Confined Space Rescue/Technical Rescue
Report #08-525
July 2010

Many times as units arrive on the scene, natural instincts take over and the need to help those who are in danger seem to be of prime importance. Sometimes the basic concept of scene safety and safety of our own are overlooked or forgotten. Examine Near- Miss Report #08-525 and place yourself at the scene as one of the first arriving units. Take the opportunity to discuss and learn the importance of SOPs/SOGs as well as pre-planning our response areas. In June 2010, the International Association of Fire Chiefs through their Safety, Health and Survival Section urged a Stand Down to focus on confined space rescue incidents in response to recent firefighter fatalities. One element of the Stand Down resources provided by the Safety, Health and Survival Section appears after the report excerpt. This excellent resource provides a technical response overview for consideration and/or supplementation to your department's response procedures. For more online resources regarding confined space rescue including other related near-miss reports, visit Stand Down Resources. Special thanks to the members of the Safety, Health and Survival Section for their work on the Stand Down.

Event Description
This incident occurred at an active construction site of a 5 million gallon, double wall, poured in place concrete water tank. A 38 year old male construction worker was working at an approximate height of 25' from scaffolding inside the inner tank structure, removing plywood forms from the ceiling of the tank. The worker was secured to scaffolding with a fall protection harness secured to the rail of the scaffolding. The harness did not have a shock absorbing lanyard. It was secured via chain to a partial body harness. As the worker attempted to strip a plywood form, he reportedly lost his balance and there was a presumable failure of the lanyard carbineer, causing the worker to fall approximately 25' to a concrete surface. After the fall, the worker was conscious and complained of lower extremity injuries. The first arriving engine officer did not conduct a size-up and did not recognize that this was a confined space rescue. The first arriving officer then entered the confined space alone and without a working radio and without air monitoring. Technical rescue resources were not assigned to initial dispatch, which resulted in the delay of properly trained personnel and specialty apparatus arriving on the scene. After the arrival of the technical rescue resources, the engine officer was ordered to evacuate the confined space, and did so without injury or incident.

Lessons Learned
It is important to remember that confined space and technical rescue incidents are low-frequency, yet high-risk events. Sixty percent of confined space fatalities are would-be rescuers. Unless specifically trained and equipped, consult with technical rescue

resources prior to taking any actions. The first arriving unit should properly size-up the scene, establish command, and request appropriate resources, no matter where they come from. Unless specifically trained or equipped, do not become part of the problem.

WHAT CAN YOUR DEPARTMENT DO
TO BE PREPARED FOR A TECH RESCUE RESPONSE?

<u>Suggested Activities</u>
- Define technical rescue and how it differs from your typical rescue or EMS incident.
- Know your response area. Do a technical rescue-specific risk assessment.
- Fire code inspections are a good time to help identify confined space or any other TRT Hazards. Identify a way to communicate the information to personnel.
- Partner with other municipal entities (DPW-Water-Wastewater) to identify district hazards
- Explain the three levels of response to a technical rescue (refer to NFPA 1670, an organizational standard)
    - Awareness
    - Operations
    - Technician
- Understand the role of the first responder at a technical rescue
    - Size-Up
    - Deny Entry (this means responders too!)
    - Focus on non-entry rescue procedures
    - Control Hazards
    - Lockout/Tagout
    - Monitor the Air/Ventilate
    - Recognize the limitations of responders trained to the awareness level
    - Know whom to call for assistance for various types of rescue situations
- Familiarize personnel with your closest TRT (Technical Rescue Team)
    - Who is your closest TRT?
    - Know *how* to call for the closest TRT
    - Know their level of capability
- Describe the hazards that may be present at each type of rescue
    - Wilderness
    - Vehicle/Machinery Rescue
    - Water
    - Rope
    - Confined Space
    - Trench Collapse
    - Building Collapse