

CAMP CROOKED CREEK SEARCH & RESCUE HIGH ADVENTURE PROGRAM



INTRODUCTION:

The Search & Rescue program here at Camp Crooked Creek is not just to earn another Merit Badge, but to introduce YOU to the possibility of a career and or a college degree in continuation of your service to your community & Nation. Each year the numbers of Americans and visiting tourists who venture out into the wilderness to explore, hunt, camp, or otherwise enjoy what nature can provide increases exponentially and as such so does the risk and possibility of such individuals to become lost and or injured. This is where YOU can become a great asset to State and County Search & Rescue Teams, by having a basic knowledge & training to provide assistance in times of emergency or disaster.

During your week of Summer Camp here at Camp Crooked Creek, you will not only earn the SAR merit badge, but also be exposed to advanced techniques of Search & Rescue used by various agencies across the United States culminating on Friday with both a Day & Night Search & Rescue operation to evaluate what YOU have learned over the previous 4 days. Understand that although the CCC HA SAR program is an ALL-DAY event, YOU will be released back to your respective Units for meals & once the class has convened for the day with the exception of Friday when those participating will be expected to attend the Night Mission in order to put the skills you have learned to use during the evening practical exercise simulation.

PRE-REQUISITES:

The following pre-requisite merit badges will allow Scouts to focus on new material rather than having to review in depth information from merit badges learned previously as the Search & Rescue course is an extension / continuation of that material.

- First Aid Merit Badge
- Emergency Preparedness Merit Badge
- Orienteering Merit Badge

NOTE: In addition, Scouts having earned the following merit badges will find material covered during the SAR course somewhat easier to understand, but these are NOT required. Signs, Signals, & Codes / Wilderness Survival / & Pioneering. AGAIN, although NOT required, these topics contain much valuable resource information to assist the Scouts participating in the CCC HA SAR course.

NOTE: ALL Scouts taking the CCC HA SAR course will be required to take the online training for ICS-100 (Introduction to Incident Command System). This meets the SAR MB requirement #5. This will require parental permission to go online. Be sure to print out and bring the certificate with you to camp to show your counselor!

NOTE: SAR Merit Badge requirements #8A through 8D & #9 WILL be worked on together as a Team effort.

WHAT IS SEARCH & RESCUE and HOW CAN I LEARN MORE ABOUT IT?

Q: Is search and rescue a career?

A: The best bet for those interested in frequent search and rescue work is to go into a field commonly called upon for missions and volunteer to be trained and placed on call. Careers in law enforcement, firefighting, national park services, FEMA and the military are all organizations frequently involved in SAR.

Q: How does one receive specialized training or a degree in SAR?

A: After hurricane Katrina in 2005, many colleges & universities today offer degrees in Emergency Response Management. Otherwise nearly every branch of the United States Armed Forces, specifically the Coast Guard & US Air Force who specialize in SAR operations. Most states (even down to the County level of government) also have primarily volunteer positions available for local SAR teams.

Becoming a search and rescue, or SAR, volunteer can add meaning and adrenaline to your favorite outdoor activities.

1. Choose a Specialty. All search and rescue volunteers have a specialty which makes them more suited towards some operations. ...
2. Get in Shape. ...
3. Get Certified. ...
4. Find a Group. ...
5. Stay Qualified.

CLASS RULES:

1. There is no such thing as a stupid question. If you have a question, raise your hand.
2. Be On Time, being late could cause you to miss out on important information.
3. Take notes!
4. No sleeping!
5. No excessive talking during instructor presentations
6. Breaks will be given every 50 minutes during classroom time.
7. No arguing with instructor or assistants
8. Scout Law, Scout Oath, Scout Motto, & Scout Slogan enforced at all times.
9. Drink Water!
10. Learn & have FUN!

DAY 1 (Monday): Terminology for SAR operations (Discussion)

8:30am to 8:50am = Introduction

- Staff introduction
- Scout Introduction
- Program Introduction

8:50am to 9:20am Terminology used in SAR operations

- Determine the difference between SEARCH and RESCUE (see page 9 SAR MB pamphlet)
- FEMA = Federal Emergency Management Agency
- NASAR = National Association for Search & Rescue
- ICS = Incident Command System
- IC = Incident Commander
- LKP = Last Known Point
- PLS = Place Last Seen
- SAR = Search & Rescue
- IAP = Incident Action Plan
- HASTY Team = First Team deployed to search quickly & accurately for clues to subject whereabouts.
- Active Search = Teams on the ground searching for subject
- Passive Search = Teams stationary on high ground looking for signs of subject such as campfire smoke.
- LAST (acronym) = Locate, Access, Stabilize, Transport
- Subject = Not Casualty or Victim until located and medical condition established
- MEDEVAC (acronym) = Medical Evacuation

