

Appalachian Search and Rescue Conference

TRAINING STANDARDS

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ASRC Training Standards

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I. Call-Out Qualified (CQ) ASRC Member

A. Scope and Intent

Call-Out Qualification is intended to form the most basic level of the ASRC training hierarchy. Its purpose is to facilitate rapid involvement of new members in search incidents while ensuring, to the extent feasible, that persons representing the ASRC are capable of functioning as useful members, primarily engaged in uncomplicated tasks. Persons of this training level are not intended to be involved in tasks of dangerous, intricate, or politically sensitive natures. CQs must be familiar with ASRC policies and procedures and must possess the common sense and maturity to serve the organization effectively.¹

B. Qualifications

To become a Call-out Qualified (CQ) ASRC member, the applicant must meet the following requirements:

1. Complete and submit to the Group Training Officer an ASRC Application for Membership;
2. Meet all of the requirements specified in the ASRC Articles of Incorporation and By-Laws;
3. Participate satisfactorily in ASRC or Group training covering: the role of the CQ, ASRC policies and procedures, personal equipment, short-term survival, search tactics, and personal safety;
4. Participate satisfactorily in a minimum of one ASRC or Group practical field exercise;
5. Meet ASRC minimum equipment requirements as set forth in the ASRC Operations Manual; and
6. Demonstrate the ability to function as an effective member of a field team on an uncomplicated task, as judged by the Group Training Officer.

C. Equipment Requirements

Equipment requirements are specified in the ASRC Operations Manual. Items listed below are for information purposes only -- refer to the Operations Manual for the most current requirements.

1. Appropriate clothes and footwear for both fair and foul weather;
2. Water container of one or two liter capacity;
3. Day pack (knapsack is sufficient);
4. Five large, heavy-duty plastic trash bags;
5. Food for 48 hours;
6. Headlamp (or hands-free flashlight) and second light source;
7. Lighter, matches and candle, or equivalent fire source;
8. Knife;

¹ If an ASRC member is unable to meet the CQ field training requirement due to a permanent physical disability, he or she may petition the ASRC to become CQ. A written request must be sent, along with a physician's letter confirming the permanent disability and outlining all physical restrictions as they apply to search and rescue, to the ASRC Conference Training Officer.

The ASRC Training Officer shall review the request, and if all other aspects of the training requirement and intent of the training requirements have been met then the individual shall be deemed CQ by the ASRC Training Officer.

Any individual who has been deemed CQ by the ASRC Training Officer without meeting the field requirements may not be sent on a field task.

The intent of this standard is not to decrease the operational standards but to provide opportunities for those who are physically disabled and therefore unable to meet our field qualifications but are otherwise able to meet all other requirements and are capable of being an asset at a search and rescue incident.

9. Compass;
10. Personal First Aid Kit;
11. Waterproof pen/pencil and paper;
12. Whistle; and
13. Two pairs plastic or vinyl examination gloves.

II. ASRC Field Team Member (FTM)

A. Qualifications

1. To become a Field Team Member (FTM), the applicant must:
 - a) Be an Active Member of the ASRC, as specified by the ASRC Bylaws;
 - b) Have met all the requirements as a CQ member;
 - c) Participate satisfactorily in four ASRC or Group training sessions, including sessions on Personal Wilderness Survival and basic ground search theory, as judged by the Group Training Officer;
 - d) Meet the technical standards listed below, as judged by the Group Training Officer;
 - e) Successfully pass a standard ASRC FTM written test and complete the standard ASRC FTM skills evaluation checklist, as verified by the Group Training Officer;
 - f) Be proposed for membership by the Group Training Officer at a group business meeting and receive a simple majority of the vote.
2. Field Team Members must meet annual continuing education requirements and maintain skills proficiency by participating in a minimum of six training sessions and respond to a minimum of two incidents per year.

B. Equipment Requirements

FTMs must meet the minimal Personal Equipment as specified in the ASRC Operations Manual. The official reference for this list is the Operations Manual. The list when this edition of the Training Standards was published was follows:

1. Appropriate clothes and footgear for both fair and foul weather;
2. Water container of one- to two- liter capacity;
3. Day pack (knapsack will be sufficient);
4. Five large, heavy-duty plastic trash bags;
5. Food for 48 hours;
6. Headlamp (or flashlight) and second light source;
7. Lighter, matches and candle, or equivalent WATERPROOF fire source;
8. Knife;
9. Compass;
10. Personal First Aid Kit;
11. WATERPROOF pen/pencil and paper;
12. Whistle; and

13. Two pairs plastic or vinyl examination gloves.

C. Knowledge and Performance Specifications

ASRC FTM standards closely resemble Virginia Ground Search and Rescue Level I (Field Team Member) standards. *Italicized* items are additional requirements for ASRC members.

1. SAR Operations

- a) Describe areas of responsibility for search and rescue as defined by the National SAR Plan.
- b) Describe areas of responsibility at the state level.
- c) List several resources that might be used during a SAR event.
- d) List several factors that may result in an aircraft being listed as missing.
- e) Describe the basic principles of the ICS and define the major staff positions as used in SAR.

