



**FIRE DEPARTMENT CITY OF NEW YORK
SAFETY AND INSPECTION SERVICES COMMAND**

INVESTIGATIVE REPORT

BRONX BOX 2-2-3732

300 WEST 234 STREET

SEPTEMBER 27, 2016

CASE NUMBER SB 13/16

FATAL INJURY

**BATTALION CHIEF MICHAEL J. FAHY
BATTALION 19**

VOLUME I

THE INVESTIGATION

VOLUME I

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I. SUMMARY

On Tuesday, September 27, 2016 the New York City Fire Department's Bronx Communications Office received a Unified Call Taker (UCT) alarm reporting a gas leak at West 234 Street and Irwin Avenue. Bronx Box 3732 was transmitted at **0622 hours**. The initial response was two Engine Companies, two Ladder Companies and one Battalion. The normally assigned first alarm companies were not available. Engine Company 95, Ladder Company 36 and Battalion 19 responded to the alarm in emergency mode. Engine Company 79 and Ladder Company 37 responded in modified response mode. Engine Company 95 and Ladder Company 36 arrived at the reported location at **0630 hours**. At **0635 hours** the Ladder Company 36 Officer notified Battalion Chief Michael J. Fahy of Battalion 19 that the gas leak was located at 300 West 234 Street. Standard Operating Procedures were initiated for a natural gas leak.

NOTE: For the purpose of this report, the term "natural gas leak" and "gas leak" are interchangeable.

The building was a two story Class 3 non fireproof private dwelling with a flat roof and a basement. The building dimensions were approximately 20 feet wide by 40 feet deep. It was located on the southwest corner of West 234 Street and Tibbett Avenue and was attached on the exposure #4 side. The cause of the natural gas leak was a failure of the high pressure gas service line inside the basement before the head of service valve. Responding units reported smelling gas from several blocks away as they approached the incident location.

The dwelling had marijuana grow rooms on the 2nd floor and in the basement. There were at least four grow rooms containing numerous marijuana plants. The doors and windows of each grow room were sealed tight with foam insulation.

The Bureau of Fire Investigation determined that the water and electric services were illegally compromised before their respective meters.

Battalion Chief Fahy was struck with debris as a result of a natural gas explosion that occurred on the 2nd floor while commanding operations from the street outside the building. He was transported to New York- Presbyterian/Allen Hospital where he succumbed to his injuries.

As a result of the investigation, the Safety and Inspection Services Command makes the following recommendations:

1. Amend Fire Department procedures to require the identification and designation of an appropriate Danger Zone at every major gas leak.
2. Reinforce Fire Department procedures found in *Hazardous Materials & Emergency Response Plan Addendum #3 Explosive or Incendiary Incidents section 8.7*.
3. Amend *Emergency Procedure Natural Gas section 4.4 to include*: When operating in an IDLH, the number of exposed personnel should be kept to a minimum.
4. Develop alternative ventilation tactics to be used when conventional methods are not practical due to safety concerns.
5. Amend *ABC 2-2011 Modified Response Program* that when additional information regarding the incident is received confirming a gas leak, the 10-20 response should be cancelled and have all units respond in emergency mode.
6. Amend *Emergency Procedures Natural Gas Addendum 2 MSA Altair Digital Gas Meter* to include the proper procedure for resetting the Altair as per the manufacture's instruction manual.
7. Develop a training program to incorporate operations at gas emergencies, and include the proper operation of meters carried by field units.
8. Research the feasibility to procure meters capable of transitioning from percentage of the LEL to actual gas in air concentration.
9. Amend *Emergency Procedure Natural Gas section 4.4 tactics section second bullet* to require the transmission of a 10-75 when in the judgment of the Incident Commander units are operating at a major gas leak.
10. Amend *Emergency Procedures Natural Gas section 4.4 Major Indoor Gas Leak* to include the notification of the utility companies' electric division to respond and request an ETA.

11. Develop a training program to incorporate *Communications Manual Chapter 14 Addendum 1* which now provides direct handie-talkie communications between FDNY members and EMS (ALS, BLS) units on the scene.
12. Chief and Company Officers must ensure strict compliance with the policy outlined in *AUC 220 Self Contained Breathing Apparatus* as it pertains to operating in an IDLH atmosphere.
13. Re-emphasize the importance of the use of the helmet chin strap.
14. Amend *AUC 310 Personal Protective Clothing* to include that the helmet chin strap is ready for immediate use.
15. Amend *AUC 337 Chief Officer Operational Checklist* to include a checklist for a major gas leak.
16. Amend *Communications Manual Chapter 4 Critical Information Dispatch System (CIDS) Section 4.3.2* to include buildings with high pressure gas service.
17. Develop a program in conjunction with the utility companies that operate within the city, to obtain the location of high pressure gas service, shutoffs, etc. throughout the city, for inclusion into the CIDS program and provide this information to FDNY GIS units for mapping purposes.
18. Eliminate the use of the term “member of service” (MOS) when describing members of the FDNY.
19. Amend Fire Department Procedures to include the transmission of meter readings taken at the scene of a gas leak to Con Edison Gas through the Fire Department Dispatcher.
20. Develop a policy where the Incident Commander can make direct contact with the Gas Emergency Response Center (GERC) using a cell phone prior to the arrival of Con Edison Gas. A similar policy should be created with National Grid’s Dispatch and Scheduling (D&S).

II. BACKGROUND

Modified Response Program

The Modified Response Program as it relates to this operation required units other than 1st due to respond in the 10-20 mode. In this response mode, all traffic regulations are to be followed. Engine Company 79 and Ladder Company 37 were responding without lights and sirens. The intent of the program is to provide an increased measure of safety to both firefighters and civilians. According to the NFPA (National Fire Protection Association), units responding using lights and sirens have a three times greater risk of being involved in an apparatus accident than units not utilizing lights and sirens.

The modified response program has been adopted citywide. The policy goal is to increase responder and civilian safety by reducing accident exposure while still providing a high level of service to the public.

When a Battalion Chief or Company Officer receives additional information regarding the incident from the dispatcher or conditions found at the scene will require the 2nd due units to operate, he/she may cancel the 10-20 response mode. The dispatcher shall announce that the 10-20 response is cancelled and that all units should respond in emergency mode. The first arriving officer will evaluate the incident and transmit the appropriate signal, when applicable. Based on the signal transmitted, responding units not on the scene will either continue into the incident or be placed 10-8 (in-service).

Residential Marijuana Grow Houses

Growing marijuana plants within private residences presents potential risk to the occupants, homeowners, and neighbors of these residences, as well as to first responders who may be called to them. It can cause extensive damage to the houses where they are maintained and are increasingly the causes of house fires, blown electrical transformers, and environmental damage.

Indoor marijuana plants can grow as tall as six feet and yield more than a pound of harvested marijuana every 90 days. Growing them requires specific conditions that consume high levels of electrical power and water which results in the drainage of chemical-laden waste water. Grow rooms are maintained at temperatures between 75 and 95 degrees Fahrenheit. At certain times during the growing cycle, plants must remain under high-power grow lights for 24 hours a day. Fertilizers and pesticides, sometimes

harsh ones, are required to grow robust and healthy plants. At times in the growing cycle, each plant can require three or more gallons of water per day.

Homes where marijuana is grown often sustain extensive structural damage. Moisture, condensation, and mold spread throughout the residence. Growers often cut holes in floors and exterior walls in order to install ventilation tubes. Growers tamper with electrical systems in order to supply multiple high-power grow lights and industrial air-conditioning units. These alterations are often done by tenant growers with little regard for fire risk or the home's structural integrity. This is an increasing concern for first responders.

Consolidated Edison Company of New York, Inc.

Consolidated Edison Company of New York, Inc. (Con Edison) is one of the largest gas, steam and electric power systems in the world, providing service to more than 3 million customers in New York City and Westchester County.

Con Edison owns and distributes natural gas in the City of New York to approximately 833,000 customers in Manhattan, the Bronx and northern sections of Queens. They receive natural gas at several delivery points, called metering stations where the pressure is reduced and fed into the company's 2,234 miles of city gas mains for delivery to its customers. Sections of the city not covered by Con Edison are serviced by National Grid.

Natural gas is delivered via pipeline to New York City at approximately 700 to 1400 psi. Pressure is regulated down to 240-420 psi for transmission gas mains and then regulated to lower pressures for distribution mains. Distribution gas mains are run under the street and deliver either:

- High pressure (60-90 psi)
- Medium pressure (3-15 psi)
- Low pressure (¼ psi)

Note: Pressures may vary based on other factors such as service demand and infrastructure improvements including new piping.

Gas service pipes branch off of the distribution mains to deliver gas to individual customers. High and medium pressure gas is regulated down to ¼ psi before it passes through the customer's meter. A minority of customers, particularly industrial and commercial facilities, may use full line pressure.

Con Edison maintains a Gas Emergency Response Center (GERC) based in the Bronx to oversee and control emergencies as they happen. GERC will assign specially trained personnel to respond to the scene. They can communicate valuable information necessary for mitigation efforts to assist responding agencies. National Grid staffs a similar response center called Dispatch and Scheduling (D&S) and is based at 1 Metro Tech Center in Brooklyn.

Properties of Natural Gas

1. Natural gas is comprised mainly of methane but also contains ethane, propane and nitrogen.
2. Colorless.
3. Odorless.
 - Mercaptan is added to natural gas, giving it a distinctive rotten egg odor.
 - Mercaptan can be removed from natural gas as it passes through soil. It can also be masked by other odors, or stripped by other chemicals. This process is known as odor fade.
 - You can become desensitized to the odorant over time and may no longer smell it, even if natural gas is still present.
 - Always test for the presence of natural gas with a combustible gas detector.
4. Lighter Than Air.
5. Explosive Range is 5% - 15% (5% indicates Lower Explosive Limit or the LEL).
 - If natural gas in the explosive range ignites in a confined location, it will explode with destructive force.
 - When unconfined (outdoors): natural gas will ignite, not explode.
6. Ignition Temperature - 1163 Degrees Fahrenheit.
7. Non-Toxic.
8. Asphyxiant - While non-toxic, natural gas in sufficient quantity can displace the oxygen in an enclosed space and cause asphyxiation.

Altair Operation

MSA ALTAIR DIGITAL GAS METER

The MSA Altair Digital Gas Meter has been issued to all Engine and Ladder Companies to increase their operational effectiveness in dealing with incidents involving natural gas. The meter does not replace existing TUFF Detectors, but should be used in conjunction with the TUFF Detector, if available, as each instrument possesses its own unique capabilities.

The MSA Altair Digital Gas Meter is equipped with two sensors; one for combustible gas and the other for oxygen. The meter is calibrated to methane, the major component of natural gas. Although the meter is capable of detecting other combustible gases, the displayed readings will not be accurate. For this reason, the meter should NOT be used to detect gases other than oxygen and natural gas.



METER OPERATION

Before turning the meter on, the member must be in an area free of contamination. To turn the MSA Altair Digital Gas Meter on, press the power button located in the center of the meter above the LCD screen. When the meter is powered on it will run through a self-check test which takes approximately 40 seconds. During this test the meter will momentarily activate all three alarm types (audible, visual and vibrating) and the display will scroll through several LCD screens. One screen will display “FAS” prompting the user to perform a “Fresh Air Setup”. Press the power button again to

perform the FAS (ensure the meter is in an area free of contamination). The FAS is used to “zero” the LEL (Lower Explosive Limit) sensor to ambient air. Not performing FAS may affect the accuracy of meter readings. The FAS can be bypassed by either pressing the reset (up arrow button (^)) button or waiting 10 seconds.

THE COMBUSTIBLE GAS SENSOR

Normal air readings should display 0.0% LEL (Lower Explosive Limit) on the meter LCD screen. The action level for indoor operations is 10% LEL and 20% for outdoor operations. A series of crosses under the COMB/EX icon which appears on the screen indicates the atmosphere is above 100% LEL. This is an extremely dangerous atmosphere as it is indicative of a potentially explosive environment that members should not operate in except for life saving purposes.

THE OXYGEN SENSOR

The LOW alarm (oxygen deficient) is latching and will not automatically reset when the oxygen concentration rises above the low set point (19.5%). To reset the alarm, press the reset button. If the condition still exists, pressing the reset button will only reset the alarm for five seconds.

MANUFACTURE RESET PROCEDURE

The Altair can be reset by pressing the up arrow button (^), above the LCD screen, as long as it has not gone into lock alarm state.

When gas readings reach 100% of the LEL, the instrument enters a Lock Alarm State, the combustible sensor shuts down and displays a series of crosses in place of the actual reading. This state can only be reset by turning the instrument off and then back on in a fresh air environment.

After consulting with an engineer at MSA, it was discovered that once the meter enters the lock alarm state (a series of crosses), pressing the reset button will only temporarily silence the alarm’s horn and vibrate motor for 15 seconds. It will then revert back to full alarm mode.

III. THE INVESTIGATION

On Tuesday, September 27, 2016 at **0622 hours**, Battalion 19 responded to a gas leak in a private dwelling at 300 West 234 Street in the Borough of the Bronx. While operating at Bronx Box 2-2 3732, Battalion Chief Michael J. Fahy sustained fatal injuries. He was on duty for twelve hours before responding to Bronx Box 2-2 3732.