9:20 to 9:30am = 10 minute Break

9:30am to 10:20am = TRIAGE

- 4 types of Triage / Trauma Classification used in MEDEVAC procedures & how to determine what a subject's status is depending on type(s) of injuries.
 - Urgent = Life or Death / Loss of Limb or Eyesight
 - Immediate = Broken bones, other severe injuries
 - Priority = Controlled bleeding, debilitating injuries
 - Routine = Does not require immediate medical care, minor injuries

10:20 to 10:30am = 10 minute Break

10:30am to 11:20am = Special Search & Rescue Environments

- Urban Type I, II, & III (see SAR Merit Badge booklet pg 29 – 31)
- Water (see SAR Merit Badge booklet pg 32)
- Snow (see SAR Merit Badge booklet pg 33)
- Underground (Caves & Tunnels etc)
- Forest
- Mountains
- Desert

11:20 to 1:20pm = Lunch Break (return to Unit)

1:30pm to 1:50pm = Ready Pack Demonstration

What should be in a "Ready Pack"?

- See Annex E: Ready Pack (Packing list)

1:50pm to 2:00pm = 10 minute Break

2:00pm to 2:20pm = Staying found. (See SAR Merit Badge booklet pg 39 & 40) (Discussion)

2:20pm to 2:30pm = 10 minute Break

2:30pm to 3:20pm = Intro to Advanced Wilderness First Aid

Recognize & Treat common injuries found during SAR operations to include the following:

- **Broken arm / leg / ribs / neck / back**
- **Sprains vs Strains**
- **Severe bleeding**
- **Internal injuries**
- **Head / Facial Injuries**
- **Snake & Insect bites**
- **Blisters**
- **Hot weather injuries**
- **Cold Weather injuries**
- **Shock**
- **Dehydration**
- **Misc Illnesses**
- **Burns**

3:20pm to 3:30pm = 10 minute Break

3:30pm to 4:00pm Continuation of Advanced Wilderness First Aid topics

4:00pm to 4:20pm = Review of Day's material

4:20pm = Release to Units

DAY 2 (Tuesday) Continuation of Advanced Wilderness First Aid, Orienteering, & Signs, Signals & Codes skills.

8:30am to 9:20am = Use of a Backboard, litter, basket litter, makeshift litter, & Travois litter

9:20am to 9:30am = 10 minute Break

9:30am to 10:20am = Transport casualty over rough terrain using the following methods:

- Litter carry
- Two-man assist
- Fireman's Carry
- Four-Hand Seated Carry

10:20am to 10:30am = 10 minute Break

10:30am to 11:20am = Standard 9-line MEDEVAC request format

11:20am to 1:20pm = Lunch Break

1:30pm to 2:20pm = Advanced Orienteering skills

- Determine Back Azimuth
- Determine location on map using resection / intersection
- Measure both straight line & curved line distance on a map
- Convert Magnetic azimuth to grid azimuth
- Review use of handheld GPS device &/or Cell phone application.
- Determine location on a UTM map using MGRS / Metric system.
- Using a Military protractor, determine 4, 6, & 8 digit grid coordinates.

2:20pm to 2:30pm = 10 minute Break

2:30pm to 3:20pm Continuation of Advanced Orienteering skills.

3:20pm to 3:30pm = 10 minute Break

3:30pm to 4:20pm = Determine / Understand visual & audio signs & signals used.

- Communicate with team members via audio signals
- Communicate with team members via arm & hand signals
- Communicate with Aircraft via visual signals

Phonetic Alphabet familiarity

A = Alpha	B = Bravo	C = Charlie	D = Delta
E = Echo	F = Foxtrot	G = Golf	H = Hotel
I = India	J = Juliet	K = Kilo	L = Lima
M = Mike	N = November	O = Oscar	P = Papa
Q = Quebec	R = Romeo	S = Sierra	T = Tango
U = Uniform	V = Victor	W = Whiskey	X = X-ray
Y = Yankee	Z = Zulu	1 = Won	2 = Too
3 = Tree	4 = fower	5 = Fife	6 = Six
7 = Sefen	8 = Aight	9 = Niner	0 = Seero

4:20pm Release to Units

DAY 3 (Wednesday) Climbing, Rappelling, Use of Aircraft for SAR operations

8:30am to 9:20am = Meet at the C.O.P.E. / Climbing Tower w/gear!

