

Benton County Emergency Management
Basic Search and Rescue Course
INTRODUCTION TO SEARCH AND RESCUE

Objectives: Students will have a basic knowledge of:

- SAR Certification class procedures and policies.
- Oregon Sheriff's Association's minimum SAR Certification standards.
- The terms defined in "Search and Rescue Certification Criteria."
- SAR volunteer - implied commitment.

I. Administrative comments concerning the Search and Rescue (SAR) class

- Parking
- ID Cards/Badges in the LEB
- Bathrooms
- Drinking fountains
- You are responsible for your garbage
- Attendance
- Video Tape of Classes
- Issue books
- Binders

II. Review of syllabus

III. Introductions

- Name, previous SAR training, related experience, and why you are taking the class?

IV. Student Manual

- Prepare for class
- Instructors may present additional information not in the manual
- Students and instructors will learn from each other; students also contribute to the learning

V. Sheriff's department responsibilities

- The Sheriff is responsible for search and rescue (SAR) in each county.
- The SAR Coordinator is responsible for carrying out duties delegated by the Sheriff and coordinating the actions of volunteer organizations through a SAR Council.
- The SAR Council is responsible for policies and procedures governing the SAR units.

NOTES

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The SAR Council consists of representatives from :

- A. Mary's Peak Search and Rescue (MPSAR)
- B. Corvallis Mountain Rescue Unit (CMRU)
- C. Benton County Sheriff's Mounted Posse (POSSE)
- D. Benton County Amateur Radio Emergency Services (BCARES)
- E. Benton County Tracker Unit (BCTU)
- F. Northwest Search Dogs (NWSA)

VI. Use of Mutual Aid Resources

There are many reasons that mutual aid assistance is request, or provided:

- No single county has the resources (including financial) to conduct extensive SAR missions without assistance.
- It is not reasonable for every county to have every expensive and specialized resource, such as dogs, and airplanes, or specialist such as sign cutters
- Requests for county mutual aid and for assistance from state or federal agencies are coordinated through Oregon Emergency Management Division (OEM). Requests must include mission number, crucial information and requested resources. OEM is then responsible for locating resources for the requesting county.

VII. Oregon SAR Certification requirements:

- A. Terms and definitions used in Search and Rescue concerning state certification:
 - 1. **Search and Rescue unit:** a body of Search and Rescue members who are officially recognized by a Sheriff or Search Coordinator.
 - 2. **Search and Rescue member:** an individual who is a member of an officially recognized Search and Rescue unit.
 - 3. **Certified:** means having successfully demonstrated all performance objectives, successfully completed the written exam and complied with all of the minimum requirements of certification standards.
 - 4. **First Aid/CPR card:** the card issued after successful completion of the basic course of instruction, usually taking 8 or 14 hours, which meets or exceeds the American Red Cross Standard First Aid program.

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5. **Performance objective:** those exercises that measure skill to determine the student's ability to perform the desired task or to determine if the student has a certain body of knowledge.
6. **Search and Rescue Coordinator:** the Sheriff of the County where the search mission is being conducted or his designate. In the case of an overhead team, the incident commander shall be considered the search coordinator.
7. **Support Unit or Personnel:** units or personnel that never involved in field operations. I.e. Communications teams, food service workers, and Chaplains.

B. State of Oregon objectives for minimum standards for SAR certification

To establish minimum standards or levels of training for ground Search and Rescue personnel involved in field operations and to provide each Sheriff or SAR Coordinator with a body of trained and qualified searchers to accomplish the Search and Rescue mission.

C. Initial qualifications, for State of Oregon Basic Search and Rescue certification

To obtain the Oregon State Search and Rescue Certification each member must (see attached documents for more information):

- 1) Obtain and maintain a minimum of a basic first aid card, or better and a valid Adult CPR card.
- 2) Successfully complete all performance objectives, skill tests and obtain a minimum score of 80% on the written exam,
 - Each successful student shall be issued an ID card signed by the Sheriff.
 - The Sheriff or SAR coordinator may revoke a member's Certification on the grounds of failing to meet requirements for maintaining certification.
- 3) Attend at least 30 hours of continuing education, approved by the Sheriff or SAR Coordinator, each year in the field related to search and rescue, but not all in one type of specialty training.

