command level. A common example of this in Benton County would be to assign a member of the Corvallis Mountain Rescue Unit as a crew supervisor, for plans assistance with terrain, personnel and route selection.

4.6.3 Fatalities

If the subject of the mission or any other person within the mission, area is deceased, evacuation of the body by program personnel should only occur when:-
Evacuation has been authorized by the State Medical Examiner, Deputy Medical examiner, or District Attorney.

-Evacuation of the deceased by a commercial funeral home is not practical.

-Personnel are voluntarily available to perform the evacuation.

Upon locating a fatality, and if safe conditions permit, the scene will be secured and an investigation begun. A Deputy should be assigned to lead the on-site investigation. Always consider criminal intent, however remote the possibility may seem at the time. Permission should be obtained from the medical examiner prior to moving the body.

The urgency for evacuating fatalities is low. While the safety of rescue personnel will not be compromised for recovery operations, it must be recognized that risk-free operations are generally not possible. However, the non-urgent nature of recoveries affords increased opportunity to apply risk management assessment and control measures. If the removal of a fatality must be delayed, efforts should be made for Deputies to remain near the scene in order to secure the site.

Due to widespread use of radio scanners and the sensitivity surrounding deaths, discrete radio communications should be used to the extent possible. “Broken Ski” or similar pre-determined verbiage can be communicated to incident personnel. All medical history is sensitive and should only be aired on the radio in a generic sense, (i.e. “45 yr old male, pulse less and apneic). The name(s) of deceased should not be aired over the radio. The use of telephone (landline, cellular, or satellite) is suggested whenever possible.

Only a physician, medical examiner or Deputy medical examiner may pronounce death. Nevertheless upon locating a fatality, and if safe conditions permit, the scene will be secured and an investigation begun. A Deputy should be assigned to lead the on-site investigation. Always consider criminal intent, however remote the possibility may seem at the time. Permission should be obtained from the medical examiner prior to moving the body, an obvious fatality should not be resuscitated. Reports should include information surrounding the nature of the incident (i.e. fell 300’), nature of the injury (i.e. massive head trauma, decapitation), and other pertinent medical information (i.e. absence of pulse and non-breathing, unresponsive pupils and dry eyes, presence of lividity, etc.). Next of kin notification is generally accomplished under the guidance and direction of the Incident Commander. Crisis Chaplaincy Services is contracted through the Sheriff’s Office to assist members with death notifications.

4.6.4 Aircraft Crash/Rescue

Reports of downed or damaged aircraft should be forwarded immediately to a Benton County SAR Mission Coordinator. OEM can assist with an ELT transmission by obtaining air resources for the search and determining the signal coordinates of an ELT transmission (if one exists). Utilize the most efficient method possible to locate a downed aircraft. Consider visual confirmation, ELT transmission, aerial reconnaissance, and other lookouts.

Benton County will respond to each report of a distress alert signal and/or missing or overdue aircraft as an emergency. Distress alert signals fall into any one of the following: ALNOT ("Alert Notification," overdue aircraft alerts), ELT ("Emergency Locator Transmitter," aircraft distress signal transmitters, EPIRB ("Emergency Position Indicating Radio Beacon," boat/vessel signal transmitters), or PLB ("Personal Locator Beacon," a manually activated personal transmitter). While history has shown that the majority of ALNOT, ELT, EPIRB, and PLB alert missions are in fact false distress alerts, the emphasis will be to coordinate responses to each incident as an actual emergency until proven otherwise.

General Questions to ask regarding Emergency Locator Transmitter Incidents (downed aircraft):

1. Who is the reporting party?
2. Is there a plane overdue?
3. What is the range the ELT is being heard and the strength?
4. Have RAMP checks been conducted at all likely airports?
5. Weather during flight?
6. When did the plane disappear?
7. Was route or geographic area covered by NTAP (National Track Analysis Program?)
8. Has the NTAP been pulled for review and stuffy (source: FAA flight following)
9. Number, age, sex of persons on board?
10. Aircraft type, general description, N #?
11. Route of flight?
12. Last Known Position?
13. How long has ELT been going off? What type is it?
14. Is Civil Air Patrol (CAP) able to fly?
15. Who is in charge of the mission?