2. Legal Aspects of SAR Operations

- a) Outline the provisions of the "Good Samaritan" law.
- b) Define the terms "implied consent," "expressed consent," "Informed consent" and "abandonment."
- c) Define the four facts necessary to prove negligence.
- d) Describe several methods of reducing liability exposure.
- e) Describe the circumstances when entry upon private property may be justified; define the problems involved with this action and possible solutions.
- f) *Briefly explain how the following legal concepts apply to search and rescue operations:*
 - (1) Civil suits and criminal actions;
 - (2) *Standards of care;*
 - (3) The right to emergency assistance and duties to provide emergency assistance;
 - (4) Crime scene protection;
 - (5) *Declaration of death and confirmation of death; and*
 - (6) *Confidentiality.*

3. Personal Equipment

- a) Explain these principles of clothing selection:
 - (1) Choice of clothing material, *listing the "3 W's" of clothing for wet, cool climates, and explaining their importance;*
 - (2) *Waterproof/windproof, including the advantages, disadvantages, and uses of waterproof shell garments, and the water penetration resistance of: coated nylon; 60/40 cloth; 65/35 cloth; and waterproof/ breathable fabrics;*
 - (3) *Layering and other cold weather dressing concepts, including: ventilation, "dressing cold," and the dangers associated with overheating in the winter; and*
 - (4) *Loft and other properties of clothing suitable for various weathers, including a description of clothing materials, including cotton, down, wool, and synthetic fibers, in terms of dry warmth, wet warmth, wind protection, absorption and retention of water, and wicking of water.*

- b) *Describe several ways to prevent excessive body heat loss. Describe the following concepts and their importance to maintaining body temperature.*
 - (1) *The routes of heat loss and their relative importance;*
 - (2) *The use of energy stores to produce heat, and the metabolic costs of shivering;*
 - (3) *Vasodilation, sweating, and behavior means of increasing heat loss, and the long term consequences of them;*
 - (4) *Vasoconstriction and behavior as a means of conserving heat;*
 - (5) *The effects of tobacco and alcohol on normal heat homeostasis;*
 - (6) *The particular danger of hypothermia weather.*
 - c) Explain the selection principles for these items:
 - (1) Boots;
 - (2) Sleeping bag;
 - (3) Ground protection and insulation;
 - (4) Backpack/daypack;
 - (5) Tent;
 - (6) Personal safety items;
 - (7) Fire starting aids;
 - (8) Items for signaling and navigation;
 - (9) Light sources and batteries;
 - (10) Emergency shelters; and
 - (11) *Stoves.*
 - d) Describe the basic characteristics (voltage, life, weight, cost, temperature characteristics and dangers) of carbon-zinc, alkaline, lithium, and nickel-cadmium battery cells.
4. Wilderness Survival
- a) Define short-term versus long-term survival.
 - b) Describe several problems commonly encountered on SAR missions that may lead to a survival situation.
 - c) Describe the psychological factors that may affect survival ability.
 - d) Explain the "energy reserve" concept.
 - e) Describe the body's physiologic response to both cold and heat stress.
 - f) Define the following temperature-related diseases and their recognition, treatment and prevention:
 - (1) Hypothermia;
 - (2) Frostbite;
 - (3) Trench foot (immersion foot);
 - (4) Heat stroke;
 - (5) Heat exhaustion; and

- (6) Dehydration.
 - g) Be able to develop an "action plan" based on the STOP rule for a given wilderness emergency scenario.
 - h) Demonstrate the ability to bivouac in any type weather conditions, without significantly affecting functional ability.
 - i) Define average daily food and water requirements.
5. Land Navigation and Orienteering
- a) Identify and define the following terms or concepts:
 - (1) Latitude and longitude;
 - (2) Degrees, minutes and seconds;
 - (3) True north and magnetic north; and
 - (4) Declination.
 - b) Demonstrate the ability to read and interpret topographic map border information, colors and symbols. *Demonstrate the ability to read a 7.5 minute topographic map, including the following information:*
 - (1) *Grades of highways, roads, trails and bridges;*
 - (2) *Power lines and other landmark lines;*
 - (3) *Buildings, schools, churches and cemeteries;*
 - (4) *Storage tanks, wells, mines, caves, picnic areas and campsites;*
 - (5) *Benchmarks (control stations) and spot elevations;*
 - (6) *Boundaries and fence lines;*
 - (7) *Contour lines, depressions, cuts and fills;*
 - (8) *Perennial and intermittent streams, springs, falls and marshes;*
 - (9) *Valleys, ridges, peaks and sags (saddles, cols); and*
 - (10) *Elevations and general land contours.*
 - c) Describe the various parts of the compass and demonstrate the ability to use it to plot a course on a map, including northing and declination correction.
 - d) Define the following plotting methods or grid systems and demonstrate the ability to use them to determine the coordinates for a given point.
 - (1) Latitude - Longitude;
 - (2) UMS (Uniform Map System);
 - (3) UTM (Universal Transverse Mercator);
 - (4) ASRC Grid;
 - (5) LORAN, using a topographic map; and
 - (6) Using a ruler and a topographic map.
 - e) Demonstrate the ability to perform the following navigational functions:
 - (1) Obtain and follow a simple compass bearing;

