



**APPALACHIAN
SEARCH AND RESCUE
CONFERENCE**

Training Standards

ASRC Training Standards
Draft version 8.1
Approved by ASRC Board of Directors ?? ??? ????

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Overview

BACKGROUND

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 Groups.

The intent of this manual is to be a performance guide for ground search and rescue for ASRC members.

FEMA (the US Federal Emergency Management Agency) says:

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 untrammelled by man, where man himself is a visitor who does not remain.

Land/wilderness search and rescue requires knowledge and skills that can be grouped and titled in different ways. As discussed in the [ASRC Training Guide](#), we have divided the Field IV, III, II and I standards, educational goals, curricula and terminal learning objectives into the following areas:

- Safety, Health and First Aid
- Communications
- Land Navigation
- Operations, Management and Leadership
- Search
- Rescue

The core competency of the ASRC is the effective and efficient application of field search and rescue skills. To effectively manage missions, search managers must understand field operations and skills. Field Team Leader and Field Team Member are operational titles. To avoid confusion, this document uses the separate titles of “Field Level XX.” Field credentialing is based on members acquiring knowledge and skills in the above-listed aspects of ground search and rescue. Assigning members with various credentialing levels to operational assignments is at the discretion of incident management.

These performance standards are what we expect those credentialed at certain levels to know and be able to do. There is some overlap between knowing and doing. Those standards that begin with “Know...” generally refer to book-learning: things that the credentialed member should understand. And, those that start with “Be able to” refer to skills that have some psychomotor component, and that the credentialed member should be able to perform. In other words, if you’re planning to

test someone against these standards, “Know...” is for the written test, and “Be able to...” is for the practical test.

Those performance standards that contain a mix of written-test and practical test material will have both “Be able to...” and “Know...” in the wording. These items could be tested with a combination of a written and practical test items, or could be tested solely via a practical test that involves oral questioning.

More background on the ASRC’s training and credentialing system is available in the [ASRC Training Guide](#).

FIELD SELF-SUFFICIENCY

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

FIELD LEVEL ADVANCEMENT PATH

The [ASRC Training Guide](#), a separate publication from these Training Standards, describes the ASRC training and credentialing system in detail. It also has training curricula for all the levels. Here, and in the grid that follows, is a summary of the ASRC Field training levels:

- Field Level IV (Trainee)
 - Awareness-level search
 - Awareness-level horizontal litter handling (non-technical evacs)
 - Awareness-level for area wilderness search and rescue hazards
- Field Level III
 - Member of a field team
 - Operations-level search
 - Operations-level horizontal litter handling (non-technical evacs)
 - Awareness-level low angle rescue (semi-tech evacs)
- Field Level II
 - Technician-level search: leads simple search tasks
 - Operations-level for low angle rescue (semi-tech evacs): participates in these rescues
 - Technician-level for horizontal litter handling (nontechnical evacs): leads these rescues

- Credentialed with wilderness first aid
- Field Level I
 - Specialist-level for search: leads complex search tasks, may serve as briefer/debriefer in Base
 - Technician-level for low angle rescue (semi-tech evacs): leads these rescues

WILDERNESS FIRST AID

To maintain operational effectiveness, the “force protection” aspects of wilderness first aid are essential. The Field levels integrate wilderness first aid force protection knowledge and skills, as well as subject/patient assessment and treatment knowledge and skills at the basic wilderness first aid level.

Groups that elect to integrate wilderness first aid training into their field training should incorporate the wilderness first aid skills that are located at the beginning of each level. Groups may elect instead to require members to seek external wilderness first aid certifications in accordance with the ASRC medical policy. Regardless of how Groups manage their members’ wilderness first aid training, internally or externally, all ASRC members are expected to meet the first aid standards for the various levels consistent with Wilderness Medical Society guidelines.*

TERMINOLOGY

These acronyms and terms are used in this document:

- **GTO** Group Training Officer
- **TO** Training Officer
- **AHJ** Authority Having Jurisdiction: in ASTM F-30 Committee in SAR, includes both RAs and organizations such as the ASRC that credential individuals, but often used as a synonym for RA
- **RA** Responsible Agency (a government entity)
- **ICS** Incident Command System
- **IC** Incident Commander
- **ASRC** Appalachian Search and Rescue Conference
- **PPE** Personal Protective Equipment
- **SAR** Search And Rescue
- **SM** Search Manager
- **Awareness level** A basic competency level that stresses hazard recognition
- **Operations level** Individuals who identify hazards, use equipment and apply limited techniques specific to search and rescue
- **Technician level** Individuals who identify hazards,

use equipment and apply advanced techniques specific to search and rescue

- **Specialist level** Individuals who identify hazards, have a very in-depth and highly advanced level of knowledge regarding search and rescue, use equipment and apply advanced techniques specific to search and rescue

ACCOMMODATIONS

These standards address the knowledge and skills expectations for able-bodied team members. The ASRC wishes to include and benefit from the skills provided by members who have physical or other limitations.

In consultation with the Conference Training Officer, Group Training Officers shall provide accommodations to members with such limitations. While alternate means of skills or knowledge assessment may be offered, due to the life-safety nature of the work performed, no knowledge requirements may be omitted.

Waiver of physical skills is acceptable. However, the Group must have a mechanism in place to ensure that the member is restricted from performing those waived skills at a mission.

GROUP REQUIREMENTS

Each accredited group shall:

- Maintain a current database or record of individual certifications, including:
 - Field and Search Manager training level
 - Specialized skills & equipment
 - Participation in training
 - Relevant external certifications held
- Develop training and testing materials for team-specific aspects of this standard, including alerting procedures and AHJ/RA-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; and 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

* Donelan, S. (2013). “Minimum Guidelines and Standards for Wilderness First Aid.” *Wilderness & Environmental Medicine* 24(4): 454-455.
Johnson, D. E., et al. (2013). “Minimum Guidelines and Scope of Practice for Wilderness First Aid.” *Wilderness & Environmental Medicine* 24(4): 456-462.

Requirements for All Members

- Identify regional and mission risks
- Determine its significance
- Implement training to address each risk

GROUP-SPECIFIC ADDITIONS

Some Groups have chosen to pursue skills or credentialing to meet specific local needs such as cave rescue, Mountain Rescue Association accreditation for high-angle rescue, wilderness medicine, and support for nearby national and other parks. We encourage these skill sets to the extent that they do not detract from fulfilling

our core mission. We encourage Groups to develop or adopt stand-alone standards and training programs for the other missions that the Group chooses to support.

Groups may add these mission-driven requirements to the Field IV-I levels to meet Group needs. We encourage Groups to develop materials (including testing) to ensure that members are familiar with local alerting, response, and external agency relations, as well as the additional skill the Group requires of members.

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

Requirements for All Members

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 following performance standards
- Wear environmentally appropriate identifiable uniforms, or markers, as determined by the Group policy
- Possess adequate food, water, and equipment to sustain themselves for at least 24 hours, in any season, or longer as determined by 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 training and responses

Field Grid	Field IV (trainee)	Field III	Field II	Field I
Timeframe	Can complete in one weekend (includes skill verification)	Can complete in 6 months	Can complete in 6 months	Can complete in 6 months
Approx. Old ASRC	CQ (Callout Qualified)	FTM (Field Team Member) part 1	FTM part 2	FTL (Field Team Leader)
Approx. VDEM Equiv.	(Planned CQ equivalent)	Search Team Member	Search Team Leader	(no equivalent)
Approx. MRA Equiv.	(no equivalent)	Support = Operations	(no equivalent)	Technician = Rescue (requires additional rescue capability)
Approx. NASAR Equiv.	(no equivalent)	SAR Tech III	SAR Tech II	SAR Tech I
Approx. NFPA Equiv.	Awareness	Operations	Technician	Specialist
Survival	Basics of cold-weather and hot-weather survival	Camp out overnight with back-packing gear; know how to find or build temporary shelter	Improvised evacuation methods	Can supervise team overnight bivouac and manage less-prepared members
Comms	Report USNG position over team radio.	Install batteries, install antenna, and change channels on team radio; proficiency with ASRC communications protocols and prowords	Proficiency with phonetic alphabet ; actions to improve radio or cellphone communications ; network discipline	Understanding of mission-level communications issues and best practices
Navigation	Report USNG position over team radio	Can use orienteering compass ; basic understanding of topographic maps ; can complete 3-station basic orienteering course in daylight using GPS	Can complete 3-station basic orienteering course with map and compass and GPS at night with retroreflective markers	Expert at reading topo maps ; can complete 3-station basic orienteering course with map and compass but no GPS in daylight
Operations	Knows how to be alerted , and how to sign in and out of a mission	Knows about staging operations at Base	Can get briefing and brief team ; knows find management	Can brief and debrief field team leaders
Leadership	Directly supervised by (paired with) a Field III or higher on all tasks	Can, if needed, lead team of Field IV and Field III searchers on simple tasks ; followership	Simple leadership skills (basic field team management); lead team of Field IV, III and II on most field tasks	More comprehensive leadership skills ; usually serves in leadership position in own Group
Search	Best practices for conduct during SAR operations, hazard awareness	Member of search team	Leads search teams	Leads complex search tasks
Ropework and Knots	(None)	Tie-in for semi-tech evac <ul style="list-style-type: none"> ASRC seat harness Barrel knot (double fisherman's) Water knot (overhand bend) Overhand (backup) Prusik knot 	Rig belays, lowering, hauling <ul style="list-style-type: none"> Figure 8 family (bend, follow-through) Modified basket hitch, wrap-3-pull-2 	Supervise rigging, solve problems <ul style="list-style-type: none"> Butterfly knot Münter hitch Radium load-releasing hitch 3:1 "Z-rig" haul
Rescue	Nontechnical litter bearer	Semi-tech litter bearer ("Awareness" level)	Belayer or haul team supervisor for semi-tech evacuations ("Operations" level); can rig anchors and belay , lowering and haul systems	Leads semi-tech evacuations ("Technician" level), supervises rigging
Equipment	Personal equipment in a pack ; know how to select appropriate personal gear and personal protective equipment (e.g., helmet, clothing, boots)	Webbing 2 carabiners 2 Prusiks	Helmet	(No additional)
Wilderness First Aid/ Medical	Beestings, including anaphylaxis ; ticks ; poison ivy ; hypothermia ; frostbite ; dehydration and heat illness	Personal hygiene for disease prevention; fatigue, exhaustion and nutrition; bloodborne pathogens ; confidentiality	Bulk of basic wilderness first aid , including wilderness specific CPR , to meet Wilderness Medical Society curriculum; improvised evacuations ; receives ASRC wilderness first aid card/credential	(No additional)

Field Grid	Field IV (trainee)	Field III	Field II	Field I

Field IV (Trainee)

OVERVIEW

A Field IV has the knowledge, skills and equipment to:

- Respond safely to a ground search and rescue incident
- Avoid becoming a significant burden
- Participate in on-the-job training during search and rescue operations

A Field IV is expected to maintain effectiveness and avoid becoming a burden on the field team for at least 6 hours.

A Field IV can recognize the hazards and risks in field training and operations in the usual search and rescue environment in the ASRC area. A Field IV also knows enough followership to not get in political trouble, for example, by saying the wrong thing to the wrong person. Field IVs are not to engage in any direct subject/patient care, so are not at risk for bloodborne pathogens. **That is, unless they are licensed as physicians, Physician Assistants or Nurse Practitioners, or certified as an EMT or other EMS professional. In that case bloodborne pathogens training is required of them as part of that licensure or certification.** We require knowledge of bloodborne pathogens and risk mitigation at the Field III level.

If approached for search and rescue help, a Field IV knows enough about Group alerting and the ASRC policy of not self-deploying to be able to:

- Assist a representative of an Agency Having Jurisdiction/Responsible Agent (AHJ/RA) to alert the Group
- For someone who is not from an AHJ/RA, explain how to contact the appropriate AHJ/RA, likely by calling 9-1-1, and why this is necessary.

Trainees at this level function only under direct supervision of a more senior member. As a best practice, trainees should not enter a high-hazard zone, such as at the edge of a cliff during a cliff rescue. However, they may serve other support functions outside the high-hazard zone. Field IVs may accompany field teams if they have the equipment, knowledge, and skill sets needed for the task.

Field IV is a temporary entry level credential. The local team's Group Training Officer acts as the executive agent of the ASRC Credentialing Board in conferring the Field IV credential. Within a short period of time (we recommend a maximum of 18 months; the term must be specified by each Group's policy), all Field IV members must progress to a higher level of credentialing.

To become a Field IV, we require no prior wilderness, first aid/medical or search and rescue experience.