- Basic Climbing Knots & Gear
- Demonstrate anchoring for both climbing & rappelling
- High Angle Rescue / Evacuation
- Hoist a mannequin in a basket litter to top of tower

9:20am to 9:30am = 10 minute Break

9:30am to 10:20am = Continuation of Climbing Tower instruction

10:20am to 10:30am = 10 minute Break

10:30am to 11:20am = Identifying / Marking an area for Aerial evacuation

- Improvised marking of a landing zone
 - Bright colored clothing
 - Logs / Rocks
- Determine size of LZ appropriate to aircraft
- Determine wind direction for landing aircraft
- Use of Colored Smoke / Flares (discussion)

11:20am to 1:20pm = Lunch Break

1:30pm to 2:20pm = US Army Blackhawk hoist operation demonstration & Crew tour of the helicopter (??)

2:20pm to 2:30pm = 10 minute Break

2:30pm to 3:20pm = Basic Tracking skills

- How to determine handedness of target being tracked
- How to determine approximate height & weight of target being tracked
- Wilderness signs of passage

3:20pm to 3:30pm = 10 minute Break

3:30pm to 4:20pm = 3 day Review of material.

4:20pm = Release to Units

DAY 4 (Thursday) Search Tactics

8:30am to 9:20am = Search & Rescue Operations & Logistics

- **SAR HQ Base Camp set up**
 - Equipment required for a SAR HQ Base Camp
 - Base Camp Operations
 - Priorities of Work
- **SAR Staff: What DO THEY DO?**
 - Incident Commander
 - Operations Chief
 - Planning Chief
 - Logistics Chief
 - Safety Officer
 - Public Information Officer
 - Liaison Officer
 - Finance/Administration Chief
 - Team Leader x2+
 - Assistant Team Leader x2+
 - Team Members

9:20am to 9:30am = 10 minute Break

9:30am to 10:20am = Familiarization with SAR forms

- Incident Action Plan Forms
- Incident Objectives (ICS 202)
- Organization Assignment List (ICS 203)
- Assignment List (ICS 204)
- Incident Radio Communications Plan (ICS 205)
- Communications List (ICS 205A)
- Medical Plan (ICS 206)
- Incident Organization Chart (ICS 207)
- Safety Message/Plan (ICS 208)

10:20am to 10:30am = 10 minute Break

10:30am to 11:20am = Interview & Investigate (see SAR Merit Badge booklet pg 49 to 55)

- Lost Person Profile
- Clue Awareness
- Evidence Preservation

11:20am to 1:20pm = Lunch Break

1:30pm to 2:20pm = SEARCH TECHNIQUES

- Establish a Confinement Area
 - Natural Boundaries
 - Man-Made Boundaries
- Types of Searches
 - Line Search
 - Straight
 - Staggered
 - Spiral Search

2:20pm to 2:30pm = 10 minute Break

2:30pm to 3:20pm = Specialized Units (discussion)

- Scent Dogs

- **Snowmobile / ATV**
- **Aerial (Plane or Helicopter)**
- **Mounted (Equestrian)**
- **River / Lake Patrol**
- **CAP (Civil Air Patrol)**
- **National Guard**
- **US Coast Guard**
- **US Air Force PJs (Para-Rescue)**

3:20pm to 3:30pm = 10 minute Break

3:30pm to 4:20pm = Review of Material thus far

4:20pm = Release to Units

DAY 5 (Friday): Practical Exercise #1 = Day Mission (8:30am to 11:20am)
Insert Scenario #1 here! (Injured Hiker)

Practical Exercise #2 = Night Mission (7:00pm to 10:00pm)
Insert Scenario #2 here! (Lost Camper)

ANNEX A: Required Materials for Course

*Access to Climbing / Rappelling tower on Wednesday morning
 *Coordinate with Fort Knox Post Commander for Blackhawk demonstration afternoon
 24x cravats
 4x wood slats for arm & leg splinting
 1x folding / collapsible litter
 1x basket litter
 21x hard hats
 21x blaze orange vests
 21x metal whistles
 2x metal signal mirrors
 1x life-size mannequin
 5x small hand held walkie-talkies (rechargeable)
 24x rolls bright colored cloth or plastic engineer tape to mark boundaries
 5x USGS or MGRS (preferably) topographical maps of CCC area (*Laminated)
 2x magnetic compass
 1x package 8"x11" overhead projector plastic overlay sheets (transparent)
 2x Multi-Colored pack of Alcohol pens
 2x Roll Duct Tape
 2x Wool Blanket / Space Blanket
 1x Backboard
 4x 5 gal Gort Coolers
 4x Folding Field Tables
 8x Folding Chairs
 1x 4' Cork Board w/tripod
 1x box push pins
 1x roll red yarn
 4x Handheld GPS
 1x Power converter with multiple USB & electrical ports
 1x 200' heavy duty extension cord
 2x wooden tent poles (6' long at least)
 100' ¼" thick manila rope for lashing
 2x 12' long wooden poles 4" thick
 2x 4' long wooden poles 4" thick
 1x Airfield Air Sock (Red)
 2x Air to Ground recognition panels (blaze orange & neon pink)
 1x "Rescue 8" descender
 100' Climbing rope (used is ok)
 12x Locking "D" Carabiners
 20x Climbing/Rappelling Harness