- (2) Determine a reciprocal;
 - (3) Move around obstacles;
 - (4) Find a position by triangulation and by resection;
 - (5) Measure distance by pacing; and
 - (6) Determine position by terrain feature identification.
- f) Describe the significance and use of these orienteering concepts:
- (1) Catching features;
 - (2) Collecting features;
 - (3) Attack points;
 - (4) Aiming off; and
 - (5) Coarse and fine orienteering.
 - (6) *Demonstrate the ability to navigate at night.*
 - (7) *Demonstrate proficiency in photocopying grid overlays onto maps.*
6. Search Skills
- a) Identify the most basic tenet of search and rescue, the one that should govern all SAR activity.
 - b) Identify the primary goal of all SAR activity.
 - c) Identify and define four key points of search theory.
 - d) Describe the standard techniques for these search tactics:
 - (1) Attraction;
 - (2) Containment;
 - (3) Survey search;
 - (4) Hasty search (scratch search);
 - (5) Sweep search (open grid search);
 - (6) Line search (closed grid search); and
 - (7) Route search.
 - e) Describe standard procedures for working with search dogs, tracking/trailing dogs and mantrackers.
 - f) Define the four core elements of tactical operations.
 - g) Briefly describe the five phases of a SAR event.
 - h) *Demonstrate the following abilities in the field:*
 - (1) *Demonstrate clue consciousness;*
 - (2) *Function as a member of a grid team, sweep team, and hasty team, and understand his/her role and duties in each type of search pattern;*
 - (3) *Accompany a dog handler on a simple search task;*
 - (4) *Demonstrate the knowledge required to responsibly and effectively handle the media in the capacity of a FTM;*

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- (5) *Work well with people, as determined by the Group Training Officer; and*
 - (6) *Use the ASRC grid system.*
 - i) Explain the use and operation of direction-finding instruments for locating downed aircraft.
7. Incident Site Procedures and Disciplines
- a) Describe several hazards commonly associated with an aircraft crash site; list additional hazards that may be present if the crash involves a military aircraft.
 - b) Define the proper approach to an aircraft crash site.
 - c) Explain the importance of the accurate documentation of events at an incident site.
 - d) Describe the proper methods to use to secure a site adequately.
 - e) Explain the importance of clue preservation at both an aircraft crash site and a possible crime scene.
 - f) Define the relationship of the FTM to the press.
8. Ropes and Technical Hardware
- a) Describe the several types of rope commonly used in wilderness rescue work, their construction, use and care.
 - b) Describe the use and care of the carabiner, the Figure-8 descender and the brake-bar rack descender.
 - c) Demonstrate the ability to tie correctly these knots:
 - (1) Figure-8 loop;
 - (2) Figure-8 bend;
 - (3) Square knot;
 - (4) Water knot (overhand bend);
 - (5) Prusik knot;
 - (6) Double fisherman's knot or barrel bend;
 - (7) *A redundant seat harness;*
 - (8) *Bowline knot;*
 - (9) *Girth hitch; and*
 - (10) *Taut-line hitch.*
 - d) Demonstrate these rope handling techniques:
 - (1) Uncoiling and stacking a rope;
 - (2) Inspection; and
 - (3) Throwing.
9. Litter Handling Techniques
- a) Demonstrate these litter handling techniques:
 - (1) Patient loading;
 - (2) Litter lift, lower and carry;
 - (3) Litter bearer rotation;

- (4) Litter laddering, including toe-nailing; and
 - (5) Calls.
 - b) Be able to act as litter captain in a non-technical evacuation, including the proper use of toenailing, laddering, and rotation of litter bearers.
 - c) Be able to be a litter team member on a semi-technical evacuation and describe the personal equipment required for the rescuer's safety.
10. Belays
- a) Demonstrate proper belay techniques including:
 - (1) Anchoring;
 - (2) Belayer tie-in;
 - (3) Stance;
 - (4) Aim;
 - (5) Uphill and downhill travel;
 - (6) ASRC standard calls;and
 - (7) Tree-wrap and mechanical brakes.
11. Field Team Organization
- a) Define "field team."
 - b) Describe at least five types of search team.
 - c) Describe at least four types of rescue team.
 - d) Define the functions of the following field team positions:
 - (1) Field Team Leader;
 - (2) Medical Officer;
 - (3) Rescue Specialist; and
 - (4) Radio Operator.
12. Helicopter Operations
- a) Describe the hazards to ground personnel working around a helicopter.
 - b) Describe standard protocols for helicopter operations.
 - c) Explain proper procedures for hoist operations.
 - d) Describe the considerations for selecting and preparing an LZ.
13. Field Communications
- a) Describe the use and dangers of these signaling devices:
 - (1) Aerial flares;
 - (2) Smoke;
 - (3) Signal mirrors;
 - (4) Fires;
 - (5) Panels and paulins; and

- (6) Hand and body signals.
- b) Define the special problems associated with the field use of portable radios and list some possible solutions.
- c) Briefly describe basic radio procedures including courtesy, security, brevity and the use of the phonetic alphabet and 10 codes.
- d) *Be able to use reliably all group-owned VHF-FM base and commonly encountered hand-held radios, including being able to:*
 - (1) *Adjust of channel, volume, squelch and PL controls;*
 - (2) *Describe and observe FCC regulations and the ASRC radio SOP;*
 - (3) *Describe indications of a low battery and the technique for changing radio batteries; and*
 - (4) *Describe various techniques for improving marginal communications encountered while using VHF-FM hand-held radios.*
- e) Demonstrate knowledge of ASRC status codes.
- f) Demonstrate non-radio communications with audible and visual signals such as: whistle or loud noise maker; signal mirror, fire & smoke and lights.

