




KITTITAS COUNTY SEARCH & RESCUE (KCSR) STANDARDS

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❖ **GENERAL STANDARDS** - The General Standards identify the basic performance and knowledge required of all KCSR personnel to participate in search and rescue operations.

- Possess current training in Basic First Aid and CPR
- Have knowledge of protection from blood borne pathogens
- Have a basic knowledge of legal aspects of search and rescue in Washington State
- Have a basic knowledge of KCSR organizational structure
- Have a basic knowledge of KCSR operating procedures, including:
 - A working knowledge of the Incident Command System (ICS) to include:
 - Chain of command
 - Check in procedures upon arrival at search base
 - Accountability systems
 - Briefing/Debriefing
 - Demobilization procedures
 - Check out procedure prior to departure from search base
 - A working knowledge of:
 - Base camp duties
 - Team positions and responsibilities
 - Dealing with subject's family and friends
 - Media relations
 - A working knowledge of:
 - Safety considerations in all aspects of SAR operations
 - Radio procedures and protocol associated with SAR operations, and a basic knowledge of how radios operate
 - Basic helicopter operations

❖ **SEARCH PERSONNEL LEVELS** - Define search personnel capabilities.

BASE CAMP/FIELD SUPPORT	BASIC FIELD	INTERMEDIATE FIELD	ADVANCED FIELD
Will be physically capable of performing their job and be trained for their task within base.	Capable of searching urban settings, where normal urban services are readily available.	Capable of working in wilderness setting, staying out overnight, under <i>moderate terrain and weather conditions.</i>	Capable of working in wilderness settings with <i>weather and terrain extremes.</i> Does not include technical rescue.

❖ **SEARCH PERSONNEL QUALIFICATIONS:** These Search Personnel Qualifications are designed in an **incremental** fashion. For example, Advanced Field will meet all levels up to and including that level.

PERSONNEL LEVELS	TRAINING QUALIFICATIONS			
	General	Base Camp and Basic Field	Intermediate Field	Advanced Field
BASE CAMP/FIELD SUPPORT				
BASIC FIELD				
INTERMEDIATE FIELD				
ADVANCED FIELD				



BASE CAMP/FIELD SUPPORT AND BASIC FIELD PERSONNEL:

~~Have basic knowledge of search techniques, to include:~~

- Type I search (hasty)
- Type II search (sweep)
- Type III search (grid)
- Evidence search
- Urban search (walk away)

~~Have basic knowledge of search tactics, to include:~~

- Search theory
- Subject behavior
- Probability of Detection (POD)
- Point Last Seen (PLS)
- Last Known Point (LKP)
- Confinement
- Passive vs. active search
- Sound sweeps
- Clue awareness
- Track awareness

~~Have knowledge, and if BASIC Field personnel demonstrated ability, of wilderness survival techniques, for example:~~

- Self reliance, hydration and nutrition in wilderness environments
- Body and equipment management in inclement or extreme weather conditions
- Positive mental attitude

~~Have basic knowledge in wilderness navigation, and ability to do the following:~~

- Identify and use maps commonly associated with SAR operations
- Use a compass

- Have knowledge of the following coordinate systems:
 - Lat/Long
 - Township/Range
 - UTM
- Understand forest service road numbering systems

~~Have basic knowledge of safety associated with the following in a search environment, for example:~~

- Traveling to and from a mission
- Campfires, camp stoves, flares and other pyrotechnic signaling devices
- Vehicles (engine exhaust, catalytic converters, etc.)
- Helicopter safety
- Urban search considerations

~~Have basic knowledge, recognition and identification of hazards associated with:~~

- Trail and terrain conditions
- Electrical hazards
- Weather conditions and impending changes
- Environment (floods, rivers, cliffs, caves, etc.)
- Hazardous Materials (HAZMAT), urban/rural environments to include: chemical, fire, drug production, etc.)
- Confined spaces (wells, mine shafts, pits, excavations, machinery, crawl spaces, etc.)
- Abandoned buildings



INTERMEDIATE FIELD PERSONNEL WILL MEET THESE ADDITIONAL QUALIFICATIONS:

~~Have completed documentation of a 24/48 Hour Pack Check.~~

~~Demonstrate ability in wilderness survival techniques under moderate terrain and weather conditions.~~

~~Perform these additional navigational skills:~~

- Use a compass to:
 - Take a field bearing
 - Take a bearing from a map
 - Follow a bearing in the field
 - Place a bearing on a map
 - Triangulate position in the field and locate on a map
- Use a GPS to:
 - Navigate
 - Obtain coordinates

- Determine locations in the field and on a map
- Realize the GPS is not a stand alone navigation tool