ANNEX B: SAR MERIT BADGE REQUIREMENTS

1. Do the following:

- a. Explain to your counselor the hazards you are most likely to encounter while participating in Search & Rescue (SAR) activities, and what you should do to anticipate, help prevent, mitigate, and respond to these hazards.
 - b. Discuss first aid and prevention for the types of injuries or illnesses that could occur while participating in SAR activities including: Snakebites, Dehydration, Shock, Hypothermia, Heat Stroke, Heat Exhaustion, Heat Cramps, Frost Bite, Blisters, and Broken Bones / Sprains.
2. Demonstrate knowledge to stay found and to prevent becoming the subject of a SAR mission.
 - a. How does the "BUDDY SYSTEM" help in staying found & safe?
 - b. How can knowledge of the area and its seasonal weather changes affect your plans?
 - c. Explain how the 10 Essentials are similar to a "READY PACK".
3. Discuss the following with your counselor:
 - a. The Difference between SEARCH and RESCUE.
 - b. The difference between PLS & LKP
 - c. The meaning of the following terms:
 - i. AFRCC
 - ii. IAP
 - iii. ICS
 - iv. Evaluating Search urgency
 - v. Establishing confinement
 - vi. Scent item
 - vii. Area air scent dog
 - viii. Briefing & Debriefing
4. Find out who in your area has authority for SAR and what their responsibilities are. Discuss this with your counselor, and explain the official duties of a SAR Team.
5. Complete the training for ICS-100 (Introduction to Incident Command System) online. Print out the certification of completion and show it to your counselor. Discuss with your counselor how the ICS compares with Scouting's PATROL METHOD.
6. Identify four types of Search & Rescue teams and discuss their use or role with your counselor. Then DO the following:
 - a. Interview a member of one of the teams you have identified above, and learn how this team contributes to a SAR operation. Discuss what you have learned with your counselor.
 - b. Describe the process and safety methods of working around at least two of the specialized SAR teams you identified above.
 - c. Explain the difference between wilderness, urban, and water SARs.
7. Discuss the UTM system, latitude & longitude. Then DO the following:
 - a. Using a 1:24,000 scale USGS topographical map, show that you can identify a location of your choice using UTM coordinates.

- b. Using a 1:24,000 scale USGS map, have your counselor give you a set of UTM coordinates on a map, then identify that location.
 - c. Show that you can identify YOUR current location using the UTM coordinates on a map, verified with using a hand held GPS.
 - d. Determine a hypothetical PLS & show on the map an area that could be used for containment using natural or man-made boundaries.
8. Choose a hypothetical scenario, either one presented in the merit badge pamphlet or one created by your counselor. Then DO the following:
 - a. Complete an incident objectives form for this scenario.
 - b. Complete an Incident Action Plan to address this scenario
 - c. Discuss with your counselor the behavior of a lost person and how that would impact your IAP.
 - d. After completing 8a-c, discuss the hypothetical scenario with your counselor.
9. Discuss with your counselor the terms HASTY Team & Hasty Search. Then DO the following:
 - a. Plan and carry out a practice Hasty Search. Include the following elements:
 - i. Clue awareness
 - ii. Evidence Preservation
 - iii. Tracking
 - iv. Locating subject via attraction or trail sweep
 - b. When it's over, hold a team debriefing to discuss the hasty search. Discuss problems encountered, successful & unsuccessful tactics used, and ideas for improvement.
10. Find out about three career or volunteer opportunities in SAR. Pick one and find out the education, training, and experience required for this professional or volunteer position. Discuss with your counselor, and explain why this position might interest you.