4.6.5 "Blood and Gore" Situations

Some incidents contain a significant amount of "Blood and Gore". Benton County recognizes that sensitivity to personnel working in these situations is important, and will work to minimize exposure to the blood and gore hazard. The Department of Defense has stated that less exposure to these situations minimizes post incident stress for employees working in and around the blood and gore hazard.

Because of this, Incident Commanders should strive to place employees working directly in or surrounded by a blood and gore hazard on 2 hour immersion shifts. By attempting to limit exposure to 2 hours, we can care for employees' mental health and reduce their post-traumatic stress occurrence. No employees under 18 years of age should work in or around blood and gore incident hazards.

Benton County Crisis Support Team Members should be activated to assist with Critical Incident Stress Debriefing on incidents which contain, "Blood and Gore".

4.6.6 In Case of Emergency [I.C.E.]

Some SAR situations may involve a single individual with no known family or contact. Nationwide, an I.C.E. cell phone campaign has begun which may assist search and rescue personnel in making contact with friends and/or family. The general theory is that owners of cellular phones pre-program a phone number and label it I.C.E. (In Case of Emergency). If they are involved in a traffic collision or other event which would render them incapable of providing personal information to rescuers, SAR personnel can call the individual pre-programmed into the telephone.

CHAPTER 5 – MISSION PROCEDURES

5.1 Activation Procedures

Search is an emergency, and Benton County Search and Rescue will not delay a response to a search situation unnecessarily**.** The Search and Rescue activation procedure is as follows:

Upon receipt of information indicating that a search and rescue may be required, the first responder (usually a Deputy Sheriff) will make the determination to request SAR resources. All requests will be made to CRCC at (541) 766-6911. Dispatch will then contact the On-Duty SAR Mission Coordinator. If Dispatch cannot contact the on-duty mission coordinator, they should proceed to the next on the list. Standby schedules for Mission Coordination will be provided to CRCC and other department heads as requested by the SAR Program Manager.

The Mission Coordinator will then make the determination which resources are appropriate to activate and take the lead in doing so. Mission Coordinator procedures are outlined in Appendix A. A first responder should not take it upon themselves to contact a resource directly; they should always go through appropriate mission coordinators for activation. The Sheriff, SAR Program Manager, and all Dispatchers have authorization to send SAR personnel pages for activation/information.

Requests (including mutual aid) for Benton County Search and Rescue resources should be made to Corvallis Regional Communications Center at (541)766-6911.

Missions are conducted in escalating degrees, depending upon the totality of circumstances.

A. The general stages a mission will progress through are the:
   1. Preliminary stage which includes initial interviews and investigations, the request for additional resources, the arrival of resources, and the formation of the initial search plan.
   2. Confinement stage which includes the establishment of a perimeter to confine the subject(s) within the mission area.
   3. Detection stage which consists of checks and sweeps to locate the subject(s), associated clues, or evidence of their passage.
   4. Evacuation or rescue stage which consists of stabilization of the subject(s) and subsequent transport to a location of safety.
   5. Demobilization stage which includes functions associated with location and release of all responding resources.

B. Strategies and tactics which result in incident stabilization through prompt deployment of response personnel should reduce the potential area of the mission and mission duration.

5.3 Mission Procedures, Specific

The BCSO expects certain procedures, strategies and tactics to be performed prior to, during, and subsequent to the arrival of resources into the mission area. The order and duration of these procedures will differ with each mission depending upon subject profile, terrain, weather, mission area, and the availability and training of responding resources.

A. Contact by the BCSO Representative should be made with the reporting party, witnesses, and others to obtain information. Such contact should be made in a timely manner.

1. A Program volunteer may contact these persons to gather preliminary information prior to the arrival of the BCSO Representative.
2. If the subject is located prior to the BCSO Representative's arrival, the BCSO Representative will contact the responsible person(s) prior to mission termination.

B. An attempt should be made by first arriving resources to locate and protect the Point Last Seen (PLS) or Last Known Position (LKP.) Plastic flagging tape and/or tarps can be used to create a barrier for protection of the PLS or LKP.

1. Any shoe, foot, or tire imprints found should be protected and compared against the subject's.
2. Clothing items should be safeguarded to allow the use of search-trained canine teams.
3. All physical evidence discovered during the course of the mission should be protected, tagged, and cataloged for possible future investigation.