Battalion Chief Fahy was appointed to the New York City Fire Department on May 9, 1999. As a Firefighter he was assigned to Engine Company 35. On January 20, 2001 he participated in the Firefighter Rotation Program and was detailed to Engine Company 224. On December 8, 2001 he returned to Engine Company 35 and on August 9, 2003, transferred to Ladder Company 14. He was promoted to the rank of Lieutenant on July 31, 2004 and was assigned to Engine Company 83 on March 25, 2006. He was promoted to the rank of Captain on November 3, 2007 and was assigned to Division 1. Michael Fahy was promoted to Battalion Chief on June 2, 2012 and was assigned to Battalion 19 on March 14, 2015. He was posthumously promoted to Deputy Chief on September 26, 2016. His rank of Battalion Chief will be used in this report.

Safety Battalion 1 was dispatched to Bronx Box 2-2 3732 at **0736 hours** on the transmission of the 2nd alarm. The Safety Chief arrived at **0814 hours** and was informed of a serious injury to a member who had already been transported to the hospital. The Safety Chief immediately notified Assistant Chief Paul Cresci, the Chief of Safety and Inspection Services Command. Chief Cresci implemented AUC 314, "Incident Command and Safety Investigations." The Chief of Safety ordered the activation of both on and off duty trained Safety Chiefs and Safety Technicians to assist in the investigation.

The Safety Chiefs and Safety Technicians were formed into work groups and given specific assignments. These assignments included documenting the scene, collecting physical evidence and conducting interviews.

During the course of the investigation the following items, records, documents, videos and photographs were collected, examined and evaluated:

1. Interviews with FDNY members who operated at the scene
2. Interviews with members of the New York City Police Department (NYPD) who operated at the scene
3. Interviews with members of Con Edison Gas
4. Interviews conducted by the Bureau of Fire Investigation
5. Interviews with emergency room personnel
6. Interviews with Mine Safety Appliances (MSA) personnel
7. NYPD 911 telephone recordings
8. FDNY Bronx Dispatcher audio recordings and transcripts
9. FDNY Battalion Handie-Talkie audio recordings and transcripts
10. Electronic Fireground Accountability System (EFAS) transcripts
11. FDNY Incident History printout
12. Bureau of Fire Investigation report
13. NYC Department of Buildings records for 300 West 234 Street from the Department of Buildings website
14. Report from the Office of the Chief Medical Examiner
15. Riding Lists (Electronic BF-4)
16. Official weather report
17. Computerized Injury Reporting System (CIRS)
18. NYPD surveillance video
19. Civilian cell phone video
20. New York Fire Incident Reporting System (NYFIRS) report
21. Photographs of the fire building, fire operations and equipment
22. Sketches, notes and drawings made from the scene

In addition the following resources were used:

1. FDNY Bureau of Communications
2. FDNY Audio Visual Unit
3. FDNY Bureau of Fire Investigation
4. FDNY Bureau of Training
5. FDNY Building Inspection Safety Program Unit

6. FDNY Hazardous Materials Unit
7. FDNY Document Control Unit
8. FDNY Emergency Medical Services
9. NYC Department of Buildings
10. NYC Police Department
11. New York Presbyterian/Allen Hospital

Information from interviews with the members, handie-talkie recordings, Electronic Fireground Accountability System (EFAS), physical evidence, photographs, incident history printout, audio/video tapes, knowledge and experience of the Safety Investigation Team were used to complete the investigation.

As with any investigation of this magnitude and gravity, there may be inconsistencies and conflicting statements among members interviewed. It is the collective opinion of the Safety Investigation Team that these inconsistencies are the result of differing perspectives, varying memories and emotional factors. They do not result from any attempt to intentionally mislead, distort or conceal facts. The Safety Investigation Team conducted 55 interviews with members who operated at the scene and those in support positions.

The Handie-Talkie Recorder System is set up in every Battalion Vehicle to capture transmissions made at the scene. The quality of these transmissions is dependent on many factors such as the location of the Battalion Vehicle, radio frequency drift, the type of building construction, heat and atmospheric conditions, the position of the antenna, and battery power. Due to these factors, each recorder may capture clearer and in some cases different transmissions. Furthermore, these recorders captured transmissions that may not have been received by Commanders and Firefighters on the fireground. This report is based in part on Battalion 19's recorder at the scene. This recording was analyzed at different speeds to clarify what had been recorded. Additionally, listening to audio in a quiet, sterile environment differs greatly from the ambient noise that occurs at fire operations.

The EFAS System is designed to improve accountability of members on the fireground. In addition, it accounts for almost all handie-talkie push to talk activations.

The purpose of this Safety Investigation is to aid in the New York City Fire Department's continuing effort to increase and ensure the safety of its members. To that end, subsequent to an event where a member of the Department is fatally injured an investigation is conducted to assess whether any modification is needed to operations, training or equipment. Upon conclusion of the investigation a report is put together outlining the findings and any recommendations. These will then go hand in hand to reflect a post incident analysis intended to identify any subsequent measures that may be needed. This investigation is not intended to imply a finding of fault or negligence on the part of the New York City Fire Department. Furthermore, the content of this report should not be construed as an admission by the New York City Fire Department, or its members, of fault or negligent conduct. Rather, this report is intended to capture the uniqueness of each incident and puts into context the judgment and discretion that our members are entrusted with while discharging their duties.

IV. PHOTOGRAPHS



Exposure #1



Exposure #1/2 Corner



Exposure #1/2 Corner Post Explosion



Exposure #2 Post Explosion



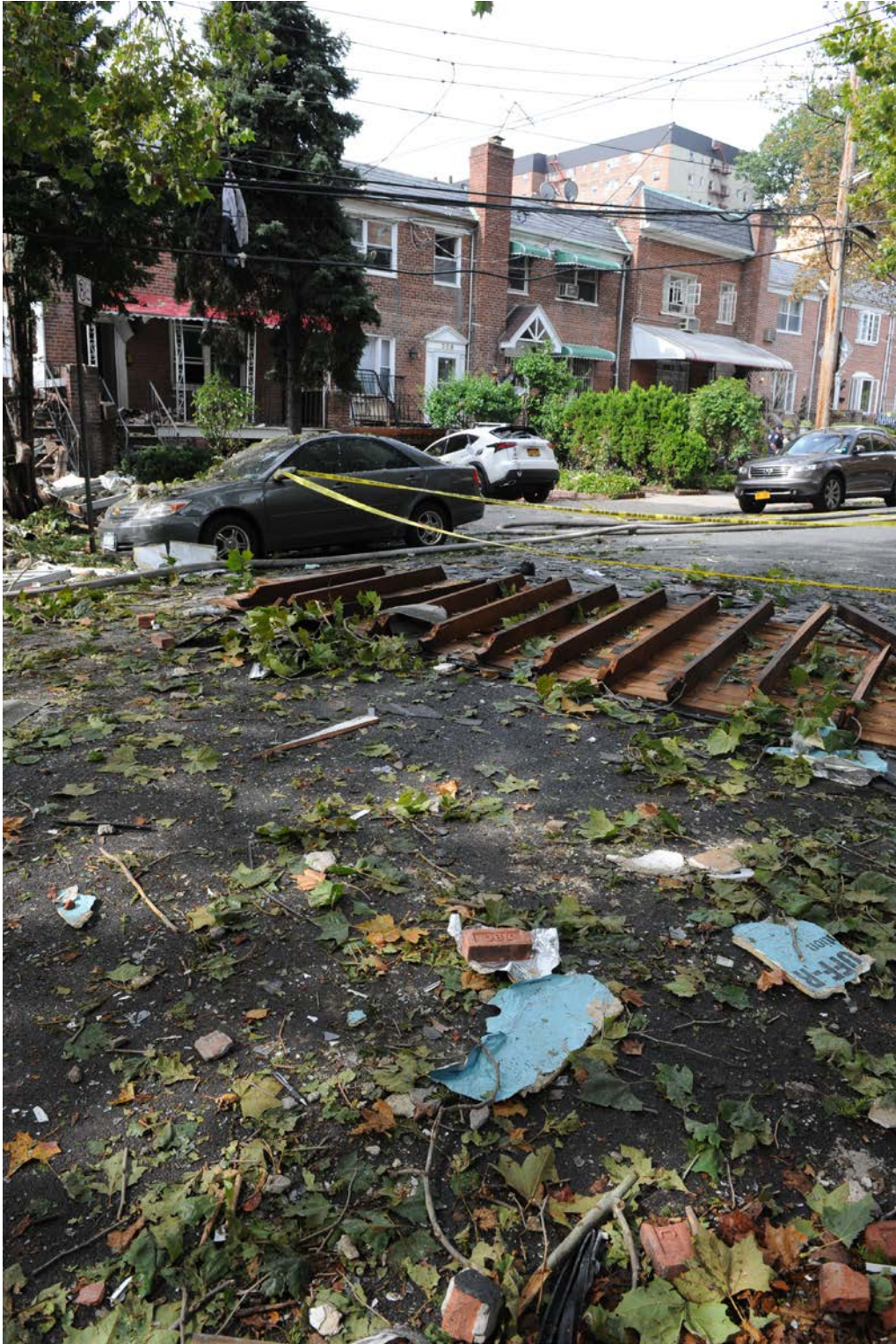
Electrical Sub Panel Illegally Installed on the 2nd Floor



**Exposure #1/2 Corner
Location of Command Post**



Exposure #3



Roof Section That Struck Battalion Chief Fahy

V. THE BUILDING

The building located at 300 West 234 Street was a two story Class 3 non fireproof private dwelling with a flat roof and a basement. It was constructed in 1940. The building dimensions were approximately 20 feet wide by 40 feet deep. It was a corner building attached on the exposure #4 side. The 2nd floor consisted of three bedrooms and a bathroom. The dwelling was an illegal marijuana grow house with numerous grow rooms located inside. The Department of Building's Certificate of Occupancy was not available. The Department of Finance listed the building as a one family dwelling.








The exposures were as follows:

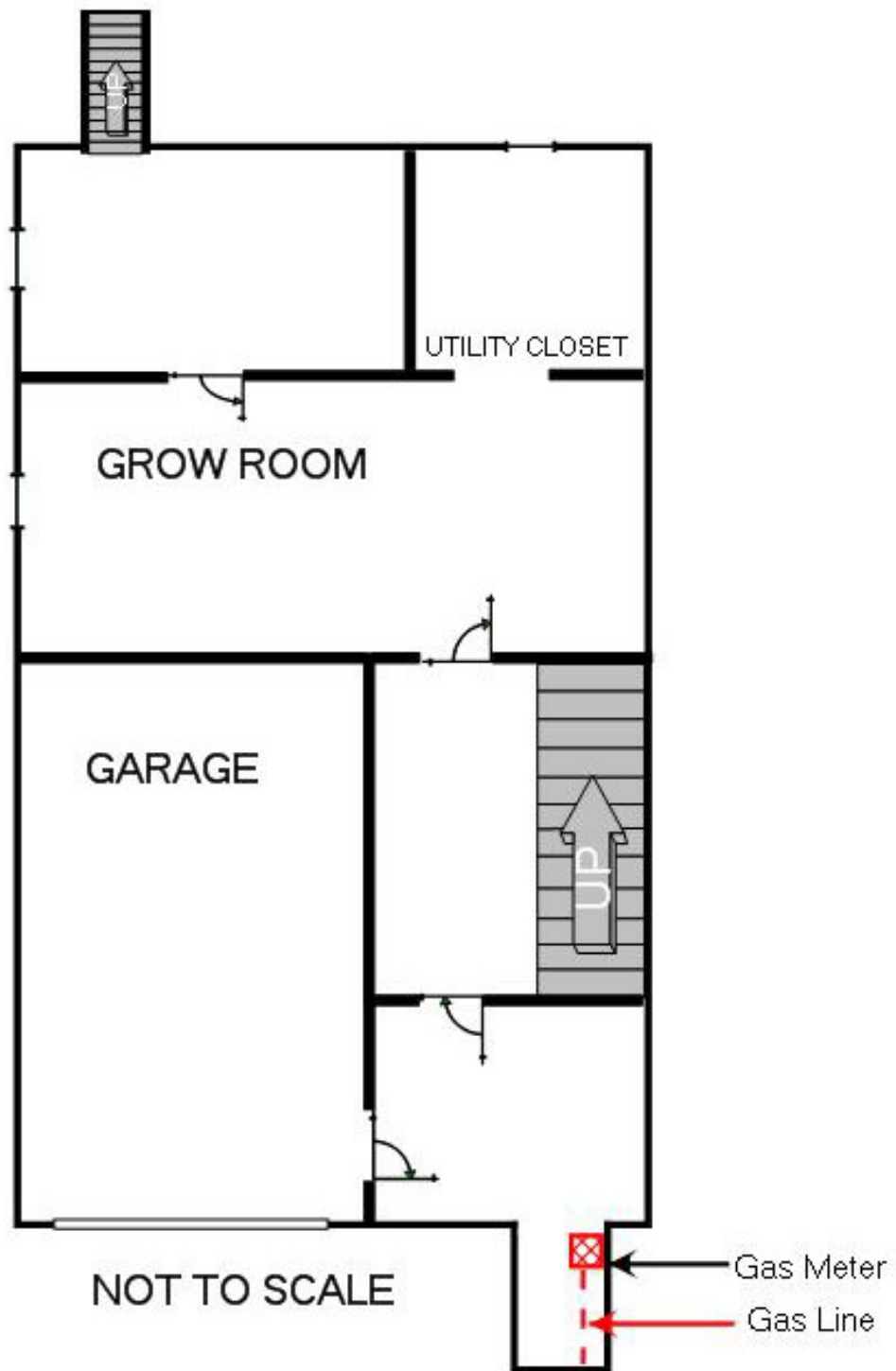
- Exposure #1 – West 234 Street
- Exposure #2 – Tibbett Avenue
- Exposure #3 – Rear Yard
- Exposure #4 – Two Story Similar Attached

Bronx 2-2 Box 3732: Tuesday 09/27/2016
300 W 234 St.