ADMINISTRATIVE REQUIREMENTS

To be credentialed as a Field IV, an individual must:

- Complete the Group application process
- Acquire all Group-required clearances (e.g., criminal background check, child abuse clearance)
- Gain an understanding of the Group's policies and procedures
- Successfully complete, and possess certification for, the FEMA online course IS-100.b (ICS-100.b), [IS-100.c](#) (ICS-100.c): *Basic Incident Command System for Initial Response*, or a subsequent equivalent
- Study the free online ASRC text [Essentials for Search and Rescue](#), and pass a brief online test on this material administered by the ASRC Credentialing Board, as reflected in the following Field IV performance standards
- Demonstrate possession of all minimum required equipment, as listed in the next section
- Participate in a minimum of one group practical field training or exercise (preferably should pass the Field IV the written test on hazard awareness before practical training)
- Be able to safely accompany a field team on a supervised simulated or real search or rescue task; in case the Field IV gets separated from the field team, this includes determining and reporting via handheld radio or cellphone the member's current USNG grid position

PACK CHECK LIST

To be credentialed as a Field IV, an individual must demonstrate possession of the following equipment:

- Appropriate field pack
- Food for 24 hours
- Water (at least 1 liter)
- Personal Protective Equipment (PPE):
 - Medical Gloves (non-latex, at least 2 pairs)
 - Leather palm (or similar) Work gloves
 - High-visibility vest with reflective markings
 - Eye protection (safety glasses)
 - Ear plugs (disposable type acceptable and recommended as very light; for protection when working with helicopters)

Field IV Pack Check List

- Clothing
 - Outerwear appropriate to the current weather and sufficient for unexpected changes in weather
 - Footwear appropriate to the current weather
- Survival Equipment
 - Trash bags (5)
 - Five one-gallon zip lock bags
 - Fire-starting material
 - Matches or lighter (waterproof)
 - Whistle (plastic, without cork)
 - Personal first aid kit
 - Small knife or multi-tool
- Search Equipment
 - Orienteering style compass (clear rectangular base)
 - GPS unit or GPS smartphone app recommended but not required
 - Headlamp and second light source (with extra set of batteries for each)
 - Pencil and paper in a zip-lock bag, or waterproof paper/pen
 - Roll of plastic surveyor's flagging tape
 - Permanent marker (e.g., Sharpie) to write on flagging tape

Field IV (Trainee) Performance Standards

A. SAFETY, HEALTH AND FIRST AID

1. Be able to maintain effectiveness and avoid becoming a significant burden on a field team, other than mentoring of the Field IV trainee, for at least 6 hours. This comes from knowing, anticipating and recognizing hazards and risks that are encountered during typical tasks, and taking appropriate measures to mitigate them. These hazards and risks include:
 - a. Subjective hazards
 - b. Fatigue and falling asleep at the wheel
 - c. Lightning strikes
 - d. Slips and falls
 - e. Rockfall
 - f. Streams and lakes
 - g. Pedestrian-vs-vehicle and pedestrian-vs-train accidents
 - h. The following wilderness search and rescue dangers, also recognition and basic field treatment for injury or illness from:
 - (1) Hypothermia
 - (2) Frostbite
 - (3) Dehydration, including monitoring urine amount and color
 - (4) Heat exhaustion
 - (5) Heatstroke
 - (6) Bees and wasps
 - (7) Ticks
 - (8) Poison ivy

2. Be able to select and use proper personal protective equipment for the field tasks, including clothing and footwear appropriate for the current weather, and when PFDs (personal flotation devices) are appropriate
3. Be able to select extra clothing, shelter and other gear and supplies to carry in the field pack, appropriate for possible changes in weather or a forced overnight bivouac
4. Know how to recognize an immediate stress reaction [moved from Field II]

B. COMMUNICATIONS

1. Be able to effectively communicate, in English, a USNG position:
 - a. Using a handheld radio
 - b. Following ASRC communications standard operating procedures as outlined in the [Appalachian Search And Rescue Conference Radio SOP Crib Sheet](#) (“Commo Crib Sheet”) except for, at the Field IV level, memorizing the phonetic alphabet

C. LAND NAVIGATION

1. Be able to, using the candidate’s choice of a personal GPS device, a personal smartphone with a GPS app (USNG app is sufficient), or a Group-owned GPS device, determine and report his or her current USNG position
2. Know what a safety direction is, and how to use it if lost

D. OPERATIONS, MANAGEMENT AND LEADERSHIP

1. Know the candidate’s Group alerting process, member **dispatch**/tracking, and the candidate’s role in the system
2. Be able to sign in and out of a mission, and know potential problems from not signing into or out of a mission
3. Know a good definition of a wilderness/land search and rescue staging area

4. Know good definitions of the terms freelancing and self-deploying in the wilderness/land search and rescue context
5. Know good reasons why freelancing/self-deploying can interfere with an organized search effort
6. Know good principles for interfacing with the media
7. Know best practices for raising safety or other concerns with a leader as recommended by the International Association of Fire Chiefs (Crew Resource Management); [I wonder if we can get rid of this as it is covered in the next item? --KC]
 - a. Opening or attention getter
 - b. State your concern
 - c. State the problem as you see it
 - d. State a solution
 - e. Obtain agreement

8. Know the followership principle of graded assertiveness [moved from Field III]
9. Know that all ASRC members have stop work authority (principle that all SAR team members have the right and responsibility to immediately call for a good faith stop of dangerous activities – those without adequate hazard controls in place or communicated to the members, and to refuse dangerous tasks.) [added]

E. RESCUE

1. Know ASRC standard best practices for:
 - a. As part of a 6 person team, picking up, carrying and putting down a litter, including laddering and toenailing, with attention to back safety
 - b. Rotating litter bearers off and on the litter and through the litter bearer positions
 - c. Giving and responding to litter movement commands

Field III

OVERVIEW

A Field III has the knowledge, skills and equipment to respond to a ground search and rescue incident.

Typical roles for ASRC members trained to the Field III level are to:

- Lead teams on simple linear tasks (i.e., trail or road walking)
- Supporting a Field II or Field I member to coordinate and supervise untrained emergent volunteers on a search task
- Serve as a field team member on a complex search task
- Serve as a field team member on a nontechnical evac or semi-tech evac (low angle rope rescue)

A Field III can recognize the common hazards and risks of search and rescue tasks and how to mitigate them.

A Field III can operate common search field team equipment such as handheld radios and GPSs, and can perform basic land navigation.

A Field III knows enough of the mechanics of leadership, and of search tactics, to manage a team of Field IV and Field III members on a simple, easy search task. A Field III can identify and provide initial management for a potential crime scene. A Field III should be able to serve as a member of a field team on both day and night tasks.

A Field III can confidently and competently serve as a litter team member in a low-angle rescue operation (a

nontechnical evacuation: no ropes involved).

ADMINISTRATIVE REQUIREMENTS

To be credentialed as a Field III, a member must:

- Successfully complete, and possess certification for, IS-200.b: *ICS for Single Resources and Initial Action Incidents*; IS-200.C: *Basic Incident Command System for Initial Response*; or a subsequent equivalent

PACK CHECK LIST

In addition to the equipment required for Field IV, the Field III must demonstrate possession of the following equipment:

- 1 inch tubular webbing (25' length for average weight member or 30' length for larger)
- 2 locking carabiners (aluminum; recommend pear-shaped wide-opening carabiners to fit a litter rail with minimum 15 kN or better 25 kN major axis strength)
- 2 lengths of 7 mm or 8 mm climbing-grade accessory cord suitable for tying Prusik loops (recommend 5' (60", 153 cm) and 4' 2" (50", 127 cm))
- A mountaineering helmet with chin strap (may be team helmet loaned to member; the member must demonstrate donning and adjusting to fit head and snugging chinstrap)

Field III Performance Standards

A. SAFETY, HEALTH AND FIRST AID

1. Know how to deal with hazards and confidentiality issues; including
 - a. Ward against communicable diseases through good hygiene in the field and at Base
 - b. Recognize and manage fatigue and exhaustion in self and others with attention to nutritional needs and sleep
 - c. Recognize the risks of blood-borne diseases and use personal protective equipment to protect against blood-borne pathogens
 - d. Know the hazards of waterborne illness and the advantages and disadvantages of current field water purification methods
 - e. Follow ASRC confidentiality best practices and other legal constraints as far as subject, mission and any first aid or medical issues, particularly as regards the press
2. Be able to camp overnight at an austere Base with backpacking-type sleeping bag, pad and tent or over-the-bag bivouac sac (may use borrowed or rented gear)
3. Be able to, and know how to, pick and improve a forced bivouac site, either for temporary shelter from the weather or for an overnight bivouac, for self or for a team with a patient, including:
 - a. Picking location
 - b. Building a debris shelter, and improving natural shelters such as caves or under large evergreen trees or beside large downed trees
 - c. Improvised insulation
 - d. Advantages and disadvantages of building a fire

B. COMMUNICATIONS

1. Be able to use a handheld radio using ASRC communications standard operating procedures as outlined in the [Appalachian Search And Rescue Conference](#)

[Radio SOP Crib Sheet](#) (“Commo Crib Sheet”) to communicate effectively and efficiently in English during field tasks:

- a. Using the phonetic alphabet and numerals
 - b. Using standard best practices for talking over a handheld radio
 - c. Without reference to written communications references
2. Be able to confidently and reliably operate standard handheld radio controls and perform the following tasks on a Group-owned radio:
 - a. Operate off/on switch
 - b. Operate volume adjustment
 - c. Operate push to talk
 - d. Operate channel selector
 - e. Attach and detach antenna
 - f. Replace battery, and if available, install AA cells in an empty AA-cell battery pack
 - g. Toggle keyboard/channel select lock if available
 - h. Know other buttons might accidentally hit and how to recover from them
 3. Know best practices for using cellphones for wilderness search and rescue communications, including:
 - a. Methods to improve communications
 - b. Advantages of texting over voice communications
 - c. Using smartphone Bluetooth push-to-talk apps to provide intra-team communications
 4. Know the uses, advantages and disadvantages of
 - a. Signal mirrors and improvised mirrors (knifblade, mirror on compass)
 - b. Whistles

- c. Smoke
 - d. Flares
 - e. Chemical luminescent light sticks
5. Be able to use standard ASRC whistle and hand signals using the ASRC Radio SOP Crib Sheet for reference

C. LAND NAVIGATION

1. Be able to interpret the following topographic map features:
- (1) Contours, including index and supplemental contours
 - (2) Power lines, pipelines and fences
 - (3) Buildings, including schools and houses of worship
 - (4) Cemeteries
 - (5) Highways, roads, trails, bridges, and railroads
 - (6) Bodies of water, rivers, perennial streams, intermittent streams, marshes and swamps
 - (7) Woodland overprint
- a. Border (map margin) information:
- (1) Scale and scale bars
 - (2) Datum
 - (3) Declination and date of map
 - (4) North arrow declination indicators:
 - i. True north
 - ii. Grid north
 - iii. Magnetic north
 - (5) Contour interval
2. Be able to measure distance on topographic maps:
- a. Use scale bars
 - b. Know that UTM/USNG grids are 1 km
 - c. Use transparent grid overlays (i.e., grid readers)

3. Be able to:
- a. Plot a set of UTM/USNG coordinates on a map
 - b. Read off UTM/USNG coordinates from a point on the map
4. Know the three most common different grid datums and their importance (WGS84/NAD83, NAD27)
5. Know the advantages, disadvantages, common uses and differences of the following grid coordinate systems:
- a. Latitude/longitude
 - b. UTM
 - c. USNG
 - d. ASRC Grid System
6. Know the definitions of true north, grid north and magnetic north
7. Be able to use an orienteering type compass to:
- a. Correct for magnetic declination, going from map to compass and compass to map, without using a mechanical declination adjustment
 - b. Take a bearing on a visible object, correct for magnetic declination, and report the correct true (grid) bearing
 - c. Given a true (grid) bearing, set it on the compass with correction for declination
 - d. Use a compass, and points A and B on a map, determine the true and magnetic bearing from A to B
8. Be able to do the following with the member's choice of a personal GPS, a personal GPS app, or a Group GPS:
- a. **System Operations:**
- (1) Turn unit on and off or open and close app (and make app stop using cellphone battery)
 - (2) Check battery charge

- (3) If applicable, change battery; if cellphone, how to attach external battery charger
- b. **Setup:**
 - (1) Set datum to correct datum (usually WGS84 or NAD83 but not NAD27)
 - (2) Set units for distance (usually miles or meters/kilometers)
 - (3) Set the grid location format to USNG (US National Grid), or, on older units, UTM
- c. Determine the UTM and USNG coordinates for your current location
- d. **Track Logging:**
 - (1) Clear the track log (if available on the unit or app being used)
 - (2) Turn track logging on and off
 - (3) Rename a track
 - (4) Find an existing track on the GPS unit or GPS app
- e. **Waypoints:**
 - (1) Mark your current location as a waypoint
 - (2) Select a point on the map and mark as a waypoint
 - (3) Locate a previously stored waypoint
 - (4) Input USNG coordinates to create a new waypoint (e.g., a find to which you must navigate)
 - (5) Rename a waypoint
 - (6) Locate a particular waypoint stored in the GPS unit or GPS app
- 9. Be able to orient a map:
 - a. By inspection (terrain association)
 - b. By compass
- 10. Know and be able to use the following orienteering concepts:
 - a. Handrail
 - b. Catching feature
 - c. Map simplification (creating a simplified mental map containing just features essential for navigating the route)
 - d. Comparing routes as far as difficulty of travel/hazards, elevation change, and difficulty of navigation/"safety" in terms of getting lost
 - e. Attack point
 - f. Aiming off
 - g. Rough vs precision navigation
 - h. Thumbing a map (keeping your thumb on your position on the map, and updating from time to time, as a means of quickly finding your current position on the map as you travel)
- 11. Be able to navigate using a paper topographic map, a compass and a GPS, and basic orienteering concepts, to complete a basic-level orienteering course safely and confidently during the day, including 3 targets at least 300 m apart

D. OPERATIONS, MANAGEMENT AND LEADERSHIP

- 1. Know and be able to use basic field team leadership skills to manage a search field team:
 - a. Using a Task Assignment Form as a guide, obtain a briefing at Base for all relevant available information and use this information to brief team members, including the field team's planned strategy and tactics
 - b. Know the standard field team position terms and duties of each, and when each should be delegated:
 - (1) Field Team Leader
 - (2) Assistant Team Leader
 - (3) Navigator
 - (4) Radio Operator
 - (5) Medic

- (6) Rescue Specialist
 - (7) Safety Officer
 - (8) Canine Handler
 - (9) Dog team flanker for a dog task (area and trailing)
 - (10) Left and right flaggers (for hanging and retrieving flagging tape at the edges of a sweep, particularly when doing close-spaced line/saturation search)
- c. Anticipate and prepare for emergencies during the task, including selecting appropriate equipment and supplies to take
 - d. Assess team members' capabilities and measure them against the expected task requirements
 - e. Follow ASRC best practices for beginning, middle and end of task:
 - (1) Radio check before leaving Base
 - (2) Check in with Base via radio (or cellphone or text) as starting task:
 - i. Team identifier
 - ii. Starting task
 - iii. At [time starting task]
 - (3) Check via radio (or cellphone or text) during task as per timing on TAF; if not specified on TAF, check in every hour on the hour unless directed otherwise by Base via radio
 - i. Team identifier
 - ii. Continuing task
 - iii. At [current time]
 - (4) Report clues to Base as found.
 - (5) Check in with Base via radio (or cellphone or text) when finish task:
 - i. Team identifier
 - ii. Completed task
 - iii. At [time finished task]
 - f. Consciously develop situational awareness of the environment, of self and of others, and model this situational awareness for other field team members
 - g. Manage the team's pace, keep the team together, and monitor task progress and accomplish the task if within the capabilities of the team's members
 - h. Debrief the team after finishing the task, and then provide debrief information to Base
- 2. Know best practices for what you should do if you are the first member of your team to arrive at a mission:
 - a. If your Group is the first SAR team at mission
 - b. If other SAR teams are already on scene
 - 3. Know best practices for raising safety or other concerns with a leader as recommended by the International Association of Fire Chiefs (Crew Resource Management):
 - a. Opening or attention getter
 - b. State your concern
 - c. State the problem as you see it
 - d. State a solution
 - e. Obtain agreement
 - 4. Know the followership principle of graded assertiveness [moved to Field IV]
- ## E. SEARCH
- 1. Know the definitions of the following search terms:
 - a. Term definitions
 - (1) Search
 - (2) Rescue
 - (3) Recovery
 - (4) Point Last Seen (PLS)
 - (5) Last Known Position (LKP)
 - (6) Initial Planning Point (IPP)
 - (7) Active (direct) vs passive (indirect) search