C. The Incident Commander should:

1. Determine and establish the mission area. This determination should be based upon the PLS or LKP of the subject, the subject profile, and accepted mission area theories (i.e., theoretical, statistical, subjective, and deductive).
2. Select a site for the incident base. It is not required for the incident base to be within the mission area. Often it is desirable to locate the incident base outside the mission area but within close proximity. This should help reduce congestion and further disturbance in the area and may help in radio communications. A staging area can be established within the mission area if travel times are unacceptable.
3. In Benton County, the following facilities will be considered for Incident Base Sites:
   - Rural Fire Protection District (RFPD) stations
   - County/City Facilities
   - State/Federal Facilities

C. Two-person (minimum) Vehicle, Horse-Mounted, Mountain Bike, and other types of Patrols should be established along the anticipated route of the subject, and for confinement around the perimeter of the mission area. This cannot always be practically accomplished, especially on or near designated wilderness areas or privately owned property, without the express permission or consent of a responsible party. Vehicles equipped with overhead lights and a siren/public address system should be used if available for subject attraction and signaling. BCSO vehicles of all types are available for missions and should be used as appropriate. However, road and weather conditions must be suitable to help assure operator and vehicle safety.

D. Aircraft should be considered for every mission and deployed dependent upon pilot discretion (concerning weather, terrain, skill level, etc.) All aircraft, except for commercial resources, are requested from Oregon Aeronautics Division ("OAD") via OEM.

1. Fixed Wing Aircraft
   - Available from the Civil Air Patrol, Corvallis Aero Service (SKYSAR Unit), the volunteer auxiliary of the U.S. Air Force. In addition to searching, this resource can also provide Sky-Comm, a high altitude radio relay function. When performing as Sky-Comm, the aircraft is dedicated to that function; therefore additional aircraft should be utilized for searching purposes.

2. Rotor Wing Aircraft (Helicopter)
   - Available from the Lane County Sheriff's Department, Eugene, Corvallis Aero Service (SKYSAR Unit), Oregon; Yamhill County Sheriff's Dept., McMinnville, Oregon, the Army National Guard (US Army), Salem, Oregon; or the Coast Guard (USCG), Newport and Astoria, Oregon.
   - Air Ambulance services are available locally through Lifeflight, Inc, and REACH Air ambulance. Requests are made through CRCC.

E. Twelve Standard Aviation questions That Could Save Your Life

1. Is this flight necessary?
2. Who is in Charge?
3. Are all hazards identified and have you made them known?
4. Should you stop the operation and flight due to:
   - Communications?
   - Weather?
   - Turbulence?
   - Personnel?
   - Conflicting Priorities?
5. Is there a better way to do it?
6. Are you driven by an overwhelming sense of urgency?
7. Can you justify your actions?
8. Are there other aircraft in the area?
9. Do you have an escape route?
10. Are any rules being broken?
11. Are communications getting tense?
12. Are you deviating from the assigned operation of flight?

WHEN IN DOUBT, DON'T!
TAKEOFFS ARE OPTIONAL – LANDINGS ARE MANDATORY!

F. Trained and Certified SUAS (Small Unmanned Aerial Systems) team of operators and observers can be deployed if situation deems necessary and personnel are available. sUAS have FLIR Thermal Imaging and Zoom-able optics to search large areas, difficult to access areas and hazard areas relatively fast and with high level of confidence.

G. Two or three-person Sign Cutting Teams should be deployed in the mission area to locate any clues (primarily shoe or foot imprints) left by the subject. These teams should be used prior to other more intrusive tactics in order to avoid contamination or destruction of subtle clues or evidence. Teams will be trained at the Tracker-I level or higher.

H. Search-trained Canine Teams should be deployed in the mission area to locate any clues (primarily air scent or soil disturbance) left by the subject. These teams should be used prior to other more intrusive tactics in order to avoid contamination or destruction of subtle clues or evidence. Canine teams must meet minimum search dog team performance standards.

I. Three-person (recommended) Hasty teams should be deployed along the subject's anticipated route and any known trails, abandoned roads, structures, major terrain features, or other attractants and natural funnels in the mission area. These clue-oriented teams can:
- Further mission area confinement and segmentation.
- Interview others in the area regarding subject information.
- Actively search for possible clues of the subject's passage or presence.

J. Periodic checks of the subject's residence and frequented locations should be performed to ensure the subject has not returned unnoticed. If the subject's vehicle is located, leave a note requesting immediate contact with Dispatch.