FDNY GIS: WBronx02 - BXBX_2ndAlarm_3732_fataltyBX_2ndAlarm_3732_EXPI_11x17.mxd

-  Hydrants
-  Sidewalk
-  300 W 234 St.
-  304 W 234 St.
-  Building Footprints

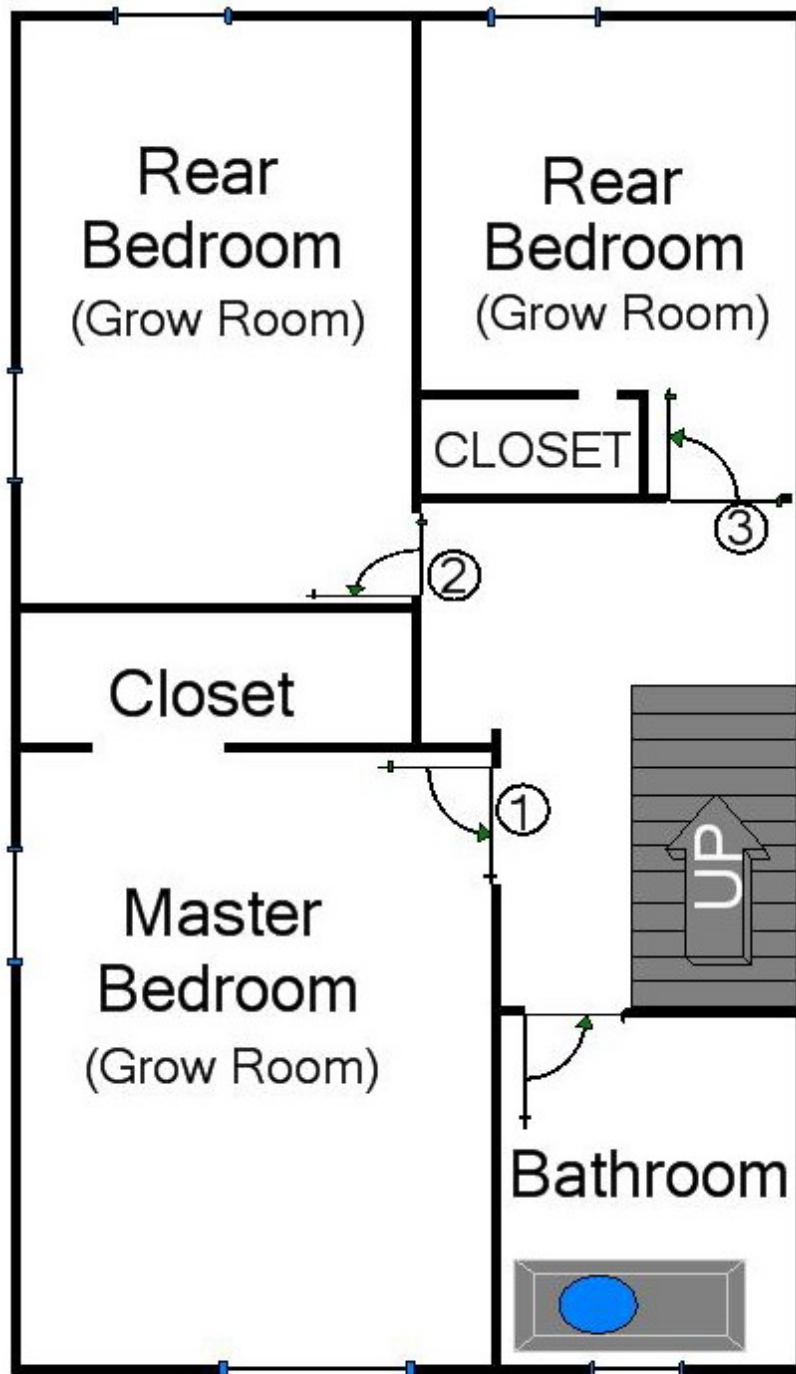




Basement



1st Floor



55 Gallon Drum In Bathtub

NOT TO SCALE

2nd Floor

VI. FDNY OPERATIONS

On Tuesday September 27, 2016 at **0622 hours**, the New York City Fire Department's Bronx Communication Office received a Unified Call Taker (UCT) alarm reporting a gas leak at West 234 Street and Irwin Avenue.

At **0622 hours** Engine Company 95, Engine Company 79, Ladder Company 36, Ladder Company 37 and Battalion 19 were assigned to respond. The Engine Companies assigned on the 1st alarm were staffed with an Officer and four Firefighters. The Ladder Companies were staffed with an Officer and five Firefighters. Engine Company 79 and Ladder Company 37 responded as per our modified response policy.

At **0628 hours** the dispatcher contacted the 1st due units and provided them with an additional location of West 234 Street and Broadway. Engine Company 95, Ladder Company 36 and Battalion 19 were redirected to this location.

The fire building was located at 300 West 234 Street. It was a two story Class 3 non fireproof private dwelling with a flat roof and a basement. The building dimensions were approximately 20 feet wide by 40 feet deep. It was located on the southwest corner of West 234 Street and Tibbett Avenue and was attached on the exposure #4 side.

There was no CIDS (Critical Information Dispatch System) information for the fire building.

The exposures were as follows:

- Exposure #1 – West 234 Street
- Exposure #2 – Tibbett Avenue
- Exposure #3 – Rear Yard
- Exposure #4 – Two Story Similar Attached

The temperature was 64° Fahrenheit with variable winds averaging 3.5 miles per hour and intermittent light rain.

INITIAL OPERATIONS

At **approximately 0629 hours** the Ladder Company 36 Officer turned on the MSA Altair 4X Multigas Detector (Altair).

At **0630 hours** Engine Company 95 and Ladder Company 36 arrived at the intersection of West 234 Street and Broadway.

At **0632 hours** Battalion 19 arrived at West 234 Street and Broadway.

At **0632:37 hours** the Ladder Company 36 Officer informed Battalion 19 via handie-talkie, ***“Just checked 234 and Broadway, nothing going on there, we’re going to head up to Tibbett.”***

Engine Company 95 arrived at the intersection of West 234 Street and Tibbett Avenue. The Engine Company 95 Officer heard a loud hissing sound and smelled a strong odor of gas emanating from the house on the southwest corner. He instructed the Engine Company 95 Chauffeur to pull the apparatus past the building and locate a hydrant at the end of the block.

At **0633 hours** Ladder Company 36 entered the block and stopped the apparatus in front of 300 West 234 Street. Battalion 19 arrived on the scene and parked their vehicle on West 234 Street just east of Tibbett Avenue.

At **0634 hours** the Ladder Company 36 Officer also noted a loud hissing sound and strong odor of gas coming from the corner building. He believed the sound of the leak was coming from the basement of 300 West 234 Street. He observed a peck vent coming through the side of the front stoop. He held his Altair directly under the peck vent and it registered a zero reading of natural gas.

At **0635 hours** the Ladder Company 36 Officer notified Battalion Chief Fahy via handie-talkie that the address of the leak was located at 300 West 234 Street (the fire building). The Ladder Company 36 Can Firefighter attempted to gain access via the front door.

The Engine Company 95 Officer turned on his Altair.

At **0635:43 hours** Battalion 19 notified the Bronx Dispatcher via Department Radio, ***“Can we start out Con Ed Gas. We’re using one and one with the rest fast. We have a leak outside of 300 West 234 Street, that’s on the corner of 234 and Tibbett.”***
(See Diagram 1)

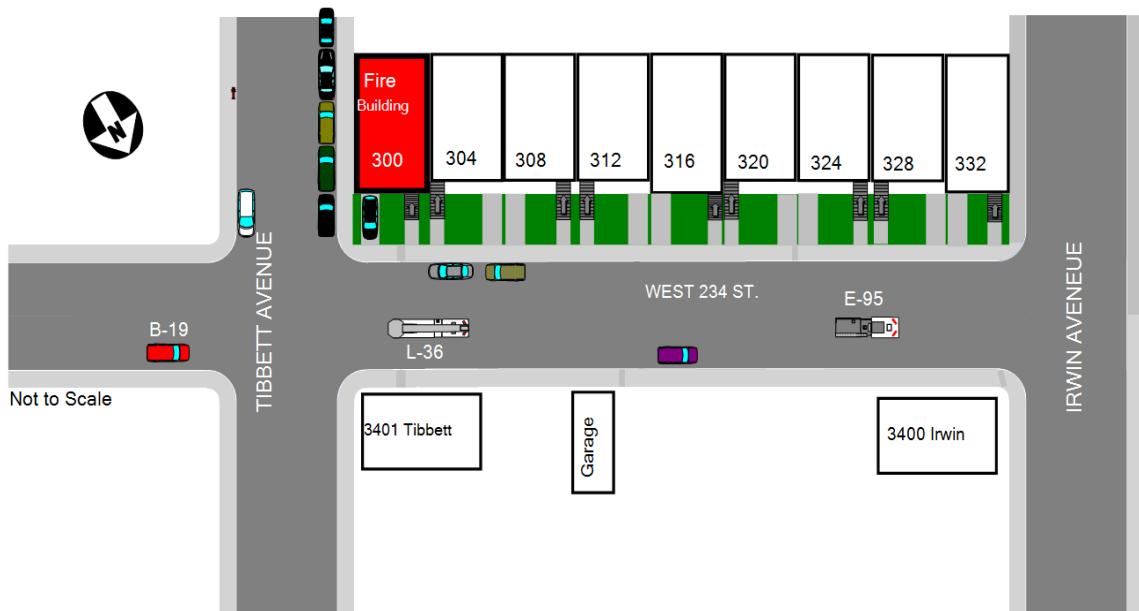


Diagram 1
Initial Apparatus Placement

At **0636 hours** the Engine Company 95 Officer placed the Altair directly under the peck vent and it also registered a zero reading for natural gas.

At **0637:00 hours** the Ladder Company 36 Officer notified Battalion Chief Fahy via handie-talkie, *“36 to 19, we were knocking on the door. We didn’t get an answer. We have a curb valve here that is accessible.”* Battalion Chief Fahy replied, *“No, just hold up a second, we’ve got Con-Ed on the way.”*

At **0638 hours** Battalion Chief Fahy arrived in front of the fire building and observed a male occupant at the first floor window and instructed him to open the front door.

At **0639 hours** the occupant opened the front door and the Ladder Company 36 Forcible Entry and Can Firefighters entered the fire building followed by the Ladder Company 36 Officer. The Ladder Company 36 Officer was advised by the Forcible Entry Firefighter that he will attempt to access the basement via the interior stairs to shut off the gas service to the building. At the same time the Ladder Company 36 Officer’s Altair alarmed and displayed a series of crosses (+++) ¹ indicating at least 5% natural gas. Members did not enter the basement due to the high concentration of gas.

At **0640:33 hours** the Ladder Company 36 Officer notified Battalion Chief Fahy via handie-talkie, *“Chief, we’re actually above the explosive limit so were not gonna*

¹ A series of crosses under the COMB/EX icon indicates the atmosphere is above 100% of the Lower Explosive Limit (LEL). This is an extremely dangerous atmosphere as it is indicative of a potentially explosive environment that members should not operate in except for life saving purposes.

open anything.” The Ladder Company 36 Officer, Forcible Entry and Can Firefighters exited the fire building followed by the building occupant.

Engine Company 79 arrived on the scene and proceeded south through the intersection of West 234 Street and Tibbett Avenue. The apparatus was positioned at a hydrant in front of 3238 Tibbett Avenue. Ladder Company 37 arrived on scene and took a position on the North West corner of West 234 Street and Tibbett Avenue. (See Diagram 2)

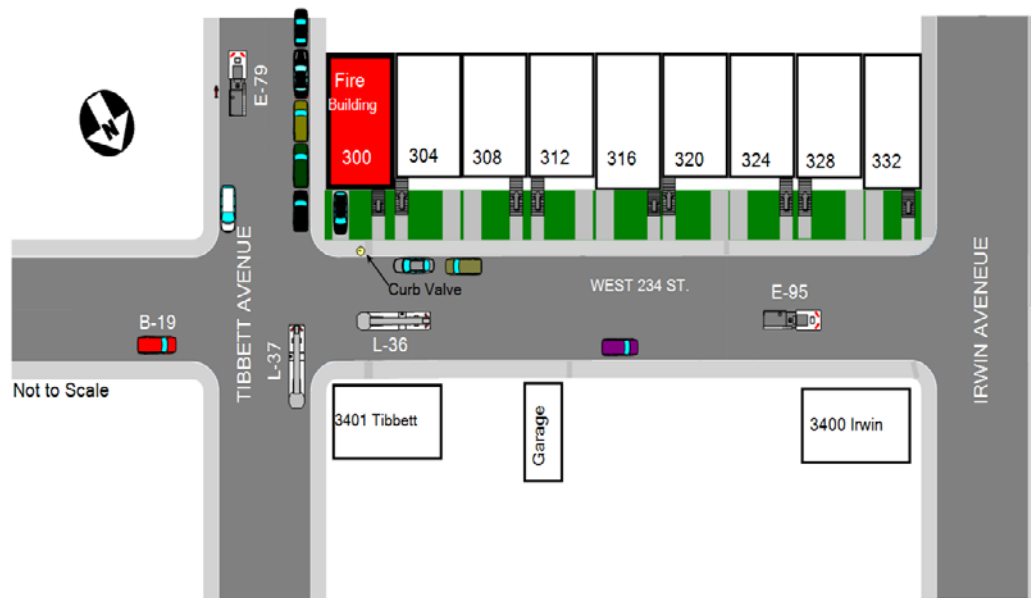


Diagram 2
Apparatus Placement of 1st Alarm Units

At **0641 hours** Battalion Chief Fahy ordered the occupant not to start the vehicle that was in the driveway of the fire building. He ascertained his identity prior to the occupant leaving the scene.

