FIREFIGHTER MICHAEL P. SMITH: Retired Firefighter Michael Smith of Ladder 58 died on Christmas Day in 2015. Michael worked at the recovery effort following the attacks on September 11, 2001. Michael died of Cancer related to his work at the World Trade Center. His death is categorized as “administrative line-of-duty.” There have been over 100 members of the FDNY who have died from being exposed to toxins at the World Trade Center. His funeral was on January 5, 2016. May he rest in peace.

TIP OF THE HELMET TO: Engine 88 and Ladder 38 who hosted the plaque dedication to Firefighter William D. Koesterer of Engine 88 on January 8, 2016. Firefighter Koesterer died from Cancer. His death is considered “administrative line-of-duty.”
On the night of December 10, 2015, FDNY units would be challenged by a fire that many veteran firefighters would describe as a “career fire.”

The temperature was unusually mild for the month of December. At 2342 hours, the Bronx Fire Dispatchers started receiving telephone calls reporting a structural fire at Valentine Avenue and E. 180 St. in the Bronx. The Bronx Fire Dispatchers transmitted box 3146. Engines 48, 75, 46, Ladders 56, 27 and Battalion 19 were dispatched.

After box 3146 was transmitted, “numerous phone calls” were received at the Dispatcher’s office. In fact, 15 phone calls were received within one minute and thirty five seconds since the initial alarm was transmitted. They were reporting situations such as: “roof on fire”, “fire from roof”,

2086 Valentine Avenue, Bronx:
“flames and smoke coming from the 3rd floor”, “house on fire on corner of location”, “flames are everywhere”. At 2343 hours, the Bronx Communications Office (BXCO) sent the full 1st alarm assignment: Engine 42, Ladder 38 (FAST Unit), Rescue 3, Squad 41, and Battalion 18. While responding, units could see a rapidly rising column of smoke and fire at the roof level, indicating a shaft fire. At 2345 hours, Ladder 27 arrived at the box and transmitted a 10-75. Engine 48 and Ladder 56 arrived at 2345 hours as well.

The initial phone calls reported that the fire building was 2098 Valentine Avenue, a seven-story multiple dwelling. In reality, this was not the fire building and was apparent as the first due units responded. Battalion 19 quickly alerted the BXCO. The correct address of the original fire building was 2086 Valentine Avenue. It was a 3-story wooden, braced frame building, in a row of 5 row frames. It was the building on southern end of the row. Heavy smoke and fire could be seen from the top of the structure. The cockloft of not only the initial fire building was showing heavy smoke pushing from the cornice, but the entire row of buildings also had heavy smoke billowing out.
Ladder 56 under the command of Lieut. Kevin White, entered the original fire building. A cursory look at the first floor did not show any fire on this floor. He and his forcible entry team ascended to the 2nd floor. At this point, they found heavy fire near the air shaft between the fire building and exposure 2. There was heavy fire extending to the 2nd floor from the air shaft. Fr. Jacob Worstell of L-56 (Irons) began taking doors off non-exposed rooms and placing the doors over fire-involved door openings to confine the fire near the shaft. The members of L-56’s forcible entry team performed a primary search of that floor.

Engine 48, commanded by Capt. Ray O’Hanlon, stretched an 1 ¾” hand line into the original fire building. They discovered fire on the first floor and Fr. Marc Viscogliosi (Nozzle) and Fr. Nick Marchese (Backup) aggressively attacked the fire on the first floor. While operating on the first floor, L-56 called for another hose line on the floor above (2nd floor). As there were no Engine Companies available at the time, Engine 48 advanced their hose line up the stairs and knocked down several rooms of fire on the 2nd floor. Ladder 56 ascended to the top (3rd) floor which had a heavy fire condition. Primary searches were begun on that floor. B.C. Michael Sturgis of Battalion 18 eventually arrived as the 2nd due Battalion Chief. Knowing his limited resources, he ordered E-48’s hose line to the third (top) floor to extinguish fire there. Engine 48 displayed great teamwork. They switched Nozzelman to Fr. Mike Smith, advanced the hose line to the third floor, and extinguished heavy fire.

Battalion Chief Michael Fahy of the 19th Battalion arrived at the fire as the 1st due Battalion Chief. He quickly sized-up the dramatic scene in front of him. He
saw the heavy fire condition in an occupied row frame building, rapidly extending to exposure 2 and the cockloft. He transmitted a 2\textsuperscript{nd} alarm at 2348 hours.