K. One-person (minimum, if in vehicle) or two-person (recommended, if not in vehicle) Radio Relay Teams should be deployed in the field to augment radio communication if communications are compromised due to terrain or equipment factors. While deployed, these Teams can perform other functions if these do not jeopardize the communication role.

L. Two-Person (recommended) Medi-Evac Teams should be staged at known locations (i.e., the incident base) for ready deployment to the field upon notification of an injury to the subject, mission personnel, or another person in the area. This team should have their own dedicated vehicle and equipment. If the injured person requires litter transport to an ambulance transfer point, a twelve-person evacuation team should be used (8 litter bearers and replacements.) The use of the "wheeled Stokes" greatly reduces evacuation team size, and increases team and subject safety. It does however, compromise the subject's comfort.

M. Two-Person (recommended) Observation Teams may be deployed in locations giving maximum view of the mission area. These locations could be high points overlooking canyons, clear-cuts, or similar features. Binoculars and spotting scopes should be assigned to these teams.

N. Loudspeaker Systems, with operators, can be deployed to direct continual sound into canyons and drainages. This sound may attract and/or comfort the subject and provide a direction for travel.

O. Three-person (minimum) Grid Search Teams may be deployed into the mission area subsequent to any sign-cutting or canine team efforts. Based upon terrain, vegetation, and time available, team member spacing will vary. Under typical situations an "open" grid pattern is a more efficient use of resources; a "closed" grid pattern produces more thorough coverage of the area and is very effective for evidence or body searches. As this procedure is highly intrusive, it can be expected to contaminate or destroy any remaining clues or evidence.

CHAPTER 6 -- POST-INCIDENT ACTIVITIES

6.1 Post-Incident Review

Two types of reviews commonly take place after a SAR mission. A "Hotwash" or immediate post-incident review is a quick gathering of response personnel, generally still at the mission site, to check in regarding missed pieces of information (paint the big incident picture to fill in the blanks for those on isolated assignments), capture issues for follow up, and deal with any immediate concerns.

A post-incident or "after action" review (AAR) should be held as soon as practicable following the conclusion of a mission. Participation in an after action review should be limited to facilitators and incident personnel only. All aspects of the incident should be evaluated (initial report, call-out, response, planning, tactics, safety, air operations, etc.) Ask the following questions:

- **What was planned?**
  Objectives and expected actions.
- **What actually happened?**
  Identify effective and non-effective performance.
  Review any non SOP actions or safety concerns.
- **Why did it happen?**
  Discuss reasons for ineffective or unsafe performance.
  Concentrate on WHAT, not WHO is right.
- **What can we do next time?**
  Determine how to apply lessons learned next time.

Post-incident reviews are intended to improve the management and effectiveness of SAR missions; comments are not part of the case incident record. A "lessons-learned" format is often useful for communicating information to other employees during training.

The IC may chair after action reviews. The Sheriff and others may be invited to attend the review. This may lend further expertise to the process and will keep program safety managers involved throughout all phases of the incident. The Incident Commander will ensure that comments regarding the incident review are summarized and submitted to the SAR Program Coordinator.

In the event of a major SAR, it may be appropriate to request the AAR be chaired by a third party. A good choice for the third party would be a SAR coordinator from a nearby County. The State may eventually have the resources to assist with AAR's at the County level.

6.2 Case Study

In some instances, critical missions should be evaluated as a case study to provide an assessment of techniques, methods, or actions that either failed to accomplish incident objectives or were proven particularly successful. These "lessons-learned" are important enough to pass along to others involved in SAR or emergency services. The SAR Program Manager will evaluate which incidents warrant a case study. A case study is an independent, in-depth evaluation of the total process, from notification through final closeout of a SAR incident. The SAR Manager will determine who participates in a case study. Consideration should be given to the use of persons from outside parks or agencies to assist in this process.

This process should not be confused with an official critique request made by the Sheriff of OEM. [ORS 404.125]

6.3 Critical Incident Stress Management

A critical incident is defined as any event that is outside the realm on normal human experience. Critical incidents might include operations involving children, fatalities, friends, abuse, or any situation with the potential to develop a stress related response. Critical Incident Stress Management (CISM) is a comprehensive, multi-component crisis intervention program offered to SAR responders (park employees and other agencies), their families, and victims' families who may be involved in any critical incident.

