

# ASRC Training Requirements

Version 8

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## Overview

The ASRC was founded to provide highly skilled assistance to local agencies to respond to wilderness missing person and rescue situations. This remains the prime mission of the conference and member teams.

The intent of this manual is to be a training guide for ground search and rescue. A Land Search and Rescue (SAR) Team conducts search, rescue, and recovery in response to natural and human-caused events that may occur in one or more of the wilderness or urban environments.

Properties that define an Urban Environment include:

- A significant number of people occupying the land
- A significantly developed area with structures and facilities
- Roads and easy means of travel

Urban Development areas are classified as:

- Residential – where people live
  - Trailer parks, Retirement communities, Suburbs
  - Seasonal communities, temp housing (campgrounds, RV Parks)
- Non-Residential – where people go to do other things
  - Shopping Malls, Schools, Amusement Parks

A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. In the Wilderness Act, further definition of an area of wilderness is:

- An area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which:
  - (1) Generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;
  - (2) Has outstanding opportunities for solitude or a primitive and unconfined type of recreation;
  - (3) Has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and
  - (4) May also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.<sup>1</sup>

Ground search and rescue requires knowledge and skills related to the following areas:

- Search
- Navigation
- Communications
- Subject management
- Personal health and safety

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<sup>1</sup> Wilderness Act (September 3, 1964 used by NPS)

- Basic ropes and rope systems
- Legal Aspects

The core competency of the ASRC is the effective and efficient application of field search skills. An understanding of field operations and skills is necessary to provide effective mission management. Field Team Leader and Field Team Member are operational titles. To avoid confusion, this document utilizes the separate titles of "Level XX Search team member" based upon the acquisition of knowledge and skills in the various aspects of Ground Search and Rescue. The assignment of members with various certification levels to operational assignments is at the discretion of incident management.

### **Field Self-Sufficiency**

FEMA types field teams are based upon the maximum time during which a crew (or team) is prepared, in terms of training and equipment, to function in the field before requiring additional logistical support.

- Deployed for up to 12 hours at a time
- Deployed for up to 24 hours at a time
- Deployed for up to 72 hours at a time

Based on the typical operational needs found in the ASRC service area, all levels of ASRC certifications should prepare for a 24-hour field task deployment. If extended self-sufficient operations will be required, field teams will receive prior notice and should consider having the additional supplies and equipment to prepare for up to 72-hour deployments.

### **Field Level Advancement path**

- Level IV Search Team Member (Trainee)
  - "Awareness" level search, horizontal litter handling
- Level III Search Team Member (Member of a field team)
  - "Operations" Level Search
  - "Awareness" Level Low Angle Rescue plus member of a litter team
- Level II Search Team Member (Leads Search Tasks and simple rescues)
  - "Technician" Level Search
  - "Operations" Level Low Angle Rescue
- Level I Search Team Member -(Leads complex search tasks and rescues)
  - "Technician" Level Low Angle Rescue

In addition to certifying field skills, the ASRC certifies Search Managers with the skills necessary to lead missions.

### **Incident Command Advancement path**

- Search Manager Level III
  - Base Staff for all missions
  - Initial on-site leadership for very small missions
- Search Manager Level II
  - Leads more complex missions
- Search Manager Level I
  - Coordinates response and allocates resources for concurrent missions
  - Serves as a resource for Level III and II Managers

**NOTES:**

- 1) It is felt that to maintain operational effectiveness; the "force protection" aspects of first aid are essential skills for all SAR personnel. The ASRC standards for each level integrate these "force protection" skills. Teams who elect to integrate the first aid training into their field training levels should consider adding the wilderness first aid skills listed as "optional" that are located at the end of each level. Alternately, teams may elect to seek external first aid certifications in accordance with the ASRC medical policy.
- 2) The phrase "Demonstrate" means perform the skill. A mission/task simulation is one way to achieve this.
- 3) This standard addresses the knowledge and skills expectations for able-bodied team members. The ASRC wishes to include and benefit from the skills provided by members who may have physical or other limitations. In consultation with the Conference Training Officer, the Group Training Officer will provide accommodations to members with such limitations. While alternate means of assessment may vary, due to the nature of the work performed, knowledge requirements are necessary. Waiver of physical skills is acceptable. However, there must be a mechanism in place to ensure that the member is restricted from performing those waived skills at a mission.

## Acronyms and Terminology

This table defines the acronyms and terminology used in this document. You may encounter more in a search and rescue operation

Acronym	Meaning
GTO	Group Training Officer
TO	Training Officer
AHJ	Authority Having Jurisdiction
RA	Responsible Agency (from a government entity)
ICS	Incident Command System
IC	Incident Commander
ASRC	Appalachian Search and Rescue Conference
PPE	Personal Protective Equipment
SAR	Search And Rescue
Awareness level	A basic competency level that stresses hazard recognition
Operations level	Individuals who identify hazards, use equipment and apply limited techniques specific to the areas of Search and rescue
Technician level	Individuals who identify hazards, use equipment and apply advanced techniques specific to the areas of Search and rescue

## Search Group

Each accredited group shall:

- Maintain a current database or record of individual certification, including:
  - Field Training Level
  - Specialized Skills & Equipment
  - Participation in training
  - Certifications held
- Develop training and testing materials for team-specific aspects of this standard, including alerting procedures and AHJ-specific requirements
- Classify members, based on their physical capabilities, to complete various types of SAR tasks
- Maintain policies, based on the local jurisdiction, for:
  - Drug and alcohol use, dependency, and abuse
  - Sexual harassment
  - Culture, race, sex/gender, and age sensitivity
- Operate within the National Incident Management System (NIMS)/Incident Command System (ICS)
- Maintain a training and education program with a goal of preventing SAR-related death, injuries, or illnesses
- Develop and maintain a risk management plan
  - Identify regional and mission risks
  - Determine its significance
  - Implement training to address each risk

### **Operational Needs:**

Some teams have chosen to pursue additional skills and/or credentialing to meet specific local needs such as: Cave Rescue, Mountain Rescue Association accreditation for high-angle rescue, wilderness medicine, and support for local National Parks. These additional skill sets are encouraged to the extent that they do not detract from fulfilling the core mission. Teams are encouraged to develop/adopt separate stand-alone standards and training programs for the non-core missions that a local team chooses to support.

Local teams may add core mission-driven requirements as an “add-on” for the Field IV-I levels to meet local needs. Teams are encouraged to develop supplemental materials (including testing) to ~~insure~~ensure that members are familiar with local alerting, response, and external agency relations.

Search Manager standards are Conference-wide. Teams may not make additions or deletions from the Search Manager standards.

## All Members

### Requirements

#### General

All members shall:

- Meet the minimum age requirement, as determined by the group policy or local jurisdiction
- Meet the minimum educational requirements, as determined by the group policy or local jurisdiction
- Meet the minimum fitness requirements, as determined by the group policy or local jurisdiction
- Complete the medical requirements, as determined by the group policy or local jurisdiction
- Complete background checks, as determined by the group policy or local jurisdiction
- Meet, or exceed, minimum participation requirements for training and operations, as defined by the group policy or local jurisdiction
- Demonstrate proficiency in individual skills and abilities as implemented in the certification standards.
- Wear environmentally appropriate identifiable uniforms, or markers, as determined by the group policy
- Possess adequate food, water, and equipment to sustain themselves for 24 hours, in any season, as determined by the group policy or local jurisdiction in the anticipated areas of operation
- Know and follow safe driving procedures, as determined by the group policy or local jurisdiction
  - Be prepared to wear the ASRC Blue uniform shirt for multi-group responses.

## SAR Field Level IV (Trainee)

A Level IV "Trainee" possesses the minimum knowledge, skills and equipment necessary to respond to a ground search and rescue incident and avoid becoming a burden on the mission.

The Level IV "Trainee" certification is a temporary entry level certification issued by the local team's Group Training Officer. It is the intent that, within a short period of time (recommended maximum 18 months), all members will progress to a higher level of certification.

A member at this level has the ability to **recognize** the hazards and risks in a given situation, or environment, and is able to request appropriate resources for search and rescue operations. Individuals at this level function **only** under direct supervision of a more senior member. Trainees **may not** enter a hazard zone, but may serve other support functions outside the hazard zone. Trainees may accompany a field team if their equipment, knowledge, and skill set do not become a burden to the team.

