



SAFETY IN SEARCH AND RESCUE

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What is Search and Rescue?

- ▶ Search and rescue (SAR) is the search for by the use of aircraft, surface craft, submarines, specialized rescue teams and equipment and provision of aid to people who are in distress or imminent danger on land or at sea. The common field of SAR includes many specialty sub-fields founded upon terrain considerations.*
- ▶ Area search utilizes an off lead K9 and search team to quickly search an area for any live human scent.
- ▶ Human Remains Detection (HRD) utilizes an on or off lead K9 and search team to search an area (land or water) for cadaver.
- ▶ Mantrailing utilizes a K9 in harness on long line to search for a specific person based on a scent article.

Types of Search and Rescue K9s

- ▶ Human Remains Detection (HRD) K9s are specially trained to locate and perform an indication for decomposition odor. These K9s ignore both animal and live human scent. HRD K9s are proficient in location of lost and missing persons, presumed deceased, in wilderness, urban areas, water, confined spaces, disasters, and assist in location of evidence in active or cold case crime scenes.
- ▶ Mantrailing K9s are scent specific. They require a scent article to discriminate the subject from others in the search area. Mantrailing K9s work in a harness, on a long line. They are able to find a lost or missing person's direction of travel and are able to work in urban or wilderness areas.
- ▶ Area Search K9s are trained to locate any live human scent. These K9s work off lead and are used to cover a large wilderness area quickly. Area search K9s are trained to ignore other K9 search teams in the area. Area search K9s can assist in searches for lost and missing persons in wilderness and disaster settings.

SAR K9s



Urban Search and Rescue*

- ▶ Urban search and rescue (US&R) involves the location, rescue (extrication), and initial medical stabilization of individuals trapped in confined spaces. Structural collapse is most often the cause for people being trapped, but individuals may also be trapped in transportation accidents, mines, and collapsed trenches.
- ▶ Urban search and rescue is considered a "multi-hazard" discipline, as it may be needed for a variety of emergencies or disasters, including earthquakes, hurricanes, typhoons, storms, tornadoes, floods, dam failures, technological accidents, terrorist activities, and hazardous materials releases. The events may be slow in developing, as in the case of hurricanes, or sudden, as in the case of earthquakes

*FEMA.gov

Urban Search and Rescue Hazards

- ▶ Construction debris
- ▶ Downed electrical lines
- ▶ Exposure to bodily fluids
- ▶ Confined Spaces
- ▶ Slips, Trips, and Falls
- ▶ Smoke and dust
- ▶ Sharp/jagged objects
- ▶ Collapse of structures
- ▶ Excessive noise



September 11 - PetGuide.com



September 11 - Today Show

April 27, 2011 Hazards

- ▶ Downed Structures
- ▶ Sharp Objects
- ▶ Insulation, Dust from Debris
- ▶ Blood Borne Pathogens
- ▶ Disease (Ticks)
- ▶ Stray Animals
- ▶ Heat Exhaustion
- ▶ Looters



Hazards for Personnel and K9s

- ▶ Heat exhaustion and hypothermia
- ▶ Dehydration
- ▶ Low Blood Sugar
- ▶ Sprains/Strains
- ▶ Cuts/Scrapes
- ▶ Broken bones



Safety Guidelines in Search and Rescue

- ▶ OSHA has several guidelines for Urban Search and Rescue Operations
 - ▶ Hand Protection - nitrile gloves worn under heavy duty work gloves
 - ▶ Footwear capable of protecting against sharp objects and blood borne pathogens
 - ▶ Eye protection
 - ▶ Head protection
 - ▶ Respiratory protection (if applicable)
 - ▶ Reliable communications equipment
 - ▶ Decontamination protocols prior to leaving the site

Safety Guidelines in Search and Rescue

- ▶ NASAR guidelines for rural and wilderness search and rescue operations*
 - ▶ Fundamentals of Search and Rescue (FUNSAR) course
 - ▶ Proper equipment for day or night operations
 - ▶ Emergency survival skills
 - ▶ First Aid for Humans and K9s
 - ▶ Identification of signs and symptoms of common medical emergencies
 - ▶ Environmental Hazards
 - ▶ Legal Guidelines



SARTECH Responder Certifications*

▶ SARTECH III

- ▶ Entry level “non-wilderness” responder
- ▶ Recommended for any person who responds to and functions on SAR missions in the urban or suburban environments

▶ SARTECH II

- ▶ Written test
 - ▶ FEMA standards
 - ▶ Leadership
 - ▶ Clue Consciousness
 - ▶ Crime Scene Preservation/Handling Evidence
 - ▶ Ready Pack/Personal Equipment
 - ▶ Tracking (Human)
- ▶ Timed 40 Acre Land Navigation
- ▶ Clue Identification
- ▶ Ropes Skills

FEMA K9 Team Certification Standards

- ▶ Test 1: Obedience
 - ▶ Emergency Stop
 - ▶ Heel
 - ▶ Long Wait
- ▶ Test 2: Bark Alert
 - ▶ 30 second alert
- ▶ Test 3: Voice and Hand Signal Navigation
 - ▶ 4 areas of different elevations, in order
 - ▶ 3 minutes to complete exercise
 - ▶ K9 and handler can be over 50 ft apart
- ▶ Test 4: Agility
 - ▶ 4 obstacles: wobbly surface, ladder, elevated plank, tunnel
 - ▶ Navigate obstacles in order
 - ▶ No collar or leash
- ▶ Test 5: Mock Search
 - ▶ 20 min time limit
 - ▶ No collar or leash
 - ▶ Directional commands only



