

Mountain Rescue Association Rocky Mountain Region Full-Member Team Certification Information

Introduction

In part, the purpose of the Mountain Rescue Association is to coordinate its member agencies in providing integrated mountain rescue services. Member teams need a common set of skills: when one team is called to assist another, it must effectively integrate into the operation, providing an asset rather than a liability. The Rocky Mountain Region's certification procedure tests the new team for these skills. It also provides an introduction of the new team to the evaluators who represent teams throughout the region.

The certification exercise consists of five parts performed after satisfying the items listed in the requirements section below: high angle evacuation, scree evacuation, demonstration of snow and ice skills including avalanche rescue, mock search exercise and table top presentation of a multi-unit incident coordinated by the applicant. In addition to the operational aspect of the exercise, an oral portion will be required. The exercise, evaluated in terms of the criteria in this document, is intended as a learning experience for both applicant and evaluators. Typically, the exercise is performed over a three day period: A Friday, Saturday and part of Sunday work well. The site for the exercise is selected by the applicant, and the problems are designed by the evaluation team, to be as realistic as possible.

The schedule should begin Friday evening when the applicant and the evaluation team meet and review the applicant's paper work and answer last minute questions about the exercise.

On Saturday morning the evaluation team will meet for an organizational meeting, at which the remaining schedule and assignments will be worked out. A briefing for the applicant will be held and the evaluation team split up. One portion of the team will go to the exercise site and set up the field portion of the exercise, while the remainder of the evaluation team will conduct the oral exercise.

At the conclusion of the first day's exercise, the evaluation team will meet to discuss the day's events, then hold a short critique of the day's events with the applicant. At the conclusion of the second day's events, the evaluation team will meet and review those events, making a decision on its recommendation. A short critique will be held, the evaluation team announcing its recommendation.

Overview

The applicant will be tested in three general areas of mountain rescue skills: summer rescue, winter rescue and search. The applicant must demonstrate its proficiency in solving problems in these areas with proper and safe techniques and with evidence of adequate numbers of trained active personnel to accomplish such a search or rescue on a routine basis. The following sections are provided so that all the members of the applicant team will know the types of

activities and skills their team will need to perform during the certification tests.

I. Oral Exercise

During this portion of the exercise the evaluation panel will ask team members questions in the following subject areas: rope dynamics, stresses and loads in technical systems, causes and prevention of and recovery from failures in technical systems, personal and victim safety and general questions about systems used in mountain rescue.

II. Field Exercise - High Angle Evacuation

- Safety
- Vertical breaking systems
- Knot pass.
- Litter team face skills
- Mid-face medical care
- Patient stabilization and loading
- Third man skills
- Communication of information between rescue personal.
- Improvisational and abdication skills

III. Field Exercise - Scree Evacuation

- Safety
- Use of natural anchors and artificial self equalizing anchor systems
- Management of emergencies. .
- Litter attendant skills.
- Route selection and direction changes
- Communication among participants in evacuation.
- Medical care.

IV. Field Exercise - Hauling Systems

- Safety
- System design
- Adaptation and improvisational techniques.
- Efficiency of system components.
- Belay techniques

V. Field Exercise - Mock Search Operation

The mock search operation is designed to evaluate the team's ground search capabilities. The location for the search operation is chosen by the applicant, and the problem is designed by the evaluation team. The operation will be evaluated by the search guidelines adopted by the Rocky Mountain Rescue Region.

- Pre Plan
- Mission size up
- Call out procedures

- Organization
- Interviewing and intelligence gathering
- Clue and track awareness
- Containment
- Strategy
- Briefing and debriefing of field teams
- Management of additional resources
- Safety

VI. Table Top Search Operation

The table top presentation of a past search operation is used to evaluate a team's operational performance. The search should be of a scale in which the team was called upon to work with resources outside their own organization. The presentation should include: background and investigation leading up to operation, operational plan for the mission, execution of operation and a self-critique. The operation will be evaluated in terms of the search guidelines adopted by the Rocky Mountain Region.

