

who are best kept a safe distance from the main setup area until the hauling/lowering is ready to proceed.

**Cold zone:** This is the area where incident support operations are directed to both the internal rescue operation and external activities required to coordinate and bring the incident under control. The Command Post is located in this area, providing direction and overall control of the incident. An accountability officer and entry control point supervisor should also be located in this area. In addition, firefighter rehab and EMS are located in the cold zone, as are personnel assigned as tactical reserve.

**Public zone:** This area is for such extrinsic activities as public information. The department's public information officer should establish a press area. Uncommitted apparatus staging should also be located in this zone. Perimeter and scene control is nothing new to the fire service, but it is a critical and often overlooked portion of the technical rescue operation.

**Victim/target zone access and stabilization.** The main priority of the entire operation must be the victim and where he is located (the target zone). The rescue group leader must determine the safest, most effective path for rescuers to reach the victim.

Assess target zone terrain. Ask yourself, What hazards are present? Is it dark? Is a steep slope involved? Is there a frictionless footing hazard such as wet or icy terrain? Are there anchor points in the target zone that can be used as temporary tie-offs for rescuers? What special equipment will be required to work in the target zone, and what is the best way to get it there? Utility umbilicals should be built into all rescue systems to ferry equipment and supplies to the target zone. Lifelines should NOT be used for this purpose.

Then, assess the victim: Can you even see the victim? Is there more than one victim? Can a thermal imaging camera help? What is the probable medical profile of the victim(s)? You must try to improve victim comfort as soon as possible. This may include conducting a medical assessment in the target zone, providing blankets to keep body heat from being lost, and administering fluids and possibly intravenous medication prior to removal. The rescue group leader must keep the victim's comfort in mind as the incident unfolds. Sometimes, so much is going on top-side that the victim's needs take a backseat. Remember, the entire complex operation stems from the victim's predicament.

**EMS considerations.** EMS will play a large part in this type of rescue, from administering to the victim to medical monitoring of rescue personnel. As with any other agency, determine the scope of EMS personnel's participation, roles, and responsibilities in advance. Assign an EMS group supervisor, preferably prior to the incident. The bulk of the EMS responders should remain in the cold zone, with unobstructed access into and out of the operational area. A skeleton crew of EMS personnel with equipment should stand by in the warm zone until the victim has been packaged and is being removed from the target zone. EMS personnel should be in a safe area (you can call this area the victim landing zone) where they can have immediate access to the victim when he is brought safely topside.

**Unassigned personnel/staffing considerations.** To conduct technical rope rescues safely and properly requires much staffing. Command must ensure that a tactical reserve is on-scene as soon as possible. A good rule of thumb to follow is to double the number of personnel you think you will need. To

maintain proper control over incoming personnel, establish strict staging and non-assigned personnel policies. Additional personnel should report to the command post for assignment. This requires a gatekeeper position similar to the lobby control officer in a high-rise operation. Establish a gatekeeper position at each zone to keep track of who passes in and out.

From the command post, assign staffing as per the requirements set forth by the operational zones. As stated, personnel will be required for the bull work, the working of rescue and belay lines. These personnel are not usually essential to the rigging operation, so stage them in the warm zone. When they are needed, conduct a briefing outlining their hot zone duties. In the hot zone, brief them again prior to operation.

You will need other personnel for equipment and stretcher shuttles, lighting, and other support operations not directly involved in the rescue but essential to the operation. Remember, too, that other odd jobs will always pop up. The work of support personnel keeps the operation moving in the proper direction.

**Communications.** Communications during large-scale incidents can be a nightmare if you do not properly control and predetermine them before the incident. The rescue team (on-line), the rescue group leader, and the hot zone safety officer at a minimum should operate on a rescue frequency (basically the fireground frequency) while the Operations Section chief and the IC maintain a Command frequency. Aides can be used to monitor the rescue frequency.