### Requirements

#### General (SAR FIELD IV)

- IV-1. No required prior wilderness, search, or rescue skills
- IV-2. Complete the team application process.
- IV-3. Acquire all team-required clearances (background check, child abuse, etc.)
- IV-4. Gain an understanding of the ~~team~~team's policies and procedures
- IV-5. Successfully complete, and possess certification for, ~~this course~~this course:
  - IV-5.1. IS-100.b ([ICS-100.b](#)) or IS-100.c ([ICS-100.c](#)): Introduction to the Incident Command System, ~~ICS-~~  
~~100~~
  - IV-6. Participate in a minimum of one group practical field training, or ~~exercise~~
  - IV-7. Demonstrate the ability to function as an effective member of a field team on a supervised task

#### Personal Health and Safety (SAR FIELD IV)

- IV-8. Maintain effectiveness and avoid becoming a burden on the field team for at least 6 hours
- IV-9. Demonstrate proper clothing selection for current and anticipated weather

- IV-9.1. Explain the concept of layered clothing, including:
  - IV-9.1.1. Defining each layer
  - IV-9.1.2. Describe the function of each layer
  - IV-9.1.3. Describe advantages of materials used in each layer
  - IV-9.1.4. Describe the disadvantages of materials used in each layer

- IV-10. Describe prevention, ~~and detection~~ and basic wilderness first aid treatment of the following medical conditions
  - IV-10.1. Heat exhaustion
  - IV-10.2. Heat~~s~~ Stroke
  - IV-10.3. Hypothermia

- IV-11. Using urinary frequency and color, demonstrate an understanding of dehydration detection
- IV-12. Present your personal field pack, including:

- IV-12.1. Appropriate field pack
- IV-12.2. Nutrition
  - IV-12.2.1. Food for 24 hours

**Commented [KC1]:** If the Field IV training and testing is to ensure safety in the WSAR context, should we have Field IV complete this training and testing before getting involved in field training? Raising this for discussion only, don't think we need to change it. If we don't change it, however, we need to have a policy for mitigating risks that the Field IV doesn't know about, such as requiring the GTO to make sure that applicants only participate in field training where their safety from field hazards is assured by close supervision.

**Commented [KC2]:** Please look at the Field IV curriculum in the *Training Guide*. There are other hazard mitigation topics covered there, and in our officially-approved and published *Essentials for Search and Rescue*, that should be reflected here. Examples include fatigue; vehicle hazards (walking along roads as well as driving); rockfall and "ROCK!"; situational awareness; ticks and Lyme disease; poison ivy; and frostbite. And the discussion of conduct in both extends beyond just "freelancing."

**Commented [KC3]:** If we're requiring all this, it's only a short step to outline basic field treatment.

- IV-12.2.2. Water (at least 1 liter)
- IV-12.3. Personal Protective Equipment (PPE):
- IV-12.3.1. Medical Gloves (non-latex, at least 2 pairs)
  - IV-12.3.2. Leather palm (or similar) Work gloves
  - IV-12.3.3. High-visibility vest with reflective markings
  - IV-12.3.4. Eye protection (safety glasses)
- IV-12.4. Clothing
- IV-12.4.1. Outerwear appropriate to the current weather
  - IV-12.4.2. Footwear appropriate to the current weather
  - IV-12.4.3. Weather gear for potential weather changes in the individual group's operational area
- IV-12.5. PPE knowledge, as determined by the individual group, includes:
- IV-12.5.1. Describe the reason for carrying each piece of PPE
  - IV-12.5.2. Demonstrate the use of all PPE found in one's pack
  - IV-12.5.3. Tell when other PPE is needed in your team's area (i.e., Personal Flotation Devices)
- IV-13.** IV-12.6. Survival Equipment
- IV-13.1. IV-12.6.1. Trash bags (5)
  - IV-13.2. IV-12.6.2. Five one-gallon zip lock bags
  - IV-13.3. IV-12.6.3. Candle/Firestarting material
  - IV-13.4. IV-12.6.4. Matches /lighter (waterproof)
  - IV-13.5. IV-12.6.5. Whistle (*plastic* without cork)
  - IV-13.6. IV-12.6.6. Personal first aid kit
  - IV-13.7. IV-12.6.7. Small knife or multi-tool
- IV-14.** IV-12.7. Search Equipment
- IV-14.1. IV-12.7.1. Orienteering style compass (rectangular base)
  - IV-14.2. IV-12.7.2. Headlamp and second light source (with an extra set of batteries for each)
  - IV-14.3. IV-12.7.3. Pencil and paper (either store in a zip-lock bag or waterproof paper/pen)
  - IV-14.4. IV-12.7.4. Roll of flagging tape
  - IV-14.5. IV-12.7.5. Permanent marker (*i.e.e.g.* Sharpie) to write on flagging tape
- IV-14.6.** IV-13. While wearing your field pack, participate in a field task of at least 2 hours duration

**Commented [KC4]:** Do we need to cover bloodborne pathogens at the Field IV level? Virginia seems to be moving that way. Here it is in Field III. In the *Training Guide* draft, I put it in Field III, too. If so, we may want to specify that we tell Field IV personnel to not get exposed to blood.

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**Commented [KC5]:** Really? Five?

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#### Navigation (SAR FIELD IV)

- IV-15.** IV-14. Using your preferred electronic navigational device (such as dedicated GPS, or Smart Phone GPS app, etc.), determine and report your current US National Grid (USNG) location. —(Example: USNG.app)
- IV-16.** IV-15. Given a set of USNG coordinates, plot a single point on a topographic map

#### Communication Skills (SAR FIELD IV)

- IV-17.** IV-16. Using English, demonstrate the ability to provide accurate, clear, and effective verbal communication

- IV-18.** IV-17. Using a team-owned portable radio, demonstrate ability to send and receive a message

- IV-19.** IV-18. Using a GPS and a team-owned portable radio, transmit your current USNG location

- IV-20.** IV-19. Discuss properly interfacing with the Media

#### Search Skills (SAR FIELD IV)

- IV-21.** IV-20. Describe your team's alerting process, member tracking, and your role in the system

- IV-22.** IV-21. Demonstrate signing into and out of a mission (may simulate using real forms)

- IV-23.** IV-22. Explain the use of a Search and Rescue (SAR) staging area

- IV-24.** IV-23. Define the term "freelancing"

- IV-25.** IV-24. Explain how "freelancing" can interfere with the organized search effort

#### Rescue Skills (SAR FIELD IV)

- IV-26.** IV-25. While participating as a member of a litter team on level ground, demonstrate

- IV-27IV-26. Properly carrying a litter as part of a 6 person team, including laddering and toenailing
- IV-28IV-27. Rotating through the various litter carry positions
- IV-29IV-28. Announcing or responding to litter movement commands

**Commented [KC6]:** This is included in *Essentials for SAR* that we approved.

## SAR Field Level III

A member at this level is prepared to serve as a **member** of a field search team. This includes having the ability to recognize the hazards and risks of a given situation, use equipment, and participate as a litter team member in a low-angle rescue operation.

Field team tasks at this level include basic search skills, limited navigational skills, and can perform field team duties, such as communications, medic, or search team member.

Individuals at this level can lead teams on a linear task (i.e. trail or road walking), help coordinate and supervise emergent volunteers (supporting a Level II or Level I team leader) or serve other support functions.

### Requirements

#### General (SAR FIELD III)

III-1. Successfully complete, and possess certification for, these courses:

- III-1.1. IS-200.b: ICS for Single Resources and Initial Action Incidents
- III-1.2. Bloodborne Pathogen Program - Infection Control Training or equivalent
- III-1.3. CPR for Healthcare Professionals or an equivalent

**Commented [KC7]:** I think we need specifics of how we usually implement the ICS and fit within it. See the draft *Training Guide* for more.

III-2. Define the phases of a search and rescue task:

- III-2.1. Receiving a task briefing
- III-2.2. Preplan (Equipment and personnel needs)
- III-2.3. Describe a search strategy for the task
- III-2.4. Describe the search tactics and techniques to use
- III-2.5. Describe how to ensure completion of assigned task/area
- III-2.6. Debriefing team and reporting to mission base
- III-2.7. Team rehabilitation and assessing readiness for additional tasks

**Commented [KC8]:** We decided to integrate wilderness first aid into our standards and training, and this includes CPR and bloodborne pathogens training as they are part of wilderness first aid. See the draft *Training Guide*. External certs are no longer required by a prior vote of the BOD. Groups may still require these, however. And Virginia thinks that SAR teams need SAR-specific bloodborne pathogen training, so maybe we need to do the same. I have added this to the draft *Training Guide*, and Katy Hart of SMRG agreed to review this and compare with her recent training in the Virginia course. And as with other wilderness first aid topics, this should be moved to Field II.