Ladder 56’s Outside Vent Firefighter (OV), Matt Miller, went to exposure 2D to gain access to the rear yard. He climbed over a fence and saw the fire problem from the rear. Fire was rapidly spreading up the exterior wall of the original fire building and auto exposing. All five row frame buildings had a rear fire escape. He proceeded to the rear of the original fire building. Fr. Miller L-56 (OV) encountered a problem with the fire escape drop ladder. The drop ladder could not be activated on this building. So, Fr. Miller ascended the fire escape on exposure 2 so he could perform horizontal ventilation on the original fire building by reaching over with his 6 foot hook. As he was performing this task, he heard a loud “crack”. He turned around and saw heavy fire broke out behind him, out of windows on exposure 2A. He immediately transmitted this information to “Command”. He climbed down the fire escape, made his way to the street, and
joined his forcible entry team in the original fire building.

Radio transmissions were now reporting a heavy fire condition in exposure 2 and hose lines were needed immediately. Engine 46, commanded by Capt. James O’Hara, and stretched a hand line to exposure 2. There were radio reports from Ladder 27 of fire in an air shaft between exposure 2 and 2A. E-46 extinguished fire in the air shaft, and then they moved up to the 2nd floor and extinguished fire there. Ultimately, this hose line made it to the 3rd (top) floor to extinguish fire on the top floor and in the cockloft.

Engine 42 commanded by Lieutenant Belgico Rodriguez advanced the third hose line to the top floor of exposure 2. It is there that they operated the third hose line with Ladder 27 and Engine 46. While Engine Companies operated, Ladder 27 performed a primary search and opened up the walls and ceilings so that the hose lines could extinguish the expanding fire. When Battalion Chief Mike Leanza of Battalion 27 arrived, he supervised operations in this building.

Ladder 56’s and Ladder 27’s Chauffeurs positioned their aerial ladders to provide access to the roof and access/egress to the upper floors. Ladder 56 drilled on these buildings and knew where to position the apparatus to overcome the obstacle of overhead power lines. Fr. Scott Doody of L-56 communicated with Fr. Matt Zimpfer of L-27 where to position their apparatus. Both aerials went to the roof and both Chauffeurs placed portable ladders to the 2nd floor of the two buildings.

Ladder 56’s and Ladder 27’s Roof Firefighters gained access to the roof via aerial ladder. It was there they found a
heavy fire condition coming from the air shaft between the original fire building and exposure 2. Fr. Thomas Brick L-56 (roof) radioed that there was heavy fire showing through the roof of the original fire building and exposure 2. They proceeded to vent the scuttles and skylights of these two buildings. Officers and Firefighters working in the fire buildings all commented how effective the vertical ventilation was at these buildings.

Lieut. Michael Conboy of Rescue 3 arrived with his company at box 3146. Initially, they sent a team to the roof to assist in vertical ventilation and the interior team went into exposure 2. They assisted in vent, entry, and search (VES) operations. Then, they were ordered to exposure 2B to determine the limits of fire travel. Lieut. Conboy reported that there was fire in exposure 2B and called for a hand line.

The first Tower Ladder to be dispatched was Ladder 58 on the 2nd alarm. The normal 2nd due Tower Ladder, Ladder 33, was out of service. Ladder 58 arrived and operated in the original fire building with Engine 88. While the inside team was operating, the outside team was setting up L-58’s apparatus to protect exposure 4.

While hose lines were being stretched and searches were being conducted, vertical ventilation was being conducted on the roof. Fr. Brian Browne R-3 (Sq-41 Det.) and Fr. Jim Lowe R-3 joined the Firefighters already operating on the roof. The roof showed heavy fire in the rear. The roof deck
started to ignite as members were cutting ventilation holes in the roof. As they moved away from the original fire building, the roofing near the rear wall started to give way and collapse. Moving as quickly as possible, they crossed over away from the original fire building, cutting and ventilating the cockloft. Every hole that was cut showed heavy fire.

Division 7 was commanded by Deputy Chief Michael Gunning. The 7th Division arrived at 2350 hours. He received his briefing from B.C. Fahy and saw the heavy fire potential in front of them. At 0003 hours, Division 7 reported the following to the BXCO: “We have 4 lines stretched and operating. We have fire in exposure 2 and 2A. Transmit a 3rd alarm.”

Ladder 59 arrived on the 2nd alarm commanded by Captain Ed Boles. They were ordered to enter exposure 2A (a vacant building) and then to exposure 2B (occupied building). L-59 found a heavy smoke condition on the top floor of exposure 2B and called for a hand line. Engine 43 commanded by Capt. Paul Newman stretched an 1 ¾ inch hand line to the top floor to operate with L-59. Engine 45 commanded by Lieut. Scott Deo arrived and stretched a hand line to exposure 2A and operated there. Engine 75 had assisted in getting hand lines into
position in exposure 2. They then assisted Engine 43 in getting their hand line into position in exposure 2B.