At **0642 hours** the Ladder Company 36 Officer and Outside Ventilation Firefighter entered exposure #4 and instructed the two occupants to evacuate the premises.

At **0642:26 hours** Battalion Chief Fahy instructed the Battalion 19 Firefighter via handie-talkie to notify the Bronx Dispatcher, *“Just tell them that we have...evacuated the house at 300 and we’re...evacuating 304 as well. And ask for...an ETA on Con-Ed.”*

At **0643 hours** Battalion Chief Fahy ordered the gas curb valve closed to the fire building.

The Ladder Company 36 Officer exited exposure #4 and returned to the front of the fire building. The Ladder Company 36 Chauffeur began evacuating occupants from 308 West 234 Street (exposure #4A).

At **0643:29 hours** the Ladder Company 36 Officer notified Battalion Chief Fahy via handie-talkie, *“304 also saturated, we’re removing occupants now.”*

At approximately **0645 hours** the Ladder Company 36 Chauffeur reset the Altair.

POST CURB VALVE SHUTDOWN OPERATIONS

At **0646 hours** the Ladder Company 37 Forcible Entry Firefighter closed the gas curb valve to the fire building and the hissing sound stopped. (See Photo 1)

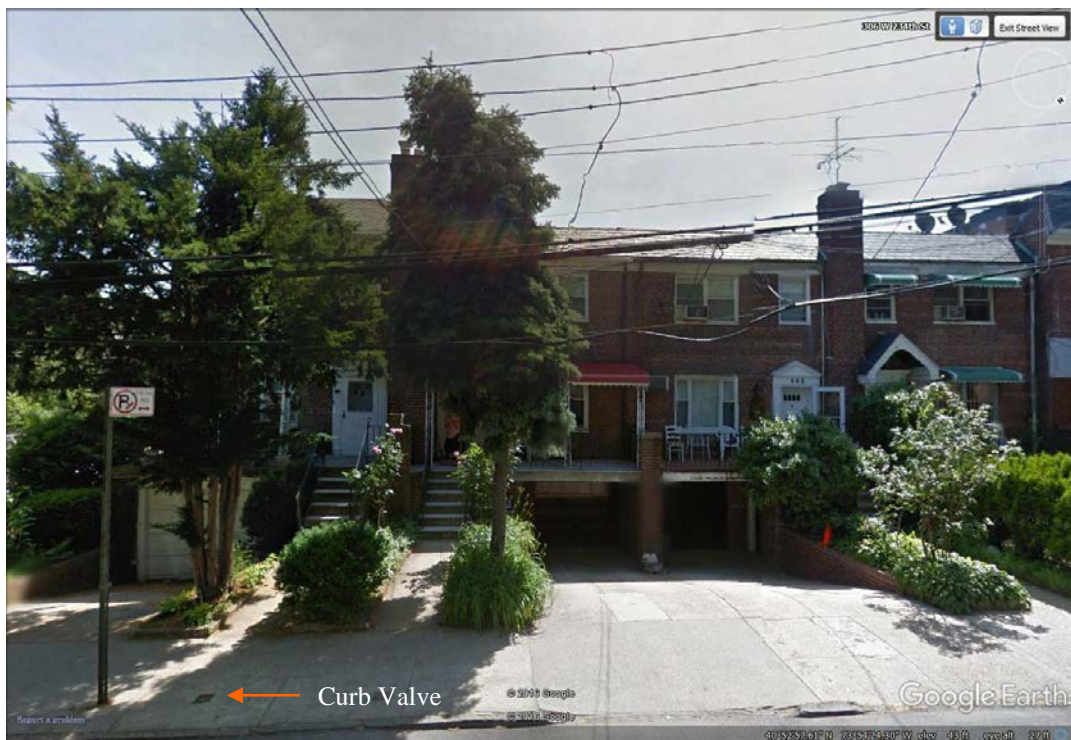


Photo 1
Gas Curb Valve for the Fire Building

At **0646:22 hours** the Battalion 19 Firefighter informed Battalion Chief Fahy via handie-talkie that Con Edison Gas provided a *“20 to 30 minute ETA.”* Battalion Chief Fahy replied to the Battalion 19 Firefighter *“alright tell em we have evacuated 300 and 304,...we’re evacuating 308 at this time.”*

The Ladder Company 36 Outside Ventilation Firefighter assisted an elderly woman down the front steps of exposure #4 followed by the second female occupant.

At **0648 hours** Battalion Chief Fahy ordered Ladder Company 37 to search exposure #4. Ladder Company 37, exclusive of the Ladder Company 37 Chauffeur, made entry to the first floor. The Ladder Company 37 Altair alarmed and registered a reading of 50% of the LEL, approximately 2.5% natural gas. The Ladder Company 37 Officer ordered his members to vent and search the first floor and basement. Searches were negative and the readings on the Altair in the basement were below 50% of the LEL. They proceeded to the 2nd floor via the interior stairs. Immediately after accessing the 2nd floor the Altair alarmed and displayed a series of crosses. The Ladder Company 37 Officer ordered his members to perform a quick search and ventilate.

At **0648:39 hours** the Ladder Company 36 Officer transmitted via handie-talkie, *“308 is good, I’m down...in the basement, nothing going on down here.”*

At **0649 hours** the Ladder Company 36 Officer, Forcible Entry and Can Firefighters returned to the front of the fire building. After consultation with Battalion Chief Fahy a decision was made to re-enter the first floor to search and vent. Immediately after they entered, the Altair alarmed and displayed a series of crosses.

Battalion Chief Fahy informed the Battalion 19 Firefighter to tell Con Edison Gas via Bronx Dispatcher, that they were above the explosive limit in two houses, the curb valve was shut off and it did not stop the leak at this time.

At **0650:01 hours** Battalion Chief Fahy stated via handie-talkie, *“Why don’t you guys get a few windows open, come out and let it vent.”* This statement was not acknowledged. THE FATAL FIRE INVESTIGATION TEAM BELIEVES THIS WAS A GENERAL STATEMENT TO ALL MEMBERS OPERATING WITHIN BOTH BUILDINGS.

At **0650 hours** the Engine Company 95 Officer entered the fire building via the front door. The Altair alarmed and displayed a series of crosses.

The Ladder Company 36 Can Firefighter opened up two front windows on the first floor of the fire building from the interior. The Ladder Company 36 Roof and Outside Ventilation Firefighters assisted in opening these windows from the building’s exterior while standing on the porch.

At **0651 hours** the Bronx Dispatcher reported a 15 minute ETA from Con Edison Gas.

The Ladder Company 36 Forcible Entry Firefighter went up to the 2nd floor of the fire building to search and vent, where he noted unusual conditions. He verbally called to the Ladder Company 36 Officer and Can Firefighter and they proceeded to the 2nd floor.

They observed three bedroom doors that were numbered (1, 2, and 3) and sealed with spray foam insulation and an open bathroom door. Inside the bathroom were tubes running from a blue 55 gallon drum to the other rooms. There were multiple extension cords and numerous containers labeled Tiger Bloom and Fossil Fuel² in the hallway and bathroom.

The Ladder Company 36 Roof and Outside Ventilation Firefighters entered the first floor of the fire building.

The Ladder Company 37 Officer, Roof, Outside Ventilation, Forcible Entry and Can Firefighters exited exposure #4.

At **0652:16 hours** the Ladder Company 36 Officer transmitted via handie-talkie to Battalion Chief Fahy, *“Possible lab up here.”* All members exited the fire building.

At **0653:21 hours** Battalion Chief Fahy transmitted via handie-talkie to the Battalion 19 Firefighter, *“19 to Alpha, could you also ask for PD to respond.”*

At **0654 hours** the Battalion 19 Firefighter transmitted a mixer off message to the Bronx Dispatcher for a possible lab at 300 West 234 Street.

At **0655 hours** the Bronx Communications Office transmitted a 10-47 for an NYPD response.

The Ladder Company 36 Chauffeur reset the Altair.

The Ladder Company 37 Officer reset the Altair.

At **0656 hours** Battalion Chief Fahy created a safety zone and had its boundaries defined with yellow warning tape. He repositioned the Command Post opposite the exposure #1/2 corner within the established safety zone.

At **0656-0706 hours** members stood fast allowing for ventilation and the arrival of Con Edison Gas.

At **0707 hours** the Ladder Company 36 Officer, Forcible Entry and Can Firefighters entered the fire building through the open front door. The Ladder Company 36 Altair alarmed and registered a reading of at least 10% of the LEL.

At **0708 hours** the Ladder Company 36 Officer, Forcible Entry and Can Firefighters proceeded to the 2nd floor via the interior stairs. The Ladder Company 36 Altair alarmed and displayed three crosses. The Ladder Company 36 Forcible Entry Firefighter was ordered to continue searching on the 2nd floor. He forced the door to the rear bedroom near the top of the stairs (Door #3 See 2nd floor plan drawing in the

² Tiger Bloom and Fossil Fuel are brand named fertilizers often used in the production of marijuana.

Building Section). Inside this room were marijuana plants growing in rows from floor to ceiling and tin ductwork with an operating black fan hanging from it. They did not enter the room and closed the bedroom door before leaving the 2nd floor.

THE FATAL FIRE INVESTIGATION TEAM BELIEVES THIS DOOR DID NOT CLOSE COMPLETELY DUE TO FOAM INSULATION PREVIOUSLY INSTALLED AROUND THE DOOR.

Ladder Company 37 exclusive of the Ladder Company 37 Chauffeur entered exposure #4 via the front door. The Ladder Company 37 Altair alarmed and displayed a reading of 29% of the LEL.

At **0709:06 hours** the Ladder Company 36 Officer transmitted to Battalion Chief Fahy via handie-talkie, *“Chief, the second floor is still in the explosive range we’re gonna come out.”*

The Ladder Company 36 Officer, Forcible Entry and Can Firefighters exited the fire building. The Ladder Company 36 Officer verbally described to Battalion Chief Fahy what they observed on the 2nd floor.

At **0711 hours** the Ladder Company 37 Outside Ventilation and Roof Firefighters exited exposure #4 via the front door. The Ladder Company 37 Officer, Forcible Entry and Can Firefighters exited exposure #4 via the basement door. The Ladder Company 37 Officer verbally reported conditions within exposure #4 to Battalion Chief Fahy. The Ladder Company 36 Chauffeur reset the Altair.

At **0713 hours** Ladder Company 36, exclusive of the Chauffeur, entered the front door of the fire building. The Altair alarmed and recorded a reading of 74% of the LEL. All members exited the front door of the fire building.

At **0714 hours** the first Con Edison Gas Employee arrived on the scene.

At **0715 hours** the Ladder Company 36 Chauffeur moved the apparatus from the front of the fire building to the front of exposure #4A. NYPD Emergency Service Unit Truck 4 arrived on the scene.

At **0716 hours** Battalion Chief Fahy made contact with the Con Edison Gas Employee in front of the fire building.

At **0718 hours** Battalion Chief Fahy conferred with Con Edison Gas and the Ladder Company 36 Officer and decided not to shut down the electric service to the fire building.

At **0719 hours** the Ladder Company 36 Officer and Roof Firefighter entered the front door of the fire building. They descended the interior stairs to the basement to establish access for Con Edison Gas.

At **0720 hours** the Con Edison Gas Employee entered 304 West 234 Street and detected no readings in the basement.

The Ladder Company 36 Officer noted conditions in the basement and determined that the garage door to the basement must be forced for entry and ventilation purposes.

At **0721:15 hours** the Ladder Company 36 Officer transmitted to Battalion Chief Fahy via handie-talkie, *“Similar scenario down here in the basement...we’ve got another one of those growing areas here and everything is completely sealed off...the only thing we can work on is that front garage.”*

The Ladder Company 36 Forcible Entry and Can Firefighters began to force the garage door of the fire building from the exterior. The Ladder Company 36 Roof Firefighter forced the garage door from the interior.

At **0722:06 hours** Battalion Chief Fahy asked the Ladder Company 36 Officer via handie-talkie, *“Can PD come in just to take a look at what you saw upstairs real quick?”*

At **0722:10 hours** the Ladder Company 36 Officer responded via handie-talkie, *“10-4. You know what, send them to the basement, cause the readings are a lot lower down here, cause it’s all getting trapped on the second floor. Send them down to the basement.”*

At **0723:28 hours** the Ladder Company 36 Officer transmitted to Battalion Chief Fahy via handie-talkie, *“Chief, if PD wants to come in from the garage it’s a straight shot.”* Battalion Chief Fahy acknowledged the message.

The garage door to the fire building was removed. The Ladder Company 36 Forcible Entry and Can Firefighters entered the garage. One Con Edison Gas Employee and two NYPD Emergency Service Unit Truck 4 Police Officers entered the garage.

At **0724 hours** the Ladder Company 37 Officer, Forcible Entry and Can Firefighters entered the basement of the fire building and assisted the Firefighters from Ladder Company 36 in the removal of interior doors that were being stored to allow Con Edison Gas access to the gas service (See Photo 2)



Photo 2
Gas Service To The Fire Building (Post Explosion)

At **0725 hours** Battalion Chief Fahy entered the fire building via the garage door opening.