ANNEX C: Resources

- <https://training.fema.gov/icsresource/icsforms.aspx>
- www.nasar.org/
- See additional resources in the Search & Rescue Merit Badge pamphlet
- Wilderness Survival MB pamphlet
- Pioneering MB pamphlet
- Orienteering MB pamphlet
- First Aid MB pamphlet
- Signs, Signals, & Codes MB pamphlet

ANNEX D: ICS FORMS

- ICS 201 * ICS 202 * ICS 203 * ICS 204 * ICS 205 * ICS 205A
- ICS 206 * ICS 207 * ICS 208 * ICS 208HM * ICS 209 * ICS 210
- ICS 211 * ICS 213 * ICS 213RR * ICS 214 * ICS 215 * ICS 215A
- ICS 217A * ICS 218 * ICS 219 * ICS 260 * ICS FORMS Instruction Booklet

ANNEX E: Packing List for “Ready Pack”

- Sturdy hiking boots
- Leather work gloves (preferably double palmed)
- Hard hat
- Baseball style hat / “Boonie Cap”
- 2 days worth of changes of clothes (long pants, sox, underwear, etc)
- Orange vest
- Water bottle / Camelback
- Notebook & #2 pencil
- Headlamp & Flashlight w/extra batteries & replacement bulbs
- Waterproof Matches / Lighter
- Seasonal weather items
- Wet weather gear
- Daypack / Patrol Pack
- Swiss Army style knife or Multi-tool
- Compass w/5 degree accuracy
- Whistle
- Signal Mirror
- Map of Search area w/plastic overlay
- Alcohol Pen (thin point)
- Means of Communication (radio/cell phone)
- Eye Protection: Sunglasses, Goggles
- 24 hours worth of food & snacks (high caloric)
- Personal First Aid kit
- Survival (space) blanket
- 50’ para-cord

NOTE: Clothing should be brightly colored (ie Blaze orange if possible. NO Camouflage!)

INSTRUCTOR’S BIOGRAPHY:

The content of this training support package was assembled and/or developed by Michael R. Long, Assistant Scoutmaster (as well as the 100th Eagle Scout) of Troop 1 (Pioneers), Louisville KY.

Mike is a retired (Sergeant First Class / E-7) veteran of the US Army having served a total of 26 years with multiple MOS's (military occupational specialties) starting out as an Electronic Warfare Morse Code Interceptor for Military Intelligence Reserve unit from 1986 to 1987, then switched to a Field Medical Ambulance Unit as a Combat Medical Specialist (earning both the coveted EXPERT FIELD MEDICAL & COMBAT MEDICAL badges) from 1987 to 1990, & from 1990 to 2013 he served as a Cavalry Scout (Armored Reconnaissance Specialist), where he was deployed with the 1ST Infantry Division to Saudi Arabia, Iraq, & Kuwait for Operation Desert Storm in 1990 where he pulled double duties as both a Cavalry Scout & Platoon Medic due to shortages of medical personnel at the time. In 1995 he was deployed to Haiti for Operation Uphold Freedom with the 2nd Armored Cavalry Regiment for peace-keeping operations to allow the nation of Haiti to rebuild their government. He has been to South Korea twice to serve in the 4th Cavalry Division as an early response force should North Korea attack in both 1999 to 2000 & 2003 to 2004. In 2005 to 2006, Mike was once again deployed to Iraq for Operation Iraqi Freedom, serving in the 3rd Infantry Division where he worked in the Brigade HQ as a recruiter for Iraqi Police Officers. While in Iraq this 2nd time, Mike was injured by an Improvised Explosive Device attack while moving in convoy from one Forward Operating Base to another. Mike served in many stateside Army bases to include Fort McCoy (WI), Fort Riley (KS), Fort Polk (LA), Fort Knox (KY), Fort Stewart (GA), Fort Irwin (CA), Fort Bliss (TX), Fort Hood (TX), Fort Devens (MA), & Fort Benning (GA). Not necessarily in that order! But finally retiring from Fort Knox in 2013 from an Operations Senior Non-Commissioned Officer position where he developed Training & Planning for both his fellow unit members as well as numerous National Guard & Army Reserve forces across the US for his last 3 years of service.

Mike attended Northland College in Ashland WI from 1985 to 1989 with a major study in Outdoor Education with an emphasis on Native American Studies & minor in Geology. While attending college, Mike served as the Team Leader / Coordinator for the Northland College Search & Rescue club which during his tenure conducted numerous practice exercises & 3 real life Search & Rescue operations in the Chequamegon National Forest of Northern Wisconsin.

Currently Mike is a reserve member of the Hardin County Mounted SAR team based out of Elizabethtown, KY & is married to his wife Rizabeth and loves spending time with his 14 month old son Noah and can't wait to get him into the Scouting experience!

"I am a little envious, yet thankful, that today's Scouts have the opportunity to learn SAR techniques through the merit badge system in order to better serve their communities in the future. I only wish this merit badge existed during my Scouting days!" - Mike