- (8) Planning area
 - (9) Searchable segment
 - (10) Probability of Detection (POD)
 - (11) Probability of Area (POA), also known as Probability of Containment (POC)
 - (12) Decision points (places subject might stray from trail)
- b. Search resources
- (1) Human field teams
 - (2) Dogs
 - i. Tracking/Trailing
 - ii. Air-Scent
 - iii. Human Remains Detection (HRD)
 - iv. Water Search
 - (3) Horses
 - (4) ATVs
 - (5) Mountain bikes
 - (6) Planes
 - (7) Helicopters
 - (8) Drones (UAVs)
- c. Search strategies
- (1) Investigation
 - (2) Containment
 - (3) Attraction/Passive (indirect)
 - (4) Hasty search
 - (5) Area search
 - (6) Tracking/trailing
- d. Search tactics
- (1) Looking
 - (2) Listening
 - (3) Smelling
- e. Containment patrol task
 - f. Reflex tasks
 - g. Hasty (Type I) tasks
 - h. Area tasks
 - (1) Sweep (Type II) tasks
 - (2) Saturation/Line (Type III) tasks
 - i. Man-tracking and signcutting tasks
 - j. Air-scenting dog tasks
 - k. Trailing dog tasks
 - l. Flankers
2. Know how to, and be able to, lead a team in accomplishing simple linear search tasks, including
- a. Communicate with those at Base by knowing basic search management terms (e.g., PLS, reflex task)
 - b. Identify, mark and protect “sign,” as the term is used in mantracking, and other clues, communicate information about this sign or those clues to Base and request specific instructions from Base
 - c. Identify, protect and document potential crime scenes, and maintain chain of custody for crime scenes and request specific instructions from Base
 - d. Observe relevant legal principles related to entry upon private property during a search
- F. RESCUE**
- 1. Be able to serve as litter captain for a non-technical evacuation (low-angle rescue without a rope belay), as a litter bearer for a semi-technical evacuation (low angle rescue using a rope), and as a member of a haul team, including:
 - a. Coach a litter team to safely lift, carry and put down a litter for a nontechnical evacuation, including standard calls and procedures for litter bearer rotation, laddering and toenailing

- b. Serve as a litter bearer on a semi-tech evac (low-angle rope rescue using a rope belay, lowering system or hauling system), including standard litter captain calls to the rope team, both uphill and downhill
- c. Tie into the litter rail when needed for a steep semi-tech evacuation (steep low-angle rope rescue)
- d. Serve as a member of a haul team for a semi-tech evac with haul system (low angle rope rescue raising the litter), using standard calls
- e. Know the advantages and disadvantages of hauling, and select and perform the appropriate method for the situation at hand:
 - (1) Backwards
 - (2) Forwards
 - (3) Hand-over-hand
 - (4) Hand-over-hand
- f. Handle rope and webbing using ASRC best practices, including identifying appropriate ropes for low-angle rescue (semi-tech evacuations), and uncoiling, inspecting, stacking and coiling rope.
- g. Competently and reliably tie
 - (1) Overhand knot
 - (2) Double fisherman's knot
 - (3) Water knot (overhand bend)
 - (4) 3-wrap Prusik knot
 - (5) The ASRC Seat Harness, using the following knots:
 - i. Square knot
 - ii. Bowline

Field II

OVERVIEW

A Field II possesses the minimum knowledge, skills and equipment to lead field teams on complex search tasks.

Typical roles for ASRC members trained to the Field II level are to lead teams on complex search tasks including difficult navigation and cross-country travel (“bushwhacking”), or to supervise a simple rescue involving ropes package a patient in a litter, rig a litter for a semi-tech evac, or serve as a member of the rope team belaying or lowering a semi-tech evac.

A Field II can care for the members of the field team at the standard wilderness first aid level. Credentialing at the Field II level also confers an ASRC wilderness first aid certificate, compliant with the guidelines published in the *Journal of Wilderness and Environmental Medicine* in 2013.*

A Field II is able to apply radio principles to problem-solve when radio or cellphone communications are difficult or equipment seems to be malfunctioning.

A Field II is proficient in land navigation using orienteering techniques.

A Field II can lead field teams on search tasks that challenge the team’s physical and emotional status.

A Field II is competent at managing potential clues, including mantracking “sign.”

A Field II can manage a find: assess the need for more resources, provide wilderness first aid to a patient, plan an evacuation, and if need be, manage operate a low angle rope system (a semi-tech evac).

ADMINISTRATIVE REQUIREMENTS

To be credentialed as a Field II, a member must successfully complete, and possess certification for, these courses:

- IS-700.a: *National Incident Management System (NIMS), An Introduction*; [IS-700.B](#), *An Introduction to the National Incident Management System*; or a subsequent equivalent
- A hazardous material awareness training course: one of the following or an equivalent approved by the ASRC Credentialing Board:
 - [FEMA IS-5.A](#): *An Introduction to Hazardous Materials* or a subsequent equivalent
 - NFPA 472: *HazMat Awareness*
 - OSHA 1910.120(Q)(6)(i): *HazMat Awareness Training*
 - CERT *HazMat Introduction*

To be credentialed as a Field II, a member must participate in at least 3 field search tasks, as part of a field search team. At least one of which must be at a real mission or full-scale simulation; at least one of which must be at an actual search or a full-scale exercise (search simulation)

PACK CHECK LIST

There are no pack check requirements for Field II beyond what is required at the Field IV and Field III levels, but the member must continue to possess or have that equipment available during missions such equipment.

* Donelan, S. (2013). “Minimum Guidelines and Standards for Wilderness First Aid.” *Wilderness & Environmental Medicine* 24(4): 454-455.
Johnson, D. E., et al. (2013). “Minimum Guidelines and Scope of Practice for Wilderness First Aid.” *Wilderness & Environmental Medicine* 24(4): 456-462.

Field II Performance Standards

A. SAFETY, HEALTH AND FIRST AID

1. Know legal concepts relevant to wilderness first aid, including:
 - a. Informed consent
 - b. Implied consent
 - c. Express consent
 - d. Competence and capacity to make informed decisions
 - e. Restraint
 - f. Duty to act
 - g. Abandonment
 - h. Negligence
 - i. Medical licensure and the practice of medicine versus First aid versus medical or EMS care by those licensed or certified to provide such care
2. Assessment
 - a. Know how to assess patients at the wilderness first aid level, including:
 - (1) Scene safety survey and assessing the need for more help
 - (2) Primary survey:
 - i. Recognize and manage cardiac arrest with external cardiac compression
 - ii. Manage the airway without adjuncts
 - iii. Manage respiratory arrest with mouth-to-mouth artificial respiration
 - iv. Recognize respiratory distress, including tension pneumothorax, and recognize and treat flail chest
 - v. Recognize and treat bleeding and shock
 - vi. Recognize and treat flail chest
 - vii. Recognize and control bleeding
 - viii. Recognize and treat for shock
 - ix. Determine ASRC Status 1, Status 2 or Status 3, including determining death
 - (3) Secondary survey:
 - b. Be able to apply and operate an Automated External Defibrillator (AED)
 - c. Be able to apply and appropriately tighten and secure both pre-made and improvised tourniquets to control severe bleeding
 - d. Be able to measure and record radial pulse and respiratory rate
 - e. Be able to palpate the following pulses:
 - (1) Carotid
 - (2) Radial
 - (3) Femoral
 - (4) Dorsalis pedis
 - (5) Posterior tibialis
3. Know principles of human thermoregulation, including:
 - a. Heat balance
 - b. Physical modes of heat loss
 - c. Human compensatory mechanisms including:
 - i. Sweating
 - ii. Vasodilation and vasoconstriction
 - iii. Shivering
4. Know how to recognize and manage, at the standard wilderness first aid level, heat illness, including:
 - a. Dehydration
 - b. Heat syncope
 - c. Heat cramps
 - d. Heatstroke, including:

- (1) Pathophysiology
 - (2) Recognition
 - (3) Cooling methods
 - (4) Cooling goals and when to stop
5. Know how to recognize and manage hypothermic team members and find subjects, including:
- a. Incipient hypothermia
 - b. Mild hypothermia
 - c. Signs and symptoms of severe hypothermia
 - d. Diagnosing hypothermia without a thermometer
 - e. Treating severe hypothermia in the field, including:
 - (1) Insulating and adding heat as much as possible
 - (2) Not being concerned about rewarming shock in the field except to evacuate the patient flat
 - (3) Avoiding bumps that might cause ventricular fibrillation
 - (4) Dealing with severe hypothermia that might mimic death, including questions of whether to start external cardiac compressions or not and the efficacy of extended CPR even if interrupted
6. Know standard wilderness first aid treatment of:
- a. Minor and major wounds
 - b. Blisters
 - c. Burns, including grading of burns and assessing extent of burns using the size of the patient's hand as a guide
 - d. Nosebleeds
7. Musculoskeletal
- a. Know management of musculoskeletal injuries, including:
 - (1) Bruises/contusions
 - (2) Sprains and strains
 - (3) Twisting injuries of the ankle including the Ottawa criteria for not needing X-rays or urgent medical treatment, and field taping for ankle sprains
 - (4) Closed and open fractures
 - (5) Joint dislocations including how to reduce digit and patella but not other dislocations
 - (6) Improvised splinting
 - (7) Understanding the pathophysiology of compartment syndrome, recognizing potential compartment syndrome and knowing the urgency of diagnosing and treating it
 - b. Be able to apply and secure both pre-made and improvised extremity splints
8. Know basic multisystem trauma recognition and management, including the concepts of the Golden hour and the golden day, and general principles for managing multisystem trauma in the backcountry
9. Know common injury patterns from lightning strikes, and know triage and immediate treatment for a group struck by lightning
10. Know search-and-rescue-focused, standard wilderness first aid level assessment and management of trauma, including:
- a. Head (brain) trauma
 - b. Pelvic fractures
 - c. Possible spinal injury including the NEXUS criteria and the need to prevent decubiti Using the NEXUS criteria to "clear" the cervical spine in the field and avoid the need for "immobilization" and the risks of "immobilization"
 - d. Chest trauma including:
 - (1) Pneumothorax
 - (2) Hemothorax
 - (3) Broken ribs
 - (4) Flail chest

- (5) Sucking chest wounds
- (6) Submersion injury
- 11. Know how to recognize and treat “dry” and envenomated bites from local pit vipers
- 12. Know standard wilderness first aid level recognition and treatment of common or severe medical problems, including “red flags” (indicators of a serious problem), specifically:
 - a. Hypoglycemia
 - b. Chest pain
 - c. Decreased level of consciousness
 - d. Seizures
- 13. Know “red flags” (indicators of a serious problem) for the following medical problems:
 - a. Abdominal pain
 - b. Vomiting and diarrhea
 - c. Urine problems including urinary tract infection and hematuria (blood in urine)
 - d. Cough
 - e. Fever
- 14. Know the seriousness of:
 - a. Persistent blurred vision
 - b. Uncontrolled nasal or other bleeding
 - c. Head injury with decreasing level of consciousness
 - d. Airway compromise
- 15. Know how to recognize immediate stress reactions, and to provide basic psychological first aid [moved immediate stress reactions to Field IV]
- 16. Know the factors that go into evacuation urgency decisions
- 17. Know basic improvised evacuation methods, including:

- a. Poles-and-blanket and poles-and-parkas stretchers
- b. Split-coil and sling piggyback carries
- c. Packstraps and pole carry

B. COMMUNICATIONS

- 1. Know basic radio principles relevant to the ASRC, including
 - a. Electromagnetic waves, wavelength and frequency, and effect of frequency on radio signal propagation
 - b. The difference between AM and FM and how speaking loudly on FM decreases signal strength
 - c. Simplex vs duplex
 - d. Retransmitters (remote bases) and repeaters
 - e. Antenna principles, including:
 - (1) Antenna radiation patterns and effective radiated power (ERP)
 - (2) The effect of ground planes and reflectors and how to improvise them in the field
 - (3) How to use other teams to relay to Base
 - (4) The effect of altitude on radio communications
 - f. Carrier squelch, monitor buttons, and PL tone squelch
 - g. Basic principles of network discipline
 - h. Techniques for improving cellphone communications in the backcountry, including use of texting instead of voice, and ways to improve antenna effective radiated power (ERP)

C. LAND NAVIGATION

- 1. Be able to interpret the following information on a USGS topographic map:
 - a. Interpreting contour lines and reliably identifying:
 - (1) Ridges and summits

