

# Revisiting the Center for Terrorism and Disaster Preparedness

by Assistant Chief Joseph W. Pfeifer

Ten years after the dramatic terrorist attacks of September 11, 2001, the images and memories are still real. Many FDNY members can recall exactly what they were doing that fateful day, who they were with and what they were thinking as two planes crashed into the World Trade Center. These events highlight the exceptionally fast pace and dangerous nature of firefighting and emergency medical care. Today's threat of terrorism, along with a wide range of other disasters, make it imperative that FDNY members and leaders are equipped with the information and tools needed to manage the threat environment effectively.

To meet the challenge of an increasingly complex world, FDNY created a Center for Terrorism and Disaster Preparedness (CTDP) in 2004. The Center serves as the focal point for strategic preparedness, providing the Department with the necessary resources to make critical decisions in dangerous environments beyond more routine responses.

The CTDP assists the Department in ensuring that it is prepared to execute FDNY's life safety mission for human and natural disasters. The Center's activities bring together members' academic, public service and private expertise to create a dynamic and practical approach to counterterrorism, disaster response and consequence management. CTDP also ensures that terrorism prevention and risk mitigation goals are achieved in a manner that is effective, efficient and sustainable. The Center assists the Department in identifying and prioritizing capabilities and ensures corresponding needs are met through future initiatives.

CTDP is a national leader in bridging the divide between the established intelligence community and non-traditional intelligence consumers and producers, such as the fire service. Through its research, strategies, plans, exercises and leadership program, the Center's all-hazards approach has greatly contributed to national policies and a better protected New York City. Situated at Fort Totten, it offers a secure location to formulate sensitive and confidential documents, conduct exercises and seminars and collaborate with other agencies.

The core competencies of CTDP include:

## **Intelligence-sharing**

- *Intelligence initiative*--intra- and inter-agency collaborations to develop a Department-wide system for open-source and classified information/intelligence production, collection, analysis and dissemination.

## **WMD and security preparedness**

- *CBRNE programs*--working groups composed of members with expertise in chemical, biological, radiological, nuclear and explosive (CBRNE) incidents are identified and organized to provide FDNY representation at homeland security inter-agency meetings, committees and conferences that address response preparedness.

## **Exercise design**

- *Exercises*--workshops, table-top, functional and full-scale exercises test knowledge and efficacy of the Department's all-hazard response protocols, including recommendations on improvements as detailed in after-action reports (AARs).

## **Emergency preparedness**

- *Emergency Response Plans* are created and updated to augment or replace current procedures and provide both general and detailed

tactical direction for responding units to terrorist events and natural disasters. As part of this planning, CTDP helps develop and maintain the FDNY's Continuity of Operations Plans (COOP).

- *Education*--CTDP has partnered with other institutions of higher learning to provide high-quality education for FDNY members.
- ### **Strategy and technology**
- *Policy*--conduct intra-agency preparedness analysis and develop new strategies to enhance capabilities. Work with Federal, State and local authorities on creating public policies for homeland security.
  - *Technology*--Develop Network Command platform for incident management, including Electronic Command Board (ECB) and other new technologies.

## **Intelligence-sharing branch**

The intelligence branch at the CTDP has broken new ground in fire service intelligence and inter-agency collaborations. The group has expanded from the FDNY's role as a consumer and now is an active producer of intelligence tailored to the needs of Firefighters and emergency responders.

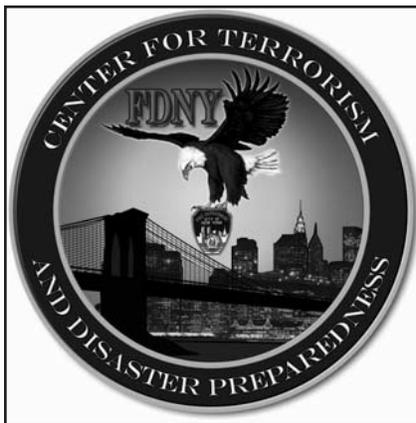
The FDNY's flagship intelligence product, the *Watchline*, is a weekly newsletter covering the pertinent stories and topics in homeland security related to emergency response. All articles conclude with a brief "assessment," which is the analysis portion of the narrative. Distributed both internally and externally, the *Watchline* reaches 80 agencies from all levels of government and more than 1000 direct subscribers outside the FDNY. Due to extensive e-mail forwarding, the actual number is more than 40,000 and even includes international readers.