14. Wilderness Medicine

Hold a current American Red Cross Standard First Aid card or equivalent, or higher certification.

III. ASRC Field Team Leader (FTL)

A. Qualifications

To become a Field Team Leader (FTL), the applicant must:

1. Meet all standards established for Field Team Member;
2. Have participated in two searches or search simulations as an FTM;
3. Be proposed for FTL membership by the Group Training Officer at a group business meeting and receive a simple majority of the vote;
4. Successfully pass the standard ASRC FTL written test and the standard ASRC FTL skills practical test; and
5. Be at least 18 years old.

B. Recertification

FTLs must meet annual continuing education requirements and maintain skill proficiency by participating in a minimum of six training sessions and respond to a minimum of two missions a year.

C. Equipment Requirements

Possess proper equipment as outlined in the ASRC Operations Manual. The official reference for this list is the Operations Manual. The list when this edition of the Training Standards was published was as follows:

1. Appropriate clothes and footgear for both fair and foul weather;
2. Water container of one- to two- liter capacity;

3. Day pack (knapsack will be sufficient);
4. Five large, heavy-duty plastic trash bags;
5. Food for 48 hours;
6. Headlamp (or flashlight) and second light source;
7. Lighter, matches and candle, or equivalent WATERPROOF fire source;
8. Knife;
9. Compass;
10. Personal First Aid Kit;
11. WATERPROOF pen/pencil and paper;
12. Whistle; and
13. Two pairs plastic or vinyl examination gloves.

D. Knowledge and Performance Expectations

ASRC FTL standards closely resemble Virginia Ground Search and Rescue Level II (FTL) standards. Italicized items are additional requirements for ASRC members.

Field Team Leaders are expected to meet all of the requirements of the Knowledge and Performance Expectations of the ASRC FTM Standards. The items listed below are additional requirements.

1. SAR Operations
 - a) Define the role of the field team for these types of missions:
 - (1) Lost person search;
 - (2) Downed aircraft search; and
 - (3) Natural disaster assistance.
 - b) List the various types of resources in each of the following categories that may be used in a typical SAR event:
 - (1) Ground search;
 - (2) Air search;
 - (3) Logistics;
 - (4) Communications; and
 - (5) Command.
2. Search Tactics
 - a) Describe in detail the responsibilities of the Field Team Leader when carrying out a field task.
 - b) Explain the execution of these search tactics using an average size and properly equipped field team.
 - (1) Containment;
 - (2) Attraction;
 - (3) Survey search;
 - (4) Hasty search (scratch search);

- (5) Sweep search (open grid search); and
 - (6) Line search (closed grid search).
 - (7) Passive and active search methods;
 - (8) Clue finders and subject finders;
 - (9) Binary search and cutting for sign;
 - (10) The "Bastard Search"; and
 - (11) Survey search.
- c) Describe in detail the tasks that must be completed once the field team returns to base camp.
3. Search Management
 - a) Outline standard search strategy for:
 - (1) Downed aircraft;
 - (2) Lost person, wilderness;
 - (3) Lost person, rural; and
 - (4) Lost person, urban.
 - b) Describe the five phases of a search mission and the primary activities that occur during each phase.
4. Rescue Operations
 - a) Describe how to formulate a rescue plan.
 - b) List the four phases of a rescue mission.
 - c) Describe the major factors a team leader must consider once a victim is located.
 - d) Describe the manpower and equipment requirements and the team organizational structure necessary to accomplish an advanced semi-technical rescue operation.
5. Equipment
 - a) Describe basic team equipment, other than required personal gear, for a wilderness SAR team.
 - b) Define a pre-plan for insuring immediate availability of team equipment in the event of a call-out.
 - c) Define an equipment inspection and maintenance program that includes member's personal equipment, team equipment and the team vehicle.
6. Mission Performance
 - a) Demonstrate the ability to travel cross country on foot, in any weather conditions, navigating by map and compass, and to establish an emergency bivouac, all without compromising the assigned task.
 - b) Demonstrate the ability to organize and execute the six tactics listed below:
 - (1) Containment;
 - (2) Attraction;

