

North Mississippi Fire Expo

November 2, 2013

“Crabbing” Out a Window or the Low Window Roll

The low window roll or “crabbing” out of a window is an intermediate, self rescue technique that can be employed when a firefighter is cut off by fire or is low on air while at an upper floor window without access to a ladder and does not have a personal escape system.

It can later be used in advanced self rescue techniques as the first steps in the deployment of a personal escape system.

History

This technique was developed by members of the FDNY after a fire on January 23, 2005 in a six story tenement. During the incident, fire rapidly extended from the 3rd floor and forced six New York City firefighters who were searching apartments above to jump from a 4th story window. The incident has come to be known as “Black Sunday”.

A complete history to the fire and investigation can be viewed here - <http://www.cdc.gov/niosh/fire/reports/face200503.html>

A similar incident occurred in Yonkers, NY in a 3 story private dwelling on October 2, 2009. This incident can be referenced here - <http://www.firefightermemorial.net/html/news091002-1.html>

Lastly, 90% of all falls from 10 feet or greater are fatal when the victim falls headfirst. Therefore, this is a skill that should be considered paramount in any firefighter that commonly works in buildings two stories or taller.

Objective

This technique when used correctly and in conjunction with other steps will allow a firefighter to:

- A. Recognize when it is necessary to bail from an upper floor.
- B. Deploy steps to insure the greatest amount of time to escape and receive aid.
- C. Render a window safe and sufficient to egress.
- D. Protect themselves from elevated temperatures while exiting.
- E. Hang as long as possible to wait for possible ladder placement.
- F. Deploy methods when a ladder is not available to reduce the falling distance and ensure falling feet first.

Deployment

- I. **Call a Mayday** – Although not the primary focus of this instruction, recognizing one is in trouble and calling a Mayday is paramount. This includes, but may not be limited to:
 - A. Being able recognize the time and need to call a Mayday.
 - B. Having the courage to call a Mayday.
 - C. Giving **L.U.N.A.R.R.** information.
 - i. **Location**
 - ii. **Unit number**
 - iii. **Name**
 - iv. **Air**
 - v. **Resources needed**

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vi. Anything you're doing to **Rectify** the situation. It is pointless and counter-productive to report your position if you are leaving that location in a bailout or otherwise.

- II. **Control ventilation points** – The first step of exiting the window is of course to remove as much of the window and casing materials as possible to provide a safe and efficient egress point. Creating this point of egress will change the dynamics of heat flow within the structure and will actually draw heat and fire toward you if nothing is done to counter it. For this reason, it is critical that any interior door(s) that are still intact and leading to the room of egress are closed PRIOR to taking out the window. This simple tactic can be performed while calling the Mayday and giving LUNARR information, will allow a trapped firefighter a longer period of time to be able to escape, and others a greater of period of time to render aid.
- III. **Make a door out of the Window** - With an axe or haligan, make the necessary strikes to rapidly remove the glass and window casings. This accomplishes several things:
- i. Removes the glass and accompanying cut hazards.
 - ii. Removing the entire window creates the largest ventilation area and will allow the highest temperatures to exit out of the highest point in the window. In standard double hung windows, a complete removal in height will facilitate temperature differences that exceed 1,000 degrees from the top and bottom of the window. Air exiting the window at the top can exceed 1,500 degrees, while air exiting the bottom can be less than 150 degrees.
 - iii. Removing the entire window and casings will create the widest width and will physically facilitate the easiest means of egress.
- IV. **Roll or “Crab” out of the window** – The standard window is 28” from the floor. The standard means of egress can be employed to both the right and the left, but it is important to remember whichever direction is chosen, you end hanging with the right arm, right leg or left arm, left leg. The following portrays exiting to the right:
- i. Place your right hand on the wall immediately adjacent to the lower, right corner of the window.
 - ii. With your hand in place, proceed head first out of the window as low as possible – roll over the sill with your head, torso, and left leg.
 - iii. The heel and calf of your right leg depending on the width of the window will catch the wall immediately adjacent to the lower, left corner of the window.
 - iv. Your left hand and left, lower leg with your knee bent will be placed on the vertical, exterior wall below the window and will aid in supporting your weight. This is important as it allows you to hold yourself up instead of your entire body weight hanging from one arm and leg.

See photos below:

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- v. This accomplishes:
 1. Constant contact with the interior wall preventing a fall.
 2. Exiting the window in the lowest possible thermal conditions.
 3. A position that is easy to maintain with little effort and for an extended period of time. Could allow for a ladder to be thrown or the fire to be extinguished and then aided back in the window.

V. **Time to go / Drop, Hang, Release** – This step is utilized when the static position of hanging in the window can no longer be maintained due to physical exhaustion or radiant heat. In order to transition:

- i. The firefighter would drop their right leg and allow their body to go into a vertical position while maintaining pressure against the vertical wall with the left hand and still hanging over the sill with their right hand.
- ii. When vertical, the firefighter should ensure their feet are together and try to prevent rigidity through the joints in their legs – basically try to keep the legs slightly bent and loose.
- iii. Release the right hand while trying to maintain a vertical position so that the fall and landing are feet first.
- iv. As best as possible, try to roll into the fall as you contact the ground.
- v. This accomplishes:
 1. Falling feet first ensures your best possible chance of survival.
 2. You eliminate slightly more than your height off the distance of the fall. When deployed from a 2nd or 3rd story window, this can be very significant.

VI. This technique can also be used in conjunction with the advanced survival skill of rappelling from an upper floor window with a personal escape device which will require further instruction and training.