TIP OF THE HELMET TO: Current and retired members of Rescue 3 and Squad 41 for hosting the Medal Day collation.

TIP OF THE HELMET TO: Members of Engine 75, Ladder 33, and Battalion 19 for hosting the “Deputy Chief Michael Fahy Memorial Run” on May 25, 2017. The proceeds went to the “Stephen Siller Tunnel to Towers Foundation.”
This was the former Knickerbocker Ice House. At the time of the fire, the ice plant had been vacant for eight years. There was no electric or gas service to the building. All machinery and refrigeration equipment had been removed for three years. The plant extended from Amsterdam Avenue to Laurel Hill Terrace. The ice house was divided into two parts. The Ice Storage Room fronted Amsterdam Avenue. It was “barn-like” in its interior. It was a six story structure. It was built of concrete construction. It was wide open from the floor to the ceiling. The concrete walls were 36 inches thick. There was cork insulation on the walls that was two feet thick. Light paneling covered the cork insulation. There was a 5 foot cockloft in the building that ran the entire length of the building. The roof was a concrete roof that was supported by steel “I” beams.

The Ice Machinery Rooms of the former Knickerbocker Ice House was separated by a dividing wall from the Ice Storage Room. This part of the occupancy extended from the rear of the Ice Storage Room to West 184 Street. The entire Knickerbocker Ice House was “L-shaped” fronting on both West 184 Street and Amsterdam Avenue.
2515 Amsterdam Avenue:
This was a six story new law tenement. It was constructed of brick and wood joist. The side bearing walls were 8 inches thick. There were 4 apartments per floor. At the time of the fire, there were 95 people living in this tenement house.

The Fire:
On Wednesday December 11, 1946, New York City residents were still basking in the glow of victory in World War II. Christmas was rapidly approaching and the holiday season was a welcome experience as loved-ones returned home from serving in the military.

At around 1708 hours, a group of four boys entered the vacant Knickerbocker Ice House and went to the roof. The boys started a fire with newspapers and a candle. The fire was eventually noticed and Manhattan Box 1753 was transmitted at 1745 hours. The fire was rapidly extinguished by units in the 13th Battalion. Chief Fire Marshal Thomas Brophy would later determine the cause of this fire as “mischievous boys”.

At around 2345 hours, Mr. Pasquale Fucci, 22, who lived on the 5th floor of the tenement at 2515 Amsterdam Avenue, smelled smoke that smelled like tar. He did nothing about it at the time and he went to have a cup of coffee with his sister. After a short while, the smoke became heavier. Mr. Fucci saw sparks landing on the roof of his building. He went down to the street to “snap” fire alarm box 1753. It was 2359 hours and Manhattan Fire Dispatchers transmitted box 1753 at Amsterdam Avenue and West 183 Street.
Engine 93 arrived at the fire and found the Ice Storage Room section of the Ice house involved in fire. The cockloft area was heavily involved. Battalion Chief Daniel Shea of the 13th Battalion was the first Chief Officer on the scene.

It was later determined that this fire started in the cellar and traveled to the cockloft via a pipe shaft. It was not determined if the fire that happened earlier in the night had any connection to the fire at 2359 hours.

Engine 93 was ordered to stretch a 2 ½ inch hose line to the roof of the rear section of the ice plant and cross over the parapet wall toward the Ice Storage Room roof. The strategy was to operate cellar pipes from the roof into the fully involved cockloft. There was no way to access the burning cockloft via the interior. The ceiling height from floor to ceiling was 60 feet. The cork insulation was providing the fuel for the fire and the cockloft was now fully involved in fire.

Rescue 3 was special called at 0019 hours by Deputy Chief Michael F. Powers of the 5th Division to check the premises for ammonia. Ammonia was a common refrigerant for these type of occupancies. The check for ammonia proved negative.

Deputy Chief Michael Powers went to the roof to supervise the extinguishing efforts on the roof. It seemed as if the fire was contained to the front of the building. However, unbeknownst to the operating firefighters, the unprotected steel beams were reacting to the intense heat in the cockloft. The steel beams were expanding. They were secured to the exterior bearing walls by “cavities” in the wall. The expanding beams had no place to go. In addition, the weakened steel beams were supporting a heavy dead load, a concrete roof.

