

# **FIREFIGHTER FATALITY REPORT**

**411 Palisade Avenue  
Jersey City, New Jersey**

**March 20, 1993**

**DIVISION OF FIRE SAFETY**

**James Dolan, *Acting Director***

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**STATE OF NEW JERSEY  
Christine Todd Whitman, *Governor***

**DEPARTMENT OF COMMUNITY AFFAIRS  
Harriet Derman, *Commissioner***

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## INTRODUCTION

This report was prepared in accordance with N.J.S.A. 52:27D-192 *et seq.*, Duties of the Division. The purpose of these firefighter casualty investigations is to report the causes of serious firefighter injuries or deaths. In some cases new information may be developed, or old lessons reinforced, in an effort to prevent similar events in the future. Fire cause and origin investigation is not a part of this report.

This investigation was conducted by Division of Fire Safety staff. The Division acknowledges Jersey City Fire Department Assistant Director Gerald Cala, Chief Frank Constantinople and the fire department's officers and firefighters for their cooperation and assistance. Recognition is also made to Jersey City Uniformed Firefighters Association, International Association of Firefighters, Local 1066, President Joseph Krajnik, and Jersey City Uniformed Fire Officer's Association, International Association of Firefighters Local 1064, President George Geyer.

The New Jersey Department of Health, Division of Occupational and Environmental Health Services, Fatality Assessment and Control Evaluation (FACE) Program personnel performed an investigation under their agreement with the National Institute of Occupational Safety and Health (NIOSH). The New Jersey Department of Labor, Division of Workplace Standards, Office of Public Employee Safety also performed an inspection of the firefighter's personal protective equipment.

The incident diagram in Appendix A was produced by the Department of Health's Fatality Assessment and Control Evaluation Program.

## SUMMARY

At 08:24 hours on Saturday, March 20, 1993, the Jersey City Fire Department was dispatched to a reported apartment fire at 411 Palisade Avenue. Initial reports indicated that there was a victim trapped. The fire building was a three-story occupancy with a liquor store on the first floor and one apartment each on the second and third floors. The building was attached to similar buildings on both sides. Upon arrival the first alarm units found heavy fire on the third floor of the building.

During the initial stages of the fire department's operation, a firefighter (who was off duty at the time) approached the incident commander (IC) and asked if his assistance was needed at the incident. The IC placed him on duty and he was ordered to assist with raising a 35' aluminum ground ladder to ventilate the windows and to provide a secondary means of egress for the firefighters performing the search on the third floor. While being maneuvered, the ladder struck a 7,500 volt primary electric transmission line. Of the three firefighters raising the ladder, one was slightly injured, one was critically injured and one firefighter suffered fatal injuries.

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## OVERVIEW

### The Municipality

Jersey City is the second largest city in New Jersey. Located across New York Bay from Manhattan, Jersey City is the Hudson County seat. It is classified as an urban center by the New Jersey Department of Community Affairs due to its high population density and urban character. With a resident population of 228,537<sup>1</sup>, it covers 15.7<sup>2</sup> square miles and has a population density of 14,557 persons per square mile.

The city is comprised of a mixture of waterfront, transportation (including portions of the New Jersey Turnpike, U.S. Routes 1 and 9 and the Pulaski Skyway), commercial, residential, manufacturing, institutional, warehousing, educational and many other occupancies. It is also the New Jersey terminus of the Holland Tunnel. Residential areas are primarily apartments and condominiums. Jersey City contains many blocks of three- and four-story mixed use dwellings. The first floor of these buildings is often occupied by mercantile or office occupancies. As with most major cities, there is a very diverse population.

### The Fire Department

The Jersey City Fire Department (JCFD) is a career department consisting of 655 employees, of whom approximately 495 are line firefighters. There are four platoons, each with 26 companies divided into four battalions. There is a fire headquarters station at 465 Marin Boulevard, and 15 other stations throughout the city. There are 16 engine companies, 10 ladder companies, one heavy rescue and one mask service/safety unit. A hazardous materials (Haz-Mat) unit is staffed by one engine and ladder company from fire headquarters. The fire department also provides Emergency

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<sup>1</sup>Population data taken from *Total Residential Population, New Jersey, Counties and Municipalities, 1980 and 1990*, State Data Center, New Jersey Department of Labor, Trenton, New Jersey, 1991.