III-3. Describe these field team roles:

- III-3.1. Team Leader
- III-3.2. Navigator
- III-3.3. Radio Operator
- III-3.4. Medic
- III-3.5. Rescue Specialist
- III-3.6. CanineK9 Handler
- III-3.7. Dog team member "walker" /"flanker" for a dog task (area and trailing)

III-4. Demonstrate your SAR pack with the following Additional personal equipment (in addition to that listed for Level IV)

- III-4.1. 1 inch tubular webbing (25' length for "normal" weight member or 30' length for larger)
- III-4.2. 2 locking carabiners (aluminum)
- III-4.3. 2 lengths of 7mm or 8mm climbing-grade accessory cord suitable for tying prusiesPrusiks
- III-4.4. Demonstrate proper donning of a mountaineering helmet with chin strap (may be team equipment)

**III-5.** Describe the signs symptoms and preventative measure for the following health concerns:

- III-5.1. Fatigue and/ exhaustion
- III-5.2. Blisters on the hand and foot
- III-5.3. Simple cuts and scrapes
- III-5.4. Bites or stings of insects and ticks

**Commented [KC9]:** This and all other wilderness first aid topics should be moved to Field II to balance the amount of material in each level.

**III-6.** Describe the symptoms of the following health concerns:

- III-6.1. Fatigue / exhaustion
- III-6.2. Blisters on the hand and foot
- III-6.3. Simple cuts and scrapes
- III-6.4. Bites or stings of insects and ticks

**III-7.** Describe the preventative measures for the following health concerns:

- III-7.1. Fatigue / Exhaustion
- III-7.2. Blisters on the hand and foot
- III-7.3. Simple cuts and scrapes
- III-7.4. Bites or stings of insects and ticks

**III-8. III-6.** Describe personal hygiene in the wilderness, including sanitation requirements and techniques.

**III-9. III-7.** Demonstrate the following field survival skills:

- III-9.1. III-7.1. Using materials from your field pack, construct an emergency shelter
- III-9.2. III-7.2. Describe appropriate water purification techniques

**III-10. III-8.** Discuss the advantages and disadvantages of the following emergency signaling devices

- III-10.1. III-8.1. Whistle
- III-10.2. III-8.2. Chemical light sticks
- III-10.3. III-8.3. Flares
- III-10.4. III-8.4. Smoke

**III-11.** Discuss the disadvantages of the following emergency signaling devices

- III-11.1. Whistle
- III-11.2. Chemical light sticks
- III-11.3. Flares
- III-11.4. Smoke

#### LEGAL ASPECTS OF SEARCH AND RESCUE (SAR FIELD III)

**III-12. III-9.** Describe and demonstrate field clue management:

- III-12.1. III-9.1. Crime scene preservation concerns
- III-12.2. III-9.2. Clue marking
- III-12.3. III-9.3. Chain of custody evidence issues
- III-12.4. III-9.4. Assessment of clue relevance
- III-12.5. III-9.5. Reporting clues to base

**III-13. III-10.** Describe privacy and information confidentiality with regards to:

- III-13.1. III-10.1. Missions
- III-13.2. III-10.2. Subjects
- III-13.3. III-10.3. Witnesses
- III-13.4. III-10.4. Patients

**III-14.** Given real or simulated written or verbal scenarios, demonstrate an understanding of private property:

**III-14.1. III-11.** Rules the laws and legal principles governing Search and Rescue (SAR) team entry onto private property and how they can affect a search and/or rescue operation task

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#### Land Navigation Skills (SAR FIELD III)

**III-15. III-12.** Demonstrate the use of a magnetic compass:

- III-15.1. III-12.1. Orient a map to North

III-15.2.III-12.2. Determine a bearing to a target

III-15.3.III-12.3. Identify a target given a magnetic bearing

III-16.III-13. Demonstrate an understanding of these navigation terms:

III-16.1.III-13.1. North

III-16.1.1.III-13.1.1. True

III-16.1.2.III-13.1.2. Magnetic

III-16.1.3.III-13.1.3. Grid

III-16.2.III-13.2. Declination

III-16.2.1.III-13.2.1. Converting from map to compass

III-16.2.2.III-13.2.2. Converting from compass to map

III-16.3.III-13.3. Map Datum

III-16.4.III-13.4. Contour Lines

III-16.4.1.III-13.4.1. Index

III-16.4.2.III-13.4.2. Intermediate

III-16.4.3.III-13.4.3. Supplementary

III-16.5.III-13.5. Explain the use of the following maps used in search and rescue:

III-16.5.1.III-13.5.1. Topographical

III-16.5.2.III-13.5.2. Street ##

III-16.5.3.III-13.5.3. Aerial imagery

III-16.5.4.III-13.5.4. Use of the "ASRC Grid" for special maps (example – park, building, complex, campus, etc.)

III-16.6.III-13.6. Demonstrate ability to locate and follow a linear feature

III-16.6.1.III-13.6.1. Example: using a topo map, navigate a nearby trail for a simulated hasty task

III-16.7.III-13.7. Given a GPS (Global Positioning Systems) unit (may be team-owned), demonstrate proficiency for the following tasks:

III-16.7.1.III-13.7.1. Explain the basics of how a GPS determines location

III-16.7.2.III-13.7.2. List two limitations / sources of GPS errors

III-16.7.3.III-13.7.3. Compare / contrast the benefits of a GPS vs map and compass for navigation

III-16.7.4.III-13.7.4. Install batteries in the GPS unit

III-16.7.5.III-13.7.5. Power the GPS unit on

III-16.7.6.III-13.7.6. Change the datum NAD27 then back to WGS84/NAD83

III-16.7.7.III-13.7.7. Change the unit of distance (example - miles, Kilometers, meters, etc.)

III-16.7.8.III-13.7.8. Set the position format to USNG (US National Grid)

III-16.7.9.III-13.7.9. Clear the track log (If available on the unit being used)

III-16.7.10.III-13.7.10. Determine the coordinates for your current location

III-16.7.11.III-13.7.11. Using the coordinates, Plot your location on a paper map

III-16.7.12. Mark your current location as a waypoint (e.g.,

III-16.7.12.1.III-13.7.12. i.e. mark where you parked your car]

III-16.7.13. Locate a previously stored waypoint

III-16.7.13.1.III-13.7.13. i.e. (e.g., how would you return to the previously marked car]

III-16.7.14.III-13.7.14. Enter a new waypoint given USNG coordinates (simulating the coordinates of a "find" to which you must navigate)

III-16.7.15.III-13.7.15. Set the GPS to guide you to the new waypoint (i.e. the "find" location)

III-16.8.III-13.8. Given only USNG coordinates, a GPS, a compass, and a topographic map, navigate at least 500m to a single point.

#### Communication Skills (SAR FIELD III)

III-17.III-14. Demonstrate accurate, clear, and effective verbal communication

III-18.III-15. Using a team portable radio, demonstrate:

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- III-18.1. Preparing the radio for field use (install battery(s), antenna)
- III-18.2. Selecting the proper channel and “locking” the radio on that channel
- III-18.3. In the field, change the radio channel
- III-18.4. Using proper protocols, demonstrate the ability to contact another field unit
- III-18.5. Using the phonetic alphabet, convey detailed information (spell a difficult last name)

III-19. Demonstrate an understanding of non-radio communications:

III-19.1. Whistles

III-19.2. Search Skills (SAR FIELD III)

III-20. Describe these search terms:

- III-20.1. Passive
- III-20.2. Attraction
- III-20.3. Containment
- III-20.4. Active Search
- III-20.5. Hasty Field team
- III-20.6. linear (trail, road, stream)
- III-20.7. Points of interest & high yield areas
- III-20.8. K9-Canine team – Trailing/tracking
- III-20.9. Canine-K9 team – Air Scent (Area)
- III-20.10. Area Search

III-20.11. Field Team

III-20.11.1. Loose grid (lay and pick up flag line)

III-20.11.2. Tight grid or Evidence (lay and pick up flag line)