- Pre-Plan
- Mission size up
- Call out procedures
- Organization
- Interviewing and intelligence gathering
- Clue and track awareness
- Containment
- Strategy
- Briefing and debriefing of field teams
- Safety
- Familiarity with the Incident Command System

VII. Field Exercise - Snow and Alpine Operations

The snow operations portion of the evaluation is designed to test the teams ability to function in the alpine environment. The site for the snow operations portion is selected by the team being evaluated and the problem is designed by the evaluation team. The following elements will be evaluated:

- Safety
- Over-snow travel skills (ie skiing, snow-shoing and walking)
- Self rescue skills
- Use snow anchor systems
- Avalanche rescue
- Medical care in the alpine environment
- Incident assessment and response
- Personal equipment

Requirements

An applicant team not meeting the National MRA requirements for membership will not be eligible for testing and certification by the Rocky Mountain Region. The Regional requirements for certification are as follows:

- I. The team seeking certification (hereafter called the Applicant) must be**
 - A. A viable, functioning team which has been operating continuously as a search and rescue organization for a minimum of four (4) years;**
 - B. A volunteer non-profit, public service organization which does NOT charge for its services;**
 - C. A team whose primary mission load and purpose is summer and winter search and rescue operations, which occur in a wilderness environment (i.e. beyond the trailhead).**

- II. The applicant must express its interest in writing to the Regional Chairman, who will notify the National President and will help the applicant to find a Regional Member Team to act as sponsor. The purpose of the sponsoring team is to**
 - A. Become acquainted with the applicant team as an organization and as individuals;**
 - B. Participate in joint training exercises as well as missions when possible and appropriate;**
 - C. Assist in training the applicant team in specific areas if requested.;**
 - D. Answer questions concerning MRA membership requirements and generally assist the applicant in applying for and achieving membership in the MRA.**

- III. The applicant must submit the following documents to the Regional Chairman with a sufficient number of copies for distribution to each of the Regional Member Teams:**
 - A. A History/Description of the Applicant Team which discusses:**
 - 1. When, How and Why it was organized;**
 - 2. Its need and role in the community;**
 - 3. Its primary area of operation and/or responsibility in relation to the Rocky Mountain Region of MRA;**
 - 4. The working relationship and understandings between the applicant team and local governmental authorities;**
 - 5. The applicant teams' method(s) of funding and financing for equipment and operations;**
 - 6. Method of notification of the team and individual members for a mission.**
 - 7. Its scope of operations and type of missions, including areas of special skills or limitations.**
 - B. Bylaws of the Organization, including**
 - 1. An organizational chart showing the various positions of authority within the team and a brief description of the responsibilities of those positions;**
 - 2. Membership requirements & standards for the team as well as any additional requirements for various levels of membership or positions of responsibility.**
 - C. Annual Membership Rosters for the past three (3) years;**
 - D. Training Schedules for the past three (3) years;**

- E. A List of Missions with dates, places, type and man-hours for the past three (3) years;
- F. A List of Personal Equipment which is required to be obtained and carried by each member during missions;
- G. An Inventory of Team Equipment listing the primary items which are owned and used by the team (not down to the last piton and/or band-aid).

IV. After ALL of the above information has been submitted to the Regional Chairman, he will distribute it to each of the regional teams and set up an informal meeting between representatives from the teams and the applicant to discuss the information submitted and the requirements for membership, including the less quantitative areas of experience, depth, continuity, leadership etc..

V. Having reviewed the above listed information, the Regional Member Teams will vote on the question of allowing the applicant team to proceed with formal testing for membership. The vote shall require a 3/4 majority of all current member teams to pass.

VI. The Regional Chairman will notify the applicant as to the results of this vote and, if favorable, will set a mutually acceptable time and place for the test. If possible the test should be conducted somewhere within the applicant's primary area of operation.

VII. If a sponsored team no-longer desires to become a Full-Member team, or desires a new sponsor, it must notify the sponsoring team and the Region.

Sponsoring Team

Any prospective Full-Member team must have a sponsor from among the existing Full-Member teams of the region. The sponsoring team acts as a "Big Brother" for the candidate team. The duties of the sponsoring team include

- I. Assisting the team in learning the skills necessary to pass the certification test.;
- II. Notifying the Region in the event that it cannot provide the recommendation for Full-Membership for the applicant, or it desires to terminate its sponsorship of the applicant;
- III. Providing the Region with a written recommendation for Full-Membership, at least 90 days before the desired certification date.

Testing

- I. An examination committee shall be organized by the Regional Member Teams. The requirements of this committee are:
 - A. Each team may send a maximum of two examiners and each examiner shall have one vote;
 - B. The examination team shall consist of at least five (5) persons who represent at least three (3) Regional Member Teams;
 - C. Each member of the examination committee must be at least a full rescue member and

preferably a mission coordinator in his own organization.