Like the after action review, attendance should be limited to those involved in the incident. Any responder can request a Critical Incident Stress Debriefing, and one should be conducted if there is even one request for such service. Attendance is voluntary, but strongly encouraged, to provide an accurate representation of all aspects of the incident.

CISM services can be requested through the Benton County Crisis Response Team (BCCRT). See Chapter 8 for further information on the BCCRT.

6.4 Victim Family Support Services

Victim family support services should be made available during and after a SAR incident. These services may include crisis intervention, victim advocate resources, grief support, food, or housing assistance. Beyond the Benton County Crisis Support Team and County contracted Chaplain services, further contact information can besought locally. Generally, these services are available through other county organizations.

CHAPTER 7 -- DOCUMENTATION & REPORT MANAGEMENT

7.1 Documentation and Reporting Procedures

Careful documentation of a SAR mission is critical for multiple reasons including: potential criminal or civil investigation, continual evaluation and improvement of the SAR program and methods, understanding of patterns of behaviors for lost subjects in different terrain and circumstances as well as for an official record of actions taken and participants involved.

For each SAR mission the incident commander/mission coordinator will, as appropriate to the mission:

- Obtain an incident and SAR mission number and complete the required reports for BCSO and OEM.

- A comprehensive report may include some or all of the following:
    - Photographs
    - Diagrams
    - ICS and SAR Forms
    - Radio Logs
    - Incident Maps
    - POA/POD Calculations
    - Resource Orders
    - Weather Information
    - Press/Media Releases
    - Financial Documentation
    - Thank-you Letters
    - Mission Suspension Documentation

- Additional recommendations to aid in the optimal documentation of a SAR Mission are including report writing tools in a SAR "jump kit" to include a Rite in the Rain SAR notebook and pen/pencil, a compass and/or GPS, a watch, a ruler or tape measure, and a camera.

- Reports should be written with the information organized, clear and focused. Use a standard format with clear subject titles, "Date, Time:" "Point Last Seen:" "Reporting Person:" "Missing:" etc.

- The report should be objective and avoid conclusions or opinions. If opinions need to be expressed for some reason, the writer should indicate that the statement is opinion.

- The writer should speak only for him/herself unless quoting someone else. If using a quote, the statement should be in quotations and the speaker should be clearly identified.

- The report should use simple English – the 6th grade comprehension rule.

- Slang, acronyms and jargon should be avoided. If an acronym must be used, it should be appropriately introduced the first time it is used only.

- Involved persons, vehicles, property, clues/evidence should be itemized and thoroughly described.

- Always have someone else read the report before you complete it. An objective reader can ask questions to help the writer clarify their communication.

- Ensure completion of all receipts for all mission expenditures, purchases, and obligations.

- Send the completed report with all attachments to the SAR program manager for approval. See appendices P, Q and R for State guidelines and a sample Benton County SAR report.

CHAPTER 8 -- PERSONNEL

8.1 General

Personnel assigned to a SAR incident will generally be drawn from County employees, and organized volunteer units affiliated with the County.

SAR Resource List

Participation in potentially hazardous SAR operations requires technical and specialized skills, a strong commitment to teamwork, and the ability to accept direction from designated leaders. To ensure positions are filled with persons who best meet these qualifications, the SAR Program Manager and OEM will maintain a comprehensive SAR resource list. The resource list is not inclusive of all resources, but should be the primary tool to help identify SAR resources.

Authorization of Premium Pay

SAR personnel are authorized premium pay (overtime) for un-programmed hours beyond normal duty schedules. An IC may authorize premium pay if they deem it is necessary. The SAR Program Manager should be kept informed of premium pay authorizations. There are many forms of premium pay (hazard, night differential, Sunday overtime, stand-by, etc.). The IC should make certain that finance is handled appropriately and that all employees receive fair authorization of premium pay where it is justified.

County Employees

County employees currently participating in Search and Rescue organization are:

Search and Rescue Program Manager, Kevin Higgins
Search and Rescue Program Specialist, Lacey Duncan

Use of County Volunteers

VIPs can contribute to the Search and Rescue program in many ways. Volunteers may be released from their regular positions of work with no adverse effect to their employment in order to respond to a Search and Rescue mission. Such agreements must be at the volunteer's request and may be paid or unpaid leaves of absences at the employer's discretion. [ORS 404.200 to 404.215]

8.2 Volunteer training requirements

Benton County Search and Rescue requires that all volunteer personnel be properly trained**.** Members of a land based search unit must be SAR certified, and will be drawn upon from multiple volunteer units. Members of all volunteer units are encouraged to become SAR certified. See Appendix O for OSSA Minimum SAR certification Guidelines. Each unit will also establish training requirements appropriate for their respective unit and specialty. Unit commanders are responsible for insuring that these standards are also met or exceeded by all members. Additionally, the SAR Program Manager will insure that all volunteer personnel are familiar with the policies of Benton County Sheriff's Office.