<sup>2</sup>Square mile data taken from *1990 Statement of Financial Condition of Counties and Municipalities*, Division of Local Government Services, New Jersey Department of Community Affairs, Trenton, New Jersey, 1990.

Medical Services (EMS) first-responder service. The JCFD's Fire Prevention Bureau is the Local Enforcing Agency for New Jersey's Uniform Fire Code.

The JCFD has participated in the National Fire Incident Reporting System (NFIRS) since 1983. NFIRS reports for 1992 show that the fire department responded to 8,900 incidents. There were a total of 2,345 fires. These fire incidents were divided into: 965 structure fires, 450 vehicle fires and 930 other fires. The department also answered 3,161 false alarms in that year. There were 81 civilian and 45 firefighter injuries, and 11 civilian fatalities in Jersey City during 1992.

Three firefighters and one officer are assigned on each shift to each engine company and three firefighters are assigned to most ladder companies. Some ladder companies have a captain and three firefighters. These personnel work 24 hour shifts separated by 72 hours off-duty.

Recruit training consists of an eight week (320 hour) recruit class at the fire department's training academy. Interviews with JCFD members indicated that there is continuing training carried out on each tour by the captains using the International Fire Service Training Association (IFSTA) manuals as guides. JCFD members also reported that Public Service Electric and Gas Company (PSE&G) provides periodic training on electrical hazards.

One safety officer, a captain, is assigned on each platoon, thus providing 24 hour a day, 7-day-a-week coverage. The department's safety officers are appointed by the chief and are provided with additional training by the department. The safety officers respond to all multiple alarm fires and otherwise as needed. The safety officer has the authority to stop any fireground operations that are deemed unsafe.

### **Communications**

The JCFD has its own alarm room and dispatchers at Division 1 Headquarters at 355 Newark Avenue. The department receives 9-1-1 calls, automatic alarms and emergency

reporting system (ERS) street-boxes. The fire department operates on two primary radio frequencies.

#### **Incident Management System**

The JCFD utilizes a formal Incident Management System that is based on the National Fire Academy model Incident Command System. The fire department trains its members on the system and has instituted procedures for its use.

#### **The Victims**

At the time of this incident Firefighter (FF) David Barbossa was a probationary firefighter with the JCFD. He had approximately seven months in the department at the time of the incident, having recently completed recruit school. He was provisionally assigned to Truck 7, but frequently fills in at other companies as needed.

FF Walter Milne was an eight-year veteran of the JCFD, also assigned to Truck 7.

FF Carlos Negrón was a 12-year veteran of the JCFD. He was assigned to JCFD's Hose Shop for the previous two years. His duties at the Hose Shop were to perform hose and equipment repairs, to act as a courier for equipment and supplies and carry out other non-line duties. FF Negrón had been assigned to administrative duties for the prior eight years due to medical reasons.



## THE INCIDENT

### Incident Location

The incident occurred at 411 Palisade Avenue, Jersey City, an occupied three story structure of wood frame construction (BOCA Construction Type 5). A liquor store occupied the first floor and the second and third floors contained one apartment each (BOCA Mixed Use Group B/R-2). This type of building is often categorized as a "taxpayer" by the fire service. Located near the southern end of the block, the building of origin was a "middle of the row" type, attached to similar buildings on both 409 and 413 Palisade Avenue (Exposures B and D, respectively)<sup>3</sup>. Access to the rear (Division C) was made difficult by the absence of side yards.

The sidewalk in front of the building was narrowed due to a mound of ice and snow that extended along its length at the curblineline. This ice and snow mound was left over from sidewalk clearing following a recent heavy winter storm. There were primary and secondary electric transmission lines, telephone lines and cable television lines on utility poles at the curbside. The closest power line to the building, as measured by PSE&G, were 8' from the front wall of the building at a height of 31' 9" above the sidewalk. The lowest wires on the utility poles were about 11' from the ground and the highest were approximately 35' above the ground. There was also a large sign advertising the liquor store located on the front wall of the building between the center and right front windows, extending from below the second floor windows to above the third floor windows. Trees lined the curblineline on both sides of the fire building. An automobile was parked in the street, at the curb, directly in front of the building.

There was no suppression system in the building. JCFD records indicate that smoke detectors were present, although not in the room of origin. The reports also indicate that the detectors did activate.

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<sup>3</sup>Terminology for exposures, divisions, etc. are taken from the National Fire Academy Model Incident Command System.