At **0726 hours** the Ladder Company 36 Forcible Entry Firefighter ascended the interior stairs of fire building and opened the 2nd floor bathroom window. He then returned to the basement via the interior stairs.

Two NYPD Emergency Service Unit Truck 4 Officers exited the fire building via the garage door opening.

A second Con Edison Gas Employee arrived on the scene.

At **0728 hours** Battalion Chief Fahy, the Ladder Company 36 Officer, Forcible Entry, Can Firefighters and the Con Edison Gas Employee exited the fire building via the garage door opening.

The Ladder Company 36 Officer turned the Altair Off.

A Con Edison Gas Supervisor, the third employee arrived on the scene.

At **0729:23 hours** Battalion Chief Fahy made the following handie-talkie transmission, *“19 to 37 you guys can take up. 19 to 79 you guys can take up.”*

The Ladder Company 37 Officer, Forcible Entry and Can Firefighters exited the fire building via the garage door opening.

At **0729:48 hours** Battalion Chief Fahy contacted the Battalion 19 Firefighter via handie-talkie, *“You could tell them we used two and two at this box and we’re going...to continue to operate with 95 and 36 ...we have Con Ed and PD on scene.”*

At **0730 hours** the Ladder Company 36 Officer and the Engine Company 95 Officer entered the fire building via the garage door opening.

At **0731 hours** three Con Edison Gas Employees entered the fire building via the garage door opening.

The Ladder Company 36 Officer and the Engine Company 95 Officer exited the fire building via the garage door opening and approached Battalion Chief Fahy in front of the fire building.

A fourth Con Edison Gas Employee who was a Field Operations Planner arrived on the scene.

At **0732 hours** the Con Edison Gas Field Operations Planner entered the fire building via the garage door opening.

Ladder Company 37 proceeded south on Tibbett Avenue through the intersection of West 234 Street leaving the scene.

At **0732:23 hours** an explosion occurred on the 2nd floor of 300 West 234 Street. (See Photo 3 and Diagram 3)



Photo 3
Fire Building After Explosion

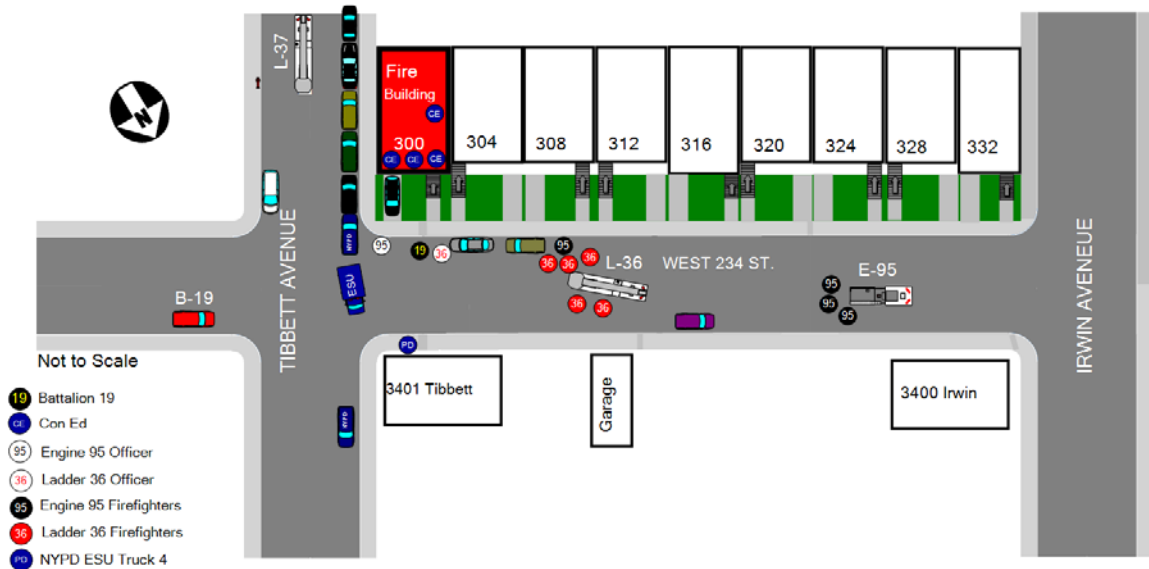


Diagram 3
Position of Members at Time of Explosion

POST EXPLOSION OPERATIONS

A large section of roof struck Battalion Chief Fahy.

THE FATAL FIRE INVESTIGATION TEAM ESTIMATES THE SECTION OF ROOF THAT STRUCK BATTALION CHIEF FAHY WEIGHED APPROXIMATELY 1500-2000 POUNDS.

(SEE PHOTO 4)

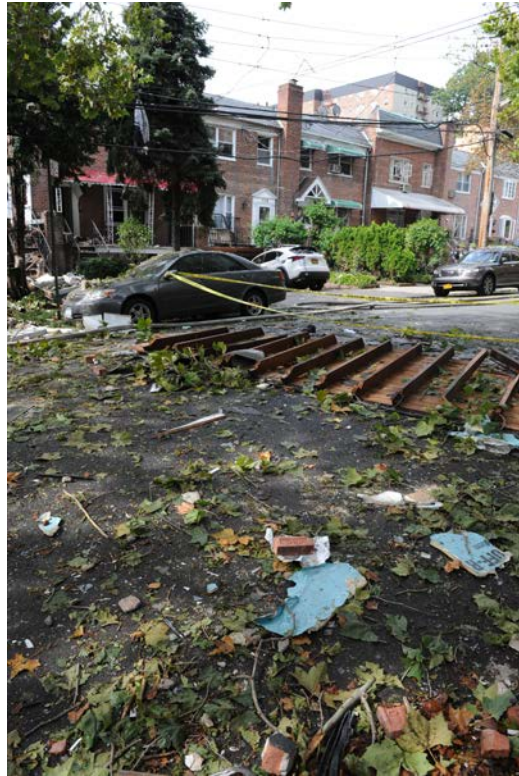


Photo 4
Section of Roof That Struck Battalion Chief Fahy

Ladder Company 37 stopped the apparatus on Tibbett Avenue just past the rear of the fire building. The Ladder Company 37 Officer reported over the department radio that an explosion had occurred and that EMS was needed. The Ladder Company 37 Firefighters exited their apparatus, quickly obtained first aid equipment, and proceeded to the front of the fire building.

The four Con Edison Gas employees were able to exit the fire building and reported to the Engine Company 95 Officer that they were all accounted for.

The Ladder Company 36 Roof Firefighter noticed Battalion Chief Fahy under a large section of roofing material and other building debris. He quickly attended to him as an NYPD ESU Truck 4 Police Officer approached from the opposite side. The Ladder Company 36 Roof Firefighter attempted to lift the large section of roof off of Battalion

Chief Fahy, but was unable to. The Ladder Company 36 Roof and Can Firefighters along with the NYPD ESU Truck 4 Officer removed Battalion Chief Fahy from under the debris and began patient assessment. (See Diagram 4)

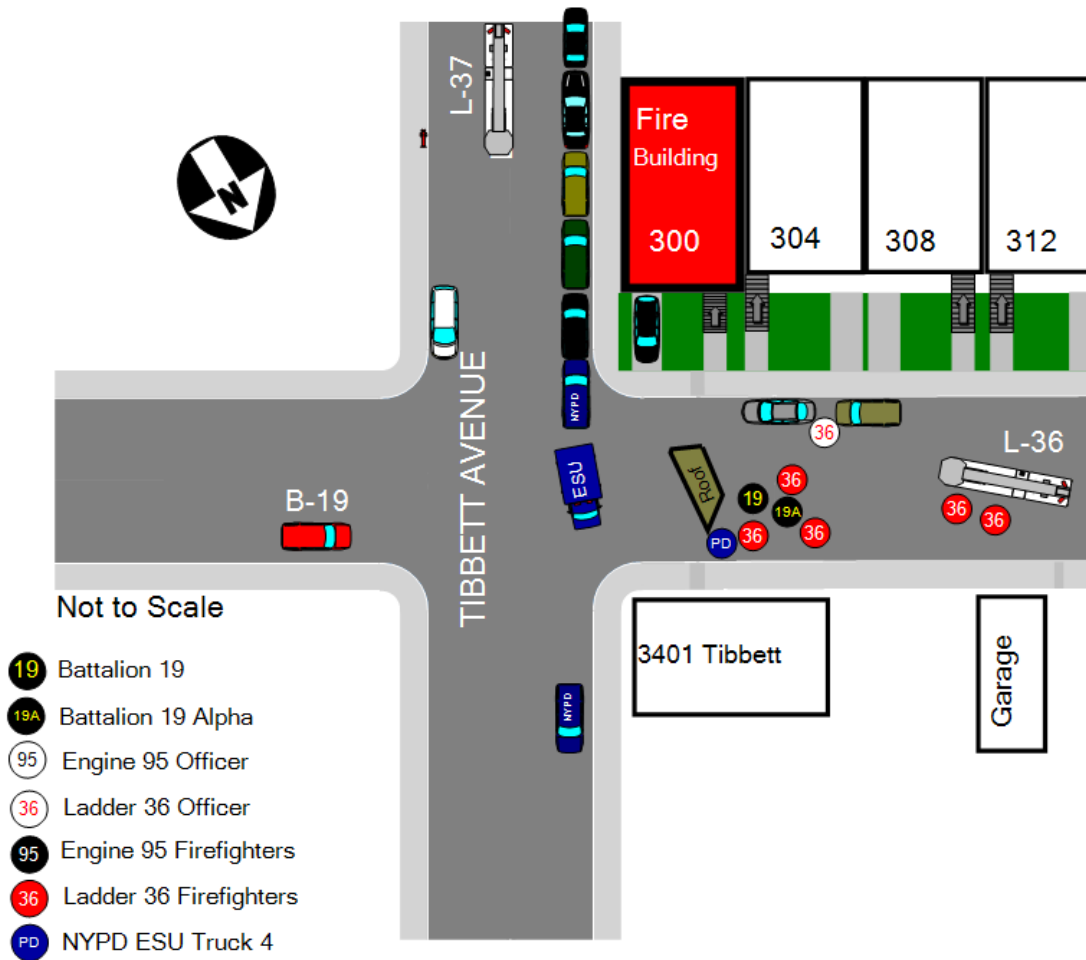


Diagram 4
Rescue Operation for Battalion Chief Fahy

The Engine Company 95 Officer proceeded to the apparatus of Ladder Company 36 and transmitted over the department radio that an explosion had occurred and requested an immediate response from EMS.

At **0733 hours** the Ladder Company 36 Roof Firefighter, the Battalion 19 Firefighter and an NYPD ESU Truck 4 Police Officer carried Battalion Chief Fahy approximately 50 feet to an area of safety alongside the apparatus of Ladder Company 36.

The Ladder Company 37 Outside Ventilation, Forcible Entry and Can Firefighters arrived and assisted in providing first aid to Battalion Chief Fahy.

At **0734 hours** EMS Unit 19B2, a BLS Unit, was assigned to the incident and responded.

The Battalion 19 Firefighter transmitted a 2nd alarm, gave a building size up and requested a forthwith response by EMS to Tibbett Avenue and West 234 Street via the department radio to the Bronx Dispatcher.

The Ladder Company 36 Officer contacted his members and accounted for them via handie-talkie.

At **0735 hours** the Engine Company 95 Officer noted small pockets of fire within the fire building and ordered his members to stretch a 2 ½” hoseline.

The Ladder Company 37 Officer, Chauffeur and Roof Firefighters entered exposure #4. They searched all three levels for occupants with negative results. They quickly exited the building.

At **0737 hours** Engine Company 81 arrived on the scene.

At **0738 hours** the FDNY EMS Unit 19B2, arrived on the scene. They parked the ambulance south of West 234 Street on Corlear Avenue, one block east of Tibbett Avenue. The 19B2 driver instructed his partner and an FDNY EMS trainee who was riding for the tour, to stay with the ambulance while he proceeded to the scene.

The Engine Company 95 Officer ordered the Engine Company 95 Chauffeur to charge the hoseline to extinguish all pockets of fire.

The Ladder Company 36 Officer transmitted a 10-60 over the department radio.

Engine Company 52 and Ladder Company 46 arrived on the scene.

At **0740 hours** the FDNY EMS Unit 19B2 driver approached Battalion Chief Fahy and noted that he was receiving first aid. The first aid was being performed by FDNY members, NYPD ESU members and an NYPD doctor. The FDNY EMS Unit 19B2 driver attempted to direct firefighters and NYPD Officers to carry Battalion Chief Fahy to the ambulance.

At **0741 hours** the Battalion 19 Firefighter transmitted another request to the Bronx Dispatcher for EMS to respond to either West 234 Street and Tibbett Avenue or West 234 Street and Irwin Avenue.