D. Review Basic Search and Rescue certification form

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E. Enforcement of standards

- In addition to issuing the ID Card, each member should be issued the approved OSSA/OEM Search and Rescue certification patch, which should be worn on the outer layer of SAR clothing so that it can be recognized.
- The Sheriff and Coordinator should attempt to only use personnel certified by the OSSA guidelines.
- SAR Skill Standard Tests and results of the written exam should be kept on file by the county SAR Coordinator.

F. Participation in SAR

1. Participation in SAR is a public service commitment. A volunteer must be willing and able to devote time to training and to respond to call-outs.
2. The expectations that coordinators and search managers have for SAR volunteers are known as the “**P.H.A.C.K.S.**” (Proficiency, Humility, Ability, Competence, Knowledge, and Solicitous):
 - a. **Proficiency:** SAR personnel should take action in a correct, competent and professional manner.
 - b. **Humility:** SAR personnel should have awareness of personal weaknesses and shortcomings. A good guideline is do the job and let others be the judge of its quality.
 - c. **Ability:** SAR personnel should be capable of performing at a high level of physical and mental intensity.
 - d. **Competence:** SAR personnel should be adequately qualified for the purpose, “...if search is required, be qualified for search, etc.”
 - e. **Knowledge:** SAR personnel should have a familiarity, awareness and understanding gained from experience and continuous study of SAR related issues. Each individual should be committed to developing their SAR knowledge and sharing that knowledge with others.
 - f. **Solicitous:** SAR personnel should be attentive and eager to do what needs to be done.
3. Attitude of safety -- The key to safety is keeping safe all individuals involved. In everyday life, the decisions made in many situations are unconscious. On SAR missions, a careful decision-making process is desirable in dealing with situations that arise during the missions. Part of this decision-making process is “making a conscious effort to examine the risks and

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benefits of all actions before they are taken.” There are three priorities to consider in SAR:

- a. You (the searcher or rescuer). The first priority goes to you. Your personal safety is paramount for all SAR operations. Personal safety involves being prepared – physically and mentally and having proper training and equipment. Part of being safe is evaluating yourself and making the decision not to respond if you can't be adequately prepared.
- b. Your companions (fellow rescuers or searchers).
- c. The subject (remember, you need searchers to have a search!).

F. Key theme is loyalty to subject

1. We work for the “subject” of the search.
2. Unit loyalty comes second.
3. The goal is for the “subject” to be found, not for you to be the one that finds the “subject.”
4. It takes everyone to find a “subject.” Remember that every area that is being covered is being eliminated from the total search area. It is important to know where the subject is not.

VII. Reading References:

Oregon State Sheriff's Association (OSSA) minimum SAR Certification Standards

VIII. Handouts

- OSSA Basic SAR Certification Criteria and Form

**MINIMUM SEARCH & RESCUE
CERTIFICATION
CRITERIA**

BASIC LEVEL



**Oregon State Sheriffs' Association
&
Oregon Emergency Management**

2008

**Revised and ratified
December 12, 2007**

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Oregon State Sheriff's Association (OSSA) SAR Standards

INTRODUCTION

The following is a recommendation for revisions to the current Oregon State Minimum Search and Rescue Certification Standards.

This document is intended to update the minimum certification standards to include recent advances in Search and Rescue technologies and strategies. The intent is to allow for flexibility in the manner to which these standards are tested. It is understood that each county may have specific needs and conditions unique to their area. Those counties may use this document in the formulation of their own testing methodology.

In the attempt to maintain the currency of Oregon's SAR certification standards, we have reviewed the standards to ensure that they are still current. There were a few changes made. Most changes clarified language in the standards.