- (3) Survey search;
 - (4) Hasty search (scratch search);
 - (5) Sweep search (open grid search);
 - (6) Line search (closed grid search).
- c) Demonstrate the ability to secure a scene properly, extricate and treat a patient, and evacuate a patient using the method most appropriate for a given situation.
 - d) Briefly describe pertinent local weather patterns, including the signs of arriving cyclonic winter storms, cold fronts, warm fronts, and local storms.
 - e) Be able to bivouac on a winter night using appropriate field gear.
 - f) Travel competently in a middle-Appalachian wilderness area during any time of year, including:
 - (1) Stream crossing evaluation; and
 - (2) Boulder-field and steep trail climbing.
 - g) *Given a photocopy of a 7.5-minute series topographic map with an ASRC grid overprint, the original 7.5-minute quadrangle map, and a Uniform Map System (UMS) gridded aeronautical chart of the area, identify points via:*
 - (1) *Latitude and longitude;*
 - (2) *The ASRC grid system;*
 - (3) *The Uniform Map System;*
 - (4) *The azimuth and distance off a VOR; and*
 - (5) *The Universal Transverse Mercator System.*
 - h) *Given only a 7.5-minute topographic quadrangle or an orienteering map with an attack point and a target plotted on it, and a standard orienteering compass, reliably and accurately:*
 - (1) *Calculate the true bearing from the attack point to the target;*
 - (2) *Calculate and set on the compass the magnetic bearing to the target; and*
 - (3) *Follow the bearing accurately, including triangulating and boxing around obstacles.*
 - i) *Correctly locate and position a point on a topographic map given:*
 - (1) *The bearings to landmarks indicated on the map (resection); or*
 - (2) *The bearing to one landmark located on the map, and the information that the position is on a specified linear feature (modified resection).*
 - j) *Given bearings from two locations to a target, correctly locate it on a topographic map (triangulation).*
 - k) *Demonstrate the ability to lead a field team competently on:*
 - (1) *Containment, attraction, survey, hasty, sweep and grid search tasks;*
 - (2) *Cutting for sign;*
 - (3) *Simple tracking;*
 - (4) *Interrogation and visual search tasks;*

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- (5) *Non-technical and semi-technical evacuation; and*
 - (6) *Direction finding.*
 - l) *Demonstrate the use of the following basic man-tracking skills and techniques:*
 - (1) *Tracking sticks;*
 - (2) *The effects of the sun and how to use them;*
 - (3) *How to identify shoe type and provide measurement; and*
 - (4) *How to find stride length and width.*
 - m) *Demonstrate the ability to properly brief a field team before a task, including:*
 - (1) *Giving appropriate information on:*
 - (a) *Subject information and history, subject's equipment and medical history;*
 - (b) *Weather;*
 - (c) *Terrain;*
 - (d) *The search task, its objectives, and how to perform it;*
 - (e) *Time available for the task and the limitations it may impose upon the task; and*
 - (f) *Team equipment and personal gear needed;*
 - (2) *Obtaining information from the team members, such as team member medical problems, and other relevant input; and*
 - (3) *Adequately evaluating team members' abilities to do the task.*
 - (4) *Demonstrate the ability to debrief properly a field team after a task, including:*
 - (5) *Instructing the team to follow proper procedure now the team has returned to base; and*
 - (6) *Acquiring team member input (POD, clues, hazards, other pertinent information).*
 - 7. Ropes and Technical Hardware
 - a) Demonstrate the ability to tie correctly the knots below (in addition to those knots listed in the FTM standards):
 - (1) Butterfly;
 - (2) Bowline-on-a-coil;
 - (3) One-way knot;
 - (4) Sheet bend;
 - (5) Frost knot;
 - (6) ASRC seat harness.
 - (7) Load-releasing hitch; and
 - (8) Cross-chest harness.
 - b) Assemble and use a single line rappel system that includes a belay.
 - c) Demonstrate the ability to direct a six person litter team safely in rigging a Z-haul system (2:1 system), a 4:1 hauling system, a "brute force" hauling system, and, using the systems, to move a litter a minimum of 100 feet up a 45 degree slope.

- d) *Demonstrate the ability to rig to an anchor using the following methods:*
 - (1) *Bowline;*
 - (2) *Tree-wrap and tie-off; and*
 - (3) *Using webbing sling loops.*
- e) *Demonstrate the ability to cast, pad and rig static lines.*
- f) *Demonstrate the ability to belay competently, including:*
 - (1) *Proper anchoring, stance, tie-in and aim;*
 - (2) *Correct use of calls and fall catching; and*
 - (3) *Prusik belays.*
- g) *Demonstrate competence in braking litters with tree wrap belays and mechanical devices.*
- h) *Serve competently in all positions on a semi-technical rescue, including:*
 - (1) *Serving as rope team member with tree-wrap brakes and Figure-8 brakes; and*
 - (2) *Selecting suitable anchor points.*
- i) *Demonstrate the ability safely to load and tie a patient into a Stokes litter, and rig it for semi-technical evacuations.*
- j) *Demonstrate competence in route selection for a semi-technical evacuation.*
- k) *Demonstrate the knowledge of and ability to care properly for ropes and technical rescue equipment.*
- 8. *Emergency Medicine*
 - a) *Hold a current American National Red Cross Standard First Aid card or equivalent, or higher certification.*

IV. Rescue Specialist (RS)

(Reserved.)

V. Base Radio Operator (BRO)

The BRO-qualified person should be capable of handling the Base radios during a large and complex mission. (The Virginia Ground Search and Rescue Certification standards do not have an equivalent for the ASRC BRO certification level.)

A. Qualifications:

To become Base Radio Operator certified, the applicant must be an ASRC Field Team Leader (FTL). The BRO must know of changes that occur to Communications Policies, Rules, Licenses, and of major changes to ASRC communication equipment.

B. Knowledge and Performance Specifications

- 1. Equipment
 - a) Be able to set up antennas and relays, using available high points and ground planes;
 - (1) Describe the proper placement of antennas.
 - b) Assemble handheld radios, and properly handle sign-in/sign-out of such radios.