Engine 50 commanded by Lieut. William Peponakis, arrived at the box as a 3rd alarm engine. They were ordered to stretch a hose line to the rear of the buildings to extinguish heavy fire moving along the rear walls and to protect exposure 3. Engine 82 assisted Engine 50 in the stretch.

Events were happening quickly. Hose lines were being called for at a pace that was difficult to keep up with, even with the third alarm recourses.

Fr. Brian Browne R-3 (Sq-41 Det.) was the senior Firefighter on the roof. He and the other members working on the roof kept cutting, venting and moving away from the original fire building. Finally, they arrived at the last building, exposure 2C. Fire was coming out of every hole that was cut and smoke was pushing out of every crevice. Fr. Browne told the members on the roof that it is time to evacuate the roof. Fr. Doody L-56 (Chauffeur) was able to reposition the stick of an aerial ladder to assist in the evacuation of the members on the roof.
D.C. Michael Gunning Division 7 saw, despite the best efforts of the operating forces, the 5 row frame buildings were not going to be saved. Smoke was starting to show at attached 2-story wood frame buildings beyond the 5 row frame buildings (exposures 2D, 2E, 2F, and 2G). D.C. Gunning decided to go to an exterior attack. A roll call was conducted to make sure everyone was out. Once this was assured, Tower Ladders 44, 58, and 33 began their outside attack.

While hooked up to the hydrant on the corner of Valentine Avenue and E. 180 St., Engine 48 was in a perfect position to utilize their apparatus mounted multiversal nozzle to keep fire from encroaching upon two multiply dwellings, exposure 4 and 4A. Fr. Kevin Adams initiated this and got approval from “Command” to use this master stream.
Despite hours of arduous firefighting, the five row frame buildings were destroyed by the fire. In addition, 4 attached 2-story row frame buildings (exposures 2D, 2E, 2F, 2G) sustained fire damage. Buildings on the exposure 3 (Tiebout Avenue) side of suffered some damage due to the radiant heat, but were saved. The advanced fire on arrival, the combustible construction, and the common cockloft all contributed to the massive amount of fire destruction. This fire eventually went to a 6th alarm.


Inspiration: Retired Deputy Chief Vincent Dunn is a nationally known expert in building construction and their collapse. He commented on the January 2016 newsletter about the “Wooster Street Collapse”: “The Wooster Street experience was the start of my obsession with burning building collapse.”
Row Frame building fires are notoriously fast moving. The characteristic that is common in all these buildings is the common cockloft. If a row of frames has a fire in a common cockloft, they may as well be considered one gigantic building with individual addresses.

Many times at Row Frame building fires, there is a delayed alarm. It is not unusual to be playing “catch-up” to an expanding fire situation upon our arrival. It is important to be pro-active in transmitting additional alarms.

Apparatus positioning is critical at Row Frame Building fires. Aerial ladders must be positioned so that roof access is assured. Tower Ladder placement is vital. Properly positioned, one Tower Ladder can cover 5 row frame buildings. Ideally, the aerial ladders should be placed at the ends of the row with a Tower Ladder in the center of the row. Multiple alarm engine companies should stay out of the fire block unless ordered. Make sure all engine companies have a good hydrant.
Fire ground

At these fires, once a hose line is in position, it does not need the services of two engine companies to staff it. The Engine Company that was assisting in the stretch should return to the street to see if the Incident Commander needs a hose line stretched elsewhere. It was difficult to keep up with the need for hose lines at this massive, expanding operation.

If a Tower Ladder is not initially available to be positioned in the center of a row of frames, the apparatus mounted multiversal nozzle on Engine Company apparatus is a good option for a master stream.

Thinking One Step Ahead

Row frame building fires can be considered “three dimensional.” You could have a fire within the occupancy, you could have a fire in the voids, and you could have a fire on the exterior walls.

Fires in the cockloft of Row Frames may necessitate skipping a building to get ahead of the fire. The Incident Commander may be faced with the decision to skip the buildings. If conditions dictate skipping a building, and it is not skipped, the entire row of buildings may be lost.
Command Priorities

The “Command Priorities” at Row Frame building fires is; 1. Life, 2. Exposures, 3. Confinement, 4. Extinguishment. The life hazard at these fires cannot be overemphasized.

After the life hazard, the major concern with these fires is horizontal extension. This is true particularly if the fire gets into the cockloft. However, fire can also be transmitted horizontally by common walls, voids between walls and beams abutting each other. Many of these buildings also have common cellars.

It is important for Ladder Companies to confine the fire as much as possible. When fire is near the apartment door, make sure the door is closed while waiting for a hose line. If the opening does not have a door, remove a door on a non-fire room and confine the fire with the removed door.

The building may or may not have a secondary means of egress. A heavy emphasis of laddering the building with portable ladders is essential. There is a possibility of a life-saving rope rescue in the rear of these buildings.