We respectfully submit these recommended standards for your inspection and approval. As always, we strive for excellence and welcome the input of all those who would offer it.

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December 2007

SEARCH AND RESCUE CERTIFICATION CRITERIA

1001 OBJECTIVES

To establish minimum standards and levels of training for ground Search and Rescue personnel involved in field operations. Also, to provide each Sheriff or County SAR Coordinator with a body of trained and qualified searchers to accomplish the Search and Rescue mission.

1002 DEFINITIONS

- (1) **Search and Rescue Unit (SAR Unit):** An organized group of Search and Rescue members who are officially recognized by a Sheriff or Search Coordinator.
- (2) **Search and Rescue Member (SAR Member):** An individual who is a member of an officially recognized Search and Rescue unit.
- (3) **Certified:** Having successfully completed all testing and performance objectives outlined in this document for field deployable SAR personnel.
- (4) **First Aid/CPR Card:** The card issued after successful completion of a basic course of instruction in the administration of First Aid and Cardio-Pulmonary Resuscitation. The course should meet or exceed standards set forth by the American Heart Association, or the American Red Cross.
- (5) **Performance Objective:** Exercises that measure an individual's skill at performing specified tasks, or to determine if the student has a certain body of knowledge.
- (6) **Search and Rescue Coordinator (SAR Coordinator):** The Sheriff of the County where the search mission is being conducted or his designee(s). Within the Incident Command System (ICS) structure, the Incident Commander will typically be the SAR Coordinator.
- (7) **Support Unit or Personnel:** Units or personnel that are never involved in field operations. Examples of these units would be communications teams, food service workers, and Chaplains.

1003 MINIMUM STANDARDS

To obtain and maintain the Oregon State Search and Rescue certification, each member must:

- (1) Hold a valid First Aid/CPR card or higher certification such as Wilderness First Responder, EMT or Paramedic.
- (2) Successfully complete all performance objective skill tests and achieve a minimum score of 80% on the written exam.
- (3) SAR certification card signed by the Sheriff of the County where the member's SAR unit is based.
- (4) Attend at least 30 hours of continuing education, approved by the Sheriff or SAR Coordinator, each year, in a field related to search and rescue.

1004 PERFORMANCE OBJECTIVE TESTS

For certification, each applicant must successfully complete all performance objective skill tests. Performance objective skill tests measure the applicants' ability to execute a given task. This test may be taken as many times as necessary to successfully demonstrate the ability to accomplish the given task. The applicants' successful completion of a task should be marked on an evaluation form as "demonstrated". The applicants' failure to properly complete a given task should be marked as "needs improvement" until the applicant can successfully complete said task.

1005 WRITTEN EXAMINATION

Each applicant must pass a written exam with a minimum score of 80%. The exam shall be administered by the Search and Rescue (SAR) Coordinator for the county in which the applicant is applying for certification. The exam must cover all areas listed in the standards, which require testing, by written evaluation. It is the responsibility of the Search Coordinator to prepare a written examination, which will adequately measure the applicant's knowledge.

1006 CERTIFICATION CARD

Each successful applicant may be issued an identification Card signed by the Sheriff or SAR Coordinator attesting to the completion of all requirements for certification. The Sheriff or SAR Coordinator for the County issuing the certification card may revoke a certification card at his or her discretion or for failure to meet the requirements for maintaining certification.

1007 ENFORCEMENT OF STANDARDS

The Sheriff of each county, or SAR Coordinator, shall ensure implementation of the minimum standards as set forth in Section 1003. The Sheriff of each county, or SAR Coordinator, shall submit, to Oregon Emergency Management an annual report which shall include a Search and Rescue Organization Resource List (form F-1) including the names of all search and rescue personnel certified by the Sheriff. This report shall be submitted before January 30 of each year. Throughout the year, the Sheriff or SAR Coordinator may certify additional personnel, however, only one report is required per year.

In addition to an ID card, each certified member may be issued an approved OSSA/OEM Search and Rescue certification patch. This patch will be worn on Search and Rescue clothing so as to be easily recognized.

