Training--More Essential than Ever

by Chief of Training
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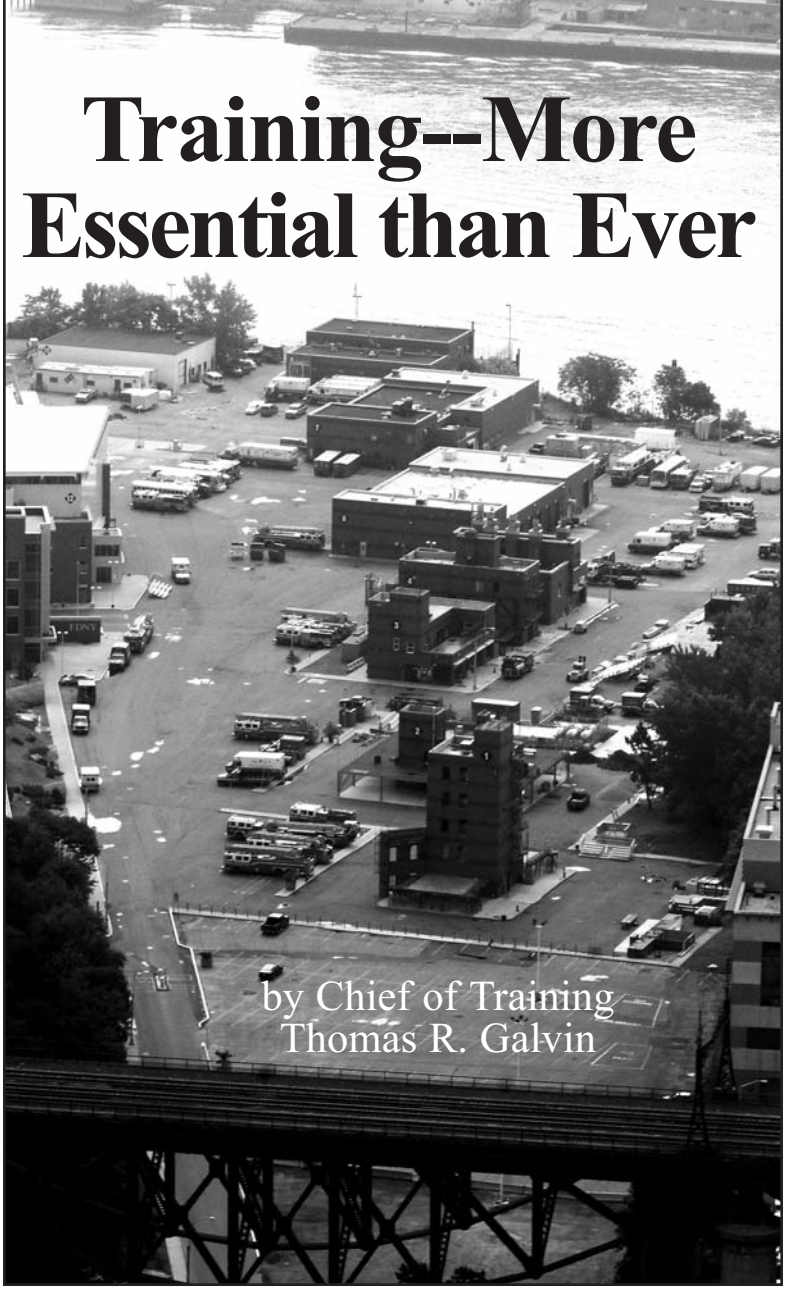

photo by Randy Barron, FDNY Photo Unit

One truism came to the forefront in the wake of 9/11--The FDNY no longer is just a fire department. In addition to merging with EMS in 1996, FDNY now is the first line of defense against terrorism, as well as natural disasters. As part of FDNY's core competencies, EMS has enhanced our response to terrorism. The abundance and vast array of training--specialized, as well as basic--given to all FDNY members throughout their careers reflects this mandate and members' new responsibilities. The training encompasses both hands-on and classroom methods.

Standardized training began soon after FDNY was founded in 1865. Within four years, an Officers School was established to teach the Department's leaders in the science of fighting fires and the art of leading men. With the addition of new tools and equipment, the job of fighting fires became more complex. For example, the first scaling ladder from 1882 led directly to the establishment of the Department's first official School of Instruction.

In the 1960s, while improving the quality and content of training, the facilities on Roosevelt Island (then called Welfare Island) were consolidated. The move to Randall's Island in the 1970s provided more space for growth.