On the roof of exposure 2 (2515 Amsterdam Avenue), some building occupants made their way to the roof of the tenement to watch the firefighters fight this challenging fire.
Battalion Chief Shea of the 13th Battalion was supervising units in the rear yard as extinguishing efforts were taking place on the roof. While on the roof, Deputy Chief Powers heard a muffled rumble from below the roof. Other firefighters on the roof would later recall that the muffled rumble was not loud. Chief Powers feared a backdraft and he abruptly ordered the firefighters operating on the roof to evacuate to the rear of the Ice House, over the parapet wall. The bearing wall of the Ice House was collapsing. The collapse happened rapidly. All the firefighters operating on the roof barely made it to the parapet wall, except for Fr. Frank Moorehead Jr. of Engine 93. His fellow firefighters said that he “disappeared” with the roof. Firefighters operating in the rear yard near the rear of exposure 2 barely escaped the collapsing wall.

The 65 high, 100 foot long ice house bearing wall was pushed to a 90 degree wall collapse by the expanding steel beams. The concrete roof collapsed as well, catapulting through the ice house. The collapsing bearing wall from the ice house fell onto the bearing wall of exposure 2, the 6-story tenement. The collapsing wall caused a catastrophic collapse of the tenement. The only part of the tenement that remained standing was the front portion of the building. The rear 12 apartments of the tenement were demolished. It was estimated that 60 sleeping occupants of the tenement were buried in the collapse.

Additional alarms were transmitted in rapid succession:

0109 hours, 2nd Alarm.
0110 hours, Special call FDNY Ambulances.
0110 hours, Special call Public Ambulances.
0121 hours, 3rd Alarm.
0123 hours, 4th Alarm.
0138 hours, Special Call for Searchlight Unit.
0218 hours, 5th Alarm.
0222 hours, Special Call for Rescue 1.
Building collapse in Washington Heights.
DECEMBER 12: Building collapse in Washington Heights.
(Photo by Phil Greitzer/NY Daily News Archive via Getty Images)

The scene rapidly turned frantic. A massive rescue effort was beginning. Firefighters on the scene could hear the screams and cries of those who were trapped. Searching firefighters used the screams of the trapped people to determine where to start their search in this massive and dangerous rubble pile.

As a result of the collapse, five firefighters were injured. They were removed to Mother Cabrini Memorial Hospital. Three of the five firefighters would remain admitted to the hospital for days.

Initially, the Searchlight Unit was not available. Neither were cranes or steam shovels. The initial rescue effort was done by hand, hand tools, and oxyacetylene torches. The rescue effort was being performed by “willing hands” and “stout courage”. The fires did not go out.
when the Ice House collapsed. Smoke was coming from the rubble. The misting rain and smoke created a pall over the scene.

Firefighters ascended the front fire escape of the collapsed tenement to search for people trapped in the remaining front apartments that were cut in two. The front portion of the tenement was unstable.

Deputy Chief Murphy of the 5th Division put out a call to the Manhattan Fire Dispatchers that more manpower was necessary. He requested that “Firefighters only” are needed. He requested 15 firefighters from each of the 14 Divisions. Firefighters and Fire Officers from all over the city would respond to the call for help.

As firefighters were digging into the pile, occasionally flames would appear coming from the rubble. Firefighters manning hose lines would have to use the hose streams sparingly to extinguish the fires. So many people were still trapped that there was a fear of them drowning if too much water was used.

Rescuing firefighters were sent to 2519 Amsterdam Avenue (exposure 2A) in an attempt to breech the cellar wall in order to gain access to the cellar of the collapsed tenement. 2519 Amsterdam Avenue was another tenement. This effort proved fruitful. At 1500 hours the next day, a man named Joe Origo,
65 years old, was found near an air shaft. Firefighters dug for five hours. FDNY Chaplain Father Charles Carroll crawled in the rubble within 6 feet of the trapped man to give absolution. At 2000 hours, Mr. Origo’s moans became faint. At 2300 hours, rescuing firefighters were forced to abandon their rescue efforts of Mr. Origo.

The next day, heavy equipment arrived at the collapse scene. Professional building wreckers were brought in and assisted in building shoring to make tunneling safer. Con Edison arrived at the scene with their heavy equipment as well. Air drills were put to use to break through masonry. The use of the air drills was monitored so that they wouldn’t cause a secondary collapse.