II. General Requirements

- A. The problems for testing will be set up by the examination team who will then inform the applicant (on site, no call-out) of the situation and the ground rules;**
- B. The problems should be as objective and realistic as possible within the parameters of a typical mountain rescue mission;**
- C. The examination committee must agree upon the location and nature of any imaginary obstacles. These obstacles shall be clearly marked and identified and then explained to the applicant before the test begins;**
- D. The problem shall not be changed during the test except by mutual agreement between the operations leader of the team being tested and the chairman of the examination committee;**
- E. At each station, where the team being tested is to perform a significant task (top, bottom, base camp, etc.), examiners from at least three (3) attending teams shall be present during that phase of the test.**

III. Scoring.

Test scoring will be provided to the team being tested as feedback on their performance in specific test areas. The team tested will be provided with the results of the scoring in various areas after the examination.

- A. At the conclusion of the exercise the examination committee votes for pass or fail.**
- B. Pass vote must be at least 3/4 majority of examiners present at the testing.**
- C. The vote as submitted by the examination committee is final and shall be entered into regional records as final.**
- D. At the option of a majority of the examination committee, the applicant may be allowed to be re-tested on only those items failed (if any) rather than the entire exam.**

IV. Technical Rock Rescue

The purpose of this examination is to evaluate the applicant on proficiency and safety in high angle and low angle rescue techniques on rock. The applicant will be responsible for providing the subject(s) for the simulated rescue. The examination committee will design the problem to cover as many of the items to be tested as possible without being overly extravagant.

The applicant will be evaluated on overall performance during the entire exercise as a whole. However, specific areas of concern have been identified as requiring special attention and the previously described scoring system will be utilized by the examiners to evaluate the applicant on the following criteria unless the applicant has acceptable justification for variations due to their particular area or method of operation.

A. Organization

1. Leadership

- a. Did a recognized leader take charge of the operation?**
- b. Did he delegate responsibility to others?**
- c. Did he have the respect and cooperation of the entire team?**
- d. Is there depth of leadership on the team with others able to take charge of specific aspects or the entire operation?**

2. Coordination
 - a. Did the team work together to get the job done?
 - b. Did someone direct and coordinate their efforts?
 - c. Did the team function as a unified organization rather than as individuals?
 3. Judgment
 - a. Was the situation evaluated thoroughly and correctly?
 - b. Were the proper decisions made to solve the problem smoothly?
 - c. How did the team react to any new developments in the problem?
 4. Efficiency
 - a. Did the team properly utilize the available personnel and equipment?
 - b. Did they minimize wasted time and effort?
 - c. Did personnel look for jobs to be done without being told?
 - d. Were all jobs accomplished as quickly as reasonably possible?
- B. Technical skills**
1. Anchors
 - a. Were the natural anchors used to best advantage?
 - b. Were the anchors selected for position in relation to the problem?
 - c. Were the anchors selected for security?
 - d. Was a self-equalizing anchor used where necessary?
 - e. Did the rescuers understand the proper use and placement of nuts, pitons and bolts?
 2. Evacuation Methods
 - a. Was the team properly equipped for the evacuation?
 - b. Was the rigging set up in the best location?
 - c. Did belayers use proper techniques?
 - d. Were belay devices used as appropriate?
 - e. Was equipment adequate and properly used?
 - f. Were all ropes managed to avoid confusion?
 - g. Were the work area and equipment kept organized?
 3. Scree
 - a. Were belay methods compatible with the available anchors?
 - b. Was the belayer in total control of the situation;
 - c. Were the belay methods appropriate to the terrain?
 - d. Were the carrying methods and number of litter bearers appropriate to the terrain?
 - e. Did the litter bearers work as a team?
 4. High Angle
 - a. Was the litter quickly and correctly rigged?
 - b. Was the litter properly positioned for the rescue situation?
 - c. Did signals between litter and belayer take top priority?
 - d. Were signals clear and concise?
 - e. Was a knot pass executed smoothly and properly?
 5. Raising methods
 - a. Was a mechanical advantage set up correctly?

- b. Was the uphaul a smooth united effort?
- c. Was a brake provided on the ropes?
- d. Were pulley systems kept organized and uncluttered?

C. Medical Skills

1. Reasonable Care

- a. Was someone immediately assigned to care for the victim?
- b. Did that person reach the victim as soon as possible?
- c. Was there continuous care?
- d. Were vital signs monitored often?
- e. Were the first aid fundamentals adequate?