Creation of IMTs

Training is a critical component of preparedness. Following 9/11, FDNY submitted a request and received, to date, $100 million to devote to training. This grant provided for additional training in counter-terrorism measures, inter-agency operations and rescue leadership. FDNY teamed up with the U.S. Forest Service to train members of the new Incident Management Teams (IMTs). The two 32-member teams were trained to manage complex incidents and catastrophic events, emergencies that require a long-term and resource management-intensive response. Some of the hands-on training included large-scale forest fires out West (shadow training, which introduced FDNY participants to unconventional firefighting aspects, such as portable fire shelter deployment and urban-wilderness interface firefighting tactics), plus extensive classroom and field training from federal instructors in using the Incident Command System (ICS) to manage these large and complex incidents.

Included among the 2005 renovations to the FDNY Fire Academy is the field house (Building 12), which simulates a typical street with two rows of three- and four-story buildings, representative of nearly every type of construction (private dwelling, H-type apartment building and a tenement) common to New York City. There is a climate-controlled indoor area for confined space training, rope training, building construction size-up, etc. The first floor has storage rooms disguised as retail stores with roll-down gates in front. The buildings also contain virtually every kind of stairway Firefighters might encounter in the five boroughs. Other training buildings opened in 2003 to 2005 on Randall's Island include a burn building, which uses computer technology to simulate live fire conditions, and a learning center with the latest audio-visual technology.

Incident management of a large-scale operation incorporates the five elements of the ICS. These elements are command, planning, operations, logistics and finance. ICS is successful because it applies a common organizational structure and key management principles in a standardized way. Initially, 63 Captains and Staff, Deputy and Battalion Chiefs were given this training in February 2002.

FDNY is the most accomplished agency in the fire service in responding to urban fires and emergencies. The World Trade Center terrorist attack demonstrated more expertise was necessary to deal with complicated inter-agency operations that will prevail at a complex level for extended operational periods. In the event of additional terrorist attacks or disasters in New York, the skills (logistics, planning, finance, public information and liaisoning with outside agencies) learned at wildland fires and Hurricane Katrina will be invaluable.

photo by Stephen "Butch" Moran

Classroom and mobile training

FDNY members never stop learning while on the job. The FDNY Officers Management Institute (FOMI)--taught by Columbia University professors--provides senior Officers with the basic building blocks of general management skills to help them

The **Command Tactical Unit** (CTU) can be used as a continuous training tool. Since the vehicle's technology permits videotaping operations, the IC can request a DVD or CDs of still footage for after-action review in the firehouse. Having the ability to provide post-event analysis will make Fire Officers and Firefighters even more prepared when they face the next emergency.

handle the administrative part of the job. The program focuses on the major areas of top-level organizational management, such as strategic and resource management, leading and managing change, communication, project management and team projects. Courses, such as *Establishing Priorities and Planning*, *Leading and Managing Strategically* and *Understanding Style Differences to Building Relationships*, will help attendees better integrate their firefighting expertise into the management structure at the highest levels of the FDNY. Practical skills modules were added and include external speakers on homeland security, public management and City and agency budget processes.

Classroom training is enhanced with videoconferencing. There are three main interactive classrooms available--one each at FDNY Headquarters, the Training Academy on Randall's Island and the EMS Training Academy at Fort Totten in Queens. The classrooms are equipped with state-of-the-art instructor tools and wired for automatic cameras and microphones. There are two satellite sites, one each at the Staten Island and Manhattan Borough Commands, as well as portable videoconferencing units for use across the Department. FDNY now can tap into national training programs offered by the Departments of Homeland Security and Justice, among other agencies. With this infrastructure, distance learning can be brought into the firehouse.

A field training program, using Mobile Training Vehicles (MTVs), are deployed daily to bring in-service training to every firehouse throughout the City. The MTVs facilitate training on forcible entry techniques; a maze simulator for search rescue drills; Personal Safety System (PSS) deployment; and roof-cutting simulator.

In conjunction with the FDNY Foundation, the FDNY rejuvenated its symposium series in March 2009. The always popular and standing-room-only training allows fire service members from all over the world to come to the Training Academy and learn from FDNY's best and brightest. An added bonus is that there is time allocated for FDNY instructors and attendees (including vendors) to swap war stories and share their expertise. Subject matter for the past three symposiums includes High-Rise Operations, Special Operations and High-Rise Fires and Emergencies.

photo by Randy Barron, FDNY Photo Unit

FDNY's state-of-the-art, 4000-square-foot, high-rise simulator was funded by the Leary Firefighters and FDNY Foundations. Introduced in 2009, it provides realistic conditions, including serious and difficult levels of access into and out of elevators, scissor stairways and multiple floors. Tactical operations include stretching and operating hose-lines and searching for fire victims in a wide variety of floor layouts, while experiencing the simulation of danger and reduced visibility caused by real fire and smoke conditions.