The New York City Police Department (NYPD) was used to try to get an accurate head count of how many people were trapped. The NYPD went door-to-door to see if any families were being sheltered by their neighbors. The next day, 33 children failed to report to school. It was found out that 25 of the 33 children had been evacuated from the building.

One of the rescue efforts that was started was the search for Fr. Frank Moorehead Jr. of Engine 93. Acting Deputy Chief (ADC) Joseph J. Scanlon and Fr. 1st Grade Adolph H. Bahruth, both
of Headquarters Staff, spearheaded the rescue effort. ADC Scanlon was ordered to start searching the rubble of the ice house for Fr. Moorehead. He was looking for the remains of the concrete roof of the ice house. As the team was searching, the unstable walls remained a constant danger of a secondary collapse. Both ADC Scanlon and Fr. Bahruth descended via portable ladder down the rubble pile to the floor of the former ice house. After an exhaustive search, Fr. Moorehead was found. He was pinned between a pile of masonry, timbers, rubble and partially submerged in water. ADC Scanlon and Fr. Bahruth succeeded in shoring the debris and making a “tunnel”. They were able to remove Fr. Moorehead to the portable ladder that was used for their access to the collapse. A stretcher was waiting for them at the ladder. Fr. Moorehead was removed to Mother Cabrini Memorial Hospital. He was declared dead at the hospital.

Acting Deputy Chief Joseph J. Scanlon was awarded the “William H. Todd Memorial Medal” and the “Department Medal” for his actions. Fr. 1st Grade Adolph H. Bahruth was awarded the “John H. Prentice Medal” and the “Department Medal” for his actions.

At another area of the collapse site, a group of Firefighters started tunneling through the debris in response to screams for help. Acting Battalion Chief (ABC) Winford L. Beebe of Headquarters Staff, Lieutenant Henry John Herrmann of Engine 7, and Lieutenant John V. Schneible of Engine 60 formed a team to start digging a tunnel through tons of debris. This effort
took hours. The team eventually reached the trapped man. Initially, it was impossible to move him. More debris had to be removed so the trapped man could breathe freely. Shoring was put in place and the rescuing firefighters comforted the man until he could be extricated. Removal of the trapped man was completed hours after he was reached.

Acting Battalion Chief Winford L. Beebe of Headquarters Staff was awarded the “Walter Scott Medal” and the “Department Medal” for his actions. Lieutenant Henry John Herrmann of Engine 7 was awarded the “Albert S. Johnston Medal” and the “Department Medal” for his actions. Lieutenant John V. Schneible of Engine 60 was awarded the “Department Medal” for his actions.
Another rescue effort was attempted by Lieutenant Henry Kramer of Engine 276, Lieutenant John G. Trainor of Hook & Ladder Co. 13, and Lieutenant Emanuel Fried of Engine 231. They responded to the screams of a trapped woman in the rubble on the southeast portion of the collapsed building. The team found an inverted “V” shaped void in the area between the two collapsed buildings. The location of the void was at approximately the third floor. Lieutenant Kramer made a hole in the rubble.

Photos Above: DECEMBER 12: House of Tragedy. Fireman removes body of a woman from the twisted wreckage of the building. Ambulances from neighboring hospitals took victims away as fast as they were removed. (Photo by Frank Hurley/NY Daily News Archive via Getty Images) Mother. Mrs. Edith De Rico, crushed from waist down, ask but one question as she is carried from wreckage of tenement house: 'Where is the baby?' (Photo by Frank Hurley/NY Daily News Archive via Getty Images)
into the void and he could see a window frame of the tenement which was down to the 1st floor. An opening was made that the rescuers could pass through. Then, Lieutenant Kramer made verbal contact with the trapped woman. Lieutenant Kramer and Lieutenant Trainor were able to muscle an “I” beam to gain better access. They kept digging by hand and were now assisted by Lieutenant Fried. They finally reached the woman’s hand. There was an imminent danger of a secondary collapse the entire time they were digging. They were able to provide some shoring as they operated. They finally succeeded in freeing the woman after hours of rescue work.

