

**MINIMUM SEARCH & RESCUE
CERTIFICATION
CRITERIA**

BASIC LEVEL



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

2005

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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 modernize the SAR certification standard, several new course points are included. These course points include knowledge of UTM coordinate systems, GPS use and limitations, modern search strategies and terminology, search safety as an objective, and emergency survival. These areas of knowledge have been included in both the written section as well as the performance section of 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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March 2005

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.

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.

MINIMUM STANDARDS

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. The elements of ORS chapter 401 that relate to Search & Rescue.
5. When mechanized equipment can be used in a wilderness area.
6. The limitations of the Good Samaritan law.

EMERGENCY SURVIVAL SKILLS AND EQUIPMENT

(Not applicable to Support Units)

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 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.

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.

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.

The applicant will demonstrate the ability to:

1. Effectively communicate to another unit by radio using proper procedures and radio codes.
2. Change the radio's batteries.
3. Change radio channel or frequency.
4. Turn the radio on.
5. Select the proper channel.
6. Hold the radio for best transmission and reception.

Through written evaluation, the applicant will demonstrate:

1. A basic knowledge of radio wave performance and the effects that terrain, distance, and structures have on Search and Rescue radio communications.
2. A basic knowledge of radio codes and procedures.
3. A basic knowledge of inter-unit communications.

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.

LAND NAVIGATION CONTINUED

(Not applicable to Support Units)

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 $\frac{1}{4}$ 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.
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 uphill, downhill, 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

(Not applicable to Support Units)

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 datums with in a GPS unit.
7. Turn on a GPS and acquire a coordinate that accurately represents your location.
8. Set their GPS for True North

CRIME SCENE SECURITY

(Not applicable to Support Units)

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.

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.

SEARCH TECHNIQUES

(Not applicable to Support Units)

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.
9. The advantages and disadvantages of searching at night.
10. The definition of POA (probability of area).
11. The definition of POD (probability of detection)
12. The definition of IPP (initial planning point)
13. The definition of LKP (last known position)
14. The definition of PLS (point last seen)
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.

MAN TRACKING

(Not applicable to Support Units)

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, mark, and preserve tracks and sign.
2. Properly use a tracking stick.
3. Describe or sketch a shoe print and describe the tread pattern, size and direction of travel.

4. Locate and identify color change, flattening, and shine left by a shoe track.

HELICOPTER SAFETY
(Not applicable to Support Units)

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
(Not applicable to Support Units)

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
(Not applicable to Support Units)

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
(Not applicable to Support Units)

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.

CERTIFICATION

Reviewed and dated by the appropriate representatives of the following listed parties.

Oregon Search and Rescue Advisory Council

Signed

Date

Oregon Emergency Management

Oregon State Sheriffs' Association

Signed

Signed

Date

Date