To become SAR certified an individual must:

- Attend and pass a training course known as the "OSSA SAR certification course", generally held in Benton County each March thru May. The Course is a comprehensive training including sessions on radio communications, ICS, tracking, map and compass techniques, crime scene security, outdoor survival, aircraft safety, search dog orientation, hypo/hyperthermia and blood borne pathogen awareness, horse awareness, and safety and much more.
- Obtain CPR and basic First aid certification
- Complete at least 30 hours of approved training per year. (The SAR Course may count towards these hours for attendees)

Recertification for SAR personnel happens annually. Personnel should submit training records to the SAR Program Coordinator for re-certification.

All volunteers will be issued identification cards for use annually.

8.3 Insurance and Liability Provisions for Volunteer Personnel

Volunteers of Benton County Search and Rescue will be provided a limited amount of coverage for workman's compensation for the period of time they volunteer their services to the Sheriff's Office. The County also provides the same protection from civil liability as it does for paid employees.

If a volunteer sustains an injury while in the course of requested service to Benton County Search and Rescue, they may apply for and receive benefits for the injury. Some provisions of this policy include that:

- The injury was sustained while performing an emergency service activity or resulted from an emergency service activity;
- Was not the result of negligence by the volunteer;
- Was not caused by voluntary intoxication of the volunteer; and,
- Was not intentionally self-inflicted [ORS 404]

Volunteer personnel have the same degree of responsibility for their actions and enjoy the same immunities as officers and employees of the state and its local governments who perform similar work. When a volunteer is employed as part of an actual emergency SAR, they will not be liable for the death or injury of any person, or damage or loss of property, except in the cases of willful misconduct. [ORS 404]

Specific guidance of volunteers on SAR:

- Use of a volunteer cannot result in the displacement of a paid employee.
- Volunteers should not be assigned duties that place them in life-threatening situations.
- Volunteers that operate machinery or equipment must demonstrate proficiency to the satisfaction of the responsible supervisor.
- If a volunteer is placed in a work environment that has environmental hazards, PPE must be provided at no cost.

Friends, Relatives, and Bystanders

Friends, relatives, and bystanders are generally discouraged from direct participation in an incident. Lack of specialized training, emotional involvement, government liability, and other factors influence this consideration. Understanding and effective communication skills on the part of SAR personnel are particularly helpful in successfully managing these persons. In some cases, however, direct mission involvement can fill a strong personal need for those who feel they must "do something." In such cases, these persons may assist in non-hazardous circumstances at the discretion of the Incident Commander but they will not be placed in emergency hire or volunteer status. Unless an area has been closed to public use (a possibility given the nature of the emergency, the potential for loss or contamination of clues or evidence, hazards, etc.) they are free to travel the search area. If they place themselves in a hazardous situation or environment, it will not be as a SAR resource or a participant under county or incident supervision. These considerations must be communicated very clearly. If resources allow, it may be best to assign a field liaison to accompany such individuals or groups.

8.4 SAR Resource Summary

In addition to seven SAR Mission Coordinators and the Benton County Sheriff's Office employees, Benton County Search and Rescue has eight recognized volunteer units who comply with the provisions made under Chapter 8.1. Benton County commits to the training, coordination, and equipment needs of these units as funding allows. See Appendix T for the Letter of Understanding detailing specific agreements between the volunteer units and BCSO.

Current volunteer SAR Resources in Benton County are summarized as follows:

Amateur Radio Emergency Service (ARES)

The Benton County chapter of the Amateur Radio Emergency Service (ARES) also functions as the local Radio Amateur Civil Emergency Services (RACES) chapter. They are available to provide support for the local, regional, government and non-governmental agencies for communication support during search and rescue or other civil emergencies. Benton County ARES can be mobilized with such equipment as a portable repeater, mobile communications van, and innumerable portable radios for emergency communications.