Photos Above: Curly-Haired Margaret Di Rico

Curly-Haired Margaret Di Rico. 5. Is taken to ambulance after being unearthed from wreckage of tenement. Her mother, Mrs. Edith Di Rico. 31, was rescued soon after. December 12, 1946. (Photo by Anthony Calvacca/New York Post Archives / (c) NYP Holdings, Inc. via Getty Images)
Lieutenant Henry Kramer of Engine 276 was awarded the “Bella Stiefel Medal for Valor” and the “Department Medal” for his actions. Lieutenant John G. Trainor of Hook & Ladder Co. 13 was awarded the “Michael J. Delehanty Medal” and the “Department Medal” for his actions. Lieutenant Emanuel Fried of Engine 231 was awarded the “Franklin Delano Roosevelt Medal” and the “Department Medal” for his actions.

The veteran FDNY Medical Officer Dr. Harry M. Archer operated at the scene. He crawled into the rubble to administer a hypodermic needle to a trapped girl. Dr. Archer worked tirelessly at the scene and area hospitals. At the time of the collapse, he was 76 years old.

At 0230 hours on December 13th, Assistant Chief Timothy P. Guinee of FDNY Operations declared that there is no hope of finding anyone alive. 36 hours after the initial fire, firefighters were still digging in the rubble looking for people trapped in the rubble. The morning of December 13th there were 17 people dead, 19 people missing, and 1 Firefighter dead. The final death toll from the collapse would be 37 people and one Firefighter. There were 40 people injured from the collapse. 25 families were affected by this tragedy.

Firefighters operated at the scene for three days. Veteran Firefighters and Police Officers reflected on the events of the days following the collapse. There was consensus that this was the worst disaster that they have witnessed in their careers.

Firefighter Frank Moorehead Jr. of Engine 93 was 28 years old. He resided at 2400 Valentine Avenue in the Bronx. May he rest in peace. Never forget!
These survivors of tenement house collapse take heart in what they have left. DECEMBER 12: These survivors of tenement house collapse take heart in what they've saved - Christmas presents that will help to make a merry Christmas for others, though their own will be a homeless one. (Photo by George Torrie/NY Daily News Archive via Getty Images)

Breakfast Cancelled. Tables are set in kitchens on fifth and sixth floors. DECEMBER 12: Breakfast Cancelled. Tables are set in kitchens on fifth and sixth floors of collapsed building, but meals were never eaten., (Photo by Ed Giorandino/NY Daily News Archive via Getty Images)
Unprotected steel loses 40 percent of its strength when heated to 1100 degrees F.

A 100 foot steel beam when heated to 1000 degrees will expand 9 ½ inches.

A 90 degree angle wall collapse is the most common type of masonry wall collapse. A masonry wall becomes more unstable once the roof is burned away or the wall is not interconnected to other walls. Masonry walls are designed to be loaded in compression. Once a wall is subjected to an un-designed lateral load, the wall is in danger.
A concrete wall is a composite wall. There are reinforcing rods within the concrete. This promotes a concrete wall falling similar to a tree.

The “collapse rescue plan” is as follows: 1) Reconnaissance or size-up. Utility size up (gas, electricity, and water). 2) Immediate rescue of surface victims. 3) Exploration of voids. 4) Selected debris removal, tunneling, trenching. 5) General rubble clearance. Approximately 75% of collapse victims are found in the first three stages of the collapse rescue plan.

Cork is used as an insulator at cold storage warehouses. Cork is a byproduct of tree bark. It is resistant to high temperatures and ignition. It burns with difficulty. Bark has a lower moisture content than does wood. “When large amounts of cork insulation ignites, it can burn beyond control, generating temperatures high enough to distort steel and cause structural collapse.”

A landmark fire in recent history involving a fire with cork insulation was the “B. Altman’s Fire.” It occurred on August 23, 1996. The store was vacant at the time of the fire. The fire was reported at 0306 hours. The address of the structure was 355 5th Avenue in Manhattan. The fire was in the fur vault that was windowless and had cork
insulation. A tremendous amount of heat was generated from the burning cork. Over 20 firefighters were injured at this fire. It required the equivalent of 8 alarms to extinguish. The FDNY operated at this fire for 18 hours.

**The Rest of the Story...**

**LIEUTENANT A. JOSEPH**

**POPPER (RET.):** On December 11, 1946, the Popper family was living in the tenement house at 2515 Amsterdam Avenue. The Popper family had a daughter and two sons, Johnny and Joe. They were all asleep at the time of the collapse of the Knickerbocker Ice House on top of their building. Johnny, the older of the two boys, was sleeping on the lower bunk and his brother Joe was sleeping on the top bunk. Joe was ten years old at the time. When the collapse occurred, it pinned the legs of Joe and he could not move. He heard his brother calling for help. Joe told Johnny: “I am coming.” However, Joe couldn’t move. Night turned into day as firefighters were digging through the rubble. Young Joe Popper prayed: “God, let me go...please.” “I promise to be good.”

