



Manchaca Fire Rescue

Probationary Firefighter Academy

FIREFIGHTER RESCUE AND SELF-RESCUE

Firefighter Safety

Basic situational awareness plays a critical role in firefighters remaining safe when working inside a structure with limited visibility, IDLH atmosphere, structural stability issues, and other hazards.

Safety Guidelines

- Don't enter a structure which fire has progressed beyond the point of victim survival
- Work from a single operational plan; NO FREELACING
- Use Accountability System
- Constantly monitor fire, heat and smoke conditions
- Maintain Communication with team members and the chain of command
- Have a RIT in place to rescue/support firefighters
- Work in Teams of 2 or more
- Check doors for excessive heat prior to entry
- Be aware of any/all secondary means of egress
- Maintain Orientation
- Close doors to compartmentalize fire (after search or location of fire)

Lost / Disoriented Firefighter

Should a firefighter become lost or disoriented, there are several steps they can follow to either self-rescue or to assist with being found by rescuing firefighters.

- Stay Calm / THINK
- Declare a MAYDAY – do not delay when you believe you are lost (many firefighter LODDs involve firefighters that never declared a mayday)
- If you AND your partner are lost, STAY TOGETHER
- Utilize Controlled / Skip Breathing to conserve air

Lost / Disoriented Firefighter

Notify Command and give a LUNAR report:

- Last know location
- Unit #
- Name
- Air
- Resources needed

Mayday, Mayday. Command, this is Engine 501 Firefighter Smith, I am lost. I am on the second floor on the Charlie side, I have half a tank of air, requesting a ladder to a Charlie window.

Activate PASS

- Turn the PASS off to communicate and turn it back on when done



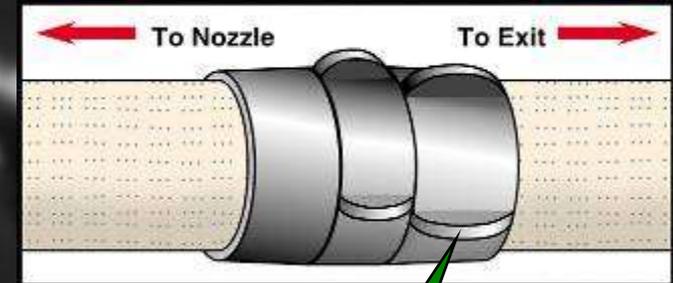
Lost / Disoriented Firefighter

Use a flashlight to signal your location

Use a tool to sound your location

Attempt to locate an exit:

- Move towards visible light
- Listen for sounds – other firefighters, fire streams, exterior noises
- Locate a wall
 - Search for windows and doors
 - Follow to exit or place of refuge
- Locate the hoseline
 - “Read the Couplings”: Male coupling points the way out



**Male
coupling
has Lugs
on the
Shank**

Lost / Disoriented Firefighter

Go down steps you find unless you are already below grade.

- Feet first doing down stairs

If the firefighter is remaining in place and may go unconscious, assume a defensive posture:

- Protect facepiece with gloves
- Lay in a position that maximizes audibility of PASS (don't lay on top of it)
- Lay near a wall to better chances of being found quickly



Firefighter Self-Rescue

There are several tactics and techniques to assist a lost or endangered firefighter with extricating themselves from the situation.

The following slides will introduce some of these techniques.

Ladder Bail

Firefighters can rapidly exit an upper floor via a laddered window using a ladder bail.

The firefighter does out the window head first, slides down the ladder until their feet clear the sill, pivot around on the ladder to descend feet first, and slide down the ladder rails to the ground.

VIDEO 1: LADDER BAIL



VIDEO 2: LADDER BAIL



Wall Breach

Wall breach is used when a firefighter is trapped in an untenable space and is unable to find an exit.

The firefighter uses their feet or a tool make an opening large enough to pass through into an adjoining space.

Once the initial hole is made, check to see what is on the other side (obstructions). Watch out for items such as electrical lines and plumbing in walls.

VIDEO: Interior Wall Breach



VIDEO: Exterior Masonry Wall Breach



Window Hang and Drop

If a firefighter needs to bail from a second floor window and there is no ladder present, the hang and drop techniques can be utilized.

Once out the window and hanging, the firefighters feet will be 5-6 feet closer to the ground than the second floor window.

The firefighter should buckle and roll as soon as their feet hit the ground to lessen the chance of injury.

VIDEO: Hang and Drop



Window Conversion for Rescue

This technique is performed by an outside team to assist the interior rescue team.

This technique is useful when moving the victim out of the building to the search teams entry point is far away, difficult to negotiate, or too dangerous for the victim.

VIDEO: Window-to-Door Conversion



Firefighter Rescue

In situations where firefighters must enter and rescue themselves, we have several tools and techniques to assist in our efforts.

The initial RIT team deployment will focus on locating the downed firefighter, securing an air supply, and rigging for extrication.

Typically in a RIT activation scenario, additional personnel will be mustered to relieve the initial RIT team and to continue the rescue operation. Firefighter rescue is a personnel and labor intensive operation.

Rigging the Downed Firefighter

Once the rescue team reaches the firefighter, a RIT pack should be secured to the firefighter to provide an extended air supply.

Additionally, the firefighter's SCBA straps can be reconfigured to create a harness. This allows the rescue team to use the SCBA for handholds and attachment points for removing the downed firefighter.

VIDEO: Rigging for Rescue



VIDEO: Simple Drag with Webbing



Specific Entrapment Scenarios

Some specific firefighter rescue tactics and techniques have been developed in response to actual LODD tragedies. Those that will be covered here include:

- The Denver Drill
- The Columbus (John Nance) Drill
- The Double Horseshoe Technique (variation of the Nance Drill)

The Denver Drill



VIDEO: 2 FF Technique



VIDEO: 3 FF Technique

The Columbus (Nance) Drill

John Nance was a 16 year veteran of the Columbus, Ohio fire department. While operating inside a commercial structure fire, FF Nance fell through the floor into the basement. Despite several attempts to rescue FF Nance, he succumbed to the elements before being removed from the basement.

The Nance drill is designed to remove an impaired firefighter vertically out of a space by use of simple rope rigging. There are several variations of the technique. This version utilizes the SCBA straps and does not require tying any knots to rig.

VIDEO: Columbus Drill



Double Horseshoe Technique

While addressing a similar scenario as the Columbus drill, the double horseshoe is designed to assist a conscious firefighter out of lower level after a floor collapse.

The firefighter being rescued must be able to assist in rescue for this technique to be used.

An advantage of this technique is that it utilizes a hoseline to effect rescue instead of having to have ropes available.

VIDEO: Double Horseshoe



Firefighter Rescue

While the fire service has made great strides in taking care and rescuing our own, the best solution is to avoid being in a position where rescue is needed.

Situational Awareness

Know your job

Know your partner

Know the conditions that surround you

Predict future developments

Have a plan B

Know when its time to go