OSSA MINIMUM SEARCH & RESCUE CERTIFICATION / QUALIFICATION CRITERIA BASIC LEVEL



Chapter 1

LEGAL ISSUES

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

- w1. Who is responsible for and in charge of Search and Rescue operations in Oregon.
- w2. When a search area may be restricted and who may restrict the search area.
- w3. The elements of direct and vicarious liability.
- w4. The elements of ORS chapter 401 that relate to

Search & Rescue.

w5. When mechanized equipment can be used in a wilderness area.

w6. The limitations of the Good Samaritan law.

<u>Chapter 2</u> <u>EMERGENCY SURVIVAL SKILLS AND EQUIPMENT</u>

Through written evaluation the applicant will identify:

- w1. 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.
- w2. What actions should be taken when a searcher becomes lost or injured.
- w3. The minimum equipment needed for emergency pack/kit and describe its use.
- w4. The three elements of fire.
- w5. The body's requirements for water in hot and cold environments.
- w6. Three methods of water purification and their effectiveness.

Through performance evaluation the applicant will demonstrate the ability to:

- p1. 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.
- p2. Locate one natural fire starter and tinder.
- p3. Gather enough wood to sustain the fire for one operational period.
- p4. Use three emergency signaling methods.
- p5. 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.
- p6. Boil water over an open fire.

Chapter 3 RADIO COMMUNICATIONS

Through written evaluation the applicant will identify:

- w1. The difference between a frequency and a channel.
- w2. The function of a repeater.
- w3. The function and operation of a manual relay.
- w4. The proper position of the antenna for best transmission and reception.
- w5. 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:

- p1. On/Off and volume controls.
- p2. Push to talk switch.
- p3. Channel/frequency selector.
- p4. Squelch control.

The applicant will demonstrate the ability to:

- p1. Effectively communicate to another unit by radio using proper procedures and radio codes.
- p2. Change the radio's batteries.
- p3. Change radio channel or frequency.
- p4. Turn the radio on.
- p5. Select the proper channel.
- p6. Hold the radio for best transmission and reception.

Through written evaluation, the applicant will demonstrate:

- w1. A basic knowledge of radio wave performance and the effects that terrain, distance, and structures have on Search and Rescue radio communications.
- w2. A basic knowledge of radio codes and procedures.
- w3. A basic knowledge of inter-unit communications.

<u>Chapter 4</u> <u>LAND NAVIGATION</u>

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

- w1. Identify the different types of maps used in SAR.
- w2. Identify the three primary coordinate systems.
- w3. Identify a location on a map using Township, Range, and Section.
- w4. Identify a location on a map using Latitude and Longitude (degrees, minutes, tenth of a minute).
- w5. Identify a location on a map using UTM.
- w6. Identify the difference between True and Magnetic north.
- w7. Identify the relevance of Datum and coordinate systems.
- w8. Identify the advantages and limitations of GPS
- w9. Identify the advantages of UTM.
- w10. The definition of declination.
- w11. Determine the elevation of a point on a map.
- w12. The coordinate system most commonly used by aircraft and maritime vessels.
- w13 How to relay Latitude / Longitude coordinates (degrees, minutes, tenth of a minute).
- w14 Determine the contour interval on a map with out a margin.

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

- p1. Orient a map, compensating for declination.
- p2. Identify 10 common map symbols.
- p3. Use a scale to measure distance on a map.
- p4. Identify five elements of the legend on a topographic map.
- p5. Read contour lines on a topographic map and identify their relationship to physical objects on the ground.
- p6. Identify the components of a compass.
- p7. Plot a bearing on a map.
- p8. 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.
- p9. Plot their location using a map and compass.
- p10. Determine the bearing between two points and the back azimuth on a map.
- p11. Adjust for declination.
- p12. Follow a compass course of at least eight legs for a total distance of at least 1 mile.
- p13. Measure a given distance, using a known stride, while traveling uphill, downhill, and on level terrain.
- p14. Shoot a bearing.
- p15. Take a bearing.
- p16. Plot a UTM coordinate.
- p17. Find a UTM coordinate.
- p18. Determine the contour interval on a topographic map.
- p19. Determine the bearing between two points on a map.
- p20. Triangulate a position.
- p21. The ability to return on a back azimuth.
- p22. To navigate accurately around an obstacle blocking a path of travel.