~~Demonstrate ability to use a radio to relay information in the field.~~

~~Demonstrate ability to perform team rescue.~~

~~Demonstrate the ability to perform rescue skills, such as:~~

- Safely access a patient in non-technical terrain
- Secure the incident scene
- Evaluate the hazards in and around the patient
- Stabilize the patient (within medical and rescue training)
- Package patient into a transport device (within medical and rescue training)
- Transport patient over non-technical terrain



ADVANCED FIELD PERSONNEL WILL MEET THESE ADDITIONAL QUALIFICATIONS:

~~Demonstrate **proficiency** in wilderness survival techniques and navigational skills in extreme terrain and weather conditions (does not include technical rescue).~~

- The Advanced Field Teams are:
 - Backcountry Ground Team
 - Winter Backcountry Ground Team
 - Backcountry Snowmobile Team
- Specific requirements for each team are set out in the **SPECIFIC TEAM QUALIFICATIONS** that follow.

❖ **SPECIFIC TEAM QUALIFICATIONS:** Set out additional requirements

unique to specific operational teams.

BACKCOUNTRY GROUND TEAM QUALIFICATIONS

Advanced Ground SAR personnel having demonstrated capability of working in a wilderness setting with weather and terrain extremes. Does not include winter missions where avalanche conditions may exist. Does not include technical rescue.

GENERAL QUALIFICATIONS:

- Must be ADVANCED FIELD qualified.

SPECIFIC QUALIFICATIONS:

- Must be able to respond rapidly with all designated equipment ready to go upon receiving call out.
- Must have personal transportation immediately available at all times.
- Must have physical fitness to:
 - Move rapidly by foot over difficult terrain in adverse conditions.
 - Sustain high levels of exertion.
 - Quickly recover from sustained exertion.
 - Be able to transport team equipment and assist in carrying a patient.
- Must have the mental attitude to:
 - Be comfortable in the wild by oneself.
 - Be willing to apply First Aid skills and encounter and assist in helping maimed and/or deceased persons.
 - Keep fit and ready.
 - Self-evaluate abilities and know when to say when personal limits are reached.
 - Accept or give direction constructively.

WINTER BACKCOUNTRY GROUND TEAM QUALIFICATIONS

Advanced Ground SAR personnel with specific avalanche training, and demonstrated capability of working safely in a wilderness setting with winter weather and terrain extremes. Does not include technical rescue.

GENERAL QUALIFICATIONS:

- Must be BACKCOUNTRY GROUND TEAM qualified.

SPECIFIC QUALIFICATIONS:

- Each team member must have completed comprehensive basic level avalanche training as offered by KCSR.
- Each team member must demonstrate the ability to travel safely in a cold weather/snow environment and have the equipment and ability to perform an overnight bivouac on snow.
- Required equipment per team member to be in the field, for a mission, or for training: (Acquisition of personal equipment is recommended in the event KCSR equipment is not available.)
 - Snowshoes
 - Avalanche beacon
 - Probe
 - Shovel
- Required Team Equipment:
 - GPS or Altimeter
 - Trail marking gear
- Each team member shall demonstrate knowledge of:
 - Small party rescue
 - Hazard recognition
 - Safe travel in avalanche terrain
 - Patient transportation/evacuation in snow, using safety line, moving and static, when necessary
- Team Leaders are required to:
 - Complete additional hours in avalanche training as offered by KCSR, and demonstrate ability to perform as team leader in an avalanche rescue scenario.
 - Have experience in, and demonstrate skills in, winter backcountry mountain travel and rescue.

SNOWMOBILE TEAM QUALIFICATIONS

Snowmobile SAR personnel called out for search and rescue operations on trails or moderate terrain. Does not include in missions where avalanche conditions may exist.

GENERAL QUALIFICATIONS:

- Must meet minimum level of INTERMEDIATE FIELD qualified.

SPECIFIC QUALIFICATIONS:

- Must be able to respond rapidly with all designated equipment ready to go upon receiving call out.
- Must keep your snowmobile maintained and ready to go at all times.
- You must keep yourself fit and ready to go.
- Willing to participate in ongoing training.

MUST HAVE THE MENTAL ATTITUDE TO:

- Be confident and comfortable by yourself in a wilderness setting.
- Be willing to apply First Aid skills and assist with the injured or deceased.
- Know your own limits; know when you have reached your personal limitations.
- Accept or give direction constructively.

SAFETY STANDARDS:

- Knowledge and experience and safe handling of snowmobile operations.
- You must have fully maintained equipment, to include 24 Hour Pack.
- You must be an experienced snowmobile rider.
- All persons will wear appropriate clothing and safety equipment.