- (2) Valleys and depressions
- (3) Even, convex and concave slopes
- (4) Saddles and knolls
- b. Information conveyed by various colors
- c. In addition to the requirements from Field III, identifying the following USGS topographic map symbols:
 - (1) Contours, including index and supplemental contours [eliminating items already in Field III; this one and those below]
 - (2) Boundaries
 - (3) Power lines, pipelines and fences
 - (4) Buildings, including schools and houses of worship
 - (5) Storage tanks, wells, mines, caves, picnic areas and campsites
 - (6) Built-up areas
 - (7) Cemeteries
 - (8) Boundary monuments, benchmarks and spot elevations
 - (9) Highways, roads, trails, bridges, and railroads
 - (10) Bodies of water, rivers, perennial streams, intermittent streams, marshes and swamps
 - (11) Woodland overprint
 - (12) Photorevisions
2. Know coordinate grids, and how to read them from paper map edge ticks, including degree variants and UTM/USNG variants:
 - a. US National Grid (USNG; a slight variation of the NATO Military Grid Reference System = MGRS)
 - b. Universal Transverse Mercator (UTM)
 - c. Degrees, minutes and seconds (DD° MM' SS")
 - d. Decimal degrees (DD.DDDDD)
 - e. Degrees and decimal minutes (DD MM.MMM)
3. Be able to competently plot an orienteering-type route between two points on a map, and identify places where the following orienteering concepts could be used:
 - a. Handrail
 - b. Catching feature
 - c. Map simplification (creating a simplified mental map containing just features essential for navigating the route)
 - d. Comparing routes as far as difficulty of travel/hazards, elevation change, and difficulty of navigation/"safety" in terms of getting lost
 - e. Attack point
 - f. Aiming off
 - g. Rough vs precision navigation
 - h. Thumbing a map (keeping your thumb on your position on the map, and updating from time to time, as a means of quickly finding your current position on the map as you travel)
4. Be able to read and navigate using a paper topographic map, a compass and a GPS, and basic orienteering concepts to complete a basic-level orienteering course safely and confidently during the night using retroreflective markers, finding 3 targets at least 300 m apart [removed this and below at request of Credentialing Board as specifying these things is their job]
5. Given a map showing an assigned approximately 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 using map, compass and GPS, and circumnavigate the assigned area, during the day
6. Be able to use a personally-preferred GPS device (smartphone app or a dedicated GPS unit) to transfer .gpx files and from a laptop computer in Base

D. OPERATIONS, MANAGEMENT AND LEADERSHIP

1. Know the meaning of the following concepts as related to field team and individual field team member morale:
 - a. Esprit de Corps
 - b. Human capital
 - c. Member engagement
 - d. Recognition
 - e. Trust
 - f. Concern for welfare and opinions of team members
 - g. Prestige
2. Be able to brief an assigned field team, using the basic principles of rhetoric, including public speaking basics [moved from Field I]
3. Know the meaning of the following concepts as related to the family liaison role
 - a. Physical support: food, water, shelter, rest
 - b. Emotional support: not leaving them alone
 - c. The “D” word (“dead”) and techniques for breaking bad news to family
 - d. Maintaining personal mental health when serving as liaison with family: recognizing immediate stress reactions in self and seeking help if needed
4. Know how to deal with family members in the field:
 - a. Prepare for immediate stress reactions and grief reactions in field
 - (1) Emotional support
 - (2) Physical support
 - i. Plan for support for family getting back to Base safely
 - ii. Plan for family that refuse to leave field and their safety

E. SEARCH

1. Know basic search tactics and be able to lead a team as follows:
 - a. Coach untrained team members in basic lost-person search techniques, including assessing, marking, protecting and communicating clues
 - b. Identify, mark and protect “sign,” as the term is used in mantracking, and communicate information about this sign to Base [duplicate of Field III]
 - c. Identify, protect and document potential crime scenes, and maintain chain of custody for crime scenes [duplicate of Field III]
 - d. Observe relevant legal principles related to entry upon private property during a search
 - e. Perform Lead the following type of tasks:
 - (1) Hasty tasks
 - (2) Sweep tasks—A sweep (wide-spaced, Type II) search task of 20 acres [removed at request of Credentialing Board as specifics are their job]
 - (3) Line search tasks—A line (close-spaced, saturation, Type III) search task, placing and removing markers at the edges for at least two instances of placing and removing edge markers
 - (4) Serving as “flanker” for search dogs or mantrackers
 - f. As part of these tasks, perform the following
 - (1) Receive a briefing by Base
 - (2) Assemble field team
 - (3) Assessing team members’ capabilities and limitations and comparing with assigned task
 - (4) Brief field team [? eliminate as duplicate of 2.?)
 - (5) Delegate duties/positions as appropriate
 - (6) Acquire necessary equipment for task
 - (7) Complete Task Assignment Form (TAF)

- (8) Perform task
 - (9) Assess for completion of task
 - (10) Debrief field team members
 - (11) Assess team members' condition at end of task and arranging for rest and rehab or return to duty as appropriate
 - (12) Debrief task with Base
2. Be able to lead a line (close-spaced, saturation, Type III) search task, placing and removing markers at the edges for at least two instances of placing and removing edge markers. [moved to above to consolidate]
 3. Demonstrate use of a tracking stick to follow a trail for 5 steps [Deleted as per BOD decision 10/19]

F. RESCUE

1. Know how to do paving, turtling and lap pass, and be able to coach a litter team in performing them
2. Know basic care principles for nylon kernmantel rope, nylon webbing, carabiners, rescue pulleys and lowering devices including the rappel rack, figure 8 descender and other mechanical belay and lowering devices owned by your team
3. Know the properties, advantages and disadvantages of wrap-3, pull-2 and modified basket hitch anchors, and be able to rig them
4. Know the properties, advantages and disadvantages of the knots required of a Field III (overhand knot, double fisherman's knot, water knot, 3-wrap Prusik

knot, and the ASRC seat harness including square knot and bowline) and the following knots, and be able to reliably and confidently tie:

- a. Figure 8 knot
 - b. Figure 8 on a bight
 - c. Figure 8 follow-through loop around an object
 - d. Figure 8 bend
 - e. Clove hitch
5. Be able to reliably and confidently use best practices for a semi-tech evac (low angle rope rescue) to
 - a. Belay a climber
 - b. Bottom-belay a rappeller
 - c. Belay and lower a litter with tree wraps
 - d. Lower a litter with a mechanical device
 - e. Belay a litter with Prusik loops and with a mechanical device
 - f. Perform as a member of a rotating belay/lowering team, both uphill and downhill rope team rotations, and managing (but not rigging) a 3:1 haul system.
 6. Know and be able to use standard best practices for packaging and securing a patient in a litter for semi-technical evacuations (low-angle rope rescue)
 7. Know and be able to use standard best practices for rigging a rope to the head of a litter for semi-technical evacuations (low-angle rope rescue)

Field I

OVERVIEW

The Field I possesses the minimum knowledge, skills and equipment to :

- Lead a field team on a complex search task
- Supervise a simple rescue involving ropes
- Apply a deep understanding of leadership principles to lead a large team

Typical roles for ASRC members trained to the Field I level are to lead teams on search tasks that are long, in unfavorable weather, or involve difficult navigation or cross-country travel, and to supervise a steep low-angle rope rescue (semi-tech evac). Specific duties include:

- Oversee field team members in their usual tasks
- Set an example for the field team members to live up to
- Serve as disciplinarian and counselor
- Maintain order in the field but, along with the medic, being observant of physical or emotional problems within the field team
- Keep the team intact throughout the task
- Keep the team informed
- Determine and monitor the abilities of each team member
- Ensure people and equipment are prepped for the task
- Divide the workload fairly
- After each task, make sure to
 - Return team equipment returned to serviceable condition
 - Return individual team members and their equipment to serviceable condition

A Field I can use knowledge of the area's geography, climate, microclimate, weather, flora and fauna to provide an expert assessment of hazards to be expected on a search task, to assess and manage emergency stream crossings, and to select and prepare emergency overnight bivouac sites for a field team.

A Field I can set up and operate a Base radio, and apply large-network best practices to maintain network discipline during a large search.

A Field I can communicate grid positions to aircraft in terms pilots understand.

A Field I has a deep understanding of field team leadership, and can lead field teams on search tasks that challenge the team physically and emotionally, such

as a long-duration task or one with many untrained volunteers.

A Field I knows enough about search management terminology and concepts to communicate effectively with Base staff, to assist in Base with briefing and debriefing teams, and manage attraction stations and large-team saturation (line) search tasks.

A Field I can rig and supervise a steep semi-tech evac (steep low-angle rope rescue), including using a Radium load-releasing hitch to switch from raise to lower and from lower to raise; and to use a Mnter hitch when other alternatives are not available.

ADMINISTRATIVE REQUIREMENTS

To be credentialed as a Field I, a member must participate in at least 3 field team tasks (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.

To be credentialed as a Field I, a member must pass a review with Group equipment, and be able to answer the following questions:

Demonstrate proficiency in the use and operation of all Group Equipment

- What is its proper name?
- What are its primary functions?
- What are its primary features?
- What are some of the "do" and "don't" for proper handling/use?
- Describe the inspection procedures for function, wear and damage

To be credentialed as a Field I, a member must know the standard search operating procedures, requirements, and protocols of the state and other major local AHJ partners.

PACK CHECK LIST

There are no pack check requirements for Field I beyond what is required at the Field IV and Field III levels, but the member must continue to possess or have that equipment available during missions such equipment.

Field I Performance Standards

A. SAFETY, HEALTH AND FIRST AID

1. Know the basics of mid-Appalachian terrain, climate, weather, botany and zoology pertinent to SAR team members serving in the field:

- a. Know the effects of altitude on precipitation
- b. Know the danger and likelihood of injury or illness from flora and fauna, including animal and insect attacks, and irritant plants:

(1) Dangers from fauna:

- i. Bears
- ii. Mountain lions
- iii. Coyotes
- iv. Feral pigs
- v. Humans
- vi. Bees and wasps
- vii. **Venomous snakes**

(2) Dangers from flora:

- i. Poison ivy **and poison sumac**
- ii. Stinging nettles
- iii. Thorns
- iv. Giant hogweed

c. Know the basic climate and weather of the mid-Appalachian region, including common seasonal weather patterns:

- (1) Climate vs weather
- (2) Continental vs. maritime climates
- (3) Elevation and latitude effects on temperature and flora
- (4) Climate change effects on the mid-Appalachians **including increased risk of flash flooding**
- (5) **Atmospheric trade-wind cells (Hadley cells)**
- (6) Prevailing westerlies, the Great Lakes, the Gulf of Mexico, and their effects on precipitation including the rain shadow effect
- (7) Hurricanes

(8) Nor'easters

(9) Polar vortexes and bomb cyclones

(10) Summer weather and thunderstorm patterns

(11) Using smartphone apps and reading the sky to predict very near-term weather

2. Know about emergency stream crossings, as an individual and as a group

B. COMMUNICATIONS

1. Know and be able to set up and properly operate a radio station at Base, including:

a. Considerations for placing Base antennas with reference to communications efficacy, high points and ground planes, and dangers including wind and lightning

b. How to assemble handheld radios, and properly handle sign-in/sign-out of such radios

c. How to change handheld radio batteries

d. How to set up and use battery chargers

e. How to identify and prioritize batteries for charging or sign-out

f. How to determine when battery charging is complete

g. Observing the FCC rules under which ASRC operates:

- i. Use and number of units allowed for each FCC licensed frequency used by ASRC
- ii. Announcing the ASRC callsign
- iii. Concerns with interference with other channel users

h. Carrying out the duties and responsibilities of Net Control

i. Using the Equipment Log to track radio equipment and the Communications Log to track radio traffic

C. LAND NAVIGATION

1. Be able to use a GPS or smartphone GPS app to ascertain and communicate DD MM.MMM coordinates of a given location (either current location or another specified location) to a helicopter as a landing zone (LZ)
2. Be able to navigate using a paper topographic map, a compass, and basic orienteering concepts, but without a GPS, to complete a basic-level orienteering course safely and confidently during the day, including 3 targets at least 300 m apart [removed at request of Credentialing Board as these specifics are their job]

D. OPERATIONS, MANAGEMENT AND LEADERSHIP

1. Know the following concepts and how they affect the ability to lead:
 - a. Personal characteristics
 - b. Multitasking
 - c. Decision-Making:
 - (1) Gary Klein's Recognition-Primed Decision (RPD) theory of decision-making
 - (2) Heuristics
 - (3) Subjective vs objective hazards
 - (4) Decision fatigue, its causes and mitigation
 - d. Selective attention
 - e. Human nature
 - f. Genetics and human behavior
 - g. Personality types, including:
 - (1) Charisma
 - (2) Contentiousness

- (3) Specific personality characteristic of emergency services workers including SAR group members

- (4) Psychopaths and sociopaths

h. Whackers and whacker management

- i. The psychological phenomenon of illusory superiority cognitive bias**

- j. Business management principles appropriate to leading volunteers:

- (1) "Scientific Management" (Taylorism, from Frederick Winslow Taylor's 1911 book *The Principles of Scientific Management*)

- i. Managers develop science for each element of member's work, which replaces old rule-of-thumb method
- ii. Managers select and then train, teach, and develop the members, whereas in past he or she chose his own work and trained himself as best he could
- iii. Managers cooperate with members to ensure work being done in accordance with principles science which have been developed
- iv. Almost equal division of work and responsibility between managers and members; managers do work for which they are better fitted

- (2) "Fourteen Points for Management" (from W. Edwards Deming's 1982 book *Out of the Crisis*)

- i. Constancy of purpose toward improvement of product and service
- ii. Leadership for change
- iii. Eliminate the need for inspection on a mass basis by building quality into the product in the first place
- iv. Minimize total cost; single suppliers on a long-term relationship of loyalty and trust
- v. Improve constantly
- vi. Institute training on the job
- vii. Supervision should help people to do a better job
- viii. Drive out fear, so that everyone may work effectively
- ix. Break down barriers between groups
- x. Eliminate slogans, exhortations, and targets

* Recognition-primed decision (RPD) is a model of how you make quick, effective decisions when faced with complex situations. You generate a possible course of action, compare it to the constraints imposed by the situation, and pick the first course of action that you don't reject. It functions well in conditions of time pressure, and in which information is partial and goals poorly defined, like wilderness search and rescue.

