On June 5, 1994 Manhattan Box 151 was transmitted at 1819 hours for a reported structural fire at 79 Worth Street. Engine 7, Engine 6, Engine 10, Ladder 1, Ladder 8 and the 1st Battalion were dispatched.

79 Worth Street is a 5-story brick and wood joist building. The building had a cellar and a sub-cellar. The building was 47’x 94’ on the first floor cellar and sub-cellar. The cellar and sub-cellar could be accessed via a narrow courtyard in the rear of the building. There was a rear fire escape that served all floors including the cellar and sub-cellar. These windows were protected by iron shutters. The 2nd through 5th floors were 85’ deep. The building was equipped with an automatic wet sprinkler system. The building was a commercial structure and was partially occupied.

Ladder 8 arrived at 1822 hours and transmitted a 10-75 at 1823 hours. Engine 7 and Ladder 1 arrived at 1823 hours as well. Battalion 4, Division 1 and Rescue 1 were dispatched upon the transmission of the 10-75.
The initial progress report from the 1st Battalion stated they are using one engine and two ladders for a rubbish fire on the 1st floor. Engine 7, commanded by Captain Ralph Fago, stretched the hose line. Upon hearing the progress report, Division 1 went 10-8.

At 1826 hours, the Roofman from Ladder 8 climbed the interior stairs to vent the stairway bulkhead. The Forcible Entry Firefighter from Ladder 8 went to the cellar to shut down the now activated sprinkler system. Engine 7 started draining and re-packing their hose line.

At 1828 hours, the Roofman from L-8 and a Firefighter from L-1 informed B.C. Tom Fox of the 1st Battalion that there was a fire on the 4th floor. The 1st Battalion transmitted to the Manhattan Dispatcher that they had multiple fires in the building, to transmit the “All-Hands” and to have the Fire Marshals respond (10-41 code 1). Division 1 started their response again.

At 1830 hours, Engine 7, assisted by Engine 6 started stretching a hose line to the 4th floor. Battalion 1 requested an additional Engine and Ladder respond to the box. At 1833 hours, Engine 10 started stretching a second hose line and at 1836, Engine 7 got water on the fire on the 4th floor. At 1832 hours, Deputy Chief David Corcoran of the 1st Division arrived at the fire.

At 1837 hours, a 3 ½” supply line was stretched from Engine 7’s pumper to the sprinkler siamese. Shortly thereafter, a sheet of glass was broken on the upper floors and it fell, cutting a hose line in the street. A “Cooper Hose Jacket” was used to stop the leak coming from the hose. A heavy smoke condition was noted on the 4th floor. Ladder 20 was ordered to bring a fan to the 4th floor to try and exhaust the smoke.

At 1845 hours, B.C. Fox Battalion 1 requested to Division 1 to have the sprinkler system shut down.

At 1850, Division 1 reported to the Manhattan Dispatcher that the fire has been knocked down. Units were opening up and searching the 4th and 5th floors and the fire is at “Probably Will Hold.” At 1854 hours, D.C. Corcoran told the 1st Division
Battalion to have units check the entire building for other fires. At 1900 hours, the fire was placed “Under Control.”

Shortly after the fire was placed “Under Control”, two Firefighters from Ladder 8, while going to the cellar to shut off a sprinkler valve, discovered heavy smoke coming from the sub-cellar of the building. They descended to the sub-cellar and found a heavy smoke condition, but no fire. They did a limited search of the front area of the sub-cellar. They then left the area to notify their officer. At the same time, it was noticed by Firefighters in the street that there was smoke wafting out of the closed sidewalk cellar gate. Ladder 1 opened up the sidewalk cellar gate and placed a portable ladder into the shaft. Smoke was venting out of the shaft.

With the discovery of yet another fire within the building (3 fires), Division 1 notified the Manhattan Dispatcher and requested an additional Ladder and Battalion Chief to the scene. Ladder 6 and Battalion 2 were dispatched.