BACKCOUNTRY SNOWMOBILE TEAM QUALIFICATIONS

Advanced Snowmobile SAR personnel with specific avalanche training, and demonstrated capability of working safely in a wilderness setting with weather and terrain extremes. Does not include technical rescue.

GENERAL QUALIFICATIONS:

- Must meet SNOWMOBILE SAR TEAM qualifications.
- Must have adequate equipment to travel in extreme weather and terrain conditions.

SPECIFIC QUALIFICATIONS:

- Each team member must have completed comprehensive basic level avalanche training as offered by KCSR.
- Each team member must demonstrate the ability to travel safely in a cold weather/snow environment and have the equipment and ability to perform an overnight bivouac on snow.
- Required equipment per team member to be in the field, for a mission, or for training: (Acquisition of personal equipment is recommended in the event KCSR equipment is not available.)
 - Avalanche beacon
 - Probe
 - Shovel
- Required Team Equipment:
 - GPS or Altimeter
 - Trail marking gear
- Each team member shall demonstrate knowledge of:
 - Small party rescue
 - Hazard recognition
 - Safe travel in avalanche terrain
 - Patient transportation/evacuation in snow, using safety line, moving and static, when necessary
- Team Leaders are required to:
 - Complete additional hours in avalanche training as offered by KCSR, and demonstrate ability to perform as team leader in an avalanche rescue scenario.
 - Have experience in, and demonstrate skills in, winter backcountry mountain travel and rescue.

KCSR HORSE TEAM (Mounted Rescue) QUALIFICATIONS

HORSES, MULES, PACK ANIMALS

PERSONNEL GENERAL QUALIFICATIONS:

- Must meet minimum level of INTERMEDIATE FIELD qualified.

PERSONNEL SPECIFIC QUALIFICATIONS:

- Must be able to handle and control his mount so as not to pose a hazard to himself and other team members.
- Should have experience in back country riding and survival.
- Must be physically able to spend an extended period of time in the saddle and the outdoors.
- Capable of navigating by charts and compass.
- Ability to give or receive instructions.

EQUIPMENT:

- No stallions at any time.
- Saddles, blankets, halters, and bridles must be in good repair.
- Animals must be in condition to endure the rigors of the back country.
- Rolling equipment must be in good mechanical condition with properly inflated tires and include spares, lug wrenches, jacks, jumper cables.

SAR HORSE & RIDER TEAM:

- Member Requirements:
- Exhibit intermediate or above horsemanship/skills
 - Being in balance at walk, trot, canter
 - Exhibit ability to start, steer, stop
- Horse Requirements:
 - Be in sound physical condition with current vaccinations & titers.
 - Be a mare or gelding (no stallions).
 - Stand quietly while being mounted/dismounted from either side.
 - Stand quietly while rider puts on a slicker, opens a map or engages in radio communications.

- Demonstrates ability to be led by another mounted rider.
 - Cross running or still water.
 - Cross a bridge.
 - Travel through mud holes.
 - Back up readily.
 - Negotiate small logs.
 - Demonstrate ability to negotiate a steep up or down grade.
 - Demonstrate acceptance of Motorbikes, Backpackers, Mountain Bikes, Helicopters, Tents, Sirens, Whistles, etc.
 - Load or unload readily in a horse truck/trailer.
 - Capable of being led over difficult terrain or obstacles.
 - Leave a group of horses and return at a walk.
 - Allow other horses to move ahead at a faster pace.
 - Turn on haunches or forehand.
- A Horse May Be Disqualified as a SAR Resource If It:
 - Does not tie
 - Runs away
 - Bucks
 - Rears
 - Kicks
 - Bites
 - Shows signs of unsoundness
 - Is unduly aggressive towards other horses

SEARCH DOG TEAM

GENERAL HANDLER QUALIFICATIONS:

- Handlers must meet minimum level of INTERMEDIATE FIELD qualified.

SPECIFIC HANDLERS QUALIFICATIONS:

- BASIC
 - Understand scent theory and be proficient in interpreting environmental conditions that affect scent
 - Know canine first aid and carry an appropriate first aid kit
 - Be able to recognize whatever alert the dog displays when it detects human scent
 - Be equipped with the additional equipment required to sustain the dog for 24 hours.
- AVALANCHE SPECIALIST HANDLER
 - Must be Winter Backcountry Ground Team Qualified

SPECIFIC SEARCH DOG TEAM QUALIFICATIONS:

- The search dog team must be:
 - Able to provide a reasonable Probability of Detection (POD) for missing persons in wilderness, rural, suburban, and/or urban areas using air-scent, tracking and/or trailing techniques
 - Capable of performing this function as an asset rather than a liability. The team must be able to perform within the existing conditions of the search mission (i.e. day/night, weather, terrain, conditions, water-depth, temperature and currents).
 - Capable of working effectively with a variety of individuals and organizations; including but not limited to:
 - Law enforcement
 - Other search and rescue organization
 - Fire departments
 - Casual volunteers

SPECIFIC CANINE QUALIFICATIONS:

- The dog must be:
 - Assigned a current Department of Emergency Management number
 - Physically and mentally able to carry out the search assignment; including, but not limited to proper vaccinations
 - Sociable and controllable in situations involving:
 - Crowds
 - Noise
 - Other dogs

- Variety of distractions
 - Of sound and stable temperament and have demonstrated consistent appropriate behavior in a variety of situations with people and other animals. Undue aggression is not acceptable.
 - Under the handlers control
 - Controllable by other personnel in the event of an emergency
 - Able to be transported in a confined space with other dogs
- The dog must provide a reasonable probability of detecting human scent and must indicate when it has detected human scent by a method that the handler recognized and that can be explained and demonstrated to another person.

SEARCH DOG TEAM:

- General dog team qualified for:
 - Cadaver search; must locate human remains or pseudo-corpse, both on the surface and buried
 - Evidence search; must locate evidence and/or articles on the ground or buried

AIR SCENT DOG TEAM:

- Must be able to clear a typically large area and locate a subject
- Qualified for:
 - Disaster search; must locate a live subject in rubble
 - Avalanche search; must provide a reasonable POD of a subject buried in the snow
 - Water search; must locate a submerged subject, searching from either land or boat

TRACKING/TRAILING DOG TEAM:

- Document the ability to locate a subject on a 24-hour -old trail. The trail shall cover a mile and a half of moderate to rough terrain.

❖ **BASIC EQUIPMENT REQUIREMENTS - Ground Teams**

KCSR 24 HOUR PACK CHECK LIST - Used for all operations. Equipment IN pack or On Person

CLOTHING: For cold or wet operations any time of the year, WOOL or SYNTHETIC (polypro, nylon, Gortex) is required. No cotton or jeans.

- _____ Boots - sturdy, good traction (lugged soles), well fitted
- _____ Boot socks - extra pair in pack
- _____ Base layer/long underwear (as appropriate)
- _____ Long sleeve shirt or sweater
- _____ Hiking pants
- _____ Warm jacket
- _____ Rain pants & jacket - windproof, not "rubberized"
- _____ Gloves/mittens, warm cap or balaclava

ESSENTIAL ITEMS FOR PERSONAL SAFETY & KCSR OPERATIONS:

- _____ Food for one full day - high energy
- _____ Water bottles - filled with 2 quarts minimum
- _____ Water purification - tablets or filter
- _____ Flashlight or headlamp - extra batteries and bulb
- _____ Map of the area
- _____ Compass - with ability to set declination (Silva, Ranger 15 recommended)
- _____ Notepad and pencils
- _____ Waterproof matches, lighter and fire starter
- _____ Pocket knife or Leatherman
- _____ Plastic signaling whistle
- _____ Field First Aid Kit
- _____ Latex/rubber gloves - Use when administering First Aid
- _____ Emergency shelter – 7' X 9' tarp (minimum size)
- _____ Space Blanket
- _____ 30' - 50' nylon cord
- _____ Toilet paper & personal items
- _____ Sunglasses and sunscreen

OPTIONAL ITEMS:

- | | |
|----------------------------------|---------------------------------------|
| _____ GPS | _____ Insect repellent |
| _____ Signal mirror | _____ Marine flares (winter use only) |
| _____ Stove | _____ Large garbage bag(s) |
| _____ Metal cup to heat water in | _____ Grid tape |
| _____ Insulating sit pad | _____ Handwarmers |
| _____ Gaiters | |

KCSB 48 HOUR PACK CHECK LIST - All of the above Essential Items plus:

- | | |
|----------------------------|------------------------------|
| _____ Tent or bivy bag | _____ Sleeping bag |
| _____ Food for 2 full days | _____ Insulated sleeping pad |

❖ **BASIC EQUIPMENT REQUIREMENTS - Snowmobile Teams**

KCSR 24 HOUR PACK CHECK LIST - Used for all operations. Equipment IN pack or On Person

CLOTHING: For cold or wet operations any time of the year, WOOL or SYNTHETIC (polypro, nylon, Gortex) is required. No cotton or jeans.