- c) Change handheld radio batteries:
 - (1) Set up battery chargers;
 - (2) Identify and prioritize batteries for charging or sign-out; and
 - (3) Determine when battery charging is complete.
2. FCC Rules and ASRC Communications Policies and SOP
 - a) Describe the 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; and
 - (3) Describe FCC rules pertinent to the ASRC.
 - b) Outline ASRC Communications Policies and SOP:
 - (1) Describe the duties and responsibilities of Net Control; and
 - (2) Describe the ASRC Communications SOP.

VI. Incident Staff (IS)

The IS-qualified person should be capable of handling the positions of Plans Section Chief or Operations Section Chief on a search. The Incident Command positions of Finance Section Chief and Logistics Section Chief are not addressed by the requirements below. We generally do not concern ourselves with financial questions. Logistics is best handled by a local person such as a rescue squad or fire department member, a police officer, or the local sheriff's office. (The Virginia Ground Search and Rescue Certification standards do not have an equivalent for the ASRC IS certification level.)

A. Qualifications

To become Incident Staff 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 selected by the ASRC Board of Directors;
4. Be proposed for Incident Staff qualification by a Group Training Officer at an ASRC Board of Director's business meeting and receive a simple majority of the vote.
5. Complete Managing Search Operations, Managing the Search Function, or equivalent training;
6. Complete Practical Search Operations, Search Operations for Staff, or equivalent training; and
7. Serve as a member of the Command Post or Base Staff on one incident.

B. Recertification

Incident Staff qualified members must meet the following recertification requirements every three calendar years:

1. Document a total of at least 6 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 re-certification requirements.

2. 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, etc.
3. 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 COQ, FTM, FTS, FTL, MSO, PSO, ICG, or leadership training.
4. Continuing education may only be used for a total of 2 shifts.
5. Receive a favorable vote of the ASRC Board of Directors.
6. This recertification process does not preclude an IS being brought before the ASRC Board of Directors for Review as needed, at any time.
7. In the event the IS does not receive a favorable vote, they will be put on an immediate suspension as IS. 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 IS 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.
8. The review cycle period shall begin the first January of the year following the IC's initial certification.

C. Knowledge and Performance Specifications

1. SAR Operations
 - a) Demonstrate a working knowledge of the ICS concepts.
 - b) Demonstrate a working knowledge of the ASRC Operations Manual and the ASRC SAR Operations Plan (SAROP).
2. Legal Aspects
 - a) Outline the delegation of authority and responsibility for search and rescue in states where ASRC is located.
 - b) Explain how the following legal concepts apply to search and rescue operations:
 - (1) Good Samaritan Laws;
 - (2) Civil suits and criminal actions;
 - (3) Standards of care;
 - (4) the right to emergency assistance and duties to provide emergency assistance;
 - (5) Abandonment;
 - (6) Implied consent;
 - (7) Entry, during incidents, on property posted "No Trespassing";
 - (8) Crime scene protection;
 - (9) Declaration of death and confirmation of death; and
 - (10) Confidentiality.

3. Field Operations
 - a) Describe sources of weather information.
 - b) Assign realistic tasks to field teams, given terrain, weather, personnel and the context of a search.
 - c) Produce legible color-enhanced copies of maps with ASRC grids.
4. Search
 - a) Brief a field team leader properly before a task, including:
 - (1) Subject information and history, subject's equipment, behavior and medical history;
 - (2) Weather;
 - (3) Terrain;
 - (4) The search task, how to perform it, what its objectives are, clues in the area;
 - (5) Estimated time to complete the task; and
 - (6) Hazards.
 - b) Describe aircraft crash scene considerations.
 - c) Describe the proper documentation of, and response to, reported clues.
 - d) Debrief a field team leader properly after a task, including:
 - (1) POD, clues, safety hazards, map updates, other pertinent field information, and any other relevant information;
 - (2) Availability for reassignment; and
 - (3) *Specialty team debriefing as appropriate, including:*
 - (a) Dogs (including obtaining information on air movement);
 - (b) Aircraft;
 - (c) Direction Finding;
 - (d) Tracking;
 - (e) Evacuation (ensuring that paperwork and documentation are completed and checked); and
 - (f) Medical (ensuring that paperwork and documentation are completed and checked).
 - e) Plot (triangulate) bearings from Direction-Finding instruments.
 - f) Handle the media in an appropriate manner (as assigned by the IC).
 - g) Be able to complete an ASRC map problem defined as follows. Given a search scenario, an ASRC OPSKIT, the ASRC Incident Staff member must be able to complete an accurate Strategy Map using ASRC and ICS symbols. The IS member must then use the map to:
 - (1) Use the Task Assignment Procedure to generate a set of appropriate tasks to complete the initial strategy with the given resources;
 - (2) Fill out a Task Assignment Form properly for each task;
 - (3) Start a Status Map using the standard ASRC symbols; and