Benton County Crisis Response Team (BCCRT)

The Benton County Crisis Support Team provides timely critical incident stress management services to individuals, groups and organizations to lessen the immediate and long-term adverse effects of a crisis.

Benton County Sheriff's Mounted Posse (Posse)

The Benton County Sheriff's Mounted Posse is committed to the assistance of mounted SAR certified personnel to assist in land search efforts. Their mission includes:

- Assist local and state agencies in the preservation of law and order, search and rescue and emergency services.
- Stimulate good horsemanship and promote strong fellowship.
- Perpetuate the traditions, customs and pageantry of Oregon's early days.
- Enhance Family activities.

The Sheriff's Mounted Posse provides planning and coordination of emergency services for all natural and human-caused disasters. Horse and rider are trained as a team and certified to the SAR certification standards set forth by the Oregon State Sheriff's Association (OSSA). Services include emergency preparedness, planning, response and recovery.

Corvallis Mountain Rescue Unit (CMRU)

Corvallis Mountain Rescue Unit is a certified Mountain Rescue Association Member and adheres to the bylaws, certification standards, and training guidelines established by MRA. CMRU provides specialized services that are often requested as mutual aid. Some such services include: High Angle technical rescue SAR, high altitude and Alpine SAR, and snow and Avalanche SAR. Most personnel are capable of self-sufficiency in deployment for up to three days. The unit maintains and deploys with its own equipment; a truck based cache full of technical rope rescue items, glacier travel devices, snow and rock anchors, wheeled litters, medical kits and more. A number of wilderness trained medical personnel are a part of the team and act under the direction of their own medical advisor.

Mary's Peak Search and Rescue (MPSAR)

MPSAR provides assistance to Benton County Search and Rescue in the form of initial first response, search management, road search and containment, man tracking, communications, and other ground search teams. They also maintain four-wheel-drive capable vehicles to support land based search and rescue. MPSAR is also available to provide transportation to health professionals, patients, and human services organizations during inclement weather. Most MPSAR members are SAR certified under OSSA guidelines and can be deployed for 12-24 hour search periods as fully self-sufficient ground searchers.

Region Three K9 (R3K9)

K9 Special Teams South is a geographical sub division of the Oregon State K9 Special Teams Inc. K9 teams affiliated with Benton County register all assets with the state and meet OSSA minimum dog standards for deployment. K9 teams from any discipline (air scent, human remains, training, etc.) are welcome to join the R3K9 unit.

SKY SAR

The Benton County Sheriff's Office SKY SAR unit is an Aviation Volunteer Group (AVG) comprised of local volunteer pilots and pilots of the Corvallis Aero Service. The mission of SKYSAR is to provide volunteer air assets whenever reasonable and available in support of BCSO missions. All air assets in SKY SAR, which include fixed wing airplanes, helicopters and drones are privately owned and operated.

Sheriff's Office SAR Team (SOSAR)

The purpose of this organization is to respond to lost, injured or missing persons that are in need of rescue and/or recovery from natural or technological danger within Benton County on a 24-hour basis. This includes but is not limited to the recovery of deceased subjects, beacon searches, evidence searches, disaster response, and general logistic support. BCSO SOSAR volunteer membership is open to employees of the Benton County Sheriff's Office.

Appendices

A - Call Out procedures

B - Evaluating Search Urgency

C – Search Mgmt. Action Plan Map and Symbols

D - Extended Lost Person Questionnaire

E - Incident Command System (ICS) Standardized Forms

F - Oregon Emergency Managers & SAR Resource Lists

G – SKY SAR Roster / Charter

H - Amateur Radio Emergency Service Roster / Charter

I - BC Crisis Response Team Mission

J - BC Sheriff's Mounted Posse Roster / Charter

K - Corvallis Mountain Rescue Unit Roster / Charter

L – R3K9 / Roster, Certifications, Charter, Bylaws

M - Mary's Peak Search and Rescue Roster / Charter

N - Sheriff's Office Search and Rescue Roster / Charter

O - OSSA SAR Minimum Certification Guidelines

P - After Action Review Guidelines

R - Wireless Technology Reference Guide

S - Letter of Understanding between Volunteer Units/BCSO

T - Memorandum of Understanding OSSA and USFS

U - Omnibus Interoperability Agreement (6 counties)

V - OERS Guidelines and Memorandum

W - ORANG Helicopter Protocols