At **0742 hours** the Ladder Company 37 Outside Ventilation, Forcible Entry and Can Firefighters along with several NYPD Police Officers moved Battalion Chief Fahy into an NYPD van that was parked on Tibbett Avenue north of West 234 Street (See Diagram 5)

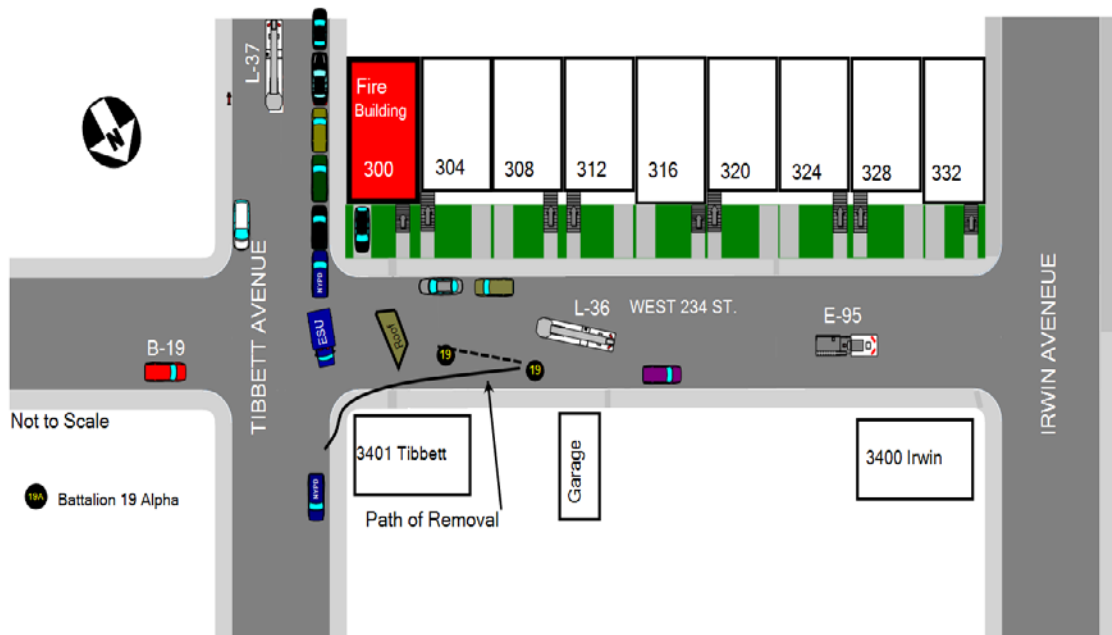


Diagram 5
Path of Removal for Battalion Chief Fahy

Battalion 27 arrived on the scene and assumed command of the incident.

Ladder Company 52 arrived on the scene.

The EMS Unit 19B2 driver proceeded back to the ambulance to prepare for transport and told his partner that a “member of service” was in cardiac arrest. When he returned to the location Battalion Chief Fahy was already removed.

The EMS Unit 19B2 driver returned to the ambulance, treated and eventually transported three NYPD Officers.

At **0743 hours** Division 7 arrived on the scene and assumed command of the incident. Battalion Chief Fahy was transported via the NYPD van to New York Presbyterian Hospital/The Allen Pavilion while being treated by an ESU Rescue medic.

At **0744 hours** Rescue Company 3 arrived on the scene.

At **0745 hours** Battalion Chief Fahy was admitted into The Allen Pavilion Emergency Room.

VII. FINDINGS

1. Battalion Chief Fahy was fatally injured by a large section of roof that was propelled into the street as a result of a natural gas explosion at 300 West 234 Street in the Bronx. This 18 foot by 6 foot 6 inch section of roof landed approximately 53 feet from the building and is estimated to have weighed between 1500-2000 pounds. The natural gas leak was caused by a corroded high pressure service pipe that separated before the head of service valve. The one inch service pipe entered the basement of the private dwelling under the front stoop. According to Con Edison Gas, the pressure in the service pipe was 58 PSI. Fire department members closed the gas curb valve on the sidewalk in front of the fire building 15 minutes after their arrival. Approximately 45 minutes after closing the curb valve, the explosion occurred resulting in the injuries to Battalion Chief Fahy.
2. Battalion Chief Fahy had the Command Post relocated from the front of the fire building to the street of the exposure #1/2 corner. Yellow hazard tape was initially used to properly define the danger zone. A decision was made after considerable time had elapsed to resume operations to allow Con Edison Gas to gain access to the fire building.
3. Entire units entered the fire building and exposure #4 subsequent to initial operations to monitor conditions. This exposed more members than necessary to an extremely dangerous atmosphere.
4. The private dwelling had marijuana grow rooms on the 2nd floor and in the basement. This was discovered by fire department personnel after gaining access to search and attempt to ventilate the structure of natural gas. Members operating on the 2nd floor noted three bedrooms and one bathroom. The bedroom doors were numbered 1, 2 and 3 and were locked on the hallway side and sealed tight with foam insulation. The bathroom door was open and inside was a 55 gallon drum that was approximately ¼ filled with a brown liquid. Hoses were run from inside the drum, through the interior walls to the bedrooms on the second floor. The hoses were sealed in the wall with foam insulation. Power cords were also noted running along the floor and into the rooms. There were many small

containers of fertilizers and plant food scattered about the bathroom floor and in the hallway.

In an attempt to ventilate the natural gas on the 2nd floor, members forced the door labeled #3, at the top of the stairs and immediately noticed marijuana plants growing from floor to ceiling. Inside the room was tin ductwork with an operating fan hanging from it and large heat lamps suspended at ceiling level. They pulled the door closed without entering, notified Battalion Chief Fahy of their findings and exited the building.

5. During the operational period, units were faced with the combined dangers of an illegal marijuana grow house and a major indoor natural gas leak within the same building. Battalion Chief Fahy transmitted a handie-talkie message to ventilate the fire building and exposure #4 and then to exit the buildings. Conditions encountered in the fire building allowed for the accumulation of natural gas on the 2nd floor where ventilation was limited to just the bathroom window.
6. Engine Company 95, Ladder Company 36 and Battalion 19 arrived at the location at 0632 hours and were aware that they were operating at a confirmed gas leak. The 2nd due units, Engine Company 79 and Ladder Company 37 continued to the location in modified response mode. They arrived on the scene eight minutes later at 0640 hours.
7. The Altair logs detailed that one of the meters at the scene was not properly reset as prescribed in the manufactures instructions and gave a false reading. The alarm was silenced by pressing the reset button as per *section 2.6 of Emergency Procedures Natural Gas, Addendum 2 MSA Altair Digital Gas Meter*. The proper procedure to reset an Altair subjected to natural gas readings of 100% of the LEL or an oxygen deficiency low set point of 19.5% are absent in our manuals.

8. Battalion Chief Fahy did not have knowledge of the actual percentage of natural gas in the fire building and exposure #4. The display of a series of crosses on the three Altairs merely informed him that the percentage was at least 5% natural gas.
9. There were no notifications made for additional FDNY resources with specialized capabilities to respond to this complex operation.
10. Con Edison Gas and NYPD were requested to respond as their needs became apparent. There were no additional requests for specialized resources such as Con Edison Electric to assist.
11. EMS unit 19B2, a BLS unit, was on the scene for four to five minutes before Battalion Chief Fahy was transported in the NYPD van. They were on the scene for three minutes when the Battalion 19 Firefighter made a second request for EMS over the department radio. At this incident EMS unit 19B2 did not have the capability of direct radio communications with on scene Fire Department members.
12. Prior to the explosion, members performed multiple entries into the fire building and exposure #4. The Self-Contained Breathing Apparatus was not utilized as outlined in department guidelines. The high concentration of natural gas caused dangerous oxygen displacement creating an IDLH. Members entering were not only exposed to dangerously low levels of oxygen but high concentrations of an explosive gas.
13. The explosion caused helmets to be dislodged from members operating in front of the fire building. Two members suffered head trauma.
14. A Chief Officer Operational Checklist directly related to major gas emergencies was not available to the Incident Commander.
15. Responding units were unaware that the fire building, which was a private dwelling, was being supplied by a high pressure gas service.
16. There was confusion created when the term “member of service” (MOS) was utilized by EMS personnel in radio transmissions to the EMS Citywide Dispatcher. This term is normally used by NYPD to describe Police Officers only.

17. Con Edison Gas did not receive transmissions of meter readings outlining the conditions at the scene.
18. There was no procedure in place to allow for direct communication between the Incident Commander and Con Edison Gas Personnel prior to their arrival.

VIII. CAUSES

Direct Causes

1. Blunt Impact Injuries

Indirect Causes

1. High Pressure Natural Gas Leak.
2. Natural Gas Explosion.
3. Marijuana Grow House.

Basic Causes

1. Combined dangers of a major indoor gas leak within a marijuana grow house which inhibited ventilation.

IX. RECOMMENDATIONS

1. Amend Fire Department procedures to require the identification and designation of an appropriate Danger Zone at every major gas leak. Members shall not enter this Danger Zone for other than life saving purposes or when approved by the Incident Commander or Sector Chief. The Danger Zone should be continually re-evaluated to ensure that changing conditions are considered.
2. Reinforce Fire Department procedures found in *Hazardous Materials & Emergency Response Plan Addendum #3 Explosive or Incendiary Incidents section 8.7*.
3. Amend *Emergency Procedure Natural Gas section 4.4 to include*: When operating in an IDLH, the number of exposed personnel should be kept to a minimum.
4. Develop alternative ventilation tactics to be used when conventional methods are not practical due to safety concerns. This operation prevented normal ventilation tactics from being carried out due to the high levels of natural gas and conditions created by the marijuana grow rooms located on the 2nd floor.
5. Amend *ABC 2-2011 Modified Response Program* that when additional information regarding the incident is received confirming a gas leak, the 10-20 response should be cancelled and have all units respond in emergency mode.
6. Amend *Emergency Procedures Natural Gas Addendum 2 MSA Altair Digital Gas Meter* to include the proper procedure for resetting the Altair as per the manufacturer's instruction manual.
 - When gas readings reach 100% of the LEL or 5% natural gas, the instrument enters a Lock Alarm State and the combustible sensor shuts down and displays "XXX" in place of the actual reading. This state can only be reset by turning the instrument OFF and back ON in a fresh air environment.
 - The Low alarm (oxygen deficient) is latching and will not automatically reset when the O2 concentration rises above the LOW set point. To reset the alarm, press the up arrow button (^). If the alarm condition still exists, the ^ button only silences the alarm for five seconds.

7. Develop a training program to incorporate operations at gas emergencies, and include the proper operation of meters carried by field units.
8. Research the feasibility to procure meters capable of transitioning from percentage of the LEL to actual gas in air concentration.
9. Amend *Emergency Procedure Natural Gas section 4.4 tactics section second bullet* to require the transmission of a 10-75 when in the judgment of the Incident Commander units are operating at a major gas leak. Consideration should be given to the establishment of a staging area for all incoming units. This location shall be transmitted by the dispatcher via department radio. In addition, the Incident Commander shall special call a Hazardous Material Response.
10. Amend *Emergency Procedures Natural Gas section 4.4 Major Indoor Gas Leak* to include the notification of the utility companies' electric division to respond and request an ETA.
11. Develop a training program to incorporate *Communications Manual Chapter 14 Addendum 1* which now provides direct handie-talkie communications between FDNY members and EMS (ALS, BLS) units on the scene. The policy can be reinforced during drills which involve Fire and EMS resources.
12. Chief and Company Officers must ensure strict compliance with the policy outlined in *AUC 220 Self Contained Breathing Apparatus* as it pertains to operating in an IDLH atmosphere.
13. Re-emphasize the importance of the use of the helmet chin strap.
14. Amend *AUC 310 Personal Protective Clothing* to include that the helmet chin strap is ready for immediate use.
15. Amend *AUC 337 Chief Officer Operational Checklist* to include a checklist for a major gas leak.
16. Amend *Communications Manual Chapter 4 Critical Information Dispatch System (CIDS) Section 4.3.2* to include buildings with high pressure gas service. Add an abbreviation such as "HPG" to denote a high pressure gas service to *Appendix A*.

17. Develop a program in conjunction with the utility companies that operate within the city, to obtain the location of high pressure gas service, shutoffs, etc. throughout the city, for inclusion into the CIDS program and provide this information to FDNY GIS units for mapping purposes.
18. Eliminate the use of the term “member of service” (MOS) when describing members of the FDNY.
19. Amend Fire Department Procedures to include the transmission of meter readings taken at the scene of a gas leak to Con Edison Gas through the Fire Department Dispatcher.
20. Develop a policy where the Incident Commander can make direct contact with the Gas Emergency Response Center (GERC) using a cell phone prior to the arrival of Con Edison Gas. A similar policy should be created with National Grid’s Emergency Response Center, which will give direct access to supervisors at Dispatch and Scheduling (D&S).

X. CHRONOLOGICAL FIRE DEPARTMENT OPERATIONS

Bronx Box 2-2-3732

(P)	=	Time taken from the Fire Dispatcher Incident History Printout
(HT)	=	Time taken from Handie-Talkie Recorders
(AV)	=	Time taken from Audio tapes (PD, FD, EMS)
(PV)	=	Time taken from NYPD Surveillance Video
(CV)	=	Time taken from Civilian Cell Phone Video
(A)	=	Time taken from Altair 4X Multi-Gas Detector Logs
(CE)	=	Time taken from Con Edison Gas Report
(E)	=	Estimated time of events

0622 Hours

0622 (P)

The Bronx Communications Office of the New York City Fire Department received a UCT alarm from the UCT 911 Operator reporting a gas leak at West 234 Street and Irwin Avenue.

The Bronx Dispatcher assigned E-95, E-79, L-36, L-37 and B-19.

E-95, E-79, L-36, and L-37, acknowledged the run via ATS.

0623 Hours

0623 (P)

B-19 acknowledged the run via ATS.

0628 Hours

0628 (AV)

Bronx Dispatcher redirected E-95, L-36, and B-19 to West 234 Street and Broadway.