- (4) Generate Medical, Organizational (including ICS 201), Communications, Evacuation and Demobilization Plans.
5. Communications
 - a) Equipment:
 - (1) Be able to set up antennas and relays, using available high points and ground planes; and
 - (2) Describe the proper placement of antennas.
 - b) *FCC Rules and ASRC Radio Communications Policy and SOP:*
 - (1) *Describe FCC rules under which the ASRC operates:*
 - (a) State the use and number of units allowed for each FCC licensed frequency used by the ASRC;
 - (b) Describe appropriate concerns with interference with other Nets; and
 - (c) Describe FCC rules pertinent to the ASRC.
 - (2) *Outline ASRC Communications Policies and SOP.*
 - c) Management:
 - (1) Develop a comprehensive Communications Plan for a mission (with multiple nets and base communications);
 - (2) Describe how to interface with other organizations providing radio communications at missions (CAP, Ham, etc.).
 - (a) Planning -- describe what is needed and how these organizations can be put to best use;
 - (b) Resources -- describe what the organizations can provide and when; and
 - (c) Operations -- find out what they need during operations and try to provide it.
 - (3) Explain when a temporary commercial telephone line installation is practical. Describe the procedure to obtain a temporary installation.
 - (4) Maintain proper records (Communications log and equipment sign-out log).

VII. Alert Officer (AO)

A. Qualifications

To become Alert Officer qualified, the applicant must:

1. Be Incident Staff or Incident Command qualified.
2. Complete the ASRC AO Training Course. Pass the written test.
3. Display knowledge, confidence and political competence in a practical examination given by an experienced AO selected by the Alert/Dispatch Coordinator. This examination will include the candidate acting as AO in several simulated Alert scenarios involving varying complexities and complications of political, organizational and technical nature.
4. Be approved by a simple majority of eligible voters present at a Group business meeting.
5. Be approved by a simple majority of eligible voters present at an ASRC Board of Directors meeting.

VIII. Incident Commander Type III (IC-III)

A. Qualifications

To become Incident Commander - III qualified the applicant must:

1. Be an Incident Staff member for at least 6 months;
2. Be at least 21 years of age.
3. Successfully complete the Incident Commander for Ground (ICG) SAR course, an approved equivalent, or demonstrate successful completion of knowledge and performance expectations.
4. 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 Incident Commander on one shift during a mission.
5. Receive a favorable written performance evaluation from the Incident Commander or supervisor for the four incidents serving in a base position.
6. Be proposed for Incident Commander –III certification by an ASRC Incident Commander at an ASRC Board of Director’s business meeting; and
7. Receive a simple majority of the vote of the member’s group.
8. Receive a favorable two-thirds or greater vote of those ASRC Board of Directors present at board meeting.

B. Recertification

Incident Commander -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, 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.
2. 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, etc.
3. 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 COQ, FTM, FTS, FTL, MSO, PSO, ICG, or leadership training.
4. Continuing education may only be used for a total of 2 shifts and may not substitute for IC shifts
5. Receive a favorable vote of the ASRC Board of Directors.

6. This recertification process does not preclude an IC-III being brought before the ASRC Board of Directors for Review as needed, at any time.
7. The review cycle period shall begin the first January of the year following the IC's initial certification.

C. Knowledge and Performance Expectations

1. SAR Operations
 - a) Demonstrate an understanding of the laws, policies, procedures, operating instructions, memorandums and agreements that govern SAR operations in the ASRC's area of operation.
 - b) 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.
 - c) Demonstrate an understanding of the SAR resources listed below including how they are obtained, and their appropriate and inappropriate uses.
 - (1) Air scent search dogs
 - (2) Tracking/trailing dogs
 - (3) Trackers/Field Team Signcutters
 - (4) Specialized SAR management teams
 - (5) Specialized SAR field teams
 - (6) Mounted search teams
 - (7) Fixed wing aircraft
 - (8) Rotary wing aircraft
 - d) Demonstrate an understanding of the non-SAR resources listed below including how they are obtained and their potential function in a SAR incident.
 - (1) Clergy and religious organizations
 - (2) Critical Incident Stress Debrief Teams
 - (3) State Coordinating Officer
 - (4) Coroner/Medical Examiner
 - (5) Child Protective services
 - (6) Public safety agencies such as fire, police, rescue, National Guard.
 - (7) 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.
 - (8) Support services such as Red Cross, Salvation Army, and civic clubs
 - e) 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.
 - (1) Psychics
 - (2) Media
 - (3) Family and friends of the subject(s)

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- f) Describe the role of the Incident Commander in relation to the Legal Responsible Agent (RA) in the following situations:
 - (1) When the RA is uncooperative
 - (2) When the mission involves or expands into other jurisdictions
 - g) Describe the role of the IC in relation to the various resources that may participate in a search mission in the following situations:
 - (1) When the IC has overall responsibility for all resources present
 - (2) When the mission involves or expands into other jurisdictions
 - h) Demonstrate an understanding of certain legal issues related to SAR including:
 - (1) Temporary detaining order, emergency care order
 - (2) Trespassing
 - (3) Confidentiality
 - (4) Criminal investigations
 - (5) Management of deceased subjects
 - (6) Restricted airspace
 - (7) Restricting access to various areas
 - (8) Site security and surveillance
 - (9) Maintaining the chain of evidence
 - (10) Use of minors in SAR incidents
 - (11) Liability for supplies, equipment, and services lent or donated for use during an incident
 - (12) Use of SAR personnel for apprehension of criminals and crime scene investigation
 - (13) Discovery of non-incident related illegal activities
2. Search Management
- a) Demonstrate the ability to develop or manage the development of an Incident Action Plan, including both daily and overall incident goals and objectives.
 - b) Demonstrate the ability 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:
 - (1) Operations
 - (2) Plans
 - (3) Logistics
 - (4) Finance
 - (5) Media liaison
 - (6) Interagency liaison
 - (7) Safety
 - (8) Investigations