D.C. Corcoran saw the Firefighters from Engine 10 standing fast in the street and ordered them to stretch an 1 ¾ inch hose line to the sub-cellar. The officer of E-10 was not near his Firefighters so D.C. Corcoran ordered Capt. Fago E-7 to take the members of E-10 down to the sub-cellar. Ladder 10 made their way to the sub-cellar to begin a search. L-10 was in the middle of their search when a Firefighter’s Self Contained Breathing Apparatus (SCBA) vibralert went off. L-10 then exited the sub-cellar. At 1918 hours, Rescue 1, commanded by Lieut. Steve Casani, reported back to Division 1 at the Command Post. They were ordered to search the sub-cellar. At the same time Ladder 6 commanded by Lieut. George Lener reported in to the 1st Division at the Command Post. They were ordered to stand fast. There was a heavy smoke condition in the sub-cellar at this time.
Once in the sub-cellar, it was not apparent where the fire was. The immediate task was to find the fire. At 1930 hours, Rescue 1, with the help of their thermal imaging camera (TIC) found fire in the rear of the sub-cellar in the ceiling, above the operating sprinklers. Rescue 1 also utilized their search rope to make entry into the sub-cellar. There was a tin ceiling separating the fire in the ceiling bays from the operating sprinklers. The sprinklers were not extinguishing the fire as the sprinkler heads were below the fire. The sprinklers cooled the smoke and drove it downward.

Rescue 1 called for an Engine and Ladder to come down to the sub-cellar. Engine 10’s line was advanced to the sub-cellar and Ladder 6 was deployed to the sub-cellar as well. Division 1 transmitted a 2nd alarm. The Officer of Engine 10 met up with Capt. Fago of Engine 7 and relieved him. Ladder 5 was now designated as the FAST Truck. Historical Note: At the time of this fire, the Thermal Imaging Camera was a new tool. The only units that had it were the Rescue Companies. In addition, Carbon Monoxide Meters were not commonplace as they are today. The only units that had the Carbon Monoxide Meters were the Rescue Companies.

Ladder 6 made their way to the sub-cellar. They deployed their Search Rope and Lieut. Lener L-6 gave strict instructions to his Firefighters to keep their SCBAs on. Firefighter Mike Toussaint (L-6 Roof Firefighter) of Ladder 6 fell on the stairs going down to the sub-cellar. Fr. Toussaint went to the street without notifying his Officer. The remaining members of Ladder 6 donned their SCBA’s and started their search. Due to the heavy smoke condition, they had to feel their way around the sub-cellar.
While searching the front of the sub-cellar, Lieut. Lener L-6 became aware of the missing member. He sent his Chauffeur, Tony Delillo, to look for him.

At the sub-cellar level in the rear of the building, there was a narrow court yard between the building wall and a retaining wall. It was about 8 foot wide. In the rear of the building, Firefighters from Ladder 1 and Rescue 1 were forcing iron shutters to attempt to vent the cellar. Forcing these iron shutters proved to be a difficult and time consuming task. Saws with metal cutting blades were used to force these iron gates.

Ladder 6’s Chauffeur returned to the sub-cellar and told Lieut. Lener that the missing member was alright and was outside.

Ladder 10 made their way down to the rear of the cellar and they witnessed smoke pushing through the floor in the rear. The Ladder 10 Officer called for a hand line and had a member go for their saw. Engine 24 stretched a hand line into the cellar via the interior stairs on the exposure four side. They worked with L-10 under the command of Battalion 4.

Ladder 20 set up fans on the 1st floor front in an attempt to exhaust the heavy smoke condition in the cellar and sub-cellar.

Ladder 5 set up a 20 ft. portable ladder to the rear fire escape from the parking lot on the exposure 3 side. This spanned the gap between the building and the parking lot.

At 1946 hours, E-6 stretched a 3 ½” line off their apparatus and hooked up to E-10’s apparatus and the sprinkler Siamese of the fire building.

At 1947 hours, Fr. Tony Delillo’s (L-6 Chauffeur) vibralert went off. L-6 had been operating in the sub-cellar for 15 minutes at this time.

At 1948 hours, an “Urgent” HT message can be heard on the HT. The message itself was is not clear. E-33 was on the way to relieve E-10 when they encountered Capt. Fago E-7. Capt. Fago was exiting the sub-cellar of the building because he was disoriented and was starting to feel the effects of carbon monoxide. Before he completely exited the building, he required assistance.
Firefighters from Ladder 10 removed Capt. Fago to the street. Capt. Fago was later treated at a hospital where he had 25 percent carboxyhemoglobin in his blood.

At 1948 hours, the members of L-6 started to run out of air. Fr. Bob Wilday, George LaPlace (L-11 Detail) and another detailed Firefighter from Ladder 9 stayed in the sub-cellar until their SCBAs were empty. Lieut. Lener led these Firefighters to one of the two the windows that were previously covered with iron gates. These members exited to the rear yard and were going in and out of the rear sub-cellar windows to the rear fire escape, to pull ceilings. Lieut. Lener stayed in the sub-cellar.