Periodically, the Center's intelligence arm releases PowerPoint presentations (PPTs) called *Fireguards*, which expand on a specific topic or event. Similar to the *Watchline*, the main function of the PPTs is to analyze, in these cases, in more detail, the subject for an emergency responder audience. Recent *Fireguards* include the FDNY definition of a Mumbai-style terrorist attack, combustible

metal fires, chemical suicides, chlorine bombs and the 2010 Times Square car bomb incident.

The intelligence wing's other products are released as needed. The Center collaborates with the web team and audio/video experts within the Department to produce videos for internal distribution (and a limited external list), covering topics such as the Times Square car bomb incident and a large-scale, mass-casualty drill. Select videos from other agencies--such as a short narrative on explosives awareness from the U.S. Army's IED research branch--also are posted on the CTDP web site.

To address imminent terrorist threats or recognize the approach of significant dates, the center issues *Terrorism Awareness Alerts*. For example, an alert in late spring reminded members to be aware that Osama bin Laden's death might incite sympathizers to retaliate against U.S. interests. Finally, the Center has refocused its efforts on internal, on-line content to coincide with the release of a new FDNY intranet browser and archive system, called DIAMONDPLATE, which gives each respective command more day-to-day control of its offerings.



The intelligence section has greatly enhanced its participation in local, regional and national homeland security networks. Intel staff members routinely engage local and national intelligence providers, including the National Operations Center (NOC), the New York State Fusion Center (NYSFC) and the NYPD Counter Terrorism Division. FDNY intelligence representatives meet weekly with Nassau County Police and the United States Coast Guard. In recognition of the Department's active participation in the intelligence community, the National Counter Terrorism Center (NCTC) has requested an FDNY analyst for its Interagency Threat Coordination Group (ITACG) in Washington, DC.

**WMD branch**

The two primary missions of the Center's WMD branch are to coordinate strategy and tactics and share newly released federal CBRNE research with Haz-Mat Operations and the intel, exercise and emergency response branches. New federal CBRNE research includes consequence modeling, equipment research, requirements and testing, standards development, training, science and technology gaps, short- and long-term health effects and medical areas, including vaccines, treatments and protocols.

Members of the WMD branch have participated on several national committees focused on Radiological Dispersion Devices (RDDs) and Improvised Nuclear Devices (INDs) to improve our City-wide and FDNY Radiological Response Plan. These include National Council of Radiation Protection and Measurements Reports, ASTM Radiological Response Standard for RDDs, ANSI equipment and training standard for radiation alarming instruments, survey meters, isotope-identifiers and mobile detection portals used at special events screening. They have participated in National Institute for Scientific Testing (NIST) testing to validate that commercial equipment actually performs the desired mission for our responders in radiation emergencies. Early test results highlighted that many commercial instruments did not meet minimum detection standards, which provided first responders with the data to push for equipment improvement.

FDNY members have worked with NIOSH to develop standards for CBRNE-rated SCBAs and the Department of Defense's Technical Support Working Group (TSWG) to test standard turnout ensembles against the permeation effects of chemical warfare agents in addition to common industrial chemicals. Efforts of Haz-Mat Operations, CTDTP and the Medical Command and the USMC Chemical, Biological, Incident Response Force (CBIRF) on the Inter-Agency Board have successfully pushed for high-level chemical protective ensembles that provide better operational maneuverability than traditional *Level A* suits. New ensembles now are deployed by the FDNY in Haz-Mat Tiered Response Companies.

WMD branch staff members have worked with scientists at the national level to develop minimum performance standards for biological detection instruments in both laboratory settings and field environments. These efforts support quality performance in DHS Bio Watch environmental monitors deployed in NYC and other major metropolitan cities, as well as the Bio Detection Systems (BDS) working in several NYC U.S. Postal Service sorting facilities. Efforts are continuing to attract commercial equipment vendors to submit their field detection instruments for validation testing. Without these tests, first responders cannot be guaranteed of reliable field bio detection equipment.

Development of a City-wide Radiological Response and Recovery Plan is nearing completion and will guide a revised FDNY RAD Plan. Participation in the DHS Secure the City Rad/Nuc program by CTDTP, Haz-Mat

Operations and the Marine Division personnel improve coordination with regional law enforcement to prevent terrorists from delivering radiological materials into NYC. FDNY staff members currently are working with the Department of Health and Mental Hygiene (DOHMH) to collect and share radiological data during radiation emergencies in a mapping presentation, which will allow field commanders and Emergency Operations Centers to visualize dangerous radiation and contamination areas.