** This commonly known as the Dunning-Kruger effect: "the knowledge and intelligence that are required to be good at a task are often the same qualities needed to recognize that one is not good at that task – and if one lacks such knowledge and intelligence, one remains ignorant that one is not good at that task." —Prof. David Dunning

- xi. Responsibility of managers not numbers but quality
- xii. Pride of workmanship: no annual or merit rating or management by objective
- xiii. A vigorous program of education and self-improvement
- xiv. Transformation is everybody's job
- k. Rhetoric, including public speaking basics [moved to Field II]
- 2. Know the basics of the following management styles and concepts and how they apply to leading volunteer teams:
 - a. Management by exception
 - b. Transactional management
 - c. Laissez-faire management
 - d. Charismatic leadership
 - e. Task-oriented leadership and management by objectives
 - f. Autocratic command-and-control leadership
 - g. Transformational leadership
 - h. Psychological safety in leadership
 - i. Thought leadership (memes)
 - j. Rules vs. best practices
 - k. Groupthink
 - l. Danger of leader asking question then proposing leader's own solution in stifling alternatives
- 3. Know sources of authority and how applicable they are to leading a field team:
 - a. From place in chain of command
 - b. From expertise
 - c. From charisma and past interpersonal relations
 - d. From "referent authority": granted by team members
 - e. From being able to provide information

- f. From being able to reward or punish
- g. From subordinates granting authority
- 4. Followership and mentoring:
 - a. Adult learning modes:
 - (1) Visual
 - (2) Auditory
 - (3) Read/write
 - (4) Kinesthetic
 - b. Adult learner characteristics:
 - (1) Autonomous and self-directed
 - (2) Have accumulated a foundation of expertise and knowledge
 - (3) Are goal oriented
 - (4) Are relevancy-oriented
 - (5) Are practical
 - (6) Need to be shown respect

E. SEARCH

- 1. In addition to the terms required in Field III, know the following terms used in SAR, their definitions, and their implications
 - a. Areas of expertise/types of SAR
 - (1) USAR: Urban Search and Rescue
 - (2) Urban Search
 - (3) Wilderness Search and Rescue
 - (4) Rescue [this and deleted items below already in Field III]
 - (5) Recovery
 - b. Search Strategy/Planning Terms and Concepts
 - (1) ICP: Incident Command Post

- (2) Base
 - (3) LKP: Last Known Point
 - (4) PLS: Point Last Seen
 - (5) IPP: Initial Planning Point
 - (6) Planning region
 - (7) Searchable segment
 - (8) POA: Probability of Area
 - (9) POD: Probability of Detection/POC: Probability of Containment
 - (10) POS: Probability of Success
 - (11) MPQ: Missing Person Questionnaire
 - (12) GIS: Geographic Information System
 - (13) Statistical model for determining POA
 - (14) Travel-time model for determining POA
 - (15) Trail-based model for determining POA
 - (16) Mattson consensus method for determining POA (“Mattson”)
 - (17) Shifting POA
 - (18) Decision points
 - (19) Sweep width
 - (20) Bike wheel model
 - i. Axle
 - ii. Rim
 - iii. Hub
 - iv. Spokes
 - v. Reflectors
- c. Common types of search task
- (1) Reflex search task
 - (2) Containment search task
 - (3) Hasty search task
 - (4) Sweep search task
 - (5) Line (saturation) search task
 - (6) Mantracking search task
 - (7) Cutting for sign (signcutting) search task
 - (8) Airscenting dog search task
 - (9) Trailing dog search task
 - (10) HRD (Human Remains Detection) search task
 - (11) UAV (unmanned aerial vehicle = drone) search task
 - (12) Manned aircraft search task
- d. Canine-specific terms
- (1) Field team vs Dog team
 - (2) Alert (dog team)
 - (3) Refind (dog team)
 - (4) Scent-discriminating
2. Know the principles and planning considerations for an attraction station along a road and one that requires a backcountry camp-in
 3. Know the differences in leading a team on a hasty or sweep (wide-spaced search) and leading a large team on a saturation (line) search task
- F. RESCUE**
1. Know the properties, advantages and disadvantages and be able to reliably and confidently tie and use:
 - a. The Münter hitch, including the Super Münter
 - b. The butterfly knot (Alpine butterfly) and know its uses
 - c. The Radium load-releasing hitch
 2. Be able to use the following for belaying and lowering, give considerations for when they are appropriate, and discuss concerns with using them in rescue situations:
 - a. Münter hitch and Super Münter

- b. Rappel rack
 - c. Figure 8 descender
 - d. Other mechanical belay and lowering devices owned by your team
3. Be able to rig and manage lowering and raising systems for steep low angle rope rescue (steep semi-technical evacs) including:
- a. Mechanical braking systems
 - b. 3:1 hauling systems, including using a Radium load-releasing hitch and other rigging to switch from lower to raise and from raise to lower
4. Know the advantages, disadvantages, safety considerations and appropriate situations for use of:
- a. Single-line systems
 - b. Single-line systems with a separate belay
 - c. Two-tensioned (dual-capability) line systems
5. Know general principles for setting up a helicopter landing zone (LZ), and principles for those on the ground interacting with a helicopter crew, including essential elements of safety

Documentation and Process for ASRC Search Manager Applications

The ASRC BOD makes a certification decision for each candidate based on the letter of the training standard, and based on the spirit of the training standard.

The letter of the training standard is interpreted here by requirements for documentation and other supporting materials to meet the qualifications as they are written in the training standards.

The spirit of the training standard is by necessity a subjective trust decision as to whether the candidate can fulfill the expected future duties of the position on a variety of incident types, based on current and past personal knowledge and experiences by others with the candidate. This document does not yet describe a process for spirit assessment.

These documentation and process rules here are intended to address several principles of certification:

- **Independence** – documentary evidence should not be based on the candidate’s own evaluation/validation where possible. These rules allow candidates to attest in some cases because of the extreme difficulty that obtaining some forms of hard copy documentation would present (such as signed debriefed TAFs as proof of FTL team leadership for the IS requirement). Generally, members of the ASRC BOD and an independent auditor should be able to look at the documentation and arrive at the same decision that the ASRC BOD make with regard to whether the letter of the qualification was met.
- **Accountability** – by providing this documentation, the individuals involved (e.g. the candidate, the GTO and others making attestations) and the ASRC BOD are held accountable for ensuring the candidate meets the letter of the qualification.
- **Standardization** – this document provides a clear set of requirements for all candidates that are standardized by the ASRC BOD, and included as part of the ASRC training standards.
- **Consistency** – these documentation guidelines help ensure BOD certification decisions are consistent. They minimize the per-candidate subjective interpretation of what documentation is “good enough” to meet the standard. A checklist for each position provides quick and consistent briefing how the relevant qualifications are met.
- **Experiential Requirements** – these documentation guidelines describe how to document mission, simulation and other experience. Other people are required to validate the candidate did in fact have the qualifying experience. The Conference Training

Officer (CTO) may contact these people during the vetting process to confirm.

- **Periodic Recertification** – the ASRC training standards defines different requirements for recertification than for initial certification. This document provides rules for showing evidence of continuing education and experience.

All applicants are strongly encouraged to keep and submit, as part of their application, their mission log that shows all incident participation or a relevant subset to help the ASRC BOD decide whether the spirit of the standard can be met. The log that is submitted should be summarized, but may be in whatever format the candidate maintains. If possible the log should contain the following information: mission name, mission number, date, length of deployment, role and tasks, SM/OPS contact details, supervisor contact details, any special tasks performed or noteworthy accomplishments (e.g. difficulty of task). No independent verification of the accuracy of the log is required.

The CTO vetting is done by verifying that all the documentation requirements are met and accurately reflected on the checklist, and may or may not include contacting the persons who attest to various qualifications are met. The forwarding of the application to the ASRC BOD may be done by combining all forms of documentation into an electronic package (e.g. a single PDF containing all copies of documentation, or multiple PDFs) and sending by email to the asrc-bod@asrc.net email list. Or it may be done by providing a single hard-copy of all documentation at a BOD meeting for reference by the ASRC BOD members.

Where written evidence is required from an authoritative source (e.g. GTO, SM, instructor or class participant), it can be provided in hard-copy letter, by fax, or in electronic copy using email. It must include the person’s first and last name, signature (or email), contact phone and optionally an email address. To allow for easier confirmation, these forms can be used by a 3rd person who is an officer of a group or of the ASRC or designated by one to perform this action, who confirms they spoke or otherwise verified the information from the authoritative source. For example, the CTO or his designate can talk by phone, instant message, text or email to the SM of a mission in the process of vetting an application to confirm a candidate’s staff role and hours worked. The documentation will contain the name of the authority, the date that it was created, authorized,

Search Manager Applications

approved or received, and who did the verification if not by the authority themselves.

In the case of hard copy letters with signatures and other supporting documentation for the application, the master copy should be maintained by the candidate. The contents of the application are not personal private information owned by the candidate. The candidate should have no expectation of privacy for this information. In making the application, the candidate is aware that distribution of this information is necessary to process the application. The candidate expressly and irrevocably assigns all copyrights or other intellectual property rights for this material to the ASRC Corporation. The ASRC secretary must receive a full electronic or hard copy of all application materials and is expected to maintain a copy of it for as long as the ASRC BOD determines is appropriate. The ASRC CTO,

ASRC BOD members and other officers may maintain their own records of application materials as well, and may maintain notes and emails that contain feedback gathered about the candidate. In order to protect the quality of such feedback, feedback that is requested by the provider to remain private may not be shared with the candidate or the ASRC BOD. But any other materials and information and notes and emails gathered or written by the CTO or by any assisting the CTO or the ASRC BOD with regard to evaluating the candidate and the application for certification are considered confidential property of the ASRC Board of Directors. As such, any and all copies must be irrevocably deleted from personal computers, email accounts, archives and disk storage upon request.

Search Manager IV

Search Manager IV standards define the minimum requirements necessary to perform in the role of a NIMS compliant General Staff position, including Operations Section Chief and Planning Section Chief) for missing person and the ground portion of a missing aircraft search.

A. SM-IV POSITION TASK BOOK (PTB)

An ASRC SM-IV PTB is available for the Group Training Officer and applicant to utilize to track progress toward completion of the SM-IV qualification requirements.

The spirit of the Search Manager-IV standard is that the SM-IV certified member be trusted to confidently serve as Ops or Plans or Logistics section chief, as ASRC Agency Representative on a reasonably large incident (200 people, 15 agencies) without much supervision by the SM, and with effective coordination with other staff, field resources, participating agencies and proper handling of media interactions and intrusions. The SM-IV member serves as an experienced FTL who is responsible for creating a variety of appropriately prioritized tasks based on the incident objectives for both foot searchers and dog tasks that achieve an effective use of available resources and time with the goal of containing the search area, and finding clues to help reduce and focus the search area and find the subject alive and well. The SM-IV certified member is also expected to perform evacuation planning and rescue coordination. The SM-IV candidate is an experienced, qualified FTL to ensure they can lead a team in the event that the needs of the mission, as determined by the SM, RA or otherwise, require the IS person to serve as an FTL instead of a staff role. Also, the SM-IV may be the only experienced and available person able to lead a rescue when a find happens out of area, or if existing field teams are deployed out of range, or out of touch. The SM-IV role must also be able to serve as ASRC agency representative to know, adhere, educate and enforce for ASRC member participants the ASRC standard operating procedures and standards of conduct.

B. QUALIFICATIONS

To become Search Manager IV certified, the applicant must:

1. Be an ASRC Field Team Leader (FTL).
2. Have served as FTL on at least three field tasks.
3. Meet the technical standards set below, as determined by the Group Training Officer.
4. Complete ICS-300, Intermediate Incident Command System (24 hours).
5. Complete a minimum total of 64 hours of classroom training in Search and Rescue management. Classes which may be used to satisfy this requirement include, but are not limited to (course hours for ICS-300 may be used to meet the 64 hour requirement):
 - a. *Managing Search Operations* (40 hours);
 - b. *Managing the Search Function* (40 hours);
 - c. *Managing Land Search Operations* (40 hours);
 - d. *Practical Search Operations* (40 hours);
 - e. *Search Manager for Ground Search and Rescue* (24 hours);
 - f. *Planning Section Chief for Search and Rescue* (24 hours);
 - g. *National Inland SAR Planning Course* (40 hours);
 - h. *National Basic Inland SAR Course* (20 hours);
 - i. *Virginia Management Team Member* (40 hours);
 - j. *Virginia Management Team Leader* (40 hours);
 - k. *Incident Commander for Ground Search and Rescue* (32 hours);
 - l. *Lost Person Behavior* (8 to 32 hours);
 - m. *Urban Search and Investigation* (16 hours);
 - n. *Wide Area Search* (24 hours); and
 - o. Other approved equivalent classes, as approved by the ASRC Credentialing Board.
6. Serve as a member of the Command Post or Base Staff on one incident within the last three years.
7. Receive a favorable simple majority vote of the member's Group.

Search Manager-IV Certification	
STANDARD	SUPPORTING MATERIALS REQUIREMENTS
Be an ASRC Field Team Leader (FTL)	SM-IV PTB signed by the GTO, <i>and</i> Current group roster shows FTL, <i>or</i> Group meeting minutes showing approval as FTL. Materials should note the date of the last FTL certification. Be sure that appropriate FTL recertification requirements are satisfied as necessary.
Have served as FTL on at least 3 field tasks	Debriefed TAF signed by Ops, <i>or</i> Attestation by a team member providing mission, date, task description
Meet the technical standards described in the ASRC Training Standards Section VII.D	SM-IV PTB endorsed by the GTO.
Complete ICS-300	Copy/scan of paper certificate
Complete 64 hours of classroom training in Search and Rescue management as described in the ASRC Training Standards Section VII.B	Copy/scan of paper certificate, <i>or</i> Attestation by course instructor that student completed course citing the name and dates of the class.
Serve as a member of the Incident Command Post staff on 1 incident within the last 3 years	Signed copy of: Organization Chart (ICS 207), <i>or</i> Incident Briefing (ICS 201), <i>or</i> Organization Assignment List (ICS203), <i>or</i> Attestation by SM or Section Chief citing mission, date and role/task. Performing any on-scene role or task for the SM, OPS, PLANS or Logistics on a real mission, not a simulation. No recent requirement.
Receive favorable simple majority vote of member's Group.	Group meeting minutes showing endorsement of the candidate for SM-IV, or letter from a group chair or vice chair or ASRC BOD rep or GTO citing this with the date of the meeting.
Submit the completed SM-IV PTB through the GTO to the CTO and be proposed for SM-IV certification at an ASRC BOD meeting	CTO forwards the vetted application package to the ASRC BOD for consideration at the next BOD meeting. Must receive a favorable two-thirds or greater vote of those ASRC BOD Representatives present at the meeting.

Showing person in a staff role

8. Be proposed for Search Manager IV certification by the Group Training Officer through the Conference Training Officer at an ASRC Board of Directors meeting and receive a favorable simple majority vote.