- (9) Clue analysis
 - c) Demonstrate the ability to communicate with the staff by means of briefings, meetings, and written communications.
 - d) Describe the internal staff information flow system, including verbal, written and electronic communications, required to insure that information is properly collected, evaluated, disseminated, utilized, and stored throughout the incident.
 - e) Describe the ability to work within a unified command system.
 - f) Describe when and how to contact the appropriate state SAR coordinating agency and what type of incident information it may require.
 - g) Identify outside influence problems common to search missions, describe solutions and the reasoning.
 - h) Identify potential safety issues and describe how they can be countered (if they can be.)
 - i) Describe when risk factors outweigh the need to continue operations.
 - j) Describe the differences in deployment of resources in urban, suburban, rural and wilderness searches, and in the ground portion of an aircraft search.
 - k) Describe the various search strategies that can be applied to the ground search portion of a missing aircraft mission.
 - l) Describe prioritization of limited resources and how such shortages can be overcome (if they can be).
 - m) Describe how to effectively and efficiently use non-SAR resources who may offer help at all types of searches.
 - n) Describe the process used in making the decision to suspend a mission.
 - o) Explain the IC's role after the subject or target has been located.
 - p) Describe the common signs of incident stress and define the criteria for recommending a critical incident stress debriefing.
 - q) Demonstrate the ability to complete all necessary mission documentation.

IX. Incident Commander Type II (IC-II)

A. Qualifications

1. Meet all the requirements for IC-III
2. Successful completion of the Federal Emergency Management Agencies independent study 195 (Basic Incident Command System) course, or an approved equivalent.
3. 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 Incident Commander or Responsible Agent on four of the incidents.

- d) Be proposed for Incident Commander - II by a type II or I ASRC Incident Commander at an ASRC Board of Director's business meeting; and
- e) Receive a simple majority of the vote of the member's group.
- f) Receive a favorable two-thirds or greater vote of those ASRC Board of Directors present at board meeting.

B. Recertification

Incident Commander - II qualified members must meet the following recertification requirements every three calendar years:

1. 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 recertification.
2. The requirements for one shift may be fulfilled with 12 hours of category II continuing education.
3. The requirements for 2 shifts may be fulfilled with 24 hours of category I continuing education or one shift with 12 hours.
4. Continuing education may only be used for a total of 2 shifts, and may not substitute for IC shift time.
5. Receive a favorable vote of the ASRC Board of Directors.
6. This recertification process does not preclude an IC-II being brought before the ASRC Board of Directors for review as needed, at any time.
7. The review cycle period shall begin the first January of the year following the IC's initial certification.

X. Incident Commander Type I (IC-1, Area Command Authority qualified)

A. Qualifications

1. Meet all requirements for Type II and III Incident Commander.
2. Complete a basic Public Information Officer (PIO) and Media Relations Workshop or approved equivalent course.
3. Successfully complete the Inland SAR School course or an approved equivalent in order to obtain a greater management appreciation of missing aircraft searches.
4. Successfully complete FEMA IS-1, IS-2, IS-5, and IS-275 or an approved equivalent.
5. Document mission practical experience as follow:
 - a) Function as a Type II Incident Commander 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.
6. Receive a simple majority of the vote of Incident Commanders present at an IC meeting after being proposed by a Type I Incident Commander.
7. Receive a simple majority vote of the member's group.

8. Receive a favorable two-thirds or greater vote of the members present at an ASRC Board of Director's meeting.

B. *Recertification*

1. Document a total of at least 6 incidents as a type II or I Incident Commander, for either missing persons or missing aircraft, during the three years immediately prior to the date of application for re-certification.
2. The requirements for one incident may be fulfilled with 24 hours of category II continuing education.
3. The requirements for two incidents may be fulfilled with 40 hours of category I continuing education.
4. Continuing education may only be used for a total of two shifts.
5. Receive a favorable vote of the ASRC Board of Directors.
6. This recertification process does not preclude an IC-I being brought before the ASRC Board of Directors for Review as needed, at any time.
7. The review cycle period shall begin the first January of the year following the IC's initial certification.

XI. All Incident Commander Levels

A. *Failure to Recertify*

1. If the IC fails to re-certify within three (3) months of the expiration date, the certification will be dropped as follows:
 - a) An IC-I will revert to IC-II for a period of one year. If re-certification is not obtained in that year, certification will revert to IC-III. After one additional year with failure to re-certify certification will revert to Incident Staff.
 - b) An IC-II will revert to IC-III for a period of one year. If re-certification is not obtained in that year, certification will revert to Incident Staff.
 - c) Those holding IC-III certification will lose certification after an additional six month grace period from the date of the end of their certification. Thereafter they will revert to Incident Staff.
2. If the IC 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 IC from re-certifying within the allotted time, he/she should file for an extension with the ASRC training officer. Requests for extensions must be in writing and will be considered on a case-by-case basis by the ASRC Board of Director's.