2. Adequate packaging

- a. Was the victim made as comfortable as possible?
- b. Were injuries treated with concern?
- c. Was loading and evacuation smooth and gentle?
- d. Was the victim padded, secured and protected in the litter?

D. Safety

1. Personnel

- a. Were personnel near the edge tied in?
- b. Was everyone in rockfall danger wearing hard hats?
- c. Was rockfall danger minimized?
- d. Was the safety of the rescuers paramount at all times?

2. Anchors

- a. Were anchors as secure as possible?
- b. Were the anchors backed up?
- c. Were they rechecked during the operation?
- d. Was the anchor system as a whole 'bomb-proof'?

3. Ropes

- a. Were all ropes protected against damage?
- b. Were the running ropes not causing rockfall?
- c. Were knots adequate and backed up by safeties?
- d. Were ropes kept from twisting and kinking?

4. Victim

- a. Was extra equipment carried for the victim?
- b. Was the victim tied into a secure system as soon as possible?
- c. Was the victim kept tied in at all times?
- d. Was the victim's safety a primary concern of the entire operation?

5. Safety Officer

- a. Was a Safety Officer designated from the outset of the mission?

V. Winter Rescue

The purpose of this section of the examination is to evaluate the applicant team in a typical search and rescue situation within the winter environment of the Rocky Mountains. The applicant will be responsible for providing the subject(s) for the exercise. The examination committee will design the problem to simulate a realistic rescue which might occur

during the winter months within the applicant's area of primary responsibility.

As with the technical rock rescue, the applicant will be evaluated on overall performance, however the following areas of interest have been identified for specific scoring as per the system described in the scoring section above. The evaluation will follow these criteria unless the applicant has acceptable justification for variations due to their particular area or method of operation.

A. Organization

1. Leadership

- a. Did a recognized leader take charge of the operation?
- b. Did he delegate responsibility to others?
- c. Did he have the respect and cooperation of the entire team?
- d. Is there depth of leadership on the team with others able to take charge of specific aspects of the entire operation?

2. Coordination

- a. Did the team work together to get the job done?
- b. Did someone direct and coordinate their efforts?
- c. Did the team function as a unified organization rather than as individuals?

3. Judgment

- a. Was the situation evaluated thoroughly and correctly?
- b. Were the proper decisions made to solve the problem smoothly?
- c. How did the team react to any new developments?

4. Efficiency

- a. Did the team properly utilize the available personnel and equipment?
- b. Did they minimize wasted time and effort?
- c. Did personnel look for jobs to be done without being told?
- d. Were all jobs accomplished as quickly as reasonably possible?

B. Technical skills

1. Travel

- a. Were enough members equipped and proficient on skis or snowshoes?
- b. Were they able to climb moderate snow slopes without problems?
- c. Were they able to move with reasonable speed into the accident site?
- d. Can team members properly use an ice ax for self arrests?
- e. Are enough members skilled in the use of crampons?
- f. Did they show a proficiency in route selection and avalanche avoidance?

2. Anchors

- a. Can enough members perform ax belays?
- b. Are members familiar with setting up adequate winter anchors with bollards, flukes, pickets, screws, etc.?
- c. Were the anchors used appropriate to the snow conditions?
- d. Were the natural anchors used to best advantage?
- e. Were the anchors selected for position in relation to the problem?
- f. Were the anchors selected for security?
- g. Was a self-equalizing anchor used where necessary?

3. Lowering methods

- a. Does the team have an adequate means for over-the-snow transport?
- b. Was the team properly equipped for the evacuation?
- c. Was the rigging set up in the best location?
- d. Did belayers use proper techniques?
- e. Were belay devices used as appropriate?
- f. Was equipment adequate and properly used?
- g. Were all ropes managed to avoid confusion?
- h. Were the work area and equipment kept organized?

4. Avalanche Rescue

- a. Is the team familiar with the use of radio beacons?
- b. Were the most probably areas determined and searched first?
- c. Was the hasty search properly conducted?
- d. Was the course probe search organized and thorough?
- e. Did the team understand the urgency of the situation?

C. Medical Skills

1. Reasonable Care

- a. Are members aware of proper care for hypothermia and frostbite?
- b. Was someone immediately assigned to care for the victim?
- c. Did that person reach the victim as soon as possible?
- d. Was there continuous care?
- e. Were vital signs monitored often?
- f. Were the first aid fundamentals adequate?