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### **Weather Conditions**

The weather at the time of this incident was clear and cold. The state had just experienced one of the largest late-winter snow and ice storms in many years and was still recovering from the storm's effects. Due to this storm there were large mounds of ice and snow on the sidewalks next to the curb line.

### **Initial Victim Actions**

FF Negron who lived in the vicinity of the fire incident, was off duty and in a store on the same block that contained the fire building. Post incident investigation revealed that when he heard a commotion in the street, he went outside to investigate. Negron was informed that there was a fire at 411 Palisade Avenue with a reported victim trapped on the third floor. Interviews with JCFD officials report that Negron called 9-1-1 to report the fire, and that he and a non-firefighter friend attempted to gain access to the third floor to search for the reported victim. Neither was wearing personal protective equipment (PPE). They were unable to gain access to the third floor due to excessive heat. They returned to the street level and were on location when the first fire department units arrived.

### **Initial Fire Department Response**

The initial call reporting the incident was received at the JCFD's central communications center at 08:24:59<sup>4</sup>. This call was followed by additional calls reporting the same incident. The original dispatch to the incident was made at 08:25:52. The first alarm structural response for District (box) 420 brought Engines 5, 7, 11 and 14, Trucks 3 and 7, Rescue 1, the Mask Service/Safety Unit, Battalion Chief 3 and Division Chief 1. Due to its heavy work load, Jersey City's Emergency Medical Services (EMS) is not automatically dispatched for fires. It does, however, have the ability to monitor the fire radio frequencies and respond if available. Engine 14 (E-14), the first due engine company, arrived at 08:29:42 and reported heavy smoke showing on the third floor of 411 Palisade Avenue. E-14 connected to the hydrant in front of 409 Palisade Avenue

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<sup>4</sup>Times utilized in this report are from the official JCFD transcript of the communications tapes.

(Exposure B). Truck 3 (T-3), the first due truck company, arrived at about the same time, and located in front of the fire building. Division 1 Deputy Chief (DC) Denis Onieal arrived on scene and took command at 08:30:12.

### **Fire Ground Actions**

Immediately upon his arrival DC Onieal was met by a woman, dressed in night clothes, who was carrying a baby. This woman reported that she was the third floor occupant and also told the chief that her father was trapped on the third floor. (This information was determined to be unfounded after the incident. The father had already left home to go to work.) DC Onieal reported that upon his arrival he noted there was heavy smoke pushing out from between the rows of aluminum siding, but not around the windows. He also noted smoke pushing out from the soffit area and moving toward exposures B and D.

DC Onieal ordered E-14's crew (one captain and three firefighters) to take a 1 ¾" hand line to the third floor for fire attack. T-3's crew (three firefighters) was assigned to perform primary search and interior ventilation. E-7's crew (one captain and three firefighters) was assigned to connect to a hydrant and provide an additional water supply to E-14 and to stretch a back-up 1 ¾" to the third floor. The engine chauffeurs stayed with their apparatus; the truck chauffeur went inside. At this point there were two captains and seven firefighters inside the fire building.

T-7 arrived with three additional firefighters and attempted to place its rear mounted aerial in a position to gain access to the roof. The large number of utility wires and their proximity to the fire building prevented use of the main ladder. The chauffeur, FF James Early, and his crew, David Barbossa and Walter Milne, walked over to report to DC Onieal. All three firefighters wore full PPE, but without self contained breathing apparatus (SCBA) face pieces in place. Early reported to Onieal first and was ordered to enter 409 Palisade Avenue (Exposure B) to attempt to gain access to the roof via the inside stairs and roof scuttle. Once there, he was ordered to access the fire building roof and attempt to perform roof ventilation. Milne and Barbossa were slightly delayed in reporting to DC Onieal by a fall that Milne took. They were ordered to pull a ladder

from Truck 3 (a two-section, aluminum, 35' ladder) and use it to break out the windows on the third floor from the exterior of the building. This was done to provide secondary ventilation for the crews on the interior. It also was a safety measure in the event that the roof ventilation operation was unsuccessful due to possible roof access problems, such as missing interior roof ladder or the roof scuttle on Exposure B being nailed shut or tar-papered over to deter burglaries. It also would provide an additional escape route for the crews working on the third floor.