C. CERTIFICATION

Upon being approved for certification by the ASRC Board of Directors, the ASRC Conference Training Officer will provide a certificate of certification to the member. This certificate will be in the official SM-IV Certification Format, as defined by the ASRC Conference Training Officer, and which contains at a minimum:

1. The full name of the Appalachian Search and Rescue Conference
2. The ASRC logo
3. The name of the member granted the certification

4. The name of the certification granted
5. The date issued
6. The date of expiration/recertification
7. The signature of the ASRC Conference Training Officer

D. RECERTIFICATION

Search Manager IV qualified members must meet the following recertification requirements every three calendar years:

1. Document a total of at least 3 shifts in staff positions, on a total of at least three ground SAR incidents, during the three years immediately prior to the date of application for re-certification. Simulations may be counted toward re-certification requirements.

Search Manager-IV Recertification	
STANDARD	SUPPORTING MATERIALS REQUIREMENTS
<p>Document a total of at least 3 shifts in staff positions, on a total of at least three ground SAR incidents for either missing persons or missing aircraft, during the three years immediately prior to the date of application for re-certification. Simulations may be counted toward recertification requirements.</p>	<p>For each "shift" or "partial shift", provide signed copy of: Organization Chart (ICS 207), <i>or</i> Incident Briefing (ICS 201), <i>or</i> Organization Assignment List (ICS203), <i>or</i> Attestation of staff role and time worked by SM or Section Chief in writing/ email (typically for partial staff work), which includes incident name/ description, date and location.</p> <p style="text-align: right; font-size: small;">Showing person in a staff role</p>
<p>The requirements for one shift may be fulfilled with 12 hours of category II continuing education. One hour of qualifying category II CE will include one hour of classroom instruction or teaching the following SAR related topics: law enforcement, EMS, medical, fire, hazardous materials, emergency management, disaster management, weather.</p>	<p>For classes that were taught as part of ASRC group training, provide list of each class with a description: title or subject, date, times (duration in hours round to nearest half hour) and location, signed or by email attested to by the current or then GTO. GTO does not have to have attended the class; just verify that the class was taught as described. For classes not taught as part of the group training or if the GTO is unavailable, provide list of each class with a description: title or subject, date, times (duration in hours round to nearest half hour) and location, and show EACH class verified by a class participant that the class was taught by the candidate as described. At least two (2) different class participants shall be represented among the total for 12 hours.</p>
<p>The requirements for two shifts may be fulfilled with 24 hours of category I continuing education or one shift can be fulfilled with 12 hours of category I CE. (One hour of qualifying category I CE will include one hour of classroom instruction or teaching the following SAR topics; any topic listed in CQ, FTM, FTS, FTL, MSO, PSO, ICG, or leadership training.</p>	<p>Same as above.</p>
<p>Submit the IS/SM-IV recertification package to the CTO</p>	<p>CTO forwards the vetted recertification package to the ASRC BOD for consideration at the next BOD meeting. Must receive a favorable vote of the ASRC Board of Directors.</p>

2. Continuing education may only be used for a total of 2 shifts.
 - a. The requirements for one shift may be fulfilled with 12 hours of category II continuing education. (One hour of qualifying category II CE will include an hour of classroom instruction or teaching the following SAR related topics: law enforcement, EMS, medical, Fire, hazardous materials, emergency management, disaster management, weather.)
 - b. The requirements for two shifts may be fulfilled with 24 hours of category I continuing education or one shift with 12 hours. One hour of qualifying category I CE will include an hour of classroom instruction or teaching the following SAR topics; any topic listed in CQ, FTM, Field Team Signcutter (FTS), FTL, *Managing Search Operations* (MSO), *Practical Search Operations* (PSO), *Incident Commander for Ground Search and Rescue* (ICG), or leadership training.
3. Receive a favorable vote of the ASRC Board of Directors.
4. In the event the SM-IV does not receive a favorable vote, they will be put on an immediate suspension as SM-IV. The Board of Directors will prepare a letter stating the reasons for the suspension if for reasons other than non-compliance with section 1. The SM-IV may choose to dispute matters in writing or in person at the next Board of Directors meeting. After a presentation by the suspended staff member the BOD will go into a closed session for deliberations. The BOD may reverse the suspension by a simple majority vote.
5. The review cycle period shall begin the first January of the year following the SM-IV's initial certification.

Search Manager-IV qualified members shall meet the recertification requirements every three (3) calendar years. Continuing education may only be used for a total of 2 shifts.

The requirements for recertification are not the same as for initial certification. For SM-IV recertification, no further refreshers of required classes are required, nor are the GTO and group review.

Currency in knowledge and techniques learned in MSO and ICS-300 are expected to be reinforced, perfected and enhanced through practical experience doing real mission management. Thus full incident shifts as the designated Ops or Plans section chief are strongly

desired for recertification.

The term “staff positions” originally was interpreted to mean only the section chief roles of operations, plans or logistics. However, not everyone can get appointed to serve a full shift as section chief on the missions they can respond to. Some missions are short. And as always, people should serve in the operational capacity best suited to help the subject and the requirements of the RA. Thus the interpretation of “staff positions” has allowed for a various types of management experience to be credited to meet the letter of the standard.

A “shift” is interpreted to mean at minimum 8 consecutive hours. It does not include time for transportation to/from the incident, but may include transportation off-scene during the incident and breaks within the period of doing the work as long as the responsibility for the staff work was retained. For quick incidents, a “shift” (8 hours credit) can be claimed if you were assigned to do staff work as part of an overhead team continually during the initial on-scene setup, dispatching of initial tasks, responding to the find, and demobilization. The qualification for 6 shifts is thus met using a total of $6 \times 8 = 48$ hours of work in “staff positions”, and which involves a minimum of 3 different ground SAR incidents.

The qualification for “staff position” can be met to the letter by claiming on-scene work that requires or exercises your search and rescue management training:

- Assigned by a SM to be responsible for one or more command staff functions (agency liaison, family liaison, PR, agency representative, investigations, safety officer) or deputy SM, or
- Assigned by an SM as to be the section chief (Operations, Plans, Logistics, or Finance), a combination of these (PLOPS), or deputy section chief,
- Assigned by a section chief to a function or job within a section, such as to do a Mattson and search area map and segmentation, write new TAFs, task briefing officer, task debriefing officer, develop/maintain resource status, interviewing for clue follow-up, developing or enhancing the subject LPQ/LPR, creating a searcher information sheet, filling out ICS forms, being communication unit leader responsible for developing and executing the overall incident communications plan, be a division supervisor or branch director or dog coordinator with responsibility for developing new tasking, doing clue tracking/plotting/analysis, doing a tasks complete map with POD and resulting POA adjustment or task reprioritization, medical/evacuation coordinator/unit leader where you develop and execute response plans.

The candidate cannot claim a position that was not assigned. The person making the assignment is

considered the supervisor or manager and will need to validate the assigned role and the duration in the documentation requirements.

Excluded from “staff positions” are quasi-field work assignments, administrative tasks, and logistics tasks that could be done by an FTM or FTL or local volunteer, unless these tasks are done as part of a larger management responsibility reviewed above. Example work that would not count as “staff positions” when done on their own without broader responsibilities above are:

- Setting up the base radio, being base radio operator, being a communications relay
- Doing just a task complete map, or task assigned map
- CP/base messenger
- Parking cars, directing traffic, developing and posting signs
- Attending sign-in, managing a staging area
- Making copies of maps or other forms
- Getting and serving food
- Providing transport for teams
- Setting up tables and picking up trash
- Conducting interview tasks door-to-door or posting flyers
- Taking general phone calls from the public or media
- Making phone calls to find supplies
- Rescue equipment officer, evacuation team leader

Staff work that is not a full shift is considered “partial shift” time that is counted as actual hours worked to add to the total hours of experience in “staff positions”. For staff work lasting longer than 8 consecutive hours, count the number of actual hours worked towards your total. Partial hours are rounded up to the next hour.

For example, you arrived at 16:00 on-scene, worked in base helping ops and plans doing various things all night (not just one thing) and then took an hour break at 0:600 to get your field gear ready for a task and came back to get assigned a task. You would count 16:00-06:00 8hrs + 6hrs = 14hrs and one mission towards the recertification qualification.

For example, if you were not the ops section chief but you did 2 hours of miscellaneous tasks in CP/Base to help plans/ops get tasks deployed, and then went to sleep, signed-out, or took a field task, you can claim those 2 hours as “partial shift” time and the incident as 1 of the 3 incidents.

E. FAILURE TO RECERTIFY

1. If the SM fails to recertify by the expiration date, their certification will be dropped to highest level certification that they have successfully met the recertification requirement for three months after the expiration date.

2. An expired SM may apply for recertification for up to 3 months past the end of their certification. Beyond this grace period, if the SM wishes to be re-certified after certification has been dropped; the entire process described in Section VIII-X must be repeated.
3. If there are extenuating circumstances that prevent the SM from recertifying within the allotted time, he/she should file for an extension with the ASRC Conference Training Officer. Requests for extensions will be considered on a case-by-case basis by the ASRC Board of Directors.

Search Manager IV Performance Standards

A. SAR OPERATIONS

1. Demonstrate a working knowledge of the ICS concepts
2. Demonstrate a working knowledge of the ASRC Operational Guidance Manual

B. LEGAL ASPECTS

1. Outline the delegation of authority and responsibility for search and rescue in states where ASRC is located
2. Explain how the following legal concepts apply to search and rescue operations:
 - a. Good Samaritan Laws
 - b. Civil suits and criminal actions
 - c. Standards of care
 - d. The right to emergency assistance and duties to provide emergency assistance
 - e. Abandonment
 - f. Implied consent
 - g. Entry, during incidents, on property posted “No Trespassing”
 - h. Crime scene protection
 - i. Declaration of death and confirmation of death
 - j. Confidentiality

C. FIELD OPERATIONS

1. Describe sources of weather information
2. Assign realistic tasks to field teams, given terrain, weather, personnel and the context of a search
3. Produce legible color-enhanced copies of maps with ASRC grids

D. SEARCH

1. Brief a field team leader properly before a task, including:
 - a. Subject information and history, subject’s equipment, behavior and medical history
 - b. Weather
 - c. Terrain
 - d. The search task, how to perform it, what its objectives are, clues in the area
 - e. Estimated time to complete the task
 - f. Hazards
2. Describe aircraft crash scene considerations
3. Describe the proper documentation of, and response to, reported clues
4. Debrief a field team leader properly after a task, including:
 - a. POD, clues, safety hazards, map updates, other pertinent field information, and any other relevant information
 - b. Availability for reassignment
 - c. Specialty team debriefing as appropriate, including:
 - (1) Dogs (including obtaining information on air movement)
 - (2) Aircraft
 - (3) Direction finding
 - (4) Tracking
 - (5) Evacuation (ensuring that paperwork and documentation are completed and checked)
 - (6) Medical (ensuring that paperwork and documentation are completed and checked)

5. Plot (triangulate) bearings from Direction-Finding instruments
6. Handle the media in an appropriate manner (as assigned by the SM)
7. Be able to complete an ASRC map problem defined as follows; given a search scenario and an ASRC OPSKIT, the ASRC SM-IV member must be able to complete an accurate Strategy Map using ASRC and ICS symbols. The SM-IV member must then use the map to:
 - a. Use the Task Assignment Procedure to generate a set of appropriate tasks to complete the initial strategy with the given resources
 - b. Fill out a Task Assignment Form properly for each task
 - c. Start a Status Map using the standard ASRC symbols
 - d. Generate Medical, Organizational (including ICS 201), Communications, Evacuation and Demobilization Plans

E. COMMUNICATIONS

1. Equipment:
 - a. Be able to set up antennas and relays, using available high points and ground planes
 - b. Describe the proper placement of antennas
2. FCC Rules and communications protocols:
 - a. Describe FCC rules under which the ASRC operates:

- (1) State the use and number of units allowed for each FCC licensed frequency used by the ASRC
- (2) Describe appropriate concerns with interference with other Nets
- (3) Describe FCC rules pertinent to the ASRC
- b. Outline common communications protocols as they relate to a SAR event
3. Management:
 - a. Develop a comprehensive Communications Plan for a mission (with multiple nets and base communications)
 - b. Describe how to interface with other organizations providing radio communications at missions (CAP, Ham, etc.):
 - (1) **Planning:** describe what is needed and how these organizations can be put to best use
 - (2) **Resources:** describe what the organizations can provide and when
 - (3) **Operations:** find out what they need during operations and try to provide it
 - c. Explain when a temporary commercial telephone line installation is practical. Describe the procedure to obtain a temporary installation
 - d. Maintain proper records (Communications log and equipment sign-out log)

Search Manager III

Search Manager III standards define the minimum requirements necessary to perform in the role of a NIMS compliant Command Staff position, incident commander, or part of a unified command for a missing person search or an aircraft search.

A. SM-III POSITION TASK BOOK (PTB)

An ASRC SM-III PTB is available for the applicant to utilize to track progress toward completion of the SM-III qualification requirements.

