



CHARLOTTESVILLE - ALBEMARLE RESCUE SQUAD



STANDARD OPERATING GUIDELINE

TOPIC: Technical Rescue Team	S.O.P. # 4.2
Approved by: Lair D. Haugh, Chief	Revised: 2/9/2003 Approved:

I. PURPOSE

- a. The purpose of the Technical Rescue Team (TRT) is to provide a nucleus of highly trained special rescue personnel to deal with the following types of situations in a safe and organized manner:
 - i. Any high-angle rescues or elevated patient movement involving the use of rope.
 - ii. Any situation where a victim is in a confined space as defined by OSHA.
 - iii. Any situation in which a patient is trapped, buried, or experiencing a medical emergency in a trench or excavation.
 - iv. Any situations involving victims trapped in the collapse of a structure.

II. QUALIFICATIONS

- a. Membership of the Technical Rescue Team will include active, associate, and life members of the Charlottesville-Albemarle Rescue Squad, Inc. that fulfill the required yearly training, meet the approval of the Technical Rescue Captain, and maintain the following certifications:
 - i. Virginia OEMS's EMT-B certification.
 - ii. Trench Rescue certification.
 - iii. Rope Rescue I certification.
 - iv. Rope Rescue II certification.
 - v. Rope Rescue III certification.
- b. Confined Space Rescue certification.
- c. VDFF's Fire-Fighter level I certification or VAVRS certification in Basic/Light Duty Rescue.
- d. Formal training in the use of self-contained breathing apparatus (SCBA) and supplied-air breathing apparatus (SABA).
- e. Structural Collapse Rescue certification.
- f. One other certification level in any other heavy/technical rescue specialty. Examples could be Vehicle Extrication, Cave Rescue, Swift Water Rescue, Heavy Rescue, Etc.
- g. In order to join the TRT, the individual must have a minimum of 2 years emergency service experience and have obtained at least 3 of the above HTR certifications. A 1-year grace period will be given to complete the required certification requirements.
- h. All HTR certifications must be current to within 5 years.

III. TRAINING

- a. There will be at least 4 field-training exercises (FTX) per year.
- b. Each team member is required to attend at least 2 of them to remain active.
- c. The training meetings will be held on announced dates and will be coordinated by the Technical Rescue Captain. Training meetings will consist of practical evolutions that simulate situations in any of the technical rescue disciplines.
- d. Training meetings are for team members, but any interested person may attend and participate as long as they hold a certification in the type of training involved.

- e. At least one of the training sessions will involve a confined space rescue evolution in compliance with OSHA regulation 29 CFR parts 1910.146 paragraph g & k.
- f. Other special training sessions may be held at anytime with attendance strongly encouraged. These sessions may involve interacting with other agencies.
- g. Any full member of CARS who wishes to request funds for outside training must do so through existing guidelines and coordinate through the Training Officer. Outside training is strongly encouraged especially if it involves specialty certification that leads to instructor level.
- h. All training attended is to be documented and forwarded to the Technical Rescue Captain for recording. Copies of all required certifications are to be kept by the Technical Rescue Captain in a file for that purpose.
- i. All TRT members are expected to be equally proficient in the types of rescues as outlined in section I.
- j. Any member that does not fulfill the training requirements of the TRT will be required to appear before a review committee which will consist of the Technical Rescue Captain, The Deputy Chief of Special Operations, and the Chief.

IV. EQUIPMENT

- a. All technical rescue equipment is to be kept at a high state of readiness at all times and easily accessible to squad members. Any equipment that is damaged or in a state of disrepair is to be tagged immediately and removed to a storage area for inspection.
 - i. The Duty Officer and Technical Rescue Captain are to be notified immediately if any equipment goes out-of- service.
 - ii. Team members are encouraged to practice with and use equipment as needed, but members are expected to clean, inspect and put any equipment back in its proper place.
- b. Any TRT equipment used for events other than team training or rescue operations must be approved by the Technical Rescue Captain.
 - i. The Duty Officer must also to be notified.
- c. Any personal equipment must be approved by the Technical Rescue Captain.
- d. An inventory of all TRT equipment will be kept by the Technical Rescue Captain. A yearly accounting of the inventory will be turned in to the Deputy Chief of Special Operations as well as an assessment of the team capabilities and abilities to handle heavy & technical rescues situations.

V. ORGANIZATION

- a. Technical Rescue Captain.
 - i. The Technical Rescue Sergeant will be responsible for the organization, operation, preparedness, and training of the TRT.
 - ii. Duties of the Technical Rescue Sergeant include:
 1. Handling on-scene operations as needed or appointing another qualified member to handling the task
 2. Appointment and dismissal of assistants
 3. Representing the team at meetings such as the CARS Board of Directors or JCFRA meetings
 4. Projecting operational needs and preparing a budget
 5. Inspection and approval of personal equipment
 6. Maintaining records and certification levels
 7. Performing other duties as needed or assigning those duties to other members of the team.