0629 Hours

0629 (A)

L-36 Altair turned on.

0630 Hours

0630 (P)

E-95 transmitted a 10-84 via the MDT.

L-36 transmitted a 10-84 via the MDT.

0630 (E)

E-95 arrived at intersection of West 234 Street and Broadway.

L-36 arrived at intersection of West 234 Street and Broadway.

0632 Hours

0632 (P)

B-19 transmitted a 10-84 via the MDT.

0632 (HT)

L-36 informed B-19 of negative results at West 234 Street and Broadway and proceeded to Tibbett Avenue.

0632 (PV)

E-95 arrived in front of 300 West 234 Street and proceeded towards Irwin Avenue.

0632 (E)

B-19 arrived at the intersection of West 234 Street and Broadway.

E-95 Officer heard loud hissing and smelled strong odor of gas at fire building.

0633 hours

0633 (HT)

E-95 Officer notified L-36 Officer of leak at the end of the block on the Tibbett Avenue side.

0633 (PV)

L-36 arrived in front of 300 West 234 Street.

0634 Hours

0634 (PV)

L-36 Officer placed the Altair under the peck vent of 300 West 234 Street.

0634 (E)

L-36 Officer heard loud hissing and noted strong odor of gas at fire building.

0635 Hours

0635 (HT)

L-36 Officer notified Battalion Chief Fahy that the location of the gas leak was 300 West 234 Street.

0635 (AV)

B-19 informed Bronx dispatcher that they will be using one and one with the rest fast for a leak outside of 300 West 234 Street and requested a Con Edison Gas response.

0635 (PV)

L-36 Can knocked on the front door of 300 West 234 Street.

0635 (A)

E-95 Altair was turned on.

0636 Hours

0636 (P)

Bronx Dispatcher notified Con Edison Gas to respond to 300 West 234 Street.

0636 (PV)

E-95 Officer placed the Altair under peck vent of 300 West 234 Street.

0637 Hours

0637 (HT)

L-36 Officer notified Battalion Chief Fahy that there was no answer at fire building and that the gas curb valve was accessible.

Battalion Chief Fahy responded no and informed him that Con Edison Gas was responding.

0638 Hours

0638 (PV)

Battalion Chief Fahy arrived in front of the fire building and observed a male occupant at first floor window.

0639 Hours

0639 (PV)

Occupant answered front door and L-36 Officer, Forcible Entry and Can entered fire building.

0639 (A)

L-36 Altair alarmed and displayed a series of three crosses.

0639 (E)

L-36 Forcible Entry attempted to descend interior stairs to basement but could not due to high concentration of natural gas.

0640 Hours

0640 (P)

E-79 transmitted a 10-84 via the MDT.

L-37 transmitted a 10-84 via the MDT.

0640 (HT)

L-36 Officer notified Battalion Chief Fahy that they were above the explosive limit and that they weren't going to open anything.

0640 (PV)

L-36 Officer, Forcible Entry and Can exited the building.

E-79 proceeded through intersection of West 234 Street and Tibbett Avenue.

L-37 took a position on the North West corner of West 234 and Tibbett Avenue.

0640 (E)

E-79 took a hydrant in front of 3238 Tibbett Avenue.

0641 Hours

0641 (PV)

Battalion Chief Fahy stopped the occupant from starting vehicle in driveway of fire building.

0642 Hours

0642 (HT)

Battalion Chief Fahy instructed B-19 firefighter to inform Bronx Dispatcher that they have evacuated 300 West 234 Street and were in the process of evacuating 304 West 234 Street. He also requested an ETA from Con Edison Gas.

0642 (PV)

L-36 Officer and Outside Ventilation entered exposure #4.

0642 (E)

L-36 Officer and Outside Ventilation instructed occupants of exposure #4 to leave premises.

0643 Hours

0643 (HT)

L-36 notified Battalion Chief Fahy that exposure #4 was also saturated with natural gas and that they were removing occupants.

0643 (E)

Battalion Chief Fahy ordered the gas curb valve shut.

L-36 Chauffeur evacuated exposure #4A.

0645 Hours

0645(A)

L-36 Altair was reset.

0646 Hours

0646 (HT)

Battalion Chief Fahy instructed B-19 Firefighter to inform Bronx Dispatcher that they evacuated 300 and 304 and that they were in the process of evacuating 308.

0646 (AV)

B-19 Firefighter informed Battalion Chief Fahy that Con Edison Gas had given a 20-30 minute eta.

0646 (PV)

L-36 Outside Ventilation assisted an elderly woman down front stairs of exposure #4.

0646 (E)

L-37 Forcible Entry shut the gas curb valve to fire building.

0648 Hours

0648 (P)

B-19 Firefighter notified Bronx Dispatcher that 300,304,308 W 234 Street being evacuated.

0648(HT)

L-36 Officer informed Battalion Chief Fahy that they were in basement of 308 and nothing was going on.

0648(PV)

L-37 Officer, Roof, Outside Ventilation, Forcible Entry and Can, Firefighters entered exposure #4 via front door.

0648(A)

L-37 Altair alarmed.

0648(E)

Battalion Chief Fahy ordered L-37 to search exposure #4.

L-37 Officer, Roof, Outside Ventilation, Forcible Entry and Can Firefighters search and ventilate the first floor and basement.

0649 Hours

0649 (HT)

B-19 Firefighter informed Battalion Chief Fahy that Con Edison Gas needed to know if the curb valve should be shut off.

Battalion Chief Fahy instructed B-19 Firefighter to inform Con Edison Gas that the curb valve had been shut off and that it didn't stop the leak, and that they were above the explosive limits in two houses.

0649 (PV)

L-36 Officer, Forcible Entry and Can entered the fire building.

0649 (A)

L-36 Altair alarmed and displayed a series of crosses.

L-37 Altair displayed a series of crosses.

0649 (E)

L-37 Officer, Forcible Entry and Can entered the second floor and performed search and ventilation.

0650 Hours

0650 (HT)

Battalion Chief Fahy ordered members to ventilate and exit.

0650 (PV)

E-95 Officer entered fire building.

L-36 Roof, Outside Ventilation and Can opened front windows of fire building.

0650 (A)

E-95 Altair alarmed and displayed three crosses.

0651 Hours

0651 (AV)

Bronx Dispatcher provided B-19 with a 15 minute ETA from Con Edison Gas.

0651 (PV)

L-36 Roof and Outside Ventilation entered the fire building.

L-37 Officer, Roof, Outside Ventilation, Forcible Entry and Can exited exposure #4.

0651 (E)

L-36 Forcible Entry proceeded to second floor, noted unusual conditions, and called down to L-36 Officer.

L-36 Officer, and Can proceeded to the second floor.

0652 Hours

0652 (HT)

L-36 Officer informed Battalion Chief Fahy of possible lab on second floor.

0652 (PV)

L-36 Officer, Roof, Outside Ventilation, Forcible Entry and Can exited the fire building.

0653 Hours

0653 (HT)

Battalion Chief Fahy instructed B-19 Firefighter to request PD to respond.

0654Hours

0654 (AV)

B-19 Firefighter informed Bronx Dispatcher of possible lab via mixer off message.

0655 Hours

0655 (P)

Bronx Communications office transmitted a 10-47 for a PD response.

0656 Hours

0656 (E)

Battalion Chief Fahy repositioned Command Post further back and established a safety zone with warning tape opposite the exposure #1/2 corner.

0707 Hours

0707 (PV)

L-36 Officer, Forcible Entry and Can entered fire building.

0707 (A)

L-36 Altair alarmed.

0708 Hours

0708 (PV)

L-37 Officer, Roof, Outside Ventilation, Forcible Entry and Can entered exposure #4 via front door.

0708 (A)

L-36 Altair displayed three crosses.

L-37 Altair alarmed and recorded a peak reading of 29.00.

0708 (E)

L-36 Officer, Forcible Entry and Can proceeded to the second floor via the interior stairs.

L-36 Forcible Entry forced second floor rear bedroom and members noted marijuana plants, fan, and HVAC unit.

0709 Hours

0709 (HT)

L-36 Officer notified Battalion Chief Fahy that the second floor was still in the explosive range.

0709 (PV)

L-36 Officer, Forcible Entry and Can exited the fire building.

0709 (E)

L-36 Officer explained conditions encountered to Battalion Chief Fahy.

0711 Hours

0711 (PV)

L-37 Roof and Outside Ventilation exited exposure #4 via front door.

0711 (A)

L-36 Chauffeur reset the Altair.

0711(E)

L-37 Officer, Forcible Entry and Can exited exposure #4 via basement door.

L-37 Officer verbally reported conditions to Battalion Chief Fahy.

0713 Hours

0713 (PV)

L-36 Officer, Roof, Outside Ventilation, Forcible Entry and Can entered the fire building via front door.

L-36 Officer, Roof, Outside Ventilation, Forcible Entry and Can exited the fire building via front door.

0713 (A)

L-36 Altair recorded a peak value of 74.00.

0714 Hours

0714 (CE)

First Con Edison Gas Employee arrived on the scene.

0715 Hours

0715 (PV)

L-36 Chauffeur moved apparatus to the front of exposure #4A.

NYPD ESU Truck 4 arrived on the scene.

0716 Hours

0716 (PV)

Battalion Chief Fahy made contact with the Con Edison Gas Employee in front of the fire building.

0718 Hours

0718 (PV)

Battalion Chief Fahy conferred with NYPD, Con Edison Gas and L-36 Officer.

0719 Hours

0719 (PV)

L-36 Officer and Roof entered front door of fire building.

0719(E)

L-36 Officer and Roof descended interior stairs to basement.

0720 Hours

0720 (PV)

The Con Edison Gas Employee entered 304 West 234 Street and detected no readings in the basement.

0720 (E)

L-36 Officer concluded that the only ventilation possible was the garage door.

0721 Hours

0721 (HT)

L-36 Officer informed Battalion Chief Fahy that there was a similar growing area in the basement as was encountered on the second floor and that the best means of access was to force the garage door.

0721 (PV)

L-36 Forcible Entry and Can began to force garage door from exterior.

0721(E)

L-36 Roof began to force garage door from interior of fire building.

0722 Hours

0722 (HT)

Battalion Chief Fahy asked L-36 Officer if PD can enter and observe conditions on second floor.

L-36 Officer answered Battalion Chief Fahy that the best way to access the second floor was via the basement. Readings were lower and the gas was getting trapped on the second floor.

0723 Hours

0723 (HT)

L-36 Officer informed Battalion Chief Fahy that if PD wanted to come in from the garage they can.

Battalion Chief Fahy acknowledged L-36 Officer's message.

0723 (PV)

The garage door to basement of fire building was removed.

L-36 Forcible Entry and Can entered the fire building through the garage door.

One Con Edison Gas Employee and two NYPD ESU Truck 4 Officers entered the fire building through the garage door.

0724 Hours

0724 (E)

L-36 and L-37 firefighters removed interior doors blocking access to the gas meter.

0725 Hours

0725 (PV)

Battalion Chief Fahy entered the fire building via opened garage door.

0726 Hours

0726 (PV)

Two NYPD ESU Truck 4 Officers exited the fire building through the garage door.

0726 (CE)

Second Con Edison Gas Employee arrived on the scene

0726 (E)

L-36 Forcible Entry ascended interior stairs to second floor, opened bathroom window, and returned to basement via interior stairs.

0728 Hours

0728 (PV)

Battalion Chief Fahy, L-36 Officer, Forcible Entry, Can and a Con Edison Gas Employee exited the fire building via the garage door.

0728 (A)

L-36 Altair was turned off.

0728 (CE)

A Con Edison Gas Supervisor, the third employee arrived on the scene.

0729 Hours

0729 (HT)

Battalion Chief Fahy informed E-79 and L-37 Officers that they can take up.

Battalion Chief Fahy instructed B-19 firefighter to notify the Bronx Dispatcher that they used two and two and were going to continue to use E-95 and L-36. PD and Con Edison Gas were on the scene.

B-19 firefighter acknowledged Battalion Chief Fahy's message.

0729 (PV)

L-37 Officer, Forcible Entry and Can exited the fire building through the garage door.

0730 Hours

0730 (PV)

E-95 and L-36 Officers entered garage of fire building.

0731 Hours

0731 (PV)

Three Con Edison Gas Employees entered fire building through garage door.

E-95 and L-36 Officers exited garage of fire building and approached Battalion Chief Fahy in front of the fire building.

0731 (CE)

A fourth Con Edison Gas Employee who was a Field Operations Planner arrived on the scene.

0732 Hours

0732 (AV)

L-37 Officer reported to the Bronx Dispatcher that an explosion had occurred and EMS was needed

E-95 Officer reported to the Bronx Dispatcher that an explosion had occurred and EMS needed was.

0732 (PV)

A fourth Con Edison Gas Employee entered the fire building through garage door.

L-37 apparatus traveled south through West 234 Street and Tibbett Avenue intersection. Fire Building Exploded.

Four Con Edison Gas Employees exited the fire building.

0732 (E)

Battalion Chief Fahy was struck by a large section of roof.

L-37 apparatus parked on Tibbett Avenue.

L-37 Firefighters exited the apparatus and obtained first aid equipment from apparatus.

L-36 Roof noticed Battalion Chief Fahy under debris and removed him with L-36 Can and an NYPD ESU Police Officer.

0733 Hours

0733 (CV)

L-36 Roof, B-19 Firefighter and an NYPD ESU Police Officer carried Battalion Chief Fahy to an area alongside L-36 apparatus.

