

Fires that Affected FDNY Firefighting Procedures

by Chief of Department Peter J. Ganci, Jr.

The FDNY, in terms of sheer numbers, has experienced every kind of fire/incident/emergency, many times over. What follows are some of the major events in our history that, due to their enormity, prompted changes in firefighting procedures and operations.

Fire and collapse

FDNY collapse information has existed for decades. Chief Contrastano wrote formal



(Above) Full-scale attack on Jennings Street building before collapse. (Below) Debris fills store in collapse area.

photos by M. Kosinenko



The Super Pumper system was purchased to address water problems encountered at brush fires.

photo by FDNY Photo Unit



Brush fires can cover tremendous areas and pose serious firefighting problems. (Inset) The 1963 brush fire on Staten Island destroyed approximately 100 private dwellings such as this. photos taken from 3rd/68 issue of WNYF

successfully at both fire and non-fire incidents. Additionally, use of the 10-60 signal is a direct result of several collapses.

Brush fires

During 1962 and 1963, Staten Island experienced a tremendous number of brush fires. In April 1962, 435 fires occurred, 51 of which were multiple alarms. On one day, there were 16 multiples. In April 1963, a conflagration struck the Island's South Shore. More than 100 structures were destroyed, most of which were wood-framed private dwellings.

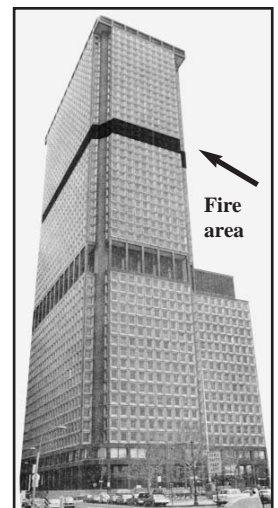
The FDNY had begun experimenting with brush fire units on loan from the U.S. Army. Today, the Verrazano-Narrows Bridge, completed in 1964, has provided easy access to the Island by additional FDNY units. At the time of the fires, mutual aid was provided by the Jersey City Fire Department, who had access over the Goethals Bridge, which was built in 1928.

We now have a revised brush fire All Unit Circular and custom-designed brush fire vehicles for Staten Island and Brooklyn. The Super Pumper—with its large-diameter hoses—purchased as a direct result of water problems encountered at the Staten Island brush fires, was the forerunner to the current Maxi Water System used at all major alarms to augment adequate water supply.

High-rise fires

The One New York Plaza high-rise fire occurred on August 5, 1970. This fire was the first of its kind in a modern commercial high-rise. The building was a 50-story, newly constructed, fireproof office tower. Two floors—totaling 40,000 square feet—were involved in fire before the FDNY arrived. The delayed alarm occurred at 1759 hours. Fire involved floors 33 and 34. FDNY resources included 50 units and more than 300 men.

Reflex time was delayed substantially because of elevator malfunctions. There were construction deficiencies causing fire to extend



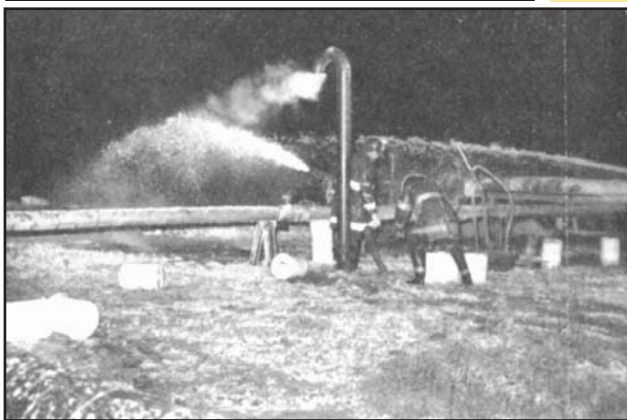
One New York Plaza, site of high-rise fire.

photo by C. Justice, FDNY Photo Unit



(Above) Units are set to attack fire from Tank #6. photo by F. Murphy (Top right) Firefighters operate from atop earth fill surface of oil storage tank. (Right) Members apply foam to fire.

Photos by C. Justice, FDNY Photo Unit



to the floor above the original fire area. Extreme temperatures limited firefighters' effective work time to approximately five minutes. Local Law 5 and Firefighting Procedures High-Rise were developed as a result of this incident.

Firefighting foam operations

Oil terminal fires are an infrequent occurrence in New York City. A member of the Department could go through a 20-year career and never experience such a fire. One oil terminal fire that did tax this Department's resources is noteworthy for lessons learned.

On January 4, 1976, the Patchogue Oil Terminal in Brooklyn exploded. The FDNY's supply of foam quickly was expended. Additional foam was requested from suppliers as far away as Philadelphia. A secondary explosion followed the initial foam knockdown of the oil tanks involved in fire. This increased the fire's fuel supply and extended the fire.

Our operations were conducted for 36 hours before an "under control" was transmitted by the Chief of Department. More than 22,000 gallons of different foam solutions were utilized. This fire initiated development of our current foam system, which includes:

- Bulk foam storage
- Bulk foam carriers
- Battalion Chief foam coordinator position

Foam units, with their bulk foam concentrate storage, are located strategically throughout the City. These units conduct drills with the Bureau of Training and Battalion Chief Foam Coordinators on a regularly scheduled basis.

The Waldbaum's fire

The Waldbaum's fire on August 2, 1978, took the lives of six firefighters. This tragedy occurred when the roof, featuring a bowstring truss, collapsed into the fire, plunging these firefighters to their deaths. Guidelines for operating on such trusses now are incorporated into the Taxpayer Firefighting Procedure Manual.

Fire tragedy leads to improved standards for fire service lifesaving ropes

On June 27, 1980, a gas explosion and fire occurred in an apartment building on West 151st Street in Manhattan. The incident rose to three

alarms before being placed under control. Firefighters Fitzpatrick and Frisby were killed when a "roof rope" broke under the weight of the two men. The tragedy led the FDNY to re-evaluate its rope policies.

Newly designed "lifesaving rope" and anti-chafing device were purchased and distributed to all FDNY units. New training bulletins were issued with more stringent rules for usage and inspection of these ropes.

Terrorism

Terrorism is a frequently used term in today's media. The FDNY has responded to "terrorist acts" for decades. Our largest response occurred on February 26, 1993, to the World Trade Center (WTC) bombing. At the height of the incident, 45 percent of the on-duty 9 x 6 tour were operating at the WTC. More than 50,000 people were occupying the buildings that comprise One and Two WTC and the Vista Hotel complex at the time of the bombing. Miraculously, only six civilians were killed.

Terrorism, particularly as it relates to Weapons of Mass Destruction, has caused great concern. Emphasis on haz-



During the initial 24 hours of operations, the equivalent of 23 alarms were called for this emergency--135 companies and 775 uniformed members.

photo by FDNY Photo Unit

ardous materials recognition and training has been ongoing and all Rescue and Squad Companies have been trained to the technician level. There have been several large, inter-agency drills addressing terrorism.

About the Author...

Chief of Department Peter J. Ganci, Jr., is a 31-year veteran of the FDNY. He started as a Firefighter in Engine 92 and rose through the ranks to become Chief of Department in October 1999.