III-20.11.3. K9-Canine Team

III-20.11.4. Trailing/tracking

III-20.11.5. K9 Team

III-20.11.6. Mantracker/signcutter

III-21. Demonstrate a basic understanding of the following search procedures, policies and guidelines:

- III-21.1. Mission briefing
- III-21.2. Staging resources
- III-21.3. Task briefing
- III-21.4. Task debriefing
- III-21.5. Mission debriefing / After-action report / Hot Wash
- III-21.6. Working with other agencies

III-22. If you are the first member of your team to arrive at a mission, explain the actions you should take

III-22.1. If yours is the first SAR team at mission

III-22.2. If other SAR teams are already on scene

III-23. Demonstrate an understanding of the following operational terms:

- III-23.1. Search
- III-23.2. Rescue
- III-23.3. Recovery

III-24. In your typical operational area, demonstrate the ability to perform as a member of a search team in these environments:

III-24.1. Day

III-24.2. Night

III-25. Lead a small field search team on a simulated linear (hasty) task

#### Basic Ropes and Rope System Skills (SAR FIELD III)

III-25.1. Demonstrate proficiency by/in tying these knots and hitches and describe their application:

**Commented [KC10]:** Is this supposed to be a heading for the following sections? If so it needs to be upgraded to a higher outline level

**Formatted**

**Commented [KC11]:** Duplicate two lines above

- III-25.1.1. III-23.1.1. Construct an ASRC Seat Harness on yourself
- III-25.1.2. III-23.1.2. Double overhand bend (aka: Double fisherman's, Barrel knot)
- III-25.1.3. III-23.1.3. Three wrap prusik hitch
- III-25.1.4. III-23.1.4. Overhand bend (aka: water knot) in webbing

**III-25.2. Describe the application of the following knots and hitches**

- III-25.2.1. An ASRC Seat Harness
- III-25.2.2. Double overhand bend (aka: Double fisherman's, Barrel knot)
- III-25.2.3. Three wrap prusik hitch
- III-25.2.4. Overhand bend (aka: water knot) in webbing

**Rescue Skills (SAR FIELD III)**

- III-25.3. III-23.2. Demonstrate instructing competence as litter bearer, and directing, a litter team on level ground, including standard commands, rotating litter bearers, laddering and toenailing
- III-25.4. Rotating positions
- III-25.5. Movement commands
- III-25.6. III-23.3. As part of a low angle (steep semi-technical) evacuation litter team (using an ASRC seat harness and prusiePrusik) attach yourself to a litter
- III-25.7. III-23.4. Using a hauling system rigged by others, serve as part of a hauling team
- III-25.8. III-23.5. Using a belay system rigged by others, demonstrate proper belay operation

**Subject (Find) Management Skills (SAR FIELD III)**

- III-25.9. III-23.6. Demonstrate understanding of subject aid procedures:
- III-25.10. III-23.7. Assessing subject status and determining appropriate next steps
- III-25.11. III-23.8. Define ASRC Status 1
  - III-25.11.1. III-23.8.1. Next Steps - You are on the find team
  - III-25.11.2. III-23.8.2. Next Steps - You are on a different field team
- III-25.12. III-23.9. Define ASRC Status 2
  - III-25.12.1. III-23.9.1. Next Steps - You are on the find team
  - III-25.12.2. III-23.9.2. Next Steps - You are on a different field team
- III-25.13. III-23.10. Define ASRC Status 3
  - III-25.13.1. III-23.10.1. Next Steps - You are on the find team
  - III-25.13.2. III-23.10.2. Next Steps - You are on a different field team
- III-25.13.2.1. III-23.10.2.1. Determining the need for additional assistance
- III-25.13.2.2. III-23.10.2.2. Communicating information with Base
  - III-25.13.3. III-23.10.3. Describe how to determine best means to communicate each status to base
  - III-25.13.4. III-23.10.4. How to report a subject "status" on radio
  - III-25.13.5. III-23.10.5. Determining and communicating location
  - III-25.13.6. III-23.10.6. Communicating medical/extrication needs of the subject
- III-25.14. III-23.11. Identifying an extraction route and facilitating access by other teams to the find location

**Commented [KC12]:** I think most of this should be in Field II and integrated into the wilderness first aid portion

**Medical Skills (Force Protection) (SAR FIELD III)**

- III-26. III-24. Describe first aid for the following:
  - III-26.1. III-24.1. Simple cuts and scrapes
  - III-26.2. III-24.2. Blisters on the hand and foot
  - III-26.3. III-24.3. Minor (thermal/heat) burns or scalds (superficial, or first degree)
  - III-26.4. III-24.4. Bites or stings of insects and ticks
  - III-26.5. III-24.5. Frostbite and sunburn
- III-27. III-25. **Optional** Additional First Aid Skills for teams opting to integrate first aid into their internal training program

**Commented [KC13]:** By prior vote of the BOD this is not optional, but required, and I agree with that requirement. However, the ASRC Credentialing Board may wish to accept a wilderness first aid credential to satisfy these requirements instead of testing on written and practical tests, but that is up to the Credentialing Board. Also, there is nothing in here about primary and secondary assessments and vital signs (essential if we provide a wilderness first aid credential as we voted to do). I have included them for Field III in the draft training guide, but that makes a lot of first aid for Field III, so we might want to move some of it to Field II. There is nothing here at all about musculoskeletal injuries, which however are covered in the draft Training Guide.

III-28.III-26. Demonstrate Identify first aid for the following:

- III-28.1.III-26.1. Simple cuts and scrapes
- III-28.2.III-26.2. Blisters on the hand and foot
- III-28.3.III-26.3. Minor (thermal/heat) burns or scalds (superficial, or first degree)
- III-28.4.III-26.4. Bites or stings of insects and ticks
- III-28.5.III-26.5. Nosebleed
- III-28.6.III-26.6. Frostbite and sunburn

III-29.III-27. Demonstrate First Aid for others the following:

- III-29.1.III-27.1. Dehydration
- III-29.2.III-27.2. Heat exhaustion
- III-29.3.III-27.3. Heat Stroke/Heatstroke
- III-29.4.III-27.4. Hypothermia
- III-29.5.III-27.5. Hyperventilation
- III-29.6.III-27.6. Hypoglycemia

#### Leadership Skills (SAR FIELD III)

III-30.III-28. Demonstrate leading a small field team on a simple linear (Hasty) task

- III-30.1.III-28.1. Briefing by command
- III-30.2.III-28.2. Assembling a team
- III-30.3.III-28.3. Briefing your field team
- III-30.4.III-28.4. Acquiring the necessary equipment for the task
- III-30.5.III-28.5. Completing the Task Assignment Form
- III-30.6.III-28.6. Performing the task
- III-30.7.III-28.7. Completing the task
- III-30.8.III-28.8. Debriefing

**Commented [KC14]:** I find it inexplicable that we should expect our members to know about hyperventilation but not psychological first aid. In the draft *Training Guide*, there is a section on psychological first aid that mentions hyperventilation as a symptom of an immediate stress reaction.

## SAR Field Level II

A member at this level is proficient in leading a field team on a complex search task, caring for their assigned teams, and managing find. Managing a find includes calling for additional resources, planning an extrication, and if need be, "operate" a low angle rope system. Level II members have the ability to recognize the hazards and risks in a given situation or environment and determine appropriate mitigation methods. Level II members can use equipment, and apply advanced search and rescue techniques to an operation.