0733 (E)

L-37 Outside Ventilation, Forcible Entry and Can provided first aid to Battalion Chief Fahy.

0734 Hours

0734 (P)

EMS Unit 19B2 assigned to the incident.

0734 (HT)

L-36 Officer accounted for all his members.

0734 (AV)

B-19 Firefighter transmitted a 2nd alarm and building size up to the Bronx Dispatcher.

0735 Hours

0735 (HT)

E-95 Officer ordered his members to stretch a 2 ½” hoseline.

0735 (PV)

L-37 Officer, Chauffeur, and Roof entered exposure #4.

0736 Hours

0736 (PV)

L-37 Officer, Chauffeur, and Roof exited exposure #4.

0737 Hours

0737 (P)

E-81 transmitted a 10-84 via the MDT.

0738 Hours

0738 (P)

EMS Unit 19B2 transmitted a 10-84 via the MDT.

L-46 transmitted a 10-84 via the MDT.

E-52 transmitted a 10-84 via the MDT.

0738 (HT)

E-95 Officer ordered the 2 ½” hoseline charged.

0738 (AV)

L-36 Officer transmitted a 10-60 over the department radio.

0738 (E)

EMS Unit 19B2 parked the ambulance south of West 234 Street on Corlear Avenue.

EMS Unit 19B2 Driver proceeded to the scene.

0740 Hours

0740 (E)

EMS Unit 19B2 Driver approached Battalion Chief Fahy and noted that he was receiving first aid.

0741 Hours

0741 (P)

The B-19 Firefighter made another request to the Bronx Dispatcher for EMS to respond.

0742 Hours

0742 (P)

B-27 transmitted a 10-84 via the MDT.

L-52 transmitted a 10-84 via the MDT.

0742 (E)

B-27 assumed command of the incident.

L-37 Outside Ventilation, Forcible Entry and Can Firefighter along with several NYPD Police Officers placed Battalion Chief Fahy into a Police van.

EMS 19B2 Driver returned to the ambulance to prepare for transport.

0743 Hours

0743 (P)

D-7 transmitted a 10-84 via the MDT.

0743 (E)

D-7 assumed command of incident.

Battalion Chief Fahy was transported to New York Presbyterian Hospital/The Allen Pavilion.

0744 Hours

0744 (P)

Rescue 3 transmitted a 10-84 via the MDT.

0745 Hours

0745 (E)

Battalion Chief Fahy admitted into The Allen Pavilion Emergency Room.

XI. HANDIE-TALKIE RECORDER TRANSCRIPT

BRONX BOX 2-2-3732 09/27/2016 PRIMARY TACTICAL CHANNEL

This transcript is from the Handie-Talkie Recorder of Battalion 19 who was on the scene during the incident. It is a product of numerous hours of work in which the digital audio was slowed down, or sped up, to aid in revealing what was spoken. Listening to audio playback in a quiet, sterile environment differs greatly from the ambient noise that occurs at fire operations. It should be remembered that at fire operations, some communications take place without the use of the handie-talkie. These facts should be taken into consideration while listening to the audio and reading the transcript.

The audio from the Handie-Talkie Recorder of Battalion 19 can be accessed by going to the "Safety Command" section in the "Contributors" tab of Diamond Plate, found on the FDNY Intranet.

06:31:16 "Joe, we got nothing over here as far odors go, nothing on the meter, we'll probably just head up to Broadway now."

06:31:24 "10-4."

06:31:48 "36."

06:32:13 "Joe, did you tell the Bronx that we checked 234 and Broadway, or no?"

06:32:17 "I did not, but um I'm gettin, I'm getting an odor at uh 234 and uh Tibbett."

06:32:28 "Alright, 10-4, I'll put it over that there's nothing at Broadway."

06:32:34 "36 to 19."

06:32:36 "19."

06:32:37 "Just checked 234 and Broadway, nothing going on there, we're going to head up to Tibbett."

06:32:45 "10-4"

06:33:19 "95 to 36, yeah there's some kind of leak, uh leak over here, uh, on the end of the block on the, on the Tibbett side of 234. It's definitely a gas leak of some kind."

06:33:31 "10-4, we're right behind ya."

06:35:06 "We think we might have it here at this house, sounds like there's uh, one of the peck vents is blowing off."

06:35:12 "10-4."
06:35:14 "You got an address right there?"
06:35:18 "300 234 Street."
06:35:21 "10-4."
06:37:00 "36 to 19, we were knocking on the door. We didn't get an answer. We have a curb valve here that is accessible."
06:37:10 "No, just hold up a second, we've got Con-Ed on the way."
06:37:14 "10-4."
06:40:33 "Chief, we're actually above the explosive limit so we're not gonna open anything."
06:40:38 "Alright, 10-4, do you wanna...see if they uh, can get dressed and maybe come out?"
06:40:44 "He's coming out now, do you want us to start evacuating next door?"
06:40:49 "Yeah, 10-..."
06:42:21 "19 to Alpha."
06:42:23 "Alpha."
06:42:26 "Just tell em that we have uh, evacuated the house at 300, and we're uh evacuating 304 as well. And ask for a uh, a uh ETA on Con-Ed."
06:42:43 "10-4."
06:43:25 "36 to 19."
06:43:28 "19."
06:43:29 "304 also saturated, we're removing the occupants now."
06:43:34 "Alright, 10-4."
06:44:30 "I'm sorry, what was that?"
06:44:32 "I'm waiting to hear back for the ETA."
06:44:35 "Alright, 10-4."
06:46:19 "Alpha to 19."
06:46:21 "19."
06:46:22 "Twenty to thirty minute ETA."
06:46:25 "Alright tell em we have um, evacuated 300 and 304, and we have uh, we're evacuating 308 at this time."
06:46:41 "10-4."
06:46:44 "Want me to notify em that the uh, levels are above explosive?"

06:46:49 "Yeah, 10-4."
06:48:36 "...6 to 19."
06:48:38 "19."
06:48:39 "308 is good, I'm down in the uh, where the gas comes into the house in the basement, nothing going on down here."
06:48:46 "Alright, 10-4."
06:48:58 "G'head."
06:49:14 "Alpha to 19."
06:49:16 "19."
06:49:18 "Con-Ed needs to know if you want the curb valve turned off."
06:49:24 "..."
06:49:26 "Uh, tell em that we did it already. We had uh, above the explosive limits in the, two houses and uh, we shut it at the curb."
06:49:37 "10-4."
06:49:38 "And that didn't stop the leak at this time."
06:49:42 "10-4."
06:50:01 "Why don't you guys get a few uh, windows open, come on out and let it vent."
06:52:12 "36 to 19."
06:52:14 "19."
06:52:16 "Possible lab, up here."
06:53:21 "19 to Alpha, could you also ask for uh, PD to respond?"
06:53:28 "10..."
07:07:56 "Chief, we have no readings on the Altair but the Tiff is going."
07:08:00 "Alright, 10-4."
07:08:03 "Actually the Tiff is going up a little bit, five parts."
07:08:08 "Rather the Altair."
07:09:06 "Chief, second floor is still on the explosive range, we're gonna come out."
07:09:13 "10-4"
07:12:58 "...no good don't worry about it."
07:21:11 "36 to 19."
07:21:12 "19."

07:21:15 “Similar scenario down here in the basement, ah, we’ve got another one of those growing area here and everything is completely sealed off, ah, the only thing we can work on is that front garage, just basically smash the hell out of it till it’s open, falls off the tracks and everything else.”

07:21:33 “10-4 yeah, would it be easier for us to do it from the outside?”

07:21:37 “Ah, yeah I would think so. I would work, ah, start at the bottom and then kind of pry it out...except where it’s compromised most in the middle.”

07:21:45 “10-4.”

07:21:53 “19 to 36, there’s, um, the, PD is asking if they can come inside, what do you think, upstairs just to take a peek first?”

07:22:04 “What was the question, Chief?”

07:22:06 “Can the PD come in just to take a look at what you saw upstairs, real quick?”

07:22:10 “10-4. You know what, send them to the basement, cause the readings are a lot lower down here, cause it’s all getting trapped on the second floor. Send them down to the basement.”

07:22:18 “Alright, 10-4.”

07:23:28 “Chief if PD wants to come in from the garage it’s a straight shot.”

07:23:31 “Oh. Ok, hold on.”

07:29:23 “19 to 37 you guys can take up. 19 to 79 you guys can take up.”

07:29:29 “10-4.”

07:29:30 “10-4, thanks.”

07:29:44 “19 to Alpha.”

07:29:47 “Alpha.”

07:29:48 “You could tell them that we, we used two and two at this box and we’re going to um, continue to operate with 95 and 36. And we have Con Ed and PD on scene.”

07:30:01 “10-4.”

07:30:21 “Alpha to 19 you wanna go with the 10-40 code 1?”

07:30:26 “10-4.”

07:32:23 EXPLOSION.

07:32:41 “Come on back you guys...”

07:32:42 “Chief. The Chief, somebody...”

07:32:56 "Rush on the bus, rush on the bus."

07:33:11 "Guys, somebody grab a board, bring a board for us, bring a board."

07:34:23 "Raul come around the block hook up to a hydrant."

07:34:28 "Yeah, Joe we're hooked up here. We're hooked up here."

07:34:32 "If there's an engine around hook up on Tibbett Avenue."

07:34:35 "We gotta got a head count of who's here. 36 to 36 Irons."

07:34:40 "Irons, Dick I'm right in front of the building."

07:34:43 "You got the Can with you?"

07:34:45 "I've got Patty, I've got Caldly."

07:34:46 "36 to OV."

07:34:48 "36 OV's here."

07:34:49 "I got my Roof. Right, 36 is all together."

07:35:04 "Guys, stretch a line guys. Can you get..."

07:35:08 "10..."

07:35:20 "95 to 79, stretch a line guys..."

07:35:26 "Hey Joe we're coming down with the line right now from Irwin."

07:35:30 "That 2 1/2?"

07:35:34 "10-4."

07:35:35 "Alright, come on down. 79's right here."

07:35:38 "79 to 19 you want me to stretch a 2 1/2 also?"

07:36:26 "3, 36 to 37 Truck, you got all your guys with you?"

07:36:30 "37 Truck all members accounted for."

07:36:42 "36 to 95."

07:36:45 "95."

07:36:46 "Do we have any visible fire anywhere?"

07:36:48 "10-4, it's in the rear. I got 79 Engine with a line right here."

07:37:03 "Robbie, just take off one more length and then we're ready to go."

07:37:08 "10-4."

07:37:28 "Hey Raul, when you're ready."

07:37:30 "10-4, give me one second."

07:37:35 "36 to 95, did any of us give a 10-60 yet?"

07:37:38 "I did not, I just told them we had a man, we had critical man down, we had an explosion on Tibbett. I gave them the address, Tibbett and 234. If you wanna give a 10-60 go ahead."

07:38:03 "Raul, you guys ready?"

07:38:07 "10..."

07:38:08 "...comes your water."

07:38:11 "Engine 95 to 9...Alpha."

07:38:15 "Engine 95 to Engine 95 Chauffeur."

07:38:20 "Chauffeur."

07:38:21 "Start a, start water when you can."

07:38:24 "10-4, here comes your water."

07:38:35 "You're on booster."

07:38:53 "37 to 79..."

07:38:57 "79..."

07:38:59 "Are you operating that line right now?"

07:39:02 "Negative, 95 is."

07:39:03 "...the rear, there's a way that we can get to the rear here...and I have a feeling that might be where the fire is, you need another line?..."

07:39:11 "37 uh, to unit operating the handline."

07:39:15 "Engine 95 go."

07:39:17 "Yeah can you shut down that line for a second, we're checking the exposure and the wall's blown in here, just give us a second."

07:39:23 "10-4, the line's shut down."

07:39:35 "Hey, Control to 95."

07:39:43 "Control to 95."

07:39:45 "5."

07:39:46 "Loo, if you're gonna move that line you might need uh one or two more lengths, just let me know."

07:39:49 "Aight, 10-4."

07:40:19 "81 to uh, 19."

07:40:25 "...10-4, 10-4, 10-4 uh."

07:40:37 "..."

07:40:52 "81 Alpha to Command..."

07:40:58 "36."

07:41:00 "PD wants to know how many more buses we need down here."

07:41:04 "Standby."

07:41:07 "We need the one right now."

07:41:11 "..."

07:41:13 "Right now we're good with two buses, send two more as precautionary."

07:41:33 "36 to 19 Alpha."

07:43:14 "37 to 95."

07:43:16 "95, I'm right here bro."

07:43:18 "Alright we're out of the building now, you can operate however you need to."

07:43:27 "Ladder 37 to Command."

07:43:29 "G'head 37."

07:43:31 "..."

07:43:58 "Ladder 37 to Battalion 27."

07:44:17 "36 to 27."

07:44:30 "37 to Battalion 27."

07:44:33 "27, g'head."

07:44:35 "Uh, Chief you're the first chief on scene now, uh you're Command."

07:44:41 "10-4."

07:44:43 "36 to 27, I'm making my way down to ya, Chief."

07:45:21 "...Rescue 3 to Command."

07:45:30 "Command, ga'head."

07:45:33 "Rescue 3 is 10-84, what do ya need from us Chief?"

07:45:36 "Rescue 3, I just pulled up myself. I'm trying to get a handle on the situation, let me walk up right now, walking up with ya right now."

07:45:45 "Rescue to Battalion 19."

07:45:48 "23 to all, 27 to uh, uh Alpha, give me a rundown, please, of all my units, I need a printout."

07:45:55 "Division 7 is on the scene, I have a printout."