2. Adequate Packaging

- a. Can the team provide thermal protection for the victim?
- b. Was the victim made as comfortable as possible?
- c. Were injuries treated with concern?
- d. Was loading and evacuation smooth and gentle?
- e. Was the victim padded, secured, and protected in the litter?

D. Safety

1. Personnel

- a. Are members trained in winter survival skills?
- b. Are they equipped well enough to spend the night out if necessary?
- c. Are they aware of the symptoms of hypothermia frostbite and dehydration?
- d. Can the members evaluate avalanche hazard?
- e. Can the members recognize and avoid avalanche slopes?
- f. Is the safety of the rescuers paramount at all times?

2. Anchors

- a. Were anchors as secure as possible?
- b. Were the anchors backed up?
- c. Were they rechecked during the operation?
- d. Was the anchor system as a whole 'bomb-proof'?

3. Ropes

- a. Was the team aware of the hazard of icy ropes?

- b. Were all ropes protected against damage?
- c. Were knots adequate and backed up by safeties
- d. Were ropes kept from twisting and kinking?
- 4. Victim
 - a. Was extra equipment carried for the victim?
 - b. Was the victim tied into a secure system as soon as possible?
 - c. Was the victim kept tied in at all times?
 - d. Was the victim's safety a primary concern of the entire operation?
- 5. Safety Officer
 - a. Was a Safety Officer designated from the outset of the mission?

VI. Search

Certification of search skills will be accomplished by both a round-table discussion and a field exercise presented by the applicant to the examination committee. This presentation shall detail at least two search operations in which the applicant has participated. These missions shall preferably be of a large enough scale to have included joint operations with other search and rescue resources. The presentation shall include documentation such as maps, overlays and mission logs. Where possible, each mission should be presented by a different mission coordinator from the applicant. Documentation should be reviewed to determine completeness and adequacy should the mission be subjected to legal review or need to be reopened. Jurisdiction requirements vary substantially, and these variations should be considered during the evaluation.

The field exercise is designed to evaluate the team's ground search capabilities. The location for the search operation is chosen by the team being evaluated and the problem is designed by the evaluation team. The field exercise should contain as a minimum:

A. Field problem elements

- 1. A reporting party (briefed by the evaluators)
- 2. A missing party (briefed by the evaluators)
- 3. An Initial Interview Session
- 4. A Mission Decision Process
- 5. A Simulated Call-out
- 6. Development of a search plan, with communication and transportation elements as needed.
- 7. Implementation of the plan
- 8. Simulation or actual transition to rescue or recovery
- 9. Demobilization and documentation

B. Evaluation Criteria should include:

- 1. Pre-plan
 - a. Who receives assistance requests from the public?
 - b. Are they search aware?
 - c. Are coordinated, trained, & equipped resources identified?

- d. What do public agencies do with search requests?
 - e. Is there an efficient way to get the initial request for help into the hands of the responsible agency?
2. Response Actions (Determining the mission)
- a. Does the search agency conduct a thorough interview with the reporting party?
 - b. Is the complainant kept available for follow-up questions and support?
 - c. Are the expected points of return such as missing party's home, vehicle, trail head or other probable points monitored through out the search operation?
 - d. Are additional potential interviewees identified?
3. Call Out
- a. Does the search agency match the mission urgency with the right kind, quantity, quality, and urgency of response?
 - b. Is a leader identified and are tasks clearly defined?
 - c. Are logistical requirements such as maps, transportation, communication, and special needs identified and met in an organized and timely manner?
 - d. Are additional interviews and investigation started?
4. On-Scene
- a. Is a search plan developed?
 - b. Is the plan distributed to all the necessary elements promptly and completely?
 - c. Is a communications plan developed and implemented?
 - d. Are field elements properly briefed on the missing party, terrain, weather, and anticipated hazards?
 - e. Are field personnel inspected to determine they are properly equipped perform their task?
 - f. Do field personnel promptly move to their areas of assignment?
 - g. Is a rescue plan developed?
 - h. Are rescue resources identified independent of in-field resources if they are needed?
 - i. When the missing party is found or the mission is suspended, is there and orderly notification to all elements and affected parties?
 - j. Is there an efficient recovery plan?
5. Strategy and Tactics
- a. Is the applicant familiar with the common and accepted strategies and tactics of search operations and proficient in their use?
6. Multi-agency Organization Structure
- a. Is the applicant 's senior leadership sufficiently familiar with the common search management structures (ie MSF, ICSAR) to allow their team to work within a large scale multi-resource operation.