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| ***REPLACE WITH YOUR MASTHEAD*** | | |
| **VFIS logo black JPG** | **SOG Title:** | |
| **SOG Number:** | |
| **Original Date:** | **Revision Date:** |
| **ABC Fire Department General Operating Guideline** | | |

**Rope Rescue Incident Operational Guidelines**

***This is a sample of a standard operating guideline (SOG) on this topic. You should review the content, modify as appropriate for your organization, have it reviewed by your leadership team and if appropriate your legal counsel. Once adopted, make sure the SOG is communicated to members, implemented and performance monitored for effective implementation.***

**Purpose:**

To ensure a safe working environment and performing rope rescue operations to evacuate patients where no other evacuation means can.

**NOTE:** *It must be understood that rope rescue operations are to be attempted only as a last option. All other means of access and egress must be considered first it should be understood that this policy in no way is to be intended to be all-inclusive. During rope rescue operations judgement, experience, training, and coordination among team members is an absolute necessity*.

**Personal Protective Equipment (PPE)**:

For all rope rescue incidents PPE shall consist of but not be limited to: safety glasses, ear protection, helmet, long pants, long sleeve shirt, jumpsuit, gloves, safety shoe or boot. If the rescuer is working near an edge (within 6 ft.), be at a height of 10 feet or more, or need to work "hands free"; he or she shall be in a harness and tied off In low angle environments a seat harness either manufactured or made up of webbing. In high angle environments a full body harness (class III) is required if the rescuer is "on rope" and does not have ground contact at all times.

**Procedure:**

* Once the Rescue officer has performed a size-up and formulated a plan, command, the rescue crew and EMS will be briefed and task assignments will be given to the rescue crew.
* The Rescue officer or designee shall establish a safe access route for rescue and medical personnel if possible.
* Rescue crewmembers shall establish a staging area for equipment and manpower so that it can be easily directed to affect the rescue.
* The Access/Rescue crew shall gain access to the victim(s), protect from further harm. If emergency medical services (EMS) cannot make direct contact with the patient, the Rescue crew will manage patient airway, bleeding, circulation and c-spine as needed. Package patient and prepare to transport. If the victim(s) to be accessed and packaged must be attended by non-team members/EMS personnel, at least one team member will coordinate packaging and be responsible for safely transporting the victim(s).
* Riggers shall establish the rescue system that will be utilized for the rescue. The rescue system shall provide a safe and efficient mode of transportation for the victim(s) as well as the rescuer(s). The system shall consist of a main line and a belay system for each person on rope. Other lines may be required by the needs of the rescue system. The system must be able to handle the rescue load.
* At any place that a rope will be in contact with an edge, either moving or static loaded, some form of padding or protection will be in place to prevent wear or damage to the rope by the edge.
* All rigging shall be checked prior to loading of any life. Only NFPA approved Life Safety rope shall be used for main and belay lines, all carabiners shall be locked, edge protection in place, all knots shall be dressed and have a backup or safety. The victim(s) shall be secured in an appropriate litter and or harness.
* The rescue officer or a single designated person shall direct movement of the rescuer(s) and/or victim(s) (on rope).
* All rope rescue equipment used during an operation shall be inspected and its use recorded per the NFPA standard on Life Safety Rope prior to being placed back in service.

**Guideline for Rope Rescue Task Performance - Operations Level Training**

1. Identify the use, care, and maintenance of all rope and related equipment carried by the department, making note of safe and proper use of the equipment and required PPE.
2. Demonstrate ability to tie the following knots, with safety or back-up knot, and identify application or use; figure-eight/ figure eight on a bight/figure-eight follow-through/clove-hitch/prusik-hitch/water knot.
3. Demonstrate proper use of edge protection
4. Construct a single and a multi-point anchor
5. Construct the following mechanical advantage systems with haul cam or progress capture device: 3:l / 4: l / 5:1 / in line 3:l or Z-rig.
6. Construct a belay system (TPB)
7. Package victim in a stokes/sked/LSP half-back
8. Construct a rope based raising system (for use in low angle environment)
9. Demonstrate use of attendants in a low angle environment.
10. Construct a load-distributing anchor
11. Construct a highline
12. Construct a rope based raising system (for use in a high angle environment.)
13. Demonstrate ability to pass a knot through a rescue system
14. Demonstrate ability to attend a litter in a high angle environment

**Guideline for Rope Rescue Task Performance - Technical Level Training**

1. Ifan area needs to be traversed, and the main ladder cannot be used, a highline shall be constructed. A Reeving Highline may be needed if lifting from any point in the area being traversed is needed. With bombproof anchor points on both sides of the area, secure one side to the anchor point. On the opposite side, construct and use a 4:1 MA to take-up any slack in the line prior to attaching to the anchor. If the span is over I00 ft. a second line, parallel to the first, shall be used. Any rescuer or victim shall have at least one tag line and two points of attachment to the main line.
2. Operations in a high angle environment, a minimum of a one main line, one belay line, and a Mechanical Advantage (haul system). Find or build two bombproof anchors. One for the main line and one for the belay. To the left, right, or behind find a third bombproof anchor for the haul system. A Tandem Prusik Belay shall be constructed and used for the belay. The main line shall have a haul ca.ml progress capture device in place to allow for the haul system to be reset with little or no loss of progression.
3. Attendants in a high angle environment shall be used only when absolutely necessary. An attendant shall be in a class III harness, be attached to the main line, the belay line, and have the ability to move above and below the litter, as well as, side to side.
4. Passing a knot through a rescue system shall be performed on an as needed basis. The load shall be secured using an attachment point below the knot. A second point of attachment shall be made below the first, with the use of an MA, create slack between the two attachment points. The system may now be moved or re-constructed in the area between the two points. Check the system. Release the load back onto the rescue system, and proceed with the operation.

***This is a sample guideline furnished to you by VFIS. Your organization should review this guideline and make the necessary modifications to meet your organization’s needs. The intent of this guideline is to assist you in reducing exposure to the risk of injury, harm or damage to personnel, property and the general public. For additional information on this topic, contact your VFIS Risk Control representative.***

**References:**

King of Prussia (PA) Volunteer Fire Company SOG KP0075 Rope Rescue Incident Operational Guideline