<u>Chapter 5</u> <u>GPS OPERATION</u>

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

- p1. Accurately plot a UTM coordinate from a GPS receiver.
- p2. Enter a waypoint in a GPS receiver.
- p3. Edit a waypoint in a GPS receiver.
- p4. View a waypoint in a GPS receiver.
- p5. Change the batteries a GPS receiver.
- p6. Change coordinate systems and datums with in a GPS unit
- p7. Turn on a GPS and acquire a coordinate that accurately represents your location.
- p8. Set their GPS for True North

<u>Chapter 6</u> <u>CRIME SCENE SECURITY</u>

Through written evaluation, the applicant will identify:

- p1. What to do when evidence of a crime or a deceased person is located.
- p2. Techniques used to secure a crime scene.
- p3. Who is allowed into a crime scene and who has control of the scene.
- p4. When a searcher may pick up or disturb possible evidence.

<u>Chapter 7</u> <u>SEARCH ORGANIZATION AND MANAGEMENT</u>

Through written evaluation the applicant will identify:

- w1. The ground team member's location in ICS.
- w2. The five functional sections of ICS.
- w3. The function of the searcher briefing and debriefing.
- w4. The function of check in and out procedures.

Chapter 8 SEARCH TECHNIQUES

Through written evaluation, the applicant will identify:

- w1. Knowledge of basic search safety and its importance in SAR.
- w2. The elements of a sound sweep search.
- w3. The elements of "Critical Separation".
- w4. The elements of Hasty search (type I).
- w5. The elements of Open Grid search (type II).
- w6. The elements of Closed Grid search (type III).
- w7. Four passive & active search techniques (confinement, attraction, track traps, road and trail blocks, camp in).
- w8. The need to perform POD estimates at the team level.
- w9. The advantages and disadvantages of searching at night.
- w10. The definition of POA (probability of area).
- w11. The definition of POD (probability of detection)
- w12. The definition of IPP (initial planning point)
- w13. The definition of LKP (last known position)
- w14. The definition of PLS (point last seen)
- w15. The importance of completing a task as it is assigned by the Incident Command.
- w16. When the searcher should seize evidence and when an investigator should seize evidence.
- w17. The elements of securing a crime scene.
- w18. The reason why searchers look for clues as well as the subject.
- w19. What to do when a clue is located.
- w20. Elements of visual detection techniques.

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

- p1. 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.
- p2. To determine "Critical Separation" in at least two different environments, i.e. wooded and open areas.
- p3. Locate, preserve and document items of evidence in a crime scene search.

Chapter 9

MAN TRACKING

Through written evaluation the applicant will identify:

- w1. The elements of a track or print.
- w2. The elements of sign.
- w3. The elements of step-by-step tracking.

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

- p1. Identify, mark, and preserve tracks and sign.
- p2. Properly use a tracking stick.
- p3. Describe or sketch a shoe print and describe the tread pattern, size and direction of travel.
- p4. Locate and identify color change, flattening, and shine left by a shoe track.

Chapter 10 HELICOPTER SAFETY

Through written evaluation, the applicant will identify:

- w1. Landing zone requirements and the information typically required by the pilot.
- w2. General helicopter safety.
- w3. When and how to properly approach and depart a helicopter.

Chapter 11 WILDERNESS MEDICINE

Through written evaluation the applicant will identify:

- w1. The symptoms, treatment, and methods of prevention of Hypothermia.
- w2. The symptoms, treatment, and methods of prevention of Frostbite.
- w3. The five ways in which heat is transferred away from the body.

<u>Chapter 12</u> <u>SEARCHER SAFETY</u>

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

- w1. Common climatic hazards for the region that they typically operate.
- w2. Forest fires.
- w3. Hunters/poachers.
- w4. Searching on private property.
- w5. Drug production areas.
- w6. Animals

Chapter 13 RESCUE TECHNIQUES

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

p1. 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.