As DC Onieal was giving orders to firefighters Barbossa and Milne, off duty FF Carlos Negrón reported to Onieal to ask if his assistance was needed. He was told to stand by. Onieal completed his orders to Barbossa and Milne. He then placed Negrón on duty and ordered him to assist with the outside ventilation evolution. Negrón was wearing no PPE as he was off duty and JCFD apparatus do not carry spare PPE.

Barbossa and Milne raised the ladder on the sidewalk in front of the building, utilizing a flat raise parallel to the building. After they raised the ladder, they rotated it toward the building front. Then they moved the butt of the ladder away from the building. The positioning of the ladder butt placed it either in or against the ice and snow mound at the curbline. At about this time Negrón arrived to provide assistance. Barbossa was on the halyard, and assisted with ladder control from his position between the ladder and the building. Milne was footing the ladder and was on the outside. Negrón was on the left (southern) beam assisting with controlling the ladder.

According to transcripts and interviews, the first time that the ladder was dropped into the window it only cracked it. The second time the ladder was dropped into the window the top sash was broken out. On the third attempt, as the ladder was raised again to drop it into the window, Barbossa reported feeling a tingling begin in his fingers and move down his arms toward his shoulders. He removed his hands from the rungs at this time. He reported that immediately after he removed his hands he heard a loud buzzing and saw sparks coming from Milne, but cannot remember whether he heard the buzzing or saw the sparks first. Barbossa then stated that he saw a large electrical type arc and heard a sound like high voltage electricity grounding out. He then reported that

he saw both Milne and Negrón fall to the ground, and that the ladder fell back onto the building's face.

FF George Blick, chauffeur of E-14, stated that he was watching the ladder evolution while standing at his pump panel. E-14 was positioned in such a manner that made Blick the closest witness. He reported that the firefighters carrying out the ladder evolution seemed to be proceeding normally, but that they seemed to either lose control of the ladder and/or to slip on the ice. This caused the ladder either to come close enough to draw an arc from the wires or to actually contact the electric wires. He reported seeing a large arc and hearing the sound of electricity grounding out. He then reported seeing Milne and Negrón fall to the ground with Milne falling flat on his back and Negrón falling on his side, his body landing between Milne's legs with his head on Milne's abdomen.

FF Blick immediately retrieved E-14's oxygen unit and first aid kit to provide assistance to the fallen members. Blick was reaching to pull Milne and Negrón away from the ladder when DC Onieal ordered him not to touch them as Negrón's foot was still against the butt of the ladder. Onieal ordered that a pike pole be used to pull the men away. Barbossa, who had previously obtained a pike pole from a truck, retrieved it, and began, with Blick's assistance, to pull the men away from the ladder. Blick reported that Milne appeared to be very ashen, had foam on his lips and appeared to be dead. He also reported that it appeared that Negrón's eyelids were fluttering. At this point, several additional firefighters from the 3rd and 4th due engines and the rescue company arrived at the scene and provided emergency medical assistance. Blick returned to his apparatus. Cardiopulmonary resuscitation (CPR) was begun immediately on both unconscious members.

After the firefighters were pulled from the ladder, DC Onieal notified the communications center at 08:34:18 that there were firefighters down following contact with electricity. EMS was notified, and since the incident was being monitored on radio, was already responding. At 08:34:33 Onieal ordered a 2nd, and at 08:35:08 a 3rd alarm due to the increase in scope and complexity of the incident.

The extra alarm companies began arriving and continued to provide EMS support and fire suppression duties. Members of first alarm Rescue 1 (R-1) and other on and off-duty fire department and EMS members were committed to helping Milne and Negrón. Basic Life Support (BLS) and Advanced Life Support (ALS) units from Jersey City Medical Center arrived and worked on both firefighters. Very aggressive EMS intervention, including intubation, intravenous lines and defibrillation was carried out. Milne was revived prior to transport to Christ Hospital, Jersey City. Treatment for Negrón continued in the emergency department at Christ Hospital, but he could not be revived. Milne was stabilized at Christ Hospital and flown by NorthStar (New Jersey State Police Aero-medical Evacuation Helicopter) to St. Barnabas Burn Center in Livingston for further burn treatment.

Fire suppression activities continued while the EMS activity was carried out on the sidewalk. The fire was extinguished with serious fire damage to the initial fire building and smoke and fire damage to Exposures B and D. JCFD units remained on the scene until 16:00 to complete extinguishment and investigation of the fire and casualty scene.