B. QUALIFICATIONS

To become Search Manager - III qualified the applicant must:

1. Meet all requirements for Search Manager IV
2. Be at least 21 years of age
3. Complete ICS-400, Advanced Incident Command System (16 hours)
4. Complete a minimum total of 80 hours of classroom training in Search and Rescue management. Classes which may be used to satisfy this requirement include, but are not limited to (course hours for ICS-400 may be used to meet the 80 hour requirement):
 - a. *Managing Search Operations* (40 hours)
 - b. *Managing the Search Function* (40 hours)
 - c. *Managing Land Search Operations* (40 hours)
 - d. *Practical Search Operations* (40 hours)
 - e. *Search Manager for Ground Search and Rescue* (24 hours)
 - f. *Planning Section Chief for Search and Rescue* (24 hours)
 - g. *National Inland SAR Planning Course* (40 hours)
 - h. *National Basic Inland SAR Course* (20 hours)
 - i. *Virginia Management Team Member* (40 hours)
 - j. *Virginia Management Team Leader* (40 hours)
5. Document mission/simulation experience as follows:
 - a. Field Team Leader or equivalent on 6 tasks. No more than three of these tasks may have occurred during simulations
 - b. Serve in a base position in Operations or Plans on at least 4 incidents
 - c. Serve as Plans Section Chief, Operations Section Chief (OPS), deputy OPS, division supervisor, or Search Manager on one shift during a mission
6. Receive a favorable written performance evaluation from the Search Manager or supervisor for the four incidents serving in a base position
7. Receive a favorable simple majority vote of the member's Group
8. Be proposed for Search Manager – III certification by the Conference Training Officer at an ASRC Board of Director's meeting;
9. Receive a favorable two-thirds or greater vote of the ASRC Board of Directors present at the meeting

C. CERTIFICATION

Upon being approved for certification by the ASRC Board of Directors, the ASRC Conference Training Officer will provide a certificate of certification to the member. This certificate will be in the official ASRC SM-III Certification Format, as defined by the ASRC Conference Training Officer, and which contains at a minimum:

1. The full name of the Appalachian Search and Rescue Conference

2. The ASRC logo
3. The name of the member granted the certification
4. The name of the certification granted
5. The date issued
6. The date of expiration/recertification
7. The signature of the ASRC Conference Training Officer

- b. The requirements for two shifts may be fulfilled with 24 hours of category I continuing education or one shift with 12 hours. (One hour of qualifying category I CE will include an hour of classroom instruction or teaching the following SAR topics; any topic listed in CQ, FTM, FTL, MSO, PSO, ICG, or leadership training
3. Receive a favorable vote of the ASRC Board of Directors
4. The review cycle period shall begin the first January of the year following the SM's initial certification

D. RECERTIFICATION

Search Manager - III qualified members must meet the following recertification requirements every three calendar years:

1. Document a total of at least 6 shifts in staff positions
 - a. Two must be as Search Manager, on a total of at least three ground SAR incidents for either, during the three years immediately prior to the date of application for re-certification
 - b. Simulations may be counted toward re-certification requirements
2. Continuing education may only be used for a total of 2 shifts and may not substitute for SM shifts
 - a. The requirements for one shift may be fulfilled with 12 hours of category II continuing education. (One hour of qualifying category II CE will include an hour of classroom instruction or teaching the following SAR related topics: law enforcement, EMS, medical, Fire, hazardous materials, emergency management, disaster management, weather)

E. FAILURE TO RECERTIFY

1. If the SM fails to recertify by the expiration date, their certification will be dropped to highest level certification that they have successfully met the recertification requirement for three months after the expiration date.
2. An expired SM may apply for recertification for up to 3 months past the end of their certification. Beyond this grace period, if the SM wishes to be re-certified after certification has been dropped; the entire process described in Section VIII-X must be repeated.
3. If there are extenuating circumstances that prevent the SM from recertifying within the allotted time, he/she should file for an extension with the ASRC Conference Training Officer. Requests for extensions will be considered on a case-by-case basis by the ASRC Board of Directors.

ASRC Search Manager Type III Certification	
STANDARD	SUPPORTING MATERIALS REQUIREMENTS
Meet all requirements for SM-IV	See previous list.
Be at least 21 years of age	Copy of government issued identification showing the age or birth date of the applicant
Complete ICS-400	Copy/scan of paper certificate
Complete a minimum total of 80 hours of classroom training in Search and Rescue management as described in the ASRC Training Standards VIII.B	Copy/scan of paper certificate, or Attestation by course instructor that student completed course citing name and date
Document mission/simulation experience as follows:	
Lead a field team on 6 tasks. No more than 3 of these tasks may have occurred during simulations.	Debriefed TAF signed by Ops, or Attestation by a team member, citing mission name/description, date, and type of task.
Serve in the Incident Command Post in Operations or Plans on at least 4 incidents.	Signed copy of: Organization Chart (ICS 207), OR Incident Briefing (ICS 201), OR Organization Assignment List (ICS203), OR Attestation by SM or Section Chief citing mission name/description, date and roles.
Serve as Plans Section Chief, Operations Section Chief (OSC), deputy OPS, division supervisor, or SM on one shift during a mission.	Signed copy of: Organization Chart (ICS 207), OR Incident Briefing (ICS 201), OR Organization Assignment List (ICS203), OR Attestation by SM or RA citing mission name/description, date and roles.
Receive a favorable written performance evaluation from the SM or supervisor for the four incidents serving in a base position.	Copy/scan of letters/emails or other written materials, OR Attestation by the SM or Section Chief stating that performance was favorable, citing mission name/description, date and roles.
Receive favorable simple majority vote of member's Group.	Group meeting minutes showing endorsement of the candidate for SM-III, or letter from a group chair or vice chair or ASRC BOD rep or GTO citing this with the date of the meeting.
Submit the completed SM-III PTB to the CTO and be proposed for SM-III certification by the Conference Training Officer at an ASRC BOD meeting.	CTO presents the vetted application package to the ASRC BOD for consideration at the next BOD meeting. Must receive a favorable two-thirds or greater vote of those ASRC BOD Representatives present at the meeting.

Showing person in OSC/PSC role

Search Manager III Performance Standards

A. SAR KNOWLEDGE

1. Define the role of the field team for these types of missions:
 - a. Lost person search
 - b. Downed aircraft search
 - c. Rescue
 - d. Disaster assistance

B. SAR OPERATIONS

1. Demonstrate an understanding of the laws, policies, and procedures, operating instructions, memorandums and agreements that govern SAR operations in the ASRC's area of operation
2. 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
3. Demonstrate an understanding of the SAR resources listed below including how they are obtained, and their appropriate and inappropriate uses:
 - a. Air scent search dogs
 - b. Tracking/trailing dogs

ASRC Search Manager-III Recertification		
STANDARD	SUPPORTING MATERIALS REQUIREMENTS	
Document a total of at least 6 shifts in staff positions; two must be as Incident Commander, on a total of at least three ground SAR incidents for either missing persons or missing aircraft, during the three years immediately prior to the date of application for re-certification. Simulations may be counted toward re-certification requirements.	Signed copy of: Organization Chart (ICS 207), OR Incident Briefing (ICS 201), OR Organization Assignment List (ICS203), OR Attestation by RA, SM or Section Chief citing name/description of mission, date, positions and durations.	Showing person in command or staff role
The requirements for one shift may be fulfilled with 12 hours of category II continuing education. (One hour of qualifying category II CE will include one hour of classroom instruction or teaching the following SAR related topics: law enforcement, EMS, medical, Fire, hazardous materials, emergency management, disaster management, weather)	For classes that were taught as part of ASRC group training, provide list of each class with a description: title or subject, date, times (duration in hours round to nearest half hour) and location, signed or by email attested to by the current or then GTO. GTO does not have to have attended the class; just verify that the class was taught as described. For classes not part of the group training or if the GTO is unavailable, provide a list of each class with a description: title or subject, date, times (duration in hours round to nearest half hour) and location, and show EACH class verified by a class participant that the class was taught by the candidate as described, either signed in hard copy or by email from the participant. The class participant name, signature (or email), contact phone and optionally an email address should be provided. At least two (2) different class participants shall be represented among the total for 12 hours.	
The requirements for two shifts may be fulfilled with 24 hours of category I continuing education or one shift with 12 hours. (One hour of qualifying category I CE will include one hour of classroom instruction or teaching the following SAR topics; any topic listed in CQ, FTM, FTS, FTL, MSO, PSO, ICG, or leadership training.	Same as above.	
Submit the SM-III recertification package to the CTO	CTO forwards the vetted recertification package to the ASRC BOD for consideration at the next BOD meeting. Must receive a favorable vote of the ASRC Board of Directors.	

- c. Trackers/Field Team Sign-cutters
 - d. Specialized SAR management teams
 - e. Specialized SAR field teams
 - f. Mounted search teams
 - g. Fixed wing aircraft
 - h. Rotary wing aircraft
 - a. Clergy and religious organizations
 - b. Critical incident stress management
 - c. State Coordinating Officer
 - d. Coroner/Medical Examiner
 - e. Child Protective Services
 - f. Public safety agencies such as fire, police, rescue, National Guard
4. Demonstrate an understanding of the non-SAR resources listed below including how they are obtained and their potential function in a SAR incident:

- g. Federal agencies such as National Park Service (NPS), National Transportation and Safety Board (NTSB), Health and Human Services, Federal Aviation Administration (FAA), military units, Federal Emergency Management Agency (FEMA), and others
 - h. Support services such as Red Cross, Salvation Army, and civic clubs
5. Demonstrate an understanding of the individuals or groups listed below including how they impact a SAR incident, what their concerns are, how to interact with them, when and how to effectively use them, and how to mitigate against inappropriate external influences:
- a. Psychics
 - b. Media
 - c. Family and friends of the subject(s)
6. Describe the role of the Search Manager in relation to the Legal Responsible Agent (RA) in the following situations:
- a. When the RA is uncooperative
 - b. When the mission involves or expands into other jurisdictions
7. Describe the role of the SM in relation to the various resources that may participate in a search mission in the following situations:
- a. When the SM has overall responsibility for all resources present
 - b. When the mission involves or expands into other jurisdictions
8. Demonstrate an understanding of certain legal issues related to SAR including:
- a. Trespassing
 - b. Confidentiality
 - c. Criminal investigations
 - d. Management of deceased subjects
 - e. Restricted airspace
 - f. Restricting access to various areas
 - g. Site security and surveillance
 - h. Maintaining the chain of evidence
 - i. Use of minors in SAR incidents
 - j. Liability for supplies, equipment, and services lent or donated for use during an incident
 - k. Use of SAR personnel for apprehension of criminals and crime scene investigation
 - l. Discovery of non-incident related illegal activities.

C. SEARCH MANAGEMENT

1. Be able to develop or manage the development of an Incident Action Plan, including both daily and overall incident goals and objectives
2. Be able to develop and manage a staff and describe when, where, and why various functions should be assigned to which staff positions, including the following functions:
 - a. Operations
 - b. Plans
 - c. Logistics
 - d. Finance
 - e. Media liaison
 - f. Interagency liaison
 - g. Safety
 - h. Investigations
 - i. Clue analysis
3. Be able to communicate with the staff by means of briefings, meetings, and written communications
4. Describe the internal staff information flow system, including verbal, written and electronic communications, required to insure that information is properly collected, evaluated, disseminated, used, and stored throughout the incident

5. Be able to work within a unified command system
6. Describe when and how to contact the appropriate state SAR coordinating agency and what type of incident information it may require
7. Identify outside influence problems common to search missions, describe solutions and the reasoning
8. Identify potential safety issues and describe how/if they can be countered
9. Describe when risk factors outweigh the need to continue operations
10. Describe the differences in deployment of resources in urban, suburban, rural and wilderness searches, and in the ground portion of an aircraft search
11. Describe the various search strategies that can be applied to the ground search portion of a missing aircraft mission
12. Describe prioritization of limited resources and how/if such shortages can be
13. Describe how to effectively and efficiently use non-SAR resources who may offer help at all types of searches
14. Describe the process used in making the decision to suspend a mission
15. Explain the SM's role after the subject or target has been located
16. Describe the common signs of incident stress and define the criteria for recommending a critical incident stress debriefing
17. Be able to complete all necessary mission documentation

Search Manager II

Search Manager II meets the same requirements at SM-III, but with an increased level of recent incident command experience.

A. SM-II POSITION TASK BOOK (PTB)

An ASRC SM-II PTB is available for the applicant to utilize to track progress toward completion of the SM-II qualification requirements.

B. QUALIFICATIONS

1. Meet all the requirements for SM-III.
2. Document mission experience as follows:
 - a. Participate as an Incident Staff Person in Operations, Plans, or Command in at least six type two incidents.
 - b. During these incidents, document having served at least 2 shifts as Operations Section Chief or Division Supervisor, and 2 shifts as Plans Section Chief.
 - c. Receive a favorable written performance evaluation from the Search Manager or Responsible Agent on four the incidents.
3. Receive a favorable simple majority vote of the member's Group.
4. Be proposed for Search Manager - II certification by the Conference Training Officer at an ASRC Board of Director's meeting.
5. Receive a favorable two-thirds or greater vote of the ASRC Board of Directors present at the meeting.

C. CERTIFICATION

Upon being approved for certification by the ASRC Board of Directors, the ASRC Conference Training Officer will provide a certificate of certification to the member. This certificate will be in the official ASRC SM-II Certification Format, as defined by the ASRC Conference Training Officer, and which contains at a minimum:

1. The full name of the Appalachian Search and Rescue Conference

2. The ASRC logo
3. The name of the member granted the certification
4. The name of the certification granted
5. The date issued
6. The date of expiration/recertification
7. The signature of the ASRC Conference Training Officer

D. RECERTIFICATION

Search Manager - II qualified members must meet the following recertification requirements every three calendar years:

1. Document a total of at least 6 shifts in staff positions; two must be as a Search Manager, on a total of at least three ground SAR incidents, for either missing person or missing aircraft, during the three years immediately prior to the date of application for recertification. Field simulations may be used to fulfill up to 3 of the required shifts.
2. Continuing education may only be used for a total of 2 shifts, and may not substitute for SM shift time.
 - a. The requirements for one shift may be fulfilled with 12 hours of category II continuing education.
 - b. The requirements for 2 shifts may be fulfilled with 24 hours of category I continuing education or one shift with 12 hours.
 - c. Receive a favorable vote of the ASRC Board of Directors.
3. The review cycle period shall begin the first January of the year following the SM's initial certification.

E. FAILURE TO RECERTIFY

1. If the SM fails to recertify by the expiration date, her certification will be dropped to highest level certification that they have successfully met the recertification requirement for three months after the expiration date.

2. An expired SM may apply for recertification for up to 3 months past the end of their certification. Beyond this grace period, if the SM wishes to be re-certified after certification has been dropped; the entire process described in Section VIII-X must be repeated.
3. If there are extenuating circumstances that prevent the SM from recertifying within the allotted time, he/she should file for an extension with the ASRC Conference Training Officer. Requests for extensions will be considered on a case-by-case basis by the ASRC Board of Directors.