### Requirements

#### General (SAR FIELD II)

II-1. Successfully complete, and possess certification for, these courses:

- II-1.1. IS-700.a: National Incident Management System (NIMS), An Introduction
- II-1.2. Complete a hazardous material awareness training courses; one of the following or equivalent
  - II-1.2.1.IS-5.A: An Introduction to Hazardous Materials
  - II-1.2.2.NFPA 472: HazMat Awareness
  - II-1.2.3.OSHA 1910.120(Q)(6)(i): HazMat Awareness Training
  - II-1.2.4.CERT HazMat Introduction

II-2. Participate in at least 3 field exercises as part of a field search team – at least one must be at a real mission or full-scale simulation

II-3. Demonstrate adequately inspecting PPE to determine

- II-3.1. Wear
- II-3.2. Damage
- II-3.3. Operational readiness

II-4. Demonstrate an advanced understanding of these phases of a search operation:

- II-4.1. Preplan
- II-4.2. Notification
- II-4.3. Planning a Strategy
- II-4.4. Tactics and Techniques
- II-4.5. Suspension
- II-4.6. After Action Review

II-5. Demonstrate an understanding of these search operation terms including their impact on operations:

- II-5.1. PLS: Point Last Scene
- II-5.2. LKP: Last Known Point
- II-5.3. Search segment/area
- II-5.4. POA: Probability of Area
- II-5.5. POD: Probability of Detection
- II-5.6. POS: Probability of Success

II-6. Demonstrate an advanced understanding of these field team roles, their use in search and the role of a team leader in facilitating effectiveness of the members in these roles:

- II-6.1. Leader
- II-6.2. Navigator
- II-6.3. Radio Operator
- II-6.4. Medic
- II-6.5. K9 Handler (Airscent, Tracking/trailing, human remains)
- II-6.6. Mantracker/signcutter

II-7. Demonstrate instructing a radio operator for a field team you are leading

**Commented [KC15]:** Think these should be in Field III so that they understand what people in Base tell them during briefing and debriefing.

**Commented [KC16]:** I have no idea what an "advanced" understanding of these roles is as distinct from a basic understanding. Or of the phases of a search operation, above.

## Personal Health and Safety (SAR FIELD II)

II-8. Describe the five (5) methods in which the body loses heat and how each can be overcome:

- II-8.1. Conduction
- II-8.2. Convection
- II-8.3. Evaporation
- II-8.4. Radiation
- II-8.5. Respiration

II-9. Describe body heat transfer including:

- II-9.1. Positive effects of heat loss
- II-9.2. Negative effects of heat loss
- II-9.3. Methods to assist heat loss
- II-9.4. Methods to prevent heat loss

II-10. Describe the intrinsic hazards within the region of operation, including (there may be others):

- II-10.1. Weather
- II-10.2. Terrain
- II-10.3. Hazardous Plants
- II-10.4. Bodies of water
- II-10.5. Wild / Domestic animals
- II-10.6. Illegal Activities

II-11. Demonstrate these aspects of field survival:

- II-11.1. Locate an optimal location for a field team to "hunker down" (i.e. during a storm)
- II-11.2. Supporting less prepared/emergent volunteer team members
- II-11.3. Demonstrate an overnight "bivouac" by staying out overnight using only equipment you carried throughout the day. This can be in any season

**Commented [KC17]:** This has been pretty well covered in Field IV and *Essentials for SAR*. That's a good place to keep it.

**Commented [KC18]:** This too.

## Legal Aspects of Search and Rescue (SAR FIELD II)

II-12. Define these factors necessary to prove negligence:

- II-12.1. Duty to act
- II-12.2. Breach of duty
- II-12.3. Breach of duty caused harm
- II-12.4. Suffers harm as a result of the breach

II-13. Demonstrate an understanding of the following forms of consent

- II-13.1. Implied consent
- II-13.2. **Expressed** consent
- II-13.3. Informed consent

**Commented [KC19]:** The legal term is "express" and not "expressed"

II-14. Describe the tort of battery and how it is avoided

II-15. Describe the tort of abandonment and how it is avoided

**Commented [KC20]:** These things can be the basis of a criminal action as well as a tort claim so would reward.

## Land Navigation Skills (SAR FIELD II)

### Land Navigation Skills (SAR FIELD II)

**Overarching Goals:** An SAR FIELD II should be proficient in land navigation, including determining current location using a topo map and GPS Device, accurately plotting points based upon provided USNG coordinates on a paper map, entering waypoints into a GPS given USNG coordinates, efficient route planning using both linear features and cross-country navigation, and navigating to and within an assigned task area to achieve complete coverage of the assigned task area.

**Commented [KC21]:** Duplicate Heading

II-16. Demonstrate proficiency in the following navigation skills:

II-16.1. Demonstrate proficiency with reading and interpreting a 7.5 minute topographic map, by discussing these features:

- II-16.1.1. Border information (scale, datum, declination, contour interval, adjacent maps)
- II-16.1.2. Information conveyed by various colors
- II-16.1.3. Symbols used for manmade object, including:
  - II-16.1.3.1. Highways, roads, trails and bridges
  - II-16.1.3.2. Power lines, pipelines
  - II-16.1.3.3. Buildings, schools, churches and cemeteries
  - II-16.1.3.4. Storage tanks, wells, mines, caves, picnic areas and campsites
  - II-16.1.3.5. Benchmarks (control stations) and spot elevations
  - II-16.1.3.6. Boundaries, fence and other landmark lines

II-16.1.4. Contour lines:

- II-16.1.4.1. Elevations, Depressions, ridges, valleys
- II-16.1.4.2. Convoluted Terrain

II-16.1.5. Water:

- II-16.1.5.1. Ponds, lakes, rivers,
- II-16.1.5.2. Perennial and intermittent streams
- II-16.1.5.3. Marshes & swamps
- II-16.1.5.4. Photo revisions.

II-16.2. Preparing for Navigation

- II-16.2.1. Orient a printed paper map of your current location using Terrain Association
- II-16.2.2. Prepare a GPS for use
  - II-16.2.2.1. Set Datum (Demonstrate changing to NAD27 & WGS84 datums)
  - II-16.2.2.2. Set coordinate system (Demonstrate changing to USNG, UTM, and Lat/Long DD.DDDDDDD, and Lat/Long DD MM.MMM)
  - II-16.2.2.3. Plotting points and entering waypoints
  - II-16.2.2.4. Given USNG coordinates, accurately plot three points on a paper topo map
  - II-16.2.2.5. Given USNG coordinates, enter 3 waypoints into your GPS

**Commented [KC22]:** In order to navigate with a topo map, I think that this should be in Field III rather than Field II

II-16.3. Planning Navigation

- II-16.3.1. Using a paper map plan a route using both linear features and cross-country navigation to move between any two points. (to include navigating around an impassable obstacle)
- II-16.3.2. Identify starting and ending points
- II-16.3.3. Route planning for efficient completion of the task
- II-16.3.4. Tricks to optimize speed

II-16.4. Demonstrate Successful Navigation

- II-16.4.1. Using a GPS, a paper map, and a compass, navigate to 3 indistinct points (not along linear features) totaling at least 1 kilometer and return to the starting point
- II-16.4.2. Navigate to an assigned task area
- II-16.4.3. Given a map showing an assigned 20 acre task area with at least one "side" that is indistinct (not along a linear feature) located within 1 km of starting point, navigate to assigned area and circumnavigate the assigned area.
- II-16.4.4. Uploading and downloading tracks
  - II-16.4.4.1. Using team GPS, if available, and personal GPS or GPS app if available (but must do one or the other) Demonstrate the ability to upload the GPS track from a completed field task
  - II-16.4.4.2. Demonstrate the ability to download a Shape file for a planned task into a GPS then display that on the screen of the device

**Commented [KC23]:** If a Field III can't do this they shouldn't be going into the field. To Field III.

**Commented [KC24]:** This also needs to be in Field III if we expect them to navigate via GPS

**Commented [KC25]:** Neither Gaia nor Backcountry Navigator offer USNG as an option, so if using these (which I do all the time) you can't switch to USNG. Maybe "USNG or UTM"?

**Commented [KC26]:** If we want them to plot waypoints for clues, which we do, this should be in Field III too

**Commented [KC27]:** Also needs to be in Field III

#### Communications Skills (SAR FIELD II)

II-17. Demonstrate the use of all team-owned portable radio equipment, including:

- II-17.1. Setting up and testing prior to a task
- II-17.2. List 3 other (non-radio) means of communicating a critical message

**Commented [KC28]:** By this do you mean converting a .shp file to something like a .gpx file that a Garmin can understand and then downloading it? Or just downloading a .gpx file that has a shape in it? Never mind. Just checked with Patty Lindsay and SARTopo doesn't use .shp files, so being able to deal with .gpx files (or maybe eventually .pdf files) is all we need.

- II-17.3. Describe how to improve the communications path due to an inability to contact base via radio
- II-17.3.1. Improve signal (stand up, use bigger antenna)
  - II-17.3.2. Location (go to top of hill "looking toward" base)
  - II-17.3.3. Use other teams as a relay
  - II-17.3.3.1. Describe the duties for the field team Radio Operator
  - II-17.3.3.2. Demonstrate properly interfacing with the Medic

#### Search Skills (SAR FIELD II)

- II-18. Discuss how to determine whether to use either active or passive search techniques

- II-18.1. Demonstrate understanding of these tracking skills:
  - II-18.1.1. Sign vs Track
  - II-18.1.2. Sign-cutting vs Tracking
  - II-18.1.3. Sign / Track preservation
  - II-18.1.4. Demonstrate use of a "tracking stick" to follow a trail for 5 steps
  - II-18.1.5. Demonstrate leading a team on an area search task of at least 20 acres
  - II-18.1.6. Brief the field team
- II-18.2. Complete an area search task
  - II-18.2.1. Place and remove "edge markers" to insure coverage
  - II-18.2.2. Describe your responsibilities should your team make a find
  - II-18.2.3. Debrief your field team
- II-18.3. Describe the role of a "walker" for a **K9-canine** task
  - II-18.3.1. Support of the Dog Handler
  - II-18.3.2. Navigation and position reporting
  - II-18.3.3. Communications
  - II-18.3.4. Find Management

**Commented [KC29]:** This should be Field III.

#### Basic Ropes and Rope System Skills (SAR FIELD II)

- II-19. Demonstrate proficiency with the construction of the following:

- II-19.1. Figure 8 knot (for the end of a rope)
- II-19.2. Figure 8 on a bight
- II-19.3. Figure 8 follow through (Figure 8 around an object)
- II-19.4. Single point anchor system with the wrap three/pull two
- II-19.5. Single point anchor system with the basket methods
- II-19.6. Attach a team litter to a rope system for a low angle operation

**Commented [KC30]:** Added clove hitch as used to rig rope to head of litter.

- II-20. Demonstrate proficiency with the operation of these systems (rigged by others):

- II-20.1. A simple 3:1 mechanical advantage system, with appropriate safety
- II-20.2. A Rope lowering system, with appropriate safety

#### Subject Management Skills (SAR FIELD II)

- II-21. Demonstrate an understanding of the Subject's Behavior

- II-21.1. (for example, whether behavior threatens the safety of the team, or other subjects)

- II-22. Demonstrate the ability to develop an evacuation plan for the subject

- II-23. Demonstrate an advanced understanding of these techniques for field care:

- II-24. Universal precautions (for example, body substance isolation, or PPE)

- II-24.1. Treatment of injury (engaging a "medic")
- II-24.2. Extrication
- II-24.3. Planning
- II-24.4. Management

**Commented [KC31]:** This really needs to covered as part of wilderness first aid wherever it ends up

- II-25. Demonstrate packaging a subject in a basket litter:

- II-25.1. Appropriately protected from weather
- II-25.2. To "protect" an existing injury
- II-25.3. To prevent further heat loss in hypothermia
- II-25.4. Adequately secured for horizontal evacuation
- II-25.5. Adequately secured for low angle extrication, including "tie in" for subject

II-25.6. Demonstrate subject removal and transport

II-25.7. Proper litter management

    II-25.7.1. Litter transport skills and procedures

    II-25.7.2. Litter calls

II-25.8. Transfer of care

#### Leadership Skills (SAR FIELD II)

II-25.9. Discuss the ability to recognize morale problems in a field team

II-25.10. Discuss techniques used to maintain or improve morale

II-25.11. Describe techniques to maintain situational awareness

II-25.12. Demonstrate delegating tasks within a field team

II-25.13. Demonstrate an understanding of hazard recognition and discuss the steps to mitigate

II-25.14. Discuss the following special issues in which family members are part of a field team

    II-25.14.1. Your team finds the subject

    II-25.14.2. Another team finds the subject

    II-25.14.3. The family member (or another field member) is uncooperative with the Team's assigned task

    II-25.14.4. The subject is status 3

**Commented [KC32]:** These should be covered in Field IV (awareness) and Field III (practical) and need not appear here.

**Commented [KC33]:** Not sure what this means at the wilderness first aid level.

## SAR Field Level I

Members at this level will generally assume the duty of field team leader for any Search or Rescue task or serve other leadership functions including task and field team management such as assisting with briefing and debriefing field teams. A member at this level can also plan, set up, rig, and operate a low angle extrication system from any aboveground wilderness scenario. A member at this level has the ability to recognize the hazards and risks in the given situation or environment (Search, High Angle, Snow and Ice, Disaster, Cave, WMD, etc.) and be able to use equipment and apply advanced search and rescue techniques to operations.

The reader will note that these standards include elements of instruction and evaluation, usually executed in a training environment. These requirements represent the reality that personnel with this level of certification are often called upon to conduct real-time instruction and correct performance (e.g., evaluate) of inexperienced field personnel (e.g., emergent volunteers). These requirements also support group organizational needs to support and sustain group training programs.

FEMA Typing: Type 1 Wilderness Field Search Team Leader

### Requirements

#### General (SAR Field I)

- I-1. Participate in at least 3 field team activities (total 6 since joining ASRC), including at least 3 at a real mission or full-scale exercise, and at least 2 serving as leader of a field team.
- I-2. Lead a team conducting a complex evacuation (must require multiple carries, a hauling or lowering systems, or multiple litter teams)
- I-3. Demonstrate proficiency in the use and operation of all Group Equipment
  - I-3.1. What is its proper name?
  - I-3.2. What are its primary functions?
  - I-3.3. What are its primary features?
  - I-3.4. What are some of the dos for proper handling/use?
  - I-3.5. What are some of the don'ts for proper handling/use?
  - I-3.6. Describe the inspection procedures for function, wear and damage
- I-4. Demonstrate understanding of the standard search operating procedures, requirements, and protocols of the state and other AHJ partners
- I-5. Discuss the following characteristics for hazard analysis and risk mitigation found in Search and Rescue
  - I-5.1. What is the hazard
  - I-5.2. What Risk(s) is/are associated with this hazard
  - I-5.3. What control(s) can be put in place to mitigate this/these risk(s)
- I-6. Demonstrate determining when to use Personal Protective Equipment (PPE) and safety equipment for Search and Rescue Field Activities
- I-7. Nothing additional this level

#### Health and Personal Safety (SAR FIELD I)

- I-6. Demonstrate determining when to use Personal Protective Equipment (PPE) and safety equipment for Search and Rescue Field Activities

Commented [34]: i suggest you remove this word - its too vague

Commented [35]: same comment here - all? what does that mean?

Commented [KC36]: I agree with Michael. I have no idea what this really means or how to evaluate it or how to write educational topics for it other than what's already covered in other places (clothing, shelter, helmets, gloves, bloodborne pathogens).

#### Legal Aspects of Search and Rescue (SAR FIELD I)

- I-7. Nothing additional this level

## Land Navigation Skills (SAR FIELD I)

I-8. Demonstrate an understanding of plotting methods or grid systems using these systems:

- I-8.1. USNG (United States National Grid)
- I-8.2. Convert location between USNG and Lat-Long (using GPS, software, or similar)
- I-8.3. Reporting current location using Latitude – Longitude (DD MM.MMM format) over radio (for example to establish a helicopter landing zone)

I-9. Demonstrate proficiency with nighttime land navigation

- I-9.1. Locate three retro-reflective points at least 300 meters apart using map, compass, and (non-mapping) GPS.

## Communications Skills (SAR FIELD I)

I-10. Demonstrate proficiency with oral and written communications skills:

- I-10.1. Correctly using the ICS Communications log
- I-10.2. Correctly using the ICS Equipment log
- I-10.3. Communicating when radio communications are not being successful
- I-10.4. Describe four (4) techniques for improving communications between a field team and base

**Commented [KC37]:** As far as I know, there has never been an ICS Equipment Log form. There is one in the PSARC forms packet that I created. Why not dump the "ICS" in this item and the one above?

**Commented [KC38]:** This should be in Field II, I think, as it's "FTMs" that usually handle the radio, not the FTL. I put it there in the Training Guide draft.

## Search Skills (SAR FIELD I)

I-11. Describe an attraction "station"

I-12. You are the Team Leader for a group of emergent volunteers tasked with an area search.

- I-12.1. Demonstrate the briefing you would give your team
- I-12.2. Demonstrate the briefing for the radio operator and "medic" on your team

I-13. Explain how to grid search an assigned area

I-14. Discuss area search proficiency, including:

- I-14.1. The role of a team leader
- I-14.2. Selecting and maintaining appropriate spacing
- I-14.3. Approaching, and moving through, a search area
- I-14.4. Techniques to insure area coverage
- I-14.5. Time management
- I-14.6. The trade-off between efficiency and thoroughness

## Basic Rope and Rescue Systems Skills (SAR FIELD I)

I-15. Demonstrate the ability to tie the following

- I-15.1. "Butterfly knot"
- I-15.2. Construct a load releasing hitch (radium release hitch)

I-16. Knowledge of Rope System Design

- I-16.1. Demonstrate the formulation of a rescue plan
- I-16.2. List the steps in a rope rescue operation for a raising system
- I-16.3. List the steps in a rope rescue operation using a lowering system

I-17. Demonstrate proficiency with the construction of these systems:

- I-17.1. Single point anchor system
- I-17.2. using wrap-3-pull-2 anchor
- I-17.3. using the anchor strap method
- I-17.4. using the tensionless hitch
- I-17.5. Properly rigging a load releasing hitch within a system

**Commented [KC39]:** I added the Münter hitch as this is a reasonable method for lowering a litter a short distance down a not-very-steep slope when don't have fancier mechanical gear with you and that makes me want every "FTL" to know this.

**Commented [KC40]:** If we don't expect any of our field qualified people to be able to rappel, why is this here? It's not used for raising and lowering anchors. Wait, I know, I know, it's for rigging a handline.

- I-17.6. A simple 3:1 mechanical advantage system, with appropriate safety
  - I-17.7. Twin-tension systems (for appropriate situations)
- I-18. Demonstrate proficiency with low angle raising systems by performing these tasks:
- I-18.1. Using operational commands and a simple 3:1 raising system, direct a team in a low-angle raising operation
  - I-18.2. While under a simulated load, convert a 3:1 raising system to a lowering system

- I-19. Demonstrate proficiency with low angle lowering systems by performing these tasks:
- I-19.1. Using operational commands, direct a team in a low-angle lowering operation
  - I-19.2. While under simulated load, direct a team in converting a lowering system to a simple 3:1 raising system

**Commented [KC41]:** I think we need to be more specific. If you're using the new 2019 Petzl Evac, it's very easy and there is no need for a Radium hitch. If you're doing it with a rappel rack and then a haul system, it's a lot more complex. Which do we expect Field I to be able to do?

## Leadership Skills (SAR FIELD I)

- I-20. Demonstrate an understanding of the following search process stages:
- I-20.1. Preplanning and Preparation
  - I-20.2. First Notice
  - I-20.3. Check-in
  - I-20.4. Briefing
  - I-20.5. Assignment
  - I-20.6. Debriefing
  - I-20.7. Check-out
  - I-20.8. Return to service
  - I-20.9. Mission Critique
  - I-20.10. Personal Mission Log
- I-21. Lead a field team on an extrication task
- I-22. Demonstrate a team briefing including:
- I-22.1. Subject information
  - I-22.2. Terrain
  - I-22.3. Tactics
  - I-22.4. Clues
  - I-22.5. Weather
  - I-22.6. Safety issues
  - I-22.7. Assignment objectives
  - I-22.8. Attitude
  - I-22.9. Equipment needed
- I-23. Demonstrate a team debriefing, including:
- I-23.1. Clues found
  - I-23.2. Search area coverage
    - I-23.2.1. were there sections of the search area that you could not effectively inspect
  - I-23.3. Safety issues
  - I-23.4. Difficulties, or problems, in the search area
  - I-23.5. Forms and documents
- I-24. Demonstrate helicopter ground support operations (landing zone [LZ]), including:
- I-24.1. Selecting and marking appropriate LZ area size
  - I-24.2. Communicating LZ coordinates to base/aircrew
  - I-24.3. Establishing and maintaining landing zone safety
  - I-24.4. Identifying visible hazards and wind direction
  - I-24.5. Identifying available resources, both personnel and equipment

I-24.6. Effectively communicating conditions and hazards to aircrew

**NOTE:** These Search Manager standards are intended to be functionally unchanged from prior standards.

## Search Manager Level III

A member at this level has the ability to function as a member of a NIMS compliant General staff position, including Operations Section Chief and Planning Section Chief for a missing person or ground portion of a missing aircraft search. Search managers at this level can initiate a search mission, including conducting an initial investigation, starting basic paperwork, and initiating reflex tasking for all resource types.

### Requirements (SM III)

#### General (SM III)

- Be certified as at least the SAR Field II level
- Serve as a general staff member of the Command Post or Base on one incident within the last three years.
- Complete ICS 300: Intermediate ICS for Expanding Incidents (24 hours)
- Complete one of the following courses:
  - Managing Land Search Operations
  - Managing the Lost Person Incident
  - Managing Search Operations
  - Managing the Search Function
  - Other equivalent (contact Conference Training Officer to determine equivalence)
- Receive a favorable evaluation from a supervising or peer Search Manager on your performance.

#### Field Operations

- Describe three sources of weather information
- For each of the following parameters, assign realistic tasks to field teams
  - Terrain
  - Weather
  - Personnel
  - the context of a search

#### Search

- Brief a field team leader properly before a task, including:
  - Subject information
    - History
    - Equipment
    - Behavior and medical history
  - Weather
  - Terrain
  - Known hazards

- The search task
  - Task objectives
  - Clues in the area
  - Estimated time allocated to the task
- Describe the considerations to be taken for an aircraft crash scene
- Given a report of clues found, describe the proper
  - Documentation
  - Response to
- Describe properly managing a field team leader debrief
  - Clues found
  - Search area coverage
    - were there sections of the search area that you could not effectively inspect
  - Safety issues
  - Difficulties, or problems, in the search area
  - Forms and documents
  - Availability for reassignment
- Demonstrate debriefing a Specialty team
  - K9 (including obtaining information on air movement)
  - Mantracker/signcutter
  - Evacuation
  - Medical
  - Aircraft
  - ELT
- Demonstrate plotting bearings from Direction-Finding instruments
- Given a simulated search scenario an Operations Kit and list of resources
  - Complete an accurate Strategy Map
  - Using the generated Strategy Map
    - Generate a set of appropriate tasks to complete the initial strategy
      - Properly generate a Task Assignment Form for each task
      - Create a Status Map
      - Complete the ICS forms
        - Medical
        - Organizational (including ICS 201)
        - Communication
        - Evacuation and Demobilization Plans

## Communications

- Demonstrate deploying antennas and relays, using available high points and ground planes
  - Describe the proper placement of antennas.
- Management
  - Given a simulated mission, develop a comprehensive Communications Plan
  - Describe interfacing via radio with other organizations
    - Local Emergency Departments
    - Civil Air Patrol
    - Ham

## Search Manager Level II

A member at this level has the ability to function as a member of a NIMS compliant Command staff position, including Incident Commander, or part of a unified command for a missing person or ground portion of a missing aircraft search. Search managers at this level can manage a single-site land-search mission, including complex missions, with a base staff up to 20 persons. Additionally, these search managers at this level can fill in a staff position in any size mission.

### Requirements (SM II)

Before advancing to Search Manager Level II, individuals shall complete these requirements:

- Hold the position of Search Manager Level III for at least 1 year
- Be at least 21 years of age
- Serve as a command staff member of the Command Post or Base on one incident (actual or simulated) within the last three years and receive a favorable performance evaluation from a supervising or peer SAR member
- Complete ICS-400: Advanced ICS for Command and General Staff (16 hours)

### Knowledge and Performance Expectations

- Legal Aspects
  - Explain how the following legal concepts apply to search and rescue operations:
    - Good Samaritan Laws
    - Civil suits and criminal actions
    - Standards of care
    - The right to emergency assistance
    - The duties to provide emergency assistance
    - Abandonment
    - Implied consent
    - Entry, during incidents, on property posted "No Trespassing"
    - Crime scene protection
    - Declaration of death
    - Confirmation of death
    - Confidentiality

#### 1. SAR Operations

- a. Define the field team role for these types of missions:
  - i. Lost person search
  - ii. Downed aircraft search
  - iii. Rescue
  - iv. Disaster assistance.
- b. Demonstrate an understanding of the laws, policies, procedures, operating instructions, memorandums and agreements that govern SAR operations in the ASRC's area of operation.
- c. Demonstrate an understanding of the NIMS Incident Command System as it applies to SAR and how the system can be adapted to any size incident.
- d. Demonstrate an understanding of the following SAR resources including:
  1. how they are obtained
  2. their appropriate use