## COMMENTS

### **Incident Management System (IMS)**

The Jersey City Fire Department utilizes the Jersey City Incident Command System (JCICS). This system is based on the National Fire Academy's Incident Command System. Training is provided to all members and the JCICS is used on all incidents.

### **Ground Ladder Training**

Firefighters interviewed stated that ladder training is provided daily. Engine companies work with either the truck company in the same house or with the first due truck company in their response district. The training is based on International Fire Service Training Association manuals.

### **Electrical Hazards Training**

It was reported in several interviews that PSE&G, the electric utility for Jersey City, provides recruit and periodic training to the department members on electrical hazards. This is a lecture and mock-up type of training.

### **Standard Operating Procedures (SOPs)**

The Jersey City Fire Department has some SOPs and detailed Department General Orders. There are no specific SOPs or general orders regarding raising ladders near electrical lines.

### **Utilization of Off-Duty Personnel**

The JCFD has a general order allowing off duty personnel to be used in emergency situations. These personnel must report to the Incident Commander (IC) and be placed on duty in order to work. Such personnel do not ordinarily have PPE unless it is carried in their own private vehicle. In this case Negron did not have any PPE.

### **High Voltage Proximity**

The firefighters on this incident were aware of the presence of wires in front of the fire building. The presence of wires interfered with ladder placement, and was a factor in the casualty event.

### **Safety Officer**

In this incident the department's safety officer had not arrived prior to the casualty event. The JCFD's safety officer responds on all serious incidents, but there may be a time during which the incident commander retains the safety functions prior to the arrival of the department's safety officer.

### **Emergency Medical Services Training**

The JCFD operates a first responder engine program. This program sends the closest available fire department unit to certain protocol life threatening EMS incidents. The purpose of this type of program is to provide the citizens with rapid EMS intervention in areas where the demand for EMS service is high. Training for this program requires all firefighters up to battalion chief to have a current cardiopulmonary resuscitation (CPR) certification. In addition, many of the firefighters are trained to Advanced First Aid, Crash Injury Management-First Responder, Emergency Medical Technician or Paramedic levels.

The EMS equipment (first aid kit, oxygen, etc.) and the EMS training gave the firefighters the ability to provide immediate and appropriate Basic Life Support (BLS) treatment, while awaiting Advanced Life Support personnel. The EMS equipment carried on Jersey City's apparatus aided in this resuscitation effort.

### **Critical Incident Stress Debriefing Team Use**

The JCFD contacted the New Jersey Critical Incident Stress Debriefing (CISD) network, and assistance was provided to emergency workers by the local CISD team.



## RECOMMENDATIONS

### **Incident Management System (IMS)**

The Jersey City Fire Department utilizes an incident management system. The JCFD system is based on the National Fire Academy's Incident Command System (ICS).

Recent statewide surveys by the Division indicate that the National Fire Academy's ICS is the Incident Management System predominantly used in New Jersey. It was also identified as the system of choice for standardization of IMS in New Jersey<sup>6</sup>. In addition, the New Jersey Fire Safety Commission has endorsed the National Fire Academy's ICS as the one system for New Jersey's use. The Division recommends that, as the Jersey City Fire Department has done, all fire departments should implement the National Fire Academy's Incident Command System.

### **Equipment Training**

The JCFD has an ongoing program for training on all of the equipment that it uses. Fire Departments should provide sufficient training on each piece of equipment to assure competence in its use by all members. The Division recommends that this training be repeated periodically to keep the firefighters' skills at the appropriate levels.

### **Specialty Training**

Specialty training should be done by fire departments as needed for the particular hazards that they face. The JCFD does this. Public utility companies, chemical corporations, military installations, *etc.* can be utilized to provide specialized training to the department. The Division recommends that this type of training be done on a periodic basis to refresh the skills of the department's members.

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<sup>6</sup>Incident Management System Survey Results, New Jersey Department of Community Affairs, Bureau of Fire Safety, June 25, 1992

### **Standard Operating Procedures (SOPs)**

The Division recommends that fire departments develop Standard Operating Procedures for anticipated situations. SOPs required for this instance would include raising ground and aerial ladders around energized electrical equipment or transmission lines.

It should also be noted that SOPs cannot apply to every situation. In some cases the firefighter, officer or incident commander must work outside of the SOP in order to accomplish the task. In other cases the SOPs actions cannot be carried out due to the risks involