Simulation Training in the Firehouse

by Battalion Chief Frank C. Montagna

Fire showing on first floor of taxpayer.

Fire burns through roof of private dwelling, exposing the adjoining multiple dwelling.

Fire in basement apartment of multiple dwelling, exposing fire escape.

Fire showing at basement windows of brownstone. Where does the first hose-line go?

13-Point Size-Up; aka Coal was Wealth

- **C**onstruction
- **O**ccupancy
- **A**pparatus & Personnel
- **L**ife Hazard

- **W**ater Supply
- **A**uxiliary Appliances
- **S**treet Conditions

- **W**eather
- **E**xposures
- **A**rea & Height
- **L**ocation & Extent
- **T**ime
- **H**azards

Members who have been through any of the promotion courses recently have trained using computerized fire simulations. These training aids have offered the newly promoted Officers an opportunity to make fireground decisions and practice communications in a safe learning atmosphere. They are given the chance to practice their new on-scene positions in a classroom setting. Mistakes are corrected and alternate solutions discussed. While obviously not a real fire situation, the Officers gain experience as they interact with the instructor and other participants.

These new Lieutenants get to respond to virtual fires. They are faced with real fireground problems and must make real-time decisions, while communicating with other responding company Officers, Firefighters and the Incident Commander (IC). New Captains operate as Acting Battalion Chiefs and make command decisions, deploy units and maintain communication with the dispatcher, responding units and civilians on the scene. New Chief Officers perform the same tasks. Wouldn't it be enlightening if members could use this kind of training in the firehouse for company drill?

Well, now they can. There are fire simulations available for use on DiamondPlate from the Local Kiosk Project. Go to the Training page and scroll down to *Training Facilities and Resources, Fire Simulations--A New Training Tool for Company Drill*. There is a link to take you to the simulations. First, members will see a brief explanation regarding how to use the simulations and below that, a link to each individual simulation. Currently, four fire simulations have been posted, including taxpayer, private dwelling second-floor, multiple dwelling basement and brownstone basement fires. The simulations featured on the Kiosk were created by Battalion Chief Frank C. Montagna, Bureau of Training; and Firefighters Joe Eduardo, Engine 89; Daniel LeBron, Engine 97; and Alan Macleod, Engine 328.

When the link is clicked on, it will take a few seconds for the file to load. Once it loads, start using it for drill in a number of ways. A good place to start is with the 13-point size-up, commonly referred to as *Coal was Wealth.* (See sidebar above.)

When I was a Firefighter, my Officers used to draw a building on the blackboard, add a few squiggly lines to indicate smoke or fire and we would have a drill. We would discuss what our positions would be at the depicted fire, apparatus and ladder placement, line size and placement, ventilation, rescue, hazards, building characteristics and more. You can still do that, but today's generation of Firefighters are multimedia savvy. They are wired into their iPhones, Blackberries and MP3 players. They play computer games and are accustomed to good graphics. In short, they expect more and now FDNY Officers can give them more.

The simulations are created from actual building photos. The smoke and fire graphics bring a sense of realism to the drill. Currently, there is only one view of the buildings, but future simulations will enable members to change the view to see various exposures via a click of the mouse.

These exercises offer company Officers and Chiefs a ready-made platform from which they can deliver a number of different types of meaningful drills. Take the time to go on-line and look at them. Try using them for drill. It will be time well-spent.

About the Author...

Battalion Chief Frank C. Montagna is a 41-year veteran of the FDNY, the past 25 of which have been as a Chief Officer. He is assigned to Battalion 58. Currently, he is working in the Bureau of Training, where he is responsible for curriculum development for Officers. He holds a degree in Fire Science from John Jay College, where he has taught fire science courses. He is a member of the editorial advisory board of Fire Engineering *and has published articles in that publication and contributes regularly to* WNYF. *He is the author of* Responding to *Routine* Emergencies.