Bretagne, last living 9/11 SAR Dog passed away
In 2016, just shy of his 17th birthday

Area Search Certification Standards (NASAR)

▶ Level III

- ▶ Locate a single stationary subject in a pre-defined 40-60 acre area, within 1.5 hours, including breaks. *(This examination and certification meets or exceeds the criteria of FEMA 508-8 Typed Resource Definitions Search and Rescue Resources 11/14/2005)*

▶ Level II

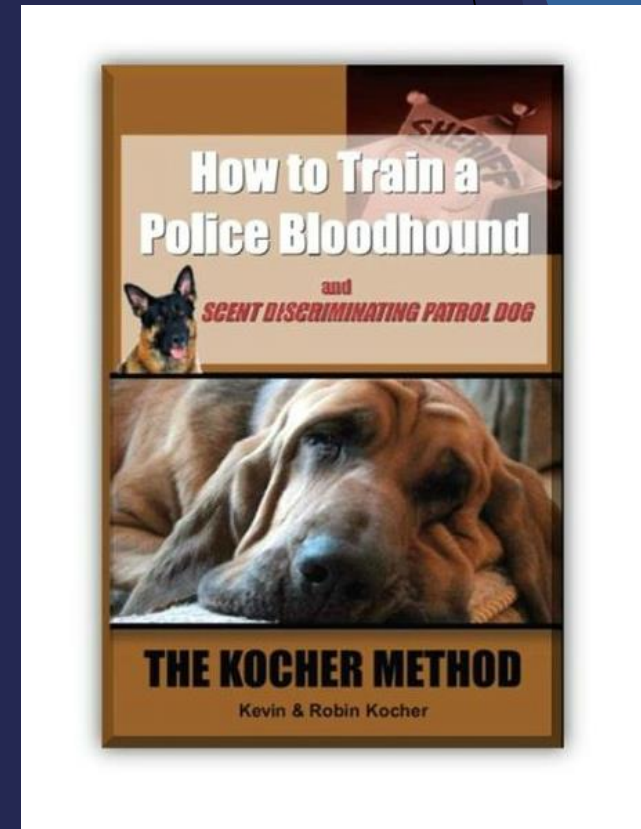
- ▶ Locate a single stationary subject in a pre-defined 60-80 acre area, within 1.5 hours, including breaks. *(This examination and certification meets or exceeds the criteria of FEMA 508-8 Typed Resource Definitions Search and Rescue Resources 11/14/2005.)*

▶ Level I

- ▶ Candidate must have passed the Type II prior to testing the Type I. A GPS may be used. *(This examination and certification meets or exceeds the criteria of FEMA 508-8 Typed Resource Definitions Search and Rescue Resources 11/14/2005.)*
- ▶ Night Search: Locate a single stationary subject situated within an 80+/- acre area, within 2 hours, including breaks.
- ▶ Day Search: Locate two moving subjects located within a 140-160 acre area, within 4 hours, including breaks.

Mantrailing Certification Standards (International Bloodhound Training Institute)

- ▶ Identify indication
- ▶ Ability to stop or rest K9
- ▶ Determine direction of travel
- ▶ No Scent Identification (NSI)
- ▶ Ability to trail
- ▶ Ability to cast for trail
- ▶ Ability to determine vehicle pick-up
- ▶ Oral Review Board
 - ▶ Knowledge of the theory of scent
 - ▶ 29 American Jurisprudence 2d #575



Human Remains Detection Certification Standards (NASAR)

- ▶ **Canine Human Remains Detection Land Type III (Non-Disaster Operations):** This is a Human Remains Detection examination and certification with a material source of between 5 and 14 grams inclusive. This examination consists of 6 search stations. These stations are elevated, surface, buried, blank, building, and vehicles. *This examination meets or exceeds the criteria of FEMA 508-8 Typed Resource Definitions Search and Rescue Resources 11/14/2005.*
- ▶ **Canine Human Remains Detection Land Type IV (Non-Disaster Operations):** This is a Human Remains Detection examination and certification with a material source of between 5 and 14 grams inclusive. This examination is comprised of 4 search stations. These stations are elevated, surface, blank, and buried. *This examination meets or exceeds the criteria of FEMA 508-8 Typed Resource Definitions Search and Rescue Resources 11/14/2005.*
- ▶ **Canine Human Remains Detection Land Type Other (Non-Disaster Operations):** This is a Human Remains Detection examination and certification with a material source of 30 grams or above. This examination is comprised of 4 search stations. These stations are elevated, surface, blank, and buried. *This examination meets or exceeds the criteria of FEMA 508-8 Typed Resource Definitions Search and Rescue Resources 11/14/2005.*
- ▶ **Individual Practical Stations:**
 - ▶ Surface Station The handler has 30 minutes to complete this station.
 - ▶ Buried Station The handler has 30 minutes to complete this station, buried 6-24 inches, 4 false holes
 - ▶ Elevated Station The handler has 30 minutes to complete this station. Elevated 5-6 feet.
 - ▶ Vehicle Search Station The handler has 12 minutes to complete this station. (only in Type III)
 - ▶ Blank Station The handler has 30 minutes to complete this station.

Civilian Search and Rescue Safety Recommendations*

- ▶ Training Courses
- ▶ Appoint a Search and Rescue Coordinator
- ▶ Implement an Untrained Volunteer Staging Area
 - ▶ Enables screening of volunteers for physical/mental abilities and criminal background checks
 - ▶ Allows personnel to place volunteers in positions in which they will be successful and execute safety
- ▶ List of locally trained volunteers
- ▶ Supervise civilian volunteers at all times

Search and Rescue - In Action