After 8 ½ hours of entrapment, the rubble shifted and it freed the legs of Joe Popper. He prayed “Oh thank you God.” He was able to crawl to an area where he could see light. He cried out for help. He could see a Firefighter digging in the rubble. Then, the Firefighter reached down and pulled Joe Popper from the rubble. In the process of pulling him out of the hole, a protruding nail lacerated the head of Joe. He was passed down the rubble pile by Firefighters with dirty faces, yet, smiling at the sight of Joe. Once he made it to the street, he told Firefighters that his Mother, Father, brother and sister were still in the rubble. However, unbeknownst to Joe at the time, the entire Popper family died in the collapse, except for Joe.

Joe would later become a Firefighter in the FDNY. He was appointed on March 30, 1960. His first assignment was Engine Co. 7. There was a Battalion Chief assigned to the 1st Battalion, which shares their firehouse with Engine Co. 7,
named Neil Kinnick. Battalion Chief Kinnick was the Firefighter that pulled 10-year old Joe Popper from the rubble back in 1946. Joe knew it was him because Battalion Chief Kinnick asked him how his head was where it was injured on the protruding nail.


DEPUTY CHIEF MICHAEL POWERS: Deputy Chief Powers distinguished himself at the operation of the Knickerbocker Ice House fire and collapse. His orders saved everyone operating on the roof of the Ice House, except for Fr. Frank Moorehead. Deputy Chief Powers wrote a WNYF article called “Multiple Dwelling Fires.” The article was about the dangers of fires in Multiple Dwellings. He was the first Chief to write about “H-type” multiple dwellings. Most of the written material at the time was about fires in factories and commercial buildings. Deputy Chief Powers was a visionary. He foresaw the firefighting problems in these buildings. All the predictions he wrote about in WNYF and the Fire College Lectures, came true.

Deputy Chief Jay Jonas, Division 7

Thanks go to the following people who contributed to this essay: FM Dan Maye (Mand Library), Janet Kimmerly (WNYF Magazine), Honorary Battalion Chief Jack Learch, Fire Dispatcher Herb Eysser (Ret.), Katy Clements (FDNY Photo Unit), Lieutenant A. Joseph Popper (Ret.), Deputy Chief Vincent Dunn (Ret.), Fr. Chris Roberto.

FIREFIGHTER RAYMOND J. PFEIFER, ENGINE 40 (RET.): Passed away on Sunday May 28, 2017, from injuries sustained from operating at Manhattan Box 5-5-8087. This was the rescue and recovery effort of the attacks on the World Trade Center on September 11, 2001. Ray was a champion of all those who operated at the World Trade Center site. He was instrumental in the effort to get the “Zadroga Bill” passed. We all owe him a debt of gratitude. May he rest in peace. Never Forget!

LIEUTENANT WILLIAM J. KELLY, LADDER 116 (RET.): Passed away on Saturday June 10, 2017, from injuries sustained from operating at Manhattan Box 5-5-8087. This was the rescue and recovery effort of the attacks on the World Trade Center on September 11, 2001. May he rest in peace. Never Forget!

FIREFIGHTER WILLIAM J. GORMLEY, L-174 (RET.): Passed away on Wednesday June 14, 2017, from injuries sustained from operating at Manhattan Box 5-5-8087. This was the rescue and recovery effort of the attacks on the World Trade Center on September 11, 2001. May he rest in peace. Never Forget!

PARAMEDIC MARK A. HARRIS, STATION 23 (RET.): Passed away on Saturday May 13, 2017, from injuries sustained from operating at Manhattan Box 5-5-8087. This was the rescue and recovery effort of the attacks on the World Trade Center on September 11, 2001. May he rest in peace. Never Forget!

EMT EMERY C. TAYLOR, OFFICE OF MEDICAL AFFAIRS: Passed away on Tuesday May 16, 2017, from injuries sustained from operating at Manhattan Box 5-5-8087. This was the rescue and recovery effort of the attacks on the World Trade Center on September 11, 2001. May he rest in peace. Never Forget!