National discussions on vaccines and antidotes provide information to FDNY medical leaders who shape our policies on protection and treatment. It informs government leaders on the need for local, state and national stockpiles of certain pharmaceuticals that may be needed quickly to counteract chemical or biological agents. CTDTP staff has coordinated with the Department of Homeland Security, FBI and the Department of Energy to receive various clearance levels for members working in assignments that require access to classified information.

**Exercise Design Team**

The Exercise Design Team builds, conducts and evaluates intra-/inter-agency table-tops and functional and full-scale exercises. The CTDTP has partnered with Borough and Division Commanders, the Department of Homeland Security, the New York City Office of Emergency Management (OEM), United States Military Academy, the Centers for Disease Control and Prevention and subject matter experts (SMEs) to plan and prepare exercises for natural, accidental and terrorist events. Co-planners have included the Bureaus of Health Services (BHS), Technology Development and Systems, Communications and Training. A small sample of preparedness exercises designed by the CTDTP include:

- Bio-POD 2005-2011
- FDNY/NYPD Mumbai-Style Attack TTX
- Radiological Response Plan Table-top(s)
- Con-Edison Full-Scale Exercise
- MTA Subway Series MCI/Re-Breather Full-Scale Exercises
- MTA East Side Access Exercise
- IMT Full-Scale Exercise
- Continuity of Operations Exercise
- USMA Functional/FDOC Exercise

CTDTP Exercise Team members attend three one-week classes during a five-month period at the National Fire Academy in Emmitsburg, Maryland. Upon completion of this nationally recognized program, participants receive a Master Exercise Practitioner Program (MEPP) certification. These exercise design members are responsible for putting together exercises that will test the Department's capabilities to respond to terrorism, as well as natural and manmade disasters.

The exercise design team works closely with Dr. Kerry Kelly and her staff at BHS in conducting the annual BIO-POD full-scale exercise. This exercise is conducted each fall to ensure the Department is prepared for a biological event. BHS and CTDTP lead the nation in ensuring that first responders are protected from bio-terrorism and pandemic events as they carry out their lifesaving mission.

Year	CTDTP Annual Exercise Totals							Multi-Agency Yearly Total Exercises
	Table-Top Exercises	Functional Exercises	Full-Scale Exercises	Workshops	Drills	Seminars		
2004	4	1	14					19
2005	15	2	6					23
2006	10	6	6					22
2007	11	3	5					19
2008	7	1	6		1		6	21
2009	18	4	10	2	4		2	40
2010	15	7	9	5	11	2	15	64
2011	6	2	3	5				16
<b>Totals</b>	<b>86</b>	<b>26</b>	<b>59</b>	<b>12</b>	<b>16</b>	<b>2</b>	<b>23</b>	<b>224</b>

*As of June 1, 2011*



The Department's first Electronic Command Board (ECB) pilot program debuted this spring. It helps to account for units deployed during a fire or emergency.

Every year, the exercise design team strives to include a broad sampling of the Department's operational units to expose as many members as possible to the benefits of preparedness versus training exercises. By maintaining close scrutiny on current trends affecting the first-responder community, both accidental and man-made, the team structures its exercise calendar accordingly.

### Emergency preparedness--planning and education

*Planning*--Emergency Response Plans are designed to augment or replace current procedures and provide both general and detailed tactical direction for responding to terrorist events and natural disasters. Plans developed by this team include:

- Hazardous Material Response Plan
- Chemical Attack in the Subway
- Bio Response Plan
- Radiological and Nuclear Response
- Improvised Explosive Device
- Collapse Rescue
- Under-River Tunnels
- Hurricane Response Updated

Part of emergency preparedness is developing a Continuity of Operations Plan, which requires senior managers to relocate operations at headquarters to other locations. During a major incident at FDNY Headquarters, the Fire Commissioner would activate his Crisis Task Force (CTF) to ensure continuity of operations. Each year, CTDP assists the Commissioner in conducting a table-top exercise with senior staff to test the effectiveness of the COOP.

*Education*--FDNY's CTDP maintains close relationships with the Combating Terrorism Center (CTC) at the United States Military Academy and the Center for Homeland Defense and Security at the Naval Postgraduate School (NPS). The CTC assists in the Counterterrorism Leadership Course, a program to educate selected Officers and Chiefs in the current trends in terrorism and counterterrorism. To further expand the Department's knowledge in this field, FDNY has sent 22 Officers to participate in a Master's degree program in Security Studies at NPS.