- | | |
|---|--|
| <input type="checkbox"/> Helmet | <input type="checkbox"/> Warm Jacket |
| <input type="checkbox"/> Boots - waterproof, warm | <input type="checkbox"/> Waterproof outerwear |
| <input type="checkbox"/> Boot socks - extra pair in pack | <input type="checkbox"/> Gloves, warm cap or balaclava |
| <input type="checkbox"/> Base layer/long underwear (as appropriate) | |

OTHER:

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Tow rope | <input type="checkbox"/> Duct tape |
| <input type="checkbox"/> Bailing wire | <input type="checkbox"/> Maintenance tool kit |

ESSENTIAL ITEMS FOR PERSONAL SAFETY & KCSR OPERATIONS:

- Food for one full day - high energy
- Water bottles - filled with 2 quarts minimum
- Water purification - tablets or filter
- Flashlight or headlamp - extra batteries and bulb
- Map of the area
- Compass - with ability to set declination (Silva, Ranger 15 recommended)
- Notepad and pencils
- Waterproof matches, lighter and fire starter
- Pocket knife or Leatherman
- Plastic signaling whistle
- Field First Aid Kit
- Latex/rubber gloves - Use when administering First Aid
- Emergency shelter – 7' X 9' tarp (minimum size)
- Space Blanket
- 30' - 50' nylon cord
- Toilet paper & personal items
- Sunglasses and sunscreen

OPTIONAL ITEMS:

- | | |
|---|--|
| <input type="checkbox"/> GPS | <input type="checkbox"/> Insect repellent |
| <input type="checkbox"/> Signal mirror | <input type="checkbox"/> Marine flares (winter use only) |
| <input type="checkbox"/> Stove | <input type="checkbox"/> Large garbage bag(s) |
| <input type="checkbox"/> Metal cup to heat water in | <input type="checkbox"/> Grid tape |
| <input type="checkbox"/> Insulating sit pad | <input type="checkbox"/> Handwarmers |
| <input type="checkbox"/> Gaiters | |

KCSB 48 HOUR PACK CHECK LIST - All of the above Essential Items plus:

- | | |
|---|---|
| <input type="checkbox"/> Tent or bivy bag | <input type="checkbox"/> Sleeping bag |
| <input type="checkbox"/> Food for 2 full days | <input type="checkbox"/> Insulated sleeping pad |

❖ **WAC 118-04** --- The Washington Administrative Code (**WAC 118-04**) says that there are three classes of search and rescue emergency workers: Novice, support

personnel, and field personnel. It defines the minimum standards for each of the classes. Novice SAR personnel are those without specific duties, including personnel in training status.

NOVICE SAR personnel shall:	SUPPORT SAR personnel shall:	FIELD SAR personnel shall:
1. Be physically and mentally fit for the position assigned.	1. Be physically and mentally fit for the position assigned.	1. Be physically and mentally fit for the position assigned.
2. Possess sufficient knowledge of SAR skills and techniques to fulfill their emergency assignment.	2. Possess knowledge of the skills required of field SAR workers.	2. Posses knowledge of and demonstrated proficiency in survival techniques and outdoor living.
	3. Possess knowledge in first aid for the control of bleeding, CPR, bone immobilization, protection from the elements, and protection from blood borne pathogens.	3. Possess knowledge in first aid for the control of bleeding, CPR, bone immobilization, protection from the elements, and protection from blood borne pathogens.
	4. Possess basic knowledge of helicopter operations (basic helicopter).	4. Possess basic knowledge of helicopter operations (basic helicopter).
	5. If duties require involvement in helicopter operations: possess demonstrated knowledge and proficiency in helicopter operations (intermediate or advanced helicopter).	5. If duties require involvement in helicopter operations: possess demonstrated knowledge and proficiency in helicopter operations (intermediate or advanced helicopter).
		6. Possess knowledge in wilderness navigation, including map, compass, and other navigation methods as appropriate.
		7. Possess knowledge of SAR techniques.
		8. Possess knowledge of crime scene recognition, evidence recognition, human remains recognition and the provisions of RCW 68.50.010, 68.50.020 and 68.50.050 (see * below).

*** RCW References**

RCW 68.50.010 generally says that the jurisdiction of most bodies that we will come in contact with is vested in the County Coroner.

RCW 68.50.020 says that it is a misdemeanor for a person who knows of the existence and location of a dead body that comes under jurisdiction of the coroner as set forth in RCW 68.50.010 to fail to notify the coroner unless they have good reason to believe the coroner has been notified.

RCW 68.50.050 states that any person, not authorized by the corner or his deputy, who removes or conceals to remove later, or directs, aids or abets such taking of a deceased person not claimed by relatives or who died by violence or from unnatural causes or unlawful means is guilty of a gross misdemeanor.