Although many of the communications will be face-to-face, also establish a hand signal communication system—especially for the member operating the aerial device. From the turntable, it may be difficult to hear the commands of someone guiding the device over the target zone.

Establish communication with the victim as soon as possible. Make every effort to put him at ease. Explain to the victim that he should not risk further injury by trying to respond to conversation or attempting to help the rescuers in the rescue operation. Also explain to the victim what is taking place and how the rescue will unfold. Establishing confidence and trust will greatly assist in the transition (vertical trip) from the target zone to the hot zone.

**Safety.** Safety must be the IC's overriding concern at all times. He must have zero tolerance for firefighter injury and must communicate this attitude through strong command and control.

A predesignated hot zone safety officer must oversee the operation in the hot zone and monitor and advise on activities in the target zone. He must have the technical skills and training of the other members operating in the hot and target zones. An overall incident safety officer should monitor hazards in the other designated operational zones. Safety should permeate the entire rescue ground.

**Aerial devices** must be rated for rope operations. Light-duty ladders rated for 250 pounds at the tip are not acceptable. Aerials should be rated for at least 500 pounds at the tip. Platforms may be well-suited if they have an adequate tip load to handle such rescues. Use aerial devices as gin poles only. While rotation of the devices is acceptable and will be necessary, using the devices for raising and lowering a load is not advised. This should be done only by manipulation of the rope systems.

All rope systems for rigging and on-line operations should be redundant—no member

should operate with fewer than two ropes attached to him. The same is true for any victims moved on-line in litters.

Use utility tag lines on all equipment lowered and raised. This will eliminate unwanted equipment movement and help steer it in the right direction.

Another safety consideration is proper lighting of the target zone and topside, especially if the incident will extend into the night hours. Request a light unit well in advance of when you'll need it.

Engine noise and exhaust can create problems on-scene. Shut down apparatus not directly involved in the operation, especially those in the hot zone just being used as anchor points.

Technical rope rescue operations often show just how well or how poorly a department is prepared on the command and tactical levels. How well are you prepared?

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#### TRIBUTE TO PRINCE ARTHUR SPEIGHTS

#### HON. SCOTT McINNIS

OF COLORADO

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, February 12, 2003*

Mr. McINNIS. Mr. Speaker, it is with great pride that I rise today to honor Prince Arthur Speights of Pueblo, Colorado for the selfless act of courage he displayed on November 8, 2002. Prince's quick actions, along with the efforts of other students from Centennial High School, helped Edith Lichtenberg to safety after flames engulfed her home.

On November 8, 2002, billowing smoke one block from Centennial High School prompted a group of students—Prince Speights, Clint Albrecht, Nick Pino, Kathy Ortiz, Linus Trujillo, and Taylor Proctor—into action. Driving toward the smoke, the group quickly discovered the bushes and trees in 86-year-old Edith Lichtenberg's yard ablaze and used a cell phone to contact emergency dispatchers. The flames rapidly spread to the house and the group moved swiftly to make sure no one was in the home. With the fire engulfing the front of the house, the students jumped the locked fence around the backyard to warn anyone who might still be inside. Noticing the back door open and seeing Ms. Lichtenberg still inside, they caught her attention and guided her outside away from the flames. Prince courageously helped Ms. Lichtenberg out of the house personally, and the group moved her to safety.

The youths maintained their composure during a time of adversity and conducted themselves in a fashion that has brought honor to themselves, their families, their school, and the entire community of Pueblo. It is always heartening to see young Americans meet such an extraordinary circumstance successfully. Courage like theirs strengthens and protects our communities every day.

Mr. Speaker, I am honored to rise today and recognize the heroic efforts of Prince Speights before this body of Congress and this nation. Prince's quick actions, coupled with those of his fellow students, prevented a terrible fire from ending in great tragedy. Their selfless actions are an inspiration to us all, and it is an honor to represent such an outstanding group of Americans in this Congress.