- 3. their inappropriate use
  - ii. Air scent search dogs
  - iii. Tracking/trailing dogs
  - iv. Trackers/Field Team Signcutters
  - v. Specialized SAR management teams
  - vi. Specialized SAR field teams
  - vii. Mounted search teams
  - viii. Fixed wing aircraft
  - ix. Rotary wing aircraft
- e. Demonstrate an understanding of the following non-SAR resources including
  - 1. how they are obtained
  - 2. their potential function in a SAR incident
  - ii. Clergy and religious organizations
  - iii. Critical incident stress management
  - iv. State Coordinating Officer
  - v. Coroner/Medical Examiner
  - vi. Child/Youth protective services
  - vii. Public safety agencies such as fire, police, rescue
  - viii. Federal agencies such as National Park Service (NPS)
  - ix. National Transportation and Safety Board (NTSB)
  - x. Health and Human Services
  - xi. Federal Aviation Administration (FAA)
  - xii. National Guard or other Military units
  - xiii. Federal Emergency Management Agency (FEMA)
  - xiv. Red Cross
  - xv. Salvation Army
  - xvi. Civic clubs
- f. Demonstrate an understanding of Psychics
  - i. When to effectively use them
  - ii. What their concerns are
  - iii. How they impact a SAR incident
  - iv. How to interact with them
  - v. How to effectively use them
  - vi. How to mitigate against their inappropriate external influences
- g. Demonstrate an understanding of the Media
  - i. When to effectively use them
  - ii. What their concerns are
  - iii. How they impact a SAR incident
  - iv. How to interact with them
  - v. How to effectively use them
  - vi. How to mitigate against their inappropriate external influences
- h. Demonstrate an understanding of the Family and friends of the subject(s)
  - i. When to effectively use them
  - ii. What their concerns are
  - iii. How they impact a SAR incident
  - iv. How to interact with them
  - v. How to effectively use them

- vi. How to mitigate against their inappropriate external influences
- i. Describe the role of the Search Manager in relation to the Legal Responsible Agent (RA)
  - i. When the RA is uncooperative
  - ii. When the mission involves or expands into other jurisdictions
- j. Describe the role of the SM in relation to the various resources that may participate in a search mission in the following situations:
  - i. When the SM has overall responsibility for all resources present
  - ii. When the mission involves or expands into other jurisdictions
- k. Demonstrate an understanding of certain legal issues related to SAR including:
  - i. Confidentiality
  - ii. Criminal investigations
  - iii. Discovery of non-incident related illegal activities
  - iv. Liability for lent or donated
    - 1. Equipment
    - 2. Services
    - 3. Supplies
  - v. Maintaining the chain of evidence
  - vi. Management of deceased subjects
  - vii. Restricting access to various areas
  - viii. Restricted airspace
  - ix. Site security and surveillance
  - x. Trespassing
  - xi. Use of minors in SAR incidents
  - xii. Use of SAR personnel for apprehension of criminals and crime scene investigation
- 2. Search Management
  - a. Demonstrate the ability to generate and manage an Incident Action Plan
    - i. including overall incident goals and objectives
    - ii. including daily incident goals and objectives
  - b. Demonstrate the ability to develop and manage a staff
    - i. Describe when and which staff positions, where, and why various functions should be assigned to, including the following functions:
      - 1. Operations
      - 2. Plans
      - 3. Logistics
      - 4. Finance
      - 5. Media liaison
      - 6. Interagency liaison
      - 7. Safety
      - 8. Investigations
      - 9. Clue analysis
  - c. Demonstrate the ability to communicate with the staff
    - i. Staff briefings
    - ii. Staff meetings
    - iii. Written communications
  - d. Describe the internal staff information flow system (verbal, written and electronic communications) required throughout the incident to insure that information is properly
    - i. Collected

- ii. Evaluated
  - iii. Disseminated
  - iv. Utilized
  - v. Stored
- e. Demonstrate the ability to work within a unified command system
- f. Describe communicating with appropriate state SAR coordinating agency
  - i. When to contact
  - ii. How to contact
  - iii. What type of incident information is required
- g. Discuss outside influence problems common to search missions
  - i. Identify
  - ii. Describe solutions
  - iii. Reasoning
- h. Discuss potential safety issues
  - i. Identify
  - ii. How they can be countered (if they can be.)
- i. Describe when risk factors outweigh the need to continue operations.
- j. In an aircraft search, describe the deployment differences for the ground portion of resources for
  - i. Urban
  - ii. Suburban
  - iii. Rural
  - iv. Wilderness
- k. In an aircraft search, describe the differences in search strategies for the ground portion of resources for
  - i. Urban
  - ii. Suburban
  - iii. Rural
  - iv. Wilderness
- l. When working with limited resources
  - i. Describe resource prioritization
  - ii. Describe how such shortages can be overcome (if they can be)
- m. When working with limited resources describe how to effectively/efficiently use them for
  - i. Urban search
  - ii. Suburban search
  - iii. Rural search
  - iv. Wilderness search
- n. Describe the process for suspending a mission
- o. Explain the SM's role after the subject has been located
- p. Stress
  - i. Describe the common signs of incident stress
  - ii. Define the criteria for recommending a critical incident stress debriefing
- q. Demonstrate the ability to complete all necessary mission documentation
- r. FCC Rules and ASRC Radio Communications Policy and SOP:
  - i. Describe FCC rules under which the ASRC operates
  - ii. Describe FCC rules pertinent to the ASRC
  - iii. Discuss the ASRC Communications Policies and SOP

- iv. State the use and number of units allowed for each FCC licensed frequency used by the ASRC
  - v. Describe appropriate concerns with interference with other Nets
- s. Planning
    - i. Describe what is needed and how these organizations can be put to best use
    - ii. Resources -- describe what the organizations can provide and when; and
  - t. Operations
    - i. Find out what they need during operations and try to provide it
    - ii. Explain when a temporary commercial telephone line installation is practical
    - iii. Describe the procedure to obtain a temporary installation
  - u. Maintain proper records (Communications log and equipment sign-out log)

## Search Manager Level I

A member at this level has the ability to function as the Incident Commander or a NIMS compliant Command staff position, or part of a unified command for a missing person or ground portion of a missing aircraft search. Search Managers at this level can manage complex multi-site search missions, and serve in any staff position at any mission.

### Requirements (SM I)

Before advancing to search Manager Level I, individuals shall complete these requirements:

- Hold the position of Search Manager Level II for at least 1 year
- Complete the National Inland SAR Planning Course (40 hours)
- Complete G290: Public Information Officer – Basic
- Outline the delegation of authority and responsibility for search and rescue in states where ASRC is located.

## Appendix A

The following classes satisfy the Search Manager III, II, and I requirements:

- ICS 300: Intermediate ICS for Expanding Incidents (24 hours);
- ICS-400: Advanced ICS for Command and General Staff (16 hours);
- Managing Land Search Operations (40 hours);
- Practical Search Operations (40 hours);
- Search Manager for Ground Search and Rescue (24 hours);
- Planning Section Chief for Search and Rescue (24 hours);
- National Inland SAR Planning Course (40 hours);
- Virginia Management Team Member (40 hours);
- Virginia Management Team Leader (40 hours);
- Incident Commander for Ground Search and Rescue (32 hours);
- Lost Person Behavior (8 to 32 hours);
- Urban Search and Investigation (16 hours);
- Wide Area Search (24 hours);
- Search Leadership classes offered by NASAR
- Search leadership classes offered by VDEM, PEMA, or similar state or federal agencies

*Other approved equivalent classes, as recommended by the CTO and approved by the Board of Directors*

## Appendix B

First Aid Skills for teams opting to integrate first aid into their internal training program

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### Level III Search Team Member skills

- Show first aid for the following:
  - Simple cuts and scrapes
  - Blisters on the hand and foot
  - Minor (thermal/heat) burns or scalds (superficial, or first degree)
  - Bites or stings of insects and ticks
  - Nosebleed
  - Frostbite and sunburn
- Demonstrate First Aid for others the following:
  - Dehydration
  - Heat exhaustion
  - Heat Stroke
  - Hypothermia
  - Hyperventilation
  - Hypoglycemia

### Level III Search Team Member skills

- Patient assessment (Head to toe) primary and secondary survey
- Care for anaphylaxis
- Envenomation
- Long Bone Fractures
- Shock