Ventilation at the roof level is critical at row frame building fires. Removal of skylights and scuttle covers provides initial ventilation of the top floor. Removal of the “returns” of the skylight and scuttle will help to determine if fire has entered the cockloft. It will also provide an initial vent for the cockloft. Do not remove the “returns” remote from the fire. If you do, it will draw the fire toward the remote location.

When cutting the roof with the power saw, cut as close to the main body of fire as possible. Once the hole is cut, keep expanding it. It is far better to have a large hole than several smaller holes. Cutting a hole will help to limit horizontal extension in the cockloft.
Cockloft

When we have a fire in the cockloft, we must try to define the boundaries of the fire. Ideally, we could stretch hose lines to the exposed buildings, pull the top floor ceilings from the front to the rear (after vertical ventilation is conducted) and sweep the cockloft with hose streams from the top floor. We would then advance the hose lines to the next building by breaching the walls.

When on the top floor, Ladder Companies can determine if there is fire in the cockloft by opening a small hole in the ceiling. A small hole is opened by inserting the handle end of the hook into the ceiling. Do not expand the hole until the roof is opened and a charged hose line is in position.

Prior to opening the top floor ceiling at cockloft fires, vent the windows. Once the ceiling is opened, smoke will bank down from the cockloft.
At row frame cockloft fires, a Roof Sector Chief is important. The Roof Sector Chief can be the communications link between the roof and the Command Post. The Roof Sector Chief must have all the members on the roof working in concert to accomplish vertical ventilation and to observe the changing conditions on the roof.

Cutting a trench cut at these fires is **NOT** productive. There are not any non-combustible areas to be used as boundaries in these structures. Efforts by Firefighters on the roof would be much more efficient by cutting large holes as close as possible to the main body of the fire. The fire moves too quickly to cut a trench from the front wall to the rear wall. Remember, cutting a trench is a defensive tactic. Cutting a hole over the fire is an offensive tactic. When we cut and open a trench, we are saying: “We are giving up the fire side of the trench.” When we open a trench, all members must be removed from the fire side of the trench on the roof.
Roof Safety

When operating on the roof, constantly evaluate what your means of egress is from the roof. Fire moves rapidly in these buildings and it is possible to have your access to an aerial ladder be cut off.

When gaining access to the roof of a row frame building fire, use the aerial or tower ladder. This gives the Incident Commander visual assurance that the roof position was reached. Also, going up a scuttle ladder from an exposure is too dangerous. The fire could break out from the returns of the scuttle while climbing through it. When operating on the roof, keep in mind that you are the eyes for the Incident Commander. Be prepared to give a report via handi-talkie of the conditions on the roof and the rear of the building.

At Row Frame building fires where the Chauffeur is not performing Vent Entry Isolation Search (VEIS) on the top floor, it is important that Chauffeurs of Aerial Ladders be in position to move their ladders to remove trapped Firefighters. If a Chauffeur is performing another task (i.e.: raising portable ladders), he/she must be able to return to the pedestal. Chauffeurs of Tower Ladders must remain at the pedestal of their apparatus.
It is important to know what the conditions are in the rear of these buildings. Heavy fire coming from the windows or on the exterior walls in the rear can transmit fire to the buildings on the next street. Fire can be transmitted by radiant heat, and/or flying brands. Hose lines must be stretched to the rear of these buildings to protect these exposures.

Command and Resources

The use of the Satellite Unit at these fires would be advantageous. These fires require that numerous hand lines be stretched. The Satellite Unit could deploy their manifold with the large diameter hose. Multiple alarm units could report into the fire with a controlling nozzle and rolled-up lengths of hose and connect to the manifold.

It is absolutely vital that the Command Board be current and accurate. All Officers MUST have the Command Board adjusted when they receive orders or they are relieved from operations.
Many of these buildings have air & light shafts between buildings. If a fire has extended to the air shaft, it is important for a hose line to make access to the shaft at a lower floor and direct the stream upward to knock the down the fire.

If a row frame building has a fire escape attached, its stability must be constantly checked before use. The fire escape anchor points are combustible and the fire escape can pull away from them when exposed to fire. Or, the weight of the fire escape can pull down a wall.

All multiple alarm engine companies should report in with their “Clorox Bottle rope”. No more than two hand lines can be committed to stairways.

These buildings can be constructed with either the braced fame method or the balloon frame method. If it is a braced frame building, and the fire is on the first floor, failure of the mortise and tenon joint at the first floor ceiling is a possibility. This is true particularly if it is a corner building.

It is important to review Firefighting Procedures Brownstone and Row Frame Buildings. This document has a wealth of information and includes Ladder Company and Engine Company assignments for these fires.

This was the brick building in-between the 3 story frames and the 2 story frames, Note this is only a brick façade the building is an all wood frame construction