Search Manager Type II Certification		
STANDARD	SUPPORTING MATERIALS REQUIREMENTS	
Meet all the requirements for SM-III	See previous list	
Document mission experience: Participate as an Incident Staff person in Operations, Plans, or Command in at least six type two incidents.	Signed copy of: Organization Chart (ICS 207), <i>or</i> Incident Briefing (ICS 201), <i>or</i> Organization Assignment List (ICS203), <i>or</i> Attestation by SM or RA.	Showing person in staff role
During these incidents, document having served at least 2 shifts as Operations Section Chief or Division Supervisor, and 2 shifts as Plans Section Chief.	Signed copy of: Organization Chart (ICS 207), <i>or</i> Incident Briefing (ICS 201), <i>or</i> Organization Assignment List (ICS203), <i>or</i> Attestation by SM or RA.	Showing person in OSC/PSC role
Receive a favorable written performance evaluation from the Search Manager or Responsible Agent on four of the incidents.	Copy/scan of letters/emails or other written materials, <i>or</i> Attestation by the SM or Section Chief stating that performance was favorable.	
Receive a favorable simple majority vote of the member's Group.	Group meeting minutes showing endorsement of the candidate for SM-II.	
Submit a completed SM-II PTB to the CTO and be proposed for SM-II by the Conference Training Officer at an ASRC BOD meeting.	CTO presents the vetted application package to the ASRC BOD for consideration at the next BOD meeting. (Must receive a favorable two-thirds or greater vote of those ASRC BOD Representatives present at the meeting.)	

Search Manager Type II Recertification	
STANDARD	SUPPORTING MATERIALS REQUIREMENTS
Document a total of at least 6 shifts in type II staff positions; two must be as an Incident Commander, on a total of at least three ground SAR incidents, for either missing person or missing aircraft, during the three years immediately prior to the date of application for re-certification.	Signed copy of: Organization Chart (ICS 207), <i>or</i> Incident Briefing (ICS 201), <i>or</i> Organization Assignment List (ICS203), <i>or</i> Attestation by RA, SM or Section Chief citing name/description of mission, date, positions and durations.
The requirements for one shift may be fulfilled with 12 hours of category II continuing education. (One hour of qualifying category II CE will include one hour of classroom instruction or teaching the following SAR related topics: law enforcement, EMS, medical, Fire, hazardous materials, emergency management, disaster management, weather)	For classes that were taught as part of ASRC group training, provide list of each class with a description: title or subject, date, times (duration in hours round to nearest half hour) and location, signed or by email attested to by the current or then GTO. GTO does not have to have attended the class; just verify that the class was taught as described. For classes not taught as part of the group training or if the GTO is unavailable, provide list of each class with a description: title or subject, date, times (duration in hours round to nearest half hour) and location, and show EACH class verified by a class participant that the class was taught by the candidate as described, either signed in hard copy or by email from the participant. The class participant name, signature (or email), contact phone and optionally an email address should be provided. At least two (2) different class participants are required to be represented among the total for 12 hours.
The requirements for two shifts may be fulfilled with 24 hours of category I continuing education or one shift with 12 hours. (One hour of qualifying category I CE will include one hour of classroom instruction or teaching the following SAR topics; any topic listed in CQ, FTM, FTS, FTL, MSO, PSO, ICG, or leadership training.)	Same as above.
Submit the SM-II recertification package to the CTO	CTO forwards the vetted recertification package to the ASRC BOD for consideration at the next BOD meeting. (Must receive a favorable vote of the ASRC Board of Directors.)

Showing person in a staff role

Search Manager II Performance Standards

[There are no specific performance standards for Search Manager II]

Search Manager I

Search Manager I standards define the minimum requirements necessary to perform in the role of an Area Command Authority overseeing multiple-incident situations.

A. SM-I POSITION TASK BOOK (PTB)

An ASRC SM-I PTB is available for the applicant to utilize to track progress toward completion of the SM-I qualification requirements.

B. QUALIFICATIONS

1. Meet all requirements for Type II Search Manager.
2. Complete the FEMA Basic Public Information Officer Course (G-290), or an equivalent course as recommended by the ASRC Credentialing Board.
3. Successfully complete the National Inland SAR Planning Course (40 hours), or an equivalent course as recommended by the ASRC Credentialing Board.
4. Complete a minimum total of 120 hours of classroom training in Search and Rescue management. Classes which may be used to satisfy this requirement include but are not limited to (course hours for the National Inland SAR Planning Course may be used to meet the 120 hour requirement):
 - a. *Managing Search Operations* (40 hours);
 - b. *Managing the Search Function* (40 hours);
 - c. *Managing Land Search Operations* (40 hours);
 - d. *Practical Search Operations* (40 hours);
 - e. *Search Manager for Ground Search and Rescue* (24 hours);
 - f. *Planning Section Chief for Search and Rescue* (24 hours);
 - g. *National Basic Inland SAR Course* (20 hours).
 - h. *Virginia Management Team Member* (40 hours);
 - i. *Virginia Management Team Leader* (40 hours);
 - j. *Incident Commander for Ground Search and Rescue* (32 hours);
 - k. *Lost Person Behavior* (8 to 32 hours);
 - l. *Urban Search and Investigation* (16 hours);
 - m. *Wide Area Search* (24 hours);
 - n. Other approved equivalent classes, as recommended ASRC Credentialing Board.
5. Successfully complete FEMA Independent Study Courses:
 - a. IS-1 *Emergency Manager: An Orientation to the Position*;
 - b. IS-22 *Are You Ready? An In-depth Guide to Citizen Preparedness*;
 - c. IS-775 *EOC Management and Operations* or approved equivalents.
6. Document mission practical experience as follows: Function as a Type II Search Manager on at least 10 ground missions within the five years prior to making application for this certification. Simulations may not be counted toward meeting this requirement.
7. Receive a favorable simple majority vote of the member's Group.
8. Be proposed for Search Manager-I certification by the Conference Training Officer at an ASRC Board of Directors meeting;
9. Receive a favorable two-thirds or greater vote of the ASRC Board of Directors present at the meeting.

C. CERTIFICATION

Upon being approved for certification by the ASRC Board of Directors, the ASRC Conference Training Officer will provide a certificate of certification to the member. This certificate will be in the official ASRC SM-II Certification Format, as defined by the ASRC Conference Training Officer, and which contains at a minimum:

1. The full name of the Appalachian Search and Rescue Conference
2. The ASRC logo
3. The name of the member granted the certification
4. The name of the certification granted
5. The date issued
6. The date of expiration/recertification
7. The signature of the ASRC Conference Training Officer

D. RECERTIFICATION

1. Document a total of at least 6 incidents as a type II or I Search Manager, for either missing persons or missing aircraft, during the three years immediately prior to the date of application for recertification. Field simulations may be used to fulfill up to 3 of the required shifts.
2. Continuing education may only be used for a total of two shifts.
 - a. The requirements for one incident may be fulfilled with 24 hours of category II continuing education.

- b. The requirements for two incidents may be fulfilled with 40 hours of category I continuing education.
3. Receive a favorable vote of the ASRC Board of Directors.
4. The review cycle period shall begin the first January of the year following the SM's initial certification.

E. FAILURE TO RECERTIFY

1. If the SM fails to recertify by the expiration date, their certification will be dropped to highest level certification that they have successfully met the recertification requirement for three months after the expiration date.
2. An expired SM may apply for recertification for up to 3 months past the end of their certification. Beyond this grace period, if the SM wishes to be re-certified after certification has been dropped; the entire process described in Section VIII-X must be repeated.
3. If there are extenuating circumstances that prevent the SM from recertifying within the allotted time, he/she should file for an extension with the ASRC Conference Training Officer. Requests for extensions will be considered on a case-by-case basis by the ASRC Board of Directors.

Search Manager Type I Certification	
STANDARD	SUPPORTING MATERIALS REQUIREMENTS
Meet all requirements for Type II Search Manager.	See previous list
Complete a basic Public Information Officer (PIO) and Media Relations Workshop, or an approved equivalent course.	Copy/scan of paper certificate, <i>or</i> Attestation of course instructor that student completed course.
Successfully complete the National Inland SAR Planning course, or an approved equivalent.	Copy/scan of paper certificate, <i>or</i> Attestation of course instructor that student completed course.
Complete a minimum total of 120 hours of classroom training in Search and Rescue management as described in the ASRC Training Standards X.B	Copy/scan of paper certificate, <i>or</i> Attestation by course instructor that student completed course citing name and date.
Successfully complete FEMA IS-1, IS-22, IS-775 courses	Copy/scan of paper certificate, <i>or</i> Attestation of course instructor that student completed course.
Document mission practical experience: function as a Type II Search Manager on at least 10 ground missions within the five years prior to making application for this certification. Simulations may not be counted toward meeting this requirement.	Signed copy of: Organization Chart (ICS 207), <i>or</i> Incident Briefing (ICS 201), <i>or</i> Organization Assignment List (ICS203), <i>or</i> Attestation by SM or RA. <i>and</i> a brief description of each mission showing best practices and lessons learned, if any.
Receive a simple majority vote of the member's Group.	Group meeting minutes showing endorsement of the candidate for SM-I.
Submit a completed SM-I PTB to the CTO and be proposed for SM-I by the Conference Training Officer at an ASRC BOD meeting.	CTO presents the vetted application package to the ASRC BOD for consideration at the next BOD meeting. (Must receive a favorable two-thirds or greater vote of those ASRC BOD Representatives present at the meeting.)

Showing person in SM role and documenting incident typing

Search Manager Type I Recertification	
STANDARD	SUPPORTING MATERIALS REQUIREMENTS
Document a total of at least 6 shifts in type II or type I Search Manager, for either missing person or missing aircraft, during the three years immediately prior to the date of application for re-certification.	Signed copy of: Organization Chart (ICS 207), <i>or</i> Incident Briefing (ICS 201), <i>or</i> Organization Assignment List (ICS203), <i>or</i> Attestation by RA, SM or Section Chief citing name/description of mission, date, positions and durations.
The requirements for one shift may be fulfilled with 12 hours of category II continuing education. (One hour of qualifying category II CE will include one hour of classroom instruction or teaching the following SAR related topics: law enforcement, EMS, medical, Fire, hazardous materials, emergency management, disaster management, weather)	For classes that were taught as part of ASRC group training, provide list of each class with a description: title or subject, date, times (duration in hours round to nearest half hour) and location, signed or by email attested to by the current or then GTO. GTO does not have to have attended the class; just verify that the class was taught as described. For classes not taught as part of the group training or if the GTO is unavailable, provide list of each class with a description: title or subject, date, times (duration in hours round to nearest half hour) and location, and show EACH class verified by a class participant that the class was taught by the candidate as described, either signed in hard copy or by email from the participant. The class participant name, signature (or email), contact phone and optionally an email address should be provided. At least two (2) different class participants are required to be represented among the total for 12 hours.
The requirements for two shifts may be fulfilled with 24 hours of category I continuing education or one shift with 12 hours. (One hour of qualifying category I CE will include one hour of classroom instruction or teaching the following SAR topics; any topic listed in CQ, FTM, FTS, FTL, MSO, PSO, ICG, or leadership training.	Same as above.
Submit the SM-I recertification package to the CTO	CTO forwards the vetted recertification package to the ASRC BOD for consideration at the next BOD meeting. (Must receive a favorable vote of the ASRC Board of Directors.)

Showing person in a staff role

Search Manager I Performance Standards

[There are no specific performance standards for Search Manager I]

Change History

Old versions are posted in the ASRC Archive at <http://archive.asrc.net>.

??? (VERSION 8.1)

- Moved followership from Field III to Field IV
- Moved immediate stress reactions from Field II to Field IV
- Eliminated requirement to follow a track for 5 steps
- Moved rhetoric from Field I to Field II
- Removed as many eponyms as possible; in some cases where eponyms are very well-known, used the systematic name with the eponym following in parentheses; this included spelling out some management principles from the literature
- For terms that are not commonly known, added explanations in parentheses or footnotes
- Many other minor changes here and there, fixing typos and duplications and adding small items that were inadvertently omitted from 8.0
- In accordance with the discussion at the January 202 Retreat, changed the language “Demonstrate the ability to” to “Be able to” throughout the document; these changes are not highlighted in yellow.

OCTOBER 2019 (VERSION 8.0)

Major restructuring, see the new *ASRC Training Guide* for details.

JANUARY 2017 (VERSION 7.2)

- Reformatted using the new *s Branding Guide*.
- Minor editorial changes, fixed misspellings and typographical errors.
- Added a few older versions of the *ASRC Training Standards* to this list.

MAY 2016 (VERSION 7.2)

- Corrected spelling, typographical and formatting issues.
- Adjusted verbiage across certification levels for consistency and to remove duplication.
- Replaced/corrected online classes that have changed since the last update.
- Removed non-search management classes from list of Search Manager approved education courses.
- Incorporated ASRC Credentialing Policy Manual concepts.

MAY 2012 (VERSION 7.1):

- Corrected spelling, typographical and formatting issues.

- Corrected missing ICS-700 class in the CQ requirements.
- Added additional, recognized classes to Search Manager certifications.

OCTOBER 2011 (VERSION 7.0):

- Updated knowledge and performance expectations for all certifications.
- Updated NIMS/ICS and required training requirements for IC certifications.
- Updated required class for NIMS/ICS certifications.

OCTOBER 2008 (VERSION 6.3)

- FTM and FTL recertification policy approved on April 9, 2005 was added to the Training Standards baseline.
- Corrected typo in IS recertification requirements.
- Updated reference to the “Z-Haul” system in the FTL standard to correctly reflect that it provides a mechanical advantage of 3:1 rather than 2:1 as stated in the previous version.

JULY 2008 (VERSION 6.2)

- Included NIMS/ICS training requirements for each credential, including optional requirements for command and staff certifications.
- Included Conference Dispatch Officer certification
- The CDO Standard established the NIMS-compliant format and structure for future revisions

MARCH 2003 (VERSION 6.1)

- Updated ASRC address.
- Adjusted AO requirements (VII.A.1) based on Feb 2003 BOD meeting to require FTL and MLSO or equivalent instead of being IS.

AUGUST 2001

- Updated manual produced

MARCH 2001 (VERSION 6.0)

- IS recertification changes

JANUARY 2001

- IC standards rewritten

APRIL 1997

- MS Word Revision

APRIL 1994 & AUGUST 1994 (VERSION 5.3)

- CQ changes approved

Change History

OCTOBER 1993 (VERSION 5.2)

- AO standards added

FEBRUARY 1993

- IC change

JUNE 1991

- IC changes

OCTOBER 1989

- Communications changes

MARCH 1989

MAY 1987 (VERSION 4)

- Name changed to *ASRC Training Standards* from *ASRC Training Guide*.

JANUARY 1986 (VERSION 3.3)

JULY 1983 (VERSION 3.0)