Each Sheriff and SAR Coordinator of a County should attempt to use only personnel who have successfully completed a training course that meets or exceeds the minimum certification standards as outlined in section 1003.

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The Sheriff or his/her designee may maintain a file containing completed Skill Standards Tests and the results of the written exam. Search and Rescue units shall also comply with all local, state and federal ordinances, regulations and laws that govern their activities.

1008 ADDITIONAL TRAINING

In addition to the minimum standards outlined here, some SAR units may need and some Sheriffs may require SAR units operating in their county to possess additional specialized training. SAR units may need to meet certification standards for their specialty. These specialty areas may include but are not limited to, mountain rescue, water rescue, advanced man tracking, and ELT location. Nothing listed in the minimum standards shall be construed so as to limit or replace the certification requirements of any specialty unit.

1009 REVISION OF STANDARDS

Recommendations for revision of these standards may be presented to the Search and Rescue Coordinator of Oregon Emergency Management (OEM) or the Search and Rescue (SAR) Advisory Council of the Oregon State Sheriffs' Association. The recommendations shall be reviewed and voted on by the Search and Rescue Advisory Council and then presented to the Oregon State Sheriffs' Association and Oregon Emergency Management for final resolution.

Oregon State Sheriff's Association (OSSA) SAR Standards

NAME _____ UNIT _____

To obtain and maintain the Oregon State Search & Rescue Certification, each member must:

FIRST AID/CPR

- _____ 1. Obtain and maintain at least a basic first aid card or better.
- _____ 2. Obtain and maintain a valid Adult CPR card

LEGAL ISSUES

Through written evaluation the applicant will demonstrate knowledge of the legal issues involved in to Search and Rescue, to include:

- _____ 1. Who is responsible for and in charge of Search and Rescue operations in Oregon.
- _____ 2. When a search area may be restricted and who may restrict the search area.
- _____ 3. The elements of direct and vicarious liability.
- _____ 4. When mechanized equipment can be used in a wilderness area.
- _____ 5. The limitations of the Good Samaritan law.

RADIO COMMUNICATIONS

Through written evaluation the applicant will identify:

- _____ 1. The difference between a frequency and a channel.
- _____ 2. The function of a repeater.
- _____ 3. The function and operation of a manual relay.
- _____ 4. The proper position of the antenna for best transmission and reception.
- _____ 5. The importance of keeping the battery warm during cold weather.
- _____ 6. A basic knowledge of radio wave performance and the effects that terrain, distance and structures have on Search and Rescue radio communications.
- _____ 7. A basic knowledge of radio codes and procedures.
- _____ 8. A basic knowledge of inter-unit communications.

The applicant will demonstrate the ability to identify the following components on their Search and Rescue radio:

- _____ 1. On/Off and volume controls.
- _____ 2. Push to talk switch.
- _____ 3. Channel/frequency selector.
- _____ 4. Squelch control.
- _____ 5. Effectively communicate to another unit by radio using proper

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- _____ procedures and radio codes.
- _____ 6. Change the radio's batteries.
- _____ 7. Change radio channel or frequency.
- _____ 8. Turn the radio on.
- _____ 9. Select the proper channel.
- _____ **10. Hold the radio for best transmission and reception.**

LAND NAVIGATION

Through written evaluation, the applicant will demonstrate the ability to:

- _____ 1. Identify the different types of maps used in SAR.
- _____ 2. Identify the three primary coordinate systems.
- _____ 3. Identify a location on a map using Township, Range, and Section.
- _____ 4. Identify a location on a map using Latitude and Longitude (degrees, minutes, tenth of a minute.)
- _____ 5. Identify a location on a map using UTM.
- _____ 6. Identify the difference between True and Magnetic north.
- _____ 7. Identify the relevance of Datum and coordinate systems.
- _____ 8. Identify the advantages and limitations of GPS.
- _____ 9. Identify the advantages of UTM.
- _____ 10. The definition of declination.
- _____ 11. **Determine the elevation of a point on a map.**
- _____ 12. The coordinate system most commonly used by aircraft and maritime vessels.
- _____ 13. How to relay Latitude /Longitude coordinates (degrees, minutes, tenth of a minute.)
- _____ 14. Determine the contour interval on a map with out a margin.