The Center offers a number of part- and full-time details to future leaders of the Department. FDNY members who graduate from the Naval Postgraduate School, Combating Terrorism Leadership Course, FDNY Officers Management Institute (FOMI), Master Exercise Practitioner or equivalent will be given a chance to assist the Department in terrorism and disaster preparedness by being part of the Center's staff. Members selected

Members are urged to review the following *WNYF* articles:

- "The Marine Division Powers Forward," excerpted from December 1, 2010, *Marine Operations Strategy*, on page 19 of this issue.
- "Times Square Car Bomb Incident Mitigated Expeditiously," by Deputy Chief Daniel Donoghue and Battalion Chiefs John M. Esposito (now Deputy Chief) and Thomas J. Meara, in the 1st/2011 issue.
- "Hybrid and CNG Bus VBIED, A Review of Alternate Power Bus Emergency Procedures, Fire Operations and Terrorism Awareness," by then-Lieutenant Michael Doda, in the 3rd/2010 issue.
- "Improvised Explosive Devices: Responding to and Managing the Complex Attack Scenario," by Captain John Gormley and Firefighter Jason Brezler, in the 1st/2010 issue.
- "Mumbai: Terrorist Tactics Hinder Rescue Operations," by Firefighter Christian M. Zisel, in the 2nd/2009 issue.
- "2007 Fire Service Intelligence Enterprise Conference," by First Deputy Commissioner Frank P. Cruthers, in the 1st/2008 issue.
- "Fire Service and Homeland Security Collaborate to Form Fire Service Intelligence Enterprise (FSIE)," by Commissioner Nicholas Scoppetta, in the 3rd/2007 issue.
- "Dirty Fires: Radiological Incendiary Devices," by then-Deputy Assistant Chief Joseph W. Pfeifer, in the 2nd/2006 issue.
- "The FDNY Center for Terrorism and Disaster Preparedness," by then-Deputy Assistant Chief Joseph W. Pfeifer, in the 3rd/2005 issue.
- "Biological Terrorism Preparedness," by then-Deputy Assistant Chief Joseph W. Pfeifer and Dr. Kerry Kelly, Chief Medical Officer, in the 1st/2005 issue.
- "FDNY and West Point Unite to Combat Terrorism," by Chief of Department Peter E. Hayden, in the 2nd/2004 issue.

for this detail will do research, discuss ideas with national experts and publish guidelines in the fields of vulnerability assessment, perform intelligence analysis, write emergency response plans, conduct and design exercises and formulate preparedness strategies. The detail program will allow members to move from academic study to practical application for both terrorism and disaster management.

In an effort for the FDNY to better understand the threat of terrorism, the CTDP hosted the following seminars:

- Examining Suicide Terrorism, held at the *Intrepid*; lecture by Bruce Homan, PhD, Georgetown University
- HBO film, *Dirty Wars*, held at the HBO Theater; lecture by Charles Ferguson, PhD
- Improvised Nuclear Devices, held at the Bureau of Training; discussion with Stephen Flynn, Counsel on Foreign Relations, Stephen Musolino, PhD, Brookhaven National Labs, and Brooke Buddemeier, Department of Homeland Security
- HBO film, *Terror in Mumbai*, held at HBO Theater; discussion on preparedness for this style of attack, with Mike Sheehan, former NYPD Deputy Commissioner and intelligence expert; John Miller, Deputy Commissioner, LAPD, and ABC reporter who interviewed Osama bin Laden; LTC Reid Sawyer, Director of the Combating Terrorism Center at West Point

### Strategy and technology

*Strategy*--FDNY is involved in developing Department and national strategies on preparedness. In 2007, the Department wrote the first fire service *Terrorism Preparedness Strategy*, which has been updated recently to reflect many initiatives of Commissioner Salvatore J. Cassano. Working with the Harvard Business School, the Marine Division--along with CTDP--produced a *Marine Operations Strategy*. This document reflects the use of the role of the new fireboats in homeland security.

For years, CTDP has been working with DHS on a project called the Fire Service Intelligence Enterprise (FSIE). In April 2010, the fire service was included in a national document on Fusion Center. However, it is not enough to just have a seat at the table for intelligence; FDNY also needs to have real-time intelligence provided directly to senior decision-makers. Working with DHS and Congress, FDNY is spearheading the concept of Network Fusion, which is an adaptable system design that encourages information-/intelligence-sharing and collaboration among multiple dis-

ciplinary and technological channels. Network Fusion connects the FDNY to the intelligence community so that the right people can receive the right information quickly through secure networks.