Proby Training

In 2007, FDNY began the largest expansion of Firefighter training in its storied history. The 18 weeks greatly increases the amount of training at the Academy. Four hundred hours were added to the already demanding program. Some of the changes include:

- The number of hours spent learning about building construction and inspections was more than tripled.
- Subway rescue instruction was increased from two hours to 16.
- Ladder and engine operations instruction was doubled.
- Emergency response plan training was increased to 16 hours.
- Weapons of mass destruction response and water rescue training were expanded.

Officer Training

- First Line Supervisor's Training Program (FLSTP) is an intense, 27-day program that all new Officers complete after being promoted to Lieutenant.
- The four-week Captain's Development Program for newly promoted Captains focuses on the administrative, leadership and management skills that Company Commanders must have to meet and perform their new responsibilities efficiently as leaders of FDNY field units.
- The Battalion Chief's Command Course is a comprehensive, six-week program to aid Captains in their transition from Company to Chief Officer. A continuing Education Day is maintained.
- The Deputy Chiefs Command Course is two weeks long and features strategic and tactical components. Some topics covered include fire prevention responsibilities, development of subordinates, EEO concerns, BITS and Inspector General issues, Support Services, utilization of MIRS and Bureau of Personnel administration.

EMS Officer Training

FDNY developed an enhanced leadership training program for newly promoted EMS Deputy Chiefs. The program improves competency in areas such as on-scene command and control, management of multiple-casualty incidents (MCIs), performance as a Medical Branch Officer, administrative tasks and communication skills.

Additionally, FDNY began a training program in 2010 for newly promoted EMS Lieutenants and Captains at the Fire Academy, strengthening their interaction with Firefighters and Chief Officers at the fire scene. The EMS Officers learn how to recognize the progression of a fire and listen to and monitor fire handie-talkie transmissions when an injured Firefighter or civilian is about to be brought out of a building or confined space. Better coordination of the two efforts--fire suppression and medical care--make FDNY operations safer and more effective. The EMS members are trained to use awareness and caution at all incidents, especially high-profile locations; i.e., bridges, subways.

Advanced, Collaborative Training

- Combating Terrorism Leadership Program, offered in conjunction with the United States Military Academy at West Point. It is a four-month, graduate-level course that focuses on preparedness for terrorism, counterterrorism and weapons of mass destruction.
- Haz-Mat Team trains jointly with CBIRF, the Marines' elite unit for handling chemical and biological incidents.
- FDNY participates in a war-gaming exercise with the United States Navy at the Merchant Marine Academy in Kings Point. Designed to increase awareness of relevant issues, analyze leadership/management within FDNY, discuss command and control issues and explore procedural modifications at the operational and strategic levels.

Building Inspection and Safety Program (BISP)

The Department enhanced its building inspection procedures, with a control system developed to standardize the way every Fire Company organizes its BISP activities. Fire prevention training

Training Simulators

- Confined space and trench cave-in simulator added in 2004.
- Flashover simulators expose Firefighters to the intense heat and smoke of real flames produced by the machine; added in 2004.
- State-of-the-art driving simulator installed for chauffeur training in 2004.
- Subway simulator features a station platform and subway car; added in 2005.

Haz-Mat Training Levels for FDNY Members (Fire & EMS)

Above Operations Level--3629 Total FDNY with Advanced Training

- 40 Haz-Mat Specialists (640 hours)
- 810 Haz-Mat Tech Level II (120 hours)
- 345 EMS Haz-Tac (80 hours)
- 951 Haz-Mat Tech Level I (40 hours Haz Mat + 40 hours Tech Rescue)
- 650 Technical Decontamination Trained Personnel (24 hours)
- 833 CPC Haz-Mat Operations (16 hours + Protective Clothing)

Normal Operations Level--14,336 Total FDNY with Normal Training

- 11,485 Fire Haz-Mat Operations Level (24 hours + 16 hours WMD Operations Level Training)
- 2851 EMS Haz-Mat Operations Level (8 hours)

To learn more about specific and specialized areas of FDNY training, members are urged to review the following:

- *FDNY Terrorism and Disaster Preparedness Strategy*, 2011.
- *Marine Operations Strategy*, December 1, 2010.
- "Revisiting the Center for Terrorism and Disaster Preparedness," by Assistant Chief Joseph W. Pfeifer, on page 10 of this issue of *WNYF*.
- "The Marine Division Powers Forward," excerpted from December 1, 2010, *Marine Operations Strategy*, on page 19 of this issue of *WNYF*.