At 1950 hours, Fr. Tom Sheeran Engine 24 came out of the store on the first floor because he was out of air. He required help from other members to get out of the building due to Carbon Monoxide poisoning. At this time, L-6 had been operating in the sub-cellar for approximately 20 minutes.

The conditions in the sub-cellar were dangerous. The fire was burning above the tin ceiling and above the operating sprinklers. There was very limited visibility due to the smoke and steam being generated. The temperature of the smoke was cool. The cool smoke led to a false sense of security about the hazardous levels of Carbon Monoxide engulfing the operating Firefighters. There were numerous sprinkler heads activated. Water was accumulating in the sub-cellar about a foot high. Also, inside the sub-cellar, there were numerous bales of rags that were impeding operations.

At 1951 hours, Fr. Tom Spinard E-7 was on the stairway leading to the cellar when he heard a “Mayday”. He heard other HT transmissions but could not understand them. He then saw

Photo courtesy of FDNY Photo Unit. Fire in the sub-basement started here notice the fanning upward “V” pattern.
Capt. Fago and assisted him out of the building. Historical Note: At this time, the only members of Engine Companies that were handie-talkie equipped were the Officer and the Chauffeur.

At 1951 hours, the Chauffeur of L-6 was in front of the fire building and was changing his SCBA cylinder. He heard the “Mayday” and he went back into the sub-cellar. The “Mayday” was garbled. The ambient noise inside the building was deafening. Operating saws, generators, and exhaust fans made hearing the “Mayday” difficult. At this time, the Roofman from Ladder 8 heard on his handie-talkie, “Mayday, Mayday, I am lost.” Fr. Bob Wilday, L-6 operating in the rear and B.C. Robert Turner of Battalion 2, operating on the 2nd floor heard the “Mayday” as well.

At 1952 hours, Car 9A transmitted a 4th alarm.

At 1955 hours, Battalion 4 was in the sub-cellar when his SCBA vibralert went off and he exited the sub-cellar. He met Firefighter Steve Bates from Engine 69 (Detailed to L-8) in distress at the cellar level and assisted him to the street. It was erroneously believed that this was the member that the “Mayday” was transmitted for. Firefighters operating in the rear yard believed that the “Mayday” was cancelled.

At 1959 hours, Lieut. Gary Borega of Engine 55 was working off the rear fire escape. He heard the “Mayday” being transmitted as his unit was attacking the fire at the ceiling level of the sub-cellar. Once they knocked the fire down, he entered the sub-cellar and saw a flashlight beam coming up through the water. He reached for the light in the water and found Lieut. George Lener of Ladder 6 floating face down in about a foot of water in the sub-cellar. He turned him over and held his head out of the water. The Lieut. Borega of E-55 transmitted a “Mayday” and called out for help. Fr. Dellilo (L-6 Chauffeur) heard the yelling and the “Mayday” in the cellar, so did Battalion 6 and the Officer of L-5. The other Firefighters in the rear yard responded to the “Mayday” and made their way towards Lieut. Lener. Lieut. Borega E-55 was having difficulty removing Lieut. Lener due to the additional water weight soaked into his protective gear and his size. Other members arrived from the rear yard and assisted in the removal of the unconscious member. Lieut. Lener was removed to the rear yard where CPR was initiated.
At 2004 hours, a roll call was conducted and a search for additional missing members was conducted in the sub-cellar. Fire was still burning in the ceiling of the sub-cellar during the search. It was not out of the realm of possibilities that there may be more Firefighters unconscious in this dangerous sub-cellar.

Lieutenant George Lener was removed to Beekman Downtown Hospital at 2015 hours. At 2025 hours, Car 4 transmitted a 5th Alarm for Manhattan Box 151. At 2115 hours, Car 4 placed the fire “Under Control.”

There were 34 sprinkler heads fused in the sub-cellar, and 16 on the 4th floor.
There were a few on the other floors activated for a total of 56 sprinkler heads fused at this fire. The sprinkler system was flowing over 1,000 gallons of water per minute (gpm). The sprinkler heads were rated to be fused at 165 degrees F.

On June 16, 1994, Fire Marshals arrested Alberto A. Raposo for the crime of Arson for the fire at 79 Worth Street in Manhattan. He was convicted of arson and was sentenced to 43 years in prison on June 8, 1999.

Lieutenant George Lener Ladder Co. 6 transferred later that night to Jacobi Hospital in the Bronx to be treated in the Hyperbaric Chamber. When Lieutenant Lener was initially taken to Beekman Downtown Hospital, his carboxyhemoglobin levels were 41%. Lieutenant Lener succumbed to his injuries on July 20, 1994, 45 days after the fire. George Lener was 40 years old. He left a wife and three children. May he rest in peace.