Through performance evaluation, the applicant will demonstrate the ability to:

- _____ 1. Orient a map, compensating for declination.
- _____ 2. Identify 10 common map symbols.
- _____ 3. Use a scale to measure distance on a map.
- _____ 4. Identify five elements of the legend on a topographic map.
- _____ 5. Read contour lines on a topographic map and identify their relationship to physical objects on the ground.
- _____ 6. Identify the components of a compass.
- _____ 7. Plot a bearing on a map.
- _____ 8. Given a known bearing, travel in a straight line through wooded terrain for at least ¼ mile with no more than plus or minus 4 degrees deviation.
- _____ 9. Plot their location using a map and compass.
- _____ 10. Determine the bearing between two points and the back azimuth on a map.

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- _____ 11. Adjust for declination.
- _____ 12. Follow a compass course of at least eight legs for a total distance of at least 1-mile.
- _____ 13. Measure a given distance, using a known stride, while traveling up hill, down hill and on level terrain.
- _____ 14. Shoot a bearing.
- _____ 15. Take a bearing.
- _____ 16. Plot a UTM coordinate.
- _____ 17. Find a UTM coordinate.
- _____ 18. Determine the contour interval on a topographic map.
- _____ 19. Determine the bearing between two points on a map.
- _____ 20. Triangulate a position.
- _____ 21. The ability to return on a back azimuth.
- _____ 22. To navigate accurately around an obstacle blocking a path of travel.

GPS OPERATION

Through performance evaluation, the applicant will demonstrate the ability to:

- _____ 1. Accurately plot a UTM coordinate from a GPS receiver.
- _____ 2. Enter a waypoint in a GPS receiver.
- _____ 3. Edit a waypoint in a GPS receiver.
- _____ 4. View a waypoint in a GPS receiver.
- _____ 5. Change the batteries a GPS receiver.
- _____ 6. Change coordinate systems and datum's with in a GPS unit.
- _____ 7. Turn on a GPS and acquire a coordinate that accurately represent your location.
- _____ 8. Set their GPS for True North

SEARCH TECHNIQUES

Through written evaluation, the applicant will identify:

- _____ 1. Knowledge of basic search safety and its importance in SAR.
- _____ 2. The elements of a sound sweep search.
- _____ 3. The elements of "Critical Separation".
- _____ 4. The elements of Hasty search (type I.)
- _____ 5. The elements of Open Grid search (type II.)
- _____ 6. The elements of Closed Grid search (type III.)
- _____ 7. Four passive & active search techniques (confinement, attraction, track traps, road and trail blocks, camp in.)
- _____ 8. The need to perform POD estimates at the team level.

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- _____ 9. The advantages and disadvantages of searching at night.
- _____ 10. The definition of POA.
- _____ 11. The definition of POD.
- _____ 12. The definition of IPP.
- _____ 13. The definition of LKP.
- _____ 14. The definition of PLS.
- _____ 15. The importance of completing a task as it is assigned by the Incident Command.
- _____ 16. When the searcher should seize evidence and when an investigator should seize evidence.
- _____ 17. The elements of securing a crime scene.
- _____ 18. The reason why searchers look for clues as well as the subject.
- _____ 19. What to do when a clue is located.
- _____ 20. Elements of visual detection techniques.

Through performance evaluation, the applicant will demonstrate the ability to:

- _____ 1. To operate in a search team, while carrying a 24 hour pack, and remaining clue aware, while employing the three primary search patterns (type I,II,III) in an environment that is representative of the primary area of operation for the team.
- _____ 2. To determine "Critical Separation" in at least two different environments, i.e. wooded and open areas.
- _____ 3. Locate, preserve and document items of evidence in a crime scene search.