SOC Support Ladder Company Training

This modified Special Operations Command program improves the FDNY's ability to respond to a variety of emergencies, including weapons of mass destruction, such as chemical, nuclear or bio-terrorism incidents. The 40 hours of enhanced technical rescue training target three fundamental areas--confined space rescue operations; trench and excavation awareness and safety; and structural collapse awareness and void search operations.

was improved to increase members' ability to handle these duties as efficiently and effectively as possible.

In June 2008, FDNY held classes for the BISP Coordinators in each company. These Lieutenants, as well as their alternates, were brought to the Fire Academy for a day to learn the new system for managing the multiple priorities that must be considered when it comes to building inspections. The Department also improved the training in building inspection procedures for all new members coming on the job, as well as for newly promoted Officers. A new curriculum was developed for each rank--from Proby to Deputy Chief--to help members handle their individual responsibilities, including summons procedures training for Probies; administration and problem-solving for Lieutenants and Captains; and training in fire and building codes rules and regulations for Battalion and Deputy Chiefs.

Tactical Training Unit

In October 2008, the Tactical Training Unit at the Fire Academy began a unique program that combines classroom time and hands-on training with a simulated terrorist incident. It is designed for the first members on the scene in the aftermath of an attack. The program familiarizes the first-alarm engine and ladder companies and the BLS and ALS units with best practices when responding to a terrorist explosion, operating in a chaotic, unusual and potentially hostile environment.

EMS joined these drills in March 2009. Both Fire and EMS units responded to the detonation of an improvised explosive device (IED) on a city bus, with numerous victims. Fire and EMS personnel work together to prioritize patient treatment and transport. Responding to an explosion means dealing with multiple casualties under very difficult working conditions for first responders. The training also covers reconnaissance on the scene and apparatus positioning with the goal of minimizing risk during operations, while protecting all FDNY members.

Most Firefighters and company Officers across the five boroughs, Chiefs from all Battalions and Division Commands, more than 200 Paramedics and EMTs and more than 50 EMS Officers have been trained. They are taught the telltale signs of secondary devices that are often IED components and to be on the lookout for anything out of the ordinary. They also are taught to operate radio-free as much as possible in and around the blast site to prevent setting off any other bombs.

Wind-Impacted Fires

Following extensive research in conjunction with Polytechnic University and the National Institute of Standards and Technology (NIST) on-site in Toledo, Ohio, Chicago, Illinois, and Governors Island, companies and Chiefs received training on the principles of these kinds of fires, as well as instruction in the use of the fire window blankets, positive pressure fans and high-rise nozzles. Drills are held at the Fire Academy, with training for Chiefs in the firehouses. A wind-impacted fire component was added to the annual Education Day and included in the FLSTP. DVDs and PowerPoint presentations were developed to bring drills on the effectiveness of fire window blankets, positive pressure fans and high-rise nozzles to the firehouse.

Conclusion

Training has been defined as the lifeblood of this Department. It is an ongoing function. Every day spent in a firehouse or EMS station is a learning experience and, thus, a training opportunity. Today, more than five times as many Firefighters and EMS personnel have absorbed advanced training on numerous large-scale incidents--including chemical, biological, radiological and nuclear attacks--than before 9/11.

In sum, since 9/11, training has greatly increased throughout all the ranks. A state-of-the-art operations center (FDOC) has been constructed; an award-winning Officer management program (FOMI) has been developed; new technologies in apparatus, equipment and communications have been introduced.

As Commissioner Salvatore J. Cassano said in his message in the 2nd/2010 issue of *WNYF*, *All of these initiatives have made us better-trained, better-equipped and better prepared than ever before. Our members' work in Haiti (referring to FDNY members of the New York Task Force 1--NY-TF1--team) showed the world that we have risen from the ashes of September 11, 2001, and that we are prepared not only to help New Yorkers, but people in need wherever they may be.*

Great strides have been made. However, rest assured that FDNY will never relent when it comes to putting the best-trained Firefighters on the fireground, along with the most adept EMS personnel to handle pre-hospital care.

About the Author...

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