RANDOM THOUGHTS ON SPRINKLER SYSTEMS:

- Sprinkler systems are a very effective tool in controlling fire. According to the NFPA, the sprinkler systems are effective 95% of the time. Most of those fires require only 1 or 2 sprinkler heads to extinguish the fire.
- There has never been a multiple fire death of more than three people at a properly operating sprinklered building fire with the exception of an explosion or a flash fire.
- As a rule of thumb, a sprinkler head with a ½ inch orifice discharges 20 gpm. When 50 heads are discharging water, 1,000 gpm is being delivered into the building.

- If a building is equipped with a standpipe system and a sprinkler system, feed the standpipe siamese first. Then, feed the sprinkler siamese. Feed the sprinkler siamese with water at 150 psi.

If a sprinkler system is activated, do not turn it off until you are sure the fire is being controlled. Conditions that indicate the fire is being controlled are: 1) You do not see any active flaming. 2) The water coming from the sprinkler system and hitting operating firefighters is cold. If the water is hot, that means the water is still absorbing considerable heat.

- Sprinkler systems with water flowing due to activation from a fire, causes operational difficulties. It creates high levels of Carbon Monoxide, particularly in below grade areas that are difficult to vent. The smoke cools the products of combustion and the spray drives the smoke downward. The accumulation of water is a consideration when many heads are fused. The
operating sprinkler system can make using the Thermal Imaging Camera for search more difficult.

- When the Incident Commander decides to shut down a sprinkler system, the following conditions must be met:
  1) The fire must be controlled. 2) A charged hose line must be in position. 3) Two mask equipped and radio equipped Firefighters go to the Outside Screw and Yoke (OS&Y) valve in the sprinkler room to shut off the sprinkler system. These Firefighters stay at this location for the duration of the incident. They will be in position to charge the sprinkler system again if the fire increases in intensity.

- Carbon Monoxide meters must be monitored while operating in the sprinklered environment. Pockets of heavy concentrations of Carbon Monoxide may be present.

- When shutting off the sprinkler system, make sure the Pumper(s) feeding the sprinkler siamese is shut down. The Siamese bypasses the OS&Y valve.

- When operating at a fire that has heavy smoke from operating sprinklers, consider special calling a Ventilation Support Group supervised by a Battalion Chief to mitigate the hazard.

- When encountering a heavy smoke condition in these sprinklered cellars and sub-cellar, search ropes and thermal imaging cameras (TIC) are essential.

- Whenever operating in these environments, strict adherence to the mask policy is **MANDATORY**. The smoke condition may not look severe but there is a real possibility of heavy concentrations of Carbon Monoxide.

- After the fire at 79 Worth St., the FDNY adopted the 2 in 2 out policy. See Firefighting Procedures Managing Members in Distress, Safety Team.

- When arriving at a Class 3 Valve alarm, if you see a water gong, you know that the sprinkler system is city-main fed. If it is fed by a roof tank, it will not have a water gong.

- When arriving at a Class 3 Valve alarm and you go down to the sprinkler room: If you see two gauges next to each other, you know that the system is city-main fed. One gauge is the system gauge and the other is the water main gauge. If you see only one gauge near the sprinkler shut-off, the system is fed by a roof tank.
➢ You can tell what is going on with the sprinkler system by going to the sprinkler room. If the gauges are equal in pressure, and they are holding still, that means the system was just serviced and the alarm was transmitted by a surge in pressure from the water main. If the gauges are reading the same pressure, and they are rapidly fluctuating, you have water flow somewhere (either a fire or a broken pipe). If you have the system gauge reading higher than the water main gauge and the valve alarm was transmitted, you either have a surge in pressure that transmitted the alarm or you have a defective valve alarm. The higher pressure difference between the water main pressure and the sprinkler system pressure, the less likely there will be a valve alarm transmitted for a surge in pressure.

➢ The OS&Y valve is distinctive. If you see the stem, the system is on. If you do not see the stem, it is off.

Deputy Chief Jay Jonas, Division 7

In Memory

Lt. George Lener
The rear court yard which was once a parking lot is now an enclosed court yard surrounded by buildings on all sides all that is left of the rear fire escape is at the top center of photo. Below shows the IRON SHUTTERS which blocked the rear windows and delayed entry from the rear yard.
Shown below is the sub cellar where the rear windows once had iron shutter gates. 2 of the 3 had been open at the time. This is location of where Lt. Lener was found and removed from; the approximate location was the area of the glass desk below only 10-12 feet from the window.