*Technology*--After years in the making and pushing technology to new horizons, CTDp introduced the Department's first Electronic Command Board (ECB), with its handheld Command Pad this spring in a pilot program in the 1st and 3rd Divisions. ECB is a platform used to account for units deployed at fires and emergencies. Additionally, ECB will be connected to FDOC to receive digital blueprints and information about a structure. For subway emergencies, a Chief will have information on under-river tunnels and emergency exits sent directly to their 10-inch, tablet-style Command Pad. This device, along with a 32-inch incident monitor, also will receive *mayday* signals from the Electronic Fireground Accountability System (EFAS).

As a platform, the Chief and his/her Aide will have to carry only one device to show where units are deployed and to receive additional units from the dispatcher, electronic riding list and much more. With a glance, an Incident Commander (IC) will have all this information in graphic form at his/her fingertips. This will free up the IC to concentrate on managing the incident. Commissioner Cassano has included technology for field units as his strategy for Network Operation.

### Conclusion

Preparedness for the next major disaster requires knowledge and experience acquired from studying, exercising and actual events. Members from all ranks now can access a wide array of

**FDNY's Homeland Security slogan for first responders  
(which was adapted from the MTA) is:  
*See something. Say something. Do something.*  
Know what to do and what not to do.**

information--such as *Watchline* archives, exercise design AARs and even the latest from military sites, think tanks or the media--from the CTDp web site and beyond. The Department understands that a well-informed FDNY is better prepared to make decisions in an increasingly complex operational environment. Members are encouraged to check the CTDp web site each tour for the latest in warnings and threats. Division Commanders also are encouraged to use CTDp's exercise design team to prepare their Division for all kinds of incidents.

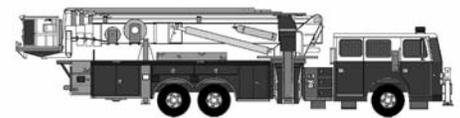
### About the Author...

*Assistant Chief Joseph W. Pfeifer is a 30-year veteran of the FDNY. He is the Chief of Counterterrorism and Emergency Preparedness. He holds three Masters degrees, the most recent of which was earned in Public Administration from Harvard University's Kennedy School of Government. He is a senior Fellow at the Combating Terrorism Center at West Point and the Ash Center for Democratic Governance and Innovation at Harvard University. He writes regularly for WNYF.*



# Taking Up

April-June 2011



<b>Deputy Chief</b>		Alfred L. Goodenough	Engine 93	Kevin Daly	Engine 225	Kevin F. McDermott	Engine 303
Richard E. Fuerch	Division 1	James J. Hart	Engine 312	Matthew DeMartinis	Engine 245	Martin S. McNamara	Engine 237
<b>Battalion Chiefs</b>		Richard A. Ladiana	Ladder 77	Joseph G. DeSalvo	Ladder 41	James J. Miller	Engine 24
Gerald T. Esposito	Battalion 47	James A. LaRocca	Engine 324	James M. Devane	Engine 73	William F. Mirro	Rescue 4
James P. Harten	Rescue Battalion	James F. McCauley, Jr.	Battalion 23	Anton K. Endriss	Engine 299	Edward Murphy	Engine 313
Timothy P. Joyce	Battalion 47	Dominick M. Michelli	Ladder 163	Charles S. Frame (3)	Rescue 3	Robert E. Mylan	Engine 323
Fred P. LaFemina	Rescue Battalion	Michael J. Murphy (2)	Ladder 85	Robert T. Froner	Engine 228	Matthew G. Neary	Squad 288
John G. Marinaro	Battalion 53	Charles Piranio	Engine 306	Lee A. Fuchs	Engine 67	Keith J. Nersten	Engine 330
Thomas Murphy	Battalion 28	Joseph A. Triolo	Ladder 6	Joseph R. Fullam	Engine 44	Greg P. Pacifico	Engine 153
John H. Newell	Battalion 16	Kevin A. Washington	Ladder 107	James N. Galatro	Ladder 108	Laurence R. Parker	Ladder 129
Herbert A. Penner	Battalion 7	John D. Weber	Ladder 117	Peter R. Gale	Engine 314	Joseph J. Perk	Engine 164
<b>Captains</b>		Robert R. Wiecezak	Engine 251	Gregory P. Garaizar	Engine 151	Gary W. Persch	Engine 158
Michael J. Brunton	Engine 240	Keith Williams	Ladder 152	Eugene Gavin, Jr.	Engine 157	Thomas C. Petrizzo	Ladder 147
Edward F. Byrne	Ladder 162	<b>Fire Marshals</b>		Michael P. Hallquest	Ladder 136	Ralph Portoghese	Engine 316
Thomas P. Byrne (2)	Engine 315	Louie J. Dalfino	ADMBFI	Kevin Halpin	Engine 314	Charles A. Price	Engine 255
Jeffrey S. DiPietro	Division 14	Steven T. Doyle	ADMBFI	Kenneth R. Haring	Ladder 30	Douglas G. Price	Engine 276
Lawrence Esposito, Jr.	Engine 326	Dennis W. Quinci	Brooklyn Base	Andrew J. Harris	Ladder 25	Patrick E. Rafferty	Engine 285
Thomas P. Hughes	Ladder 16	David V. Vitiello	ADMBFI	William C. Hayes	Ladder 45	Tricia M. Rega	Engine 152
Michael J. Legge	Engine 277	<b>Firefighters</b>		Kenneth Healy	Ladder 150	Robert L. Rivera	Ladder 109
Robert V. Mannina	Engine 258	Thomas M. Accardo	Engine 44	Luke A. Healy	Engine 314	David J. Robrecht	Ladder 126
James P. Morgan (2)	Ladder 15	Darryl J. Adone	Ladder 84	Mark B. Heintz	Ladder 87	Neil G. Rochford	Ladder 30
Steven C. Olberding	Engine 205	James E. Alfredsen	Ladder 118	Steven S. Heisinger	Engine 286	Daniel Rowland	Marine Division
Frank J. Piarulli	Engine 266	William Andruzzi, Jr.	Engine 165	Timothy P. Hinchey	Engine 73	David R. Russell	Engine 73
Salvatore Poma	ADMOP	Rafael Badillo	Ladder 47	Donald A. Honey	Engine 320	James Sanders	Ladder 12
Brian C. Reehil	Ladder 115	Armin J. Betting	Engine 206	Thomas F. Irving	Ladder 126	Scott Schaffer	Ladder 120
Robert A. Schmidt	Division 14	John S. Bohmke	Ladder 140	Matthew S. Jacoby	Engine 226	Anthony J. Scola	Engine 304
Raymond C. Wick	Engine 295	Richard W. Bowman, Jr.	Ladder 54	James F. Kane	Engine 44	Ralph P. Seiter	Engine 307
<b>Supervising Fire Marshal</b>		Daniel C. Cafaro	Ladder 76	Michael T. Keller	Ladder 164	John P. Shurina	Ladder 49
Vincent Palmieri	ADMBFI	Christopher J. Caicedo	Engine 15	Dewayne Kimbrough	Engine 37	Ricardo Sosa	Engine 224
<b>Lieutenants</b>		Joseph H. Calvanese	Ladder 80	Thomas P. Knobel	Ladder 5	James T. Stasio	Ladder 155
Steven A. Cross	Battalion 43	Joseph A. Castellano	Engine 228	Victor P. Leoncavallo	Engine 39	William G. Storz	Ladder 169
Michael M. Cunningham	Rescue 2	Peter A. Castellano	Ladder 149	Alan J. Locascio	Engine 311	Jeffrey H. Stroehlein	Engine 304
James A. Daly	Engine 251	Paul M. Castellucci	Engine 89	Michael J. Locurto	Engine 90	Agostino T. Vaccaro	Engine 229
John M. Duffy	Ladder 23	Darren J. Cataneo	Ladder 83	Matthew J. Long	Ladder 43	Peter C. Van Middeltem	Ladder 176
Robert M. Gelling	Engine 220	Craig Chille	Ladder 87	Patrick Manning	Engine 50	Robert Vansteen	Engine 28
Michael D. Glander	Ladder 49	William J. Clark, Jr.	Engine 226	Vincenzo Mastropasqua	Engine 210	David J. Viola	Ladder 135
		Robert G. Colligan	Ladder 87	Robert Masucci	Ladder 168	Michael T. Walsh	Engine 211
		John Colon	Engine 167	Mark Matthes	Ladder 76	Patrick West	Engine 313
				Brian McCann	Engine 220	Joseph F. Williams	Ladder 101
				Michael J. McCarthy	Engine 320		