CRIME SCENE SECURITY

Through written evaluation, the applicant will identify:

- _____ 1. What to do when evidence of a crime or a deceased person is located.
- _____ 2. Techniques used to secure a crime scene.
- _____ 3. Who is allowed into a crime scene and who has control of the scene.
- _____ 4. When a searcher may pick up or disturb possible evidence.

EMERGENCY SURVIVAL SKILLS AND EQUIPMENT

Through written evaluation the applicant will identify:

- _____ 1. What equipment must be carried and what clothing must be worn into the field by the searchers for the type of Search and Rescue operations they are involved with.
- _____ 2. What actions should be taken when a searcher becomes lost or injured.
- _____ 3. The minimum equipment needed for emergency pack/kit and

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- _____ describe its use.
- _____ 4. The three elements of fire.
- _____ 5. The body's requirements for water in hot and cold environments.
- _____ 6. Three methods of water purification and their effectiveness.

Through performance evaluation the applicant will demonstrate the ability to:

- _____ 1. Start a fire using materials found in the field and carried in their pack. The fire must be constructed in a manor that will provide personal warmth.
- _____ 2. Locate one natural fire starter and tinder.
- _____ 3. Gather enough wood to sustain the fire for one operational period.
- _____ 4. Use three emergency signaling methods.
- _____ 5. Build a shelter that is well marked and visible to nearby searchers, durable enough to protect from wind, rain, or snow, using materials carried with them and/or found in the field.
- _____ 6. Boil water over an open fire.

SEARCH ORGANIZATION AND MANAGEMENT

Through written evaluation the applicant will identify:

- _____ 1. The ground team member's location in ICS.
- _____ 2. The five functional sections of ICS.
- _____ 3. The function of the searcher briefing and debriefing.
- _____ 4. The function of check in and out procedures.

MAN TRACKING

Through written evaluation the applicant will identify:

- _____ 1. The elements of a track or print.
- _____ 2. The elements of sign.
- _____ 3. The elements of step by step tracking.

Through performance evaluation, the applicant will demonstrate the ability to:

- _____ 1. Identify and preserve tracks and sign.
- _____ 2. Properly use a tracking stick.
- _____ 3. Properly mark and preserve a track.
- _____ 4. While working in a tracking team, follow a track for 100 yards on ground that is representative of the area that the applicant routinely operates.
- _____ 5. Describe or sketch a shoe print and describe the tread pattern, size and direction of travel.

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- _____
- _____
6. Locate and identify color change, flattening, and shine left by a shoe track.

HELICOPTER SAFETY

Through written evaluation, the applicant will identify:

1. Landing zone requirements and the information typically required by the pilot.

2. General helicopter safety.

3. When and how to properly approach and depart a helicopter.

WILDERNESS MEDICINE

Through written evaluation the applicant will identify:

1. The symptoms, treatment, and methods of prevention of Hypothermia.

2. The symptoms, treatment, and methods of prevention of frostbite.

3. The five ways in which heat is transferred away from the body.

SEARCHER SAFETY

The applicant will identify the elements of specialized hazards of a SAR mission:

1. Common climatic hazards for the region that they typically operate.

2. Forest fires.

3. Hunters/poachers.

4. Searching on private property.

5. Drug production areas.

6. Animals.

RESCUE TECHNIQUES

Through performance evaluation, the applicant will demonstrate the ability to:

1. Properly assess a patient's medical status, secure the patient into a litter and transport the litter safely as a member of a litter team. The litter team will transport the loaded litter over, under and around obstacles for a minimum of ¼ mile.

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_____ DATE WRITTEN TEST COMPLETED
_____ SCORE ON WRITTEN TEST

I CERTIFY THAT THE ABOVE NAMED APPLICANT HAS SATISFACTORILY COMPLETED ALL THE ABOVE REQUIREMENTS AND IS RATED AS SAR CERTIFIED.

Certifying Official

Date

Title