VI. ACTIVATIONS

- a. Upon receiving a call for a technical rescue situation, ECC will dispatch the following groups:
 - i. A trauma level ambulance.
 - ii. Squad 135 (and Collapse Rescue Trailer if necessary).
 - iii. The Technical Rescue Team
 1. Only TRT members are to respond to the incident scene. CARS members are to report to the building and stand-by.
 - iv. The Duty Officer.
 - v. The Fire Department.
 - vi. The Police Department.
- b. Upon arriving on the scene, the first-due ambulance will assess the situation for the following:
 - i. What is the nature of the problem? Collapse, entrapment, elevation, confined space, medical, etc.
 - ii. How many victims are there?
 - iii. What is their location?
 - iv. Are there any on-scene hazards?
 - v. Disrupted utilities.
 - vi. Flowing water.
 - vii. Secondary collapse.
 - viii. Mechanical hazards/heavy equipment.
 - ix. Exposed but non-disrupted utilities.
 - x. Hazardous materials/explosives.
 - xi. Non-trained rescuers attempting rescue.
 - xii. Onlookers or traffic hazards.
- c. An assessment will be made to determine whether crews will be operating in a Rescue or Recovery mode.
- d. After a through assessment, a report will be made by the first-in units to ECC detailing the problem and outlining units needed to mitigate the incident. ECC will then place the operation on TAC 4 for communications for the duration of the incident.
- e. ECC will assure TRT response, (if needed), and will advise the Duty Officer of the first-in unit's report.
- f. The first-in units will then establish a visible command and have PD control access to the area. Patient care is to be started only if there is absolutely no danger to the ambulance crew.
- g. All personnel shall report to and work through the incident command post. Establishment of sector officers associated with the rescue may be necessary. These shall be in accordance with the specific incident SOG and the Incident Command SOG.
- h. Rescue operations are to commence only if there is no danger to the on-scene crew.
 - i. Normally the rescue should commence only when the TRT arrives and takes command. The number of TRT members is to be determined by the SOP specific to the incident.
- i. Command will keep ECC apprised periodically on the progress of the rescue via telephone.
- j. Command will ensure that documentation of all activities for court & credibility is carried out during the incident.
- k. During the incident, it may become necessary to rehab personnel. Command should coordinate rehabilitation in accordance with the Ambulance Stand-By For Structure Fires SOG.
- l. Upon termination of the incident, all equipment is to be checked and returned to service ASAP.

- m. Complete documentation of the incident will be made by the Incident Commander with copies sent to the Chief, Deputy Chief of Special Operations, and the Technical Rescue Captain.
 - i. A copy of the incident report is to be sent to the Director of the DFP's Heavy and Technical Rescue Team by the Technical Rescue Captain for informal evaluation and suggestions.
- n. All TRT responses are to be critiqued within 1 week of the incident. Lessons learned are to be passed on to all team members and adjustments made to improve team operations.

VII. CHAIN OF COMMAND

- a. The chain of command for technical rescue incidents will be as follows:
 - i. Technical Rescue Captain (or most experienced TRT member)
 - ii. Duty Officer
 - 1. Can serve in an overall command capacity, freeing up the Technical Rescue Captain to oversee the operation.
 - iii. Sector Officers
 - 1. Should be appointed as needed to safely and effectively carry out the operation
 - 2. Should be selected from qualified personnel

VIII. COMPETITIONS AND DEMONSTRATIONS

- a. Due to the low statistical frequency of technical rescues, competitions and demonstrations provide a quality alternative to practice and hone skills as well as improve public awareness.
- b. Requests for competitions and demonstrations are to be directed to the Technical Rescue Captain.

IX. AVAILABILITY

- a. The Deputy Chief of Special Operations as well as the Duty Officer and Technical Rescue Captain are to be notified anytime a TRT capability is taken OOS for any length of time.

X. DEFINITIONS

- a. Confined Space - any space not intended for continuous employee occupancy, having a limited means of egress, and which is also subject to either the accumulation of an actual or potentially hazardous atmosphere...or a potential for engulfment. Confined spaces generally include, but are not limited to storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, manholes, underground utility vaults, acid tanks, digesters, ovens, kiers, pulpers, tunnels, and pipelines. Open top spaces more than four feet in depth such as pits, tubs, vaults, and vessels may also be confined spaces.
- b. Engulfment - the surrounding and effective capture of a person by finely divided particulate matter or a liquid.
- c. Excavation - a man-made cut, cavity, trench or depression in a earth surface, formed by earth removal. Usually wider than deep.
- d. High-Angle Rescue - a situation where a victim is elevated above ground greater than 10 feet or below ground and must be moved and/or rescued by the use of rope and/or mechanical advantage systems and rigging.
- e. Rope Rescue I - the introductory level (16 hours) that familiarizes the student with the equipment and techniques necessary to save him-her self from harm by escaping from an uninhabitable environment.

- f. Rope Rescue II - the intermediate level (32 hours) that addresses the equipment and techniques required to safely access, stabilize, and remove victims of elevated or below grade accidents.
- g. Rope Rescue III - the advanced level (16 hours) that teaches tensioning ropes to develop angled and near horizontal traverse systems.
- h. SitRep - situation report.
- i. Structural Collapse Rescue - the rescue of victims from entrapment or pinning in any type of structural collapse.
- j. Trench - a narrow excavation in relation to its length made below the surface of the ground. In general, the depth is greater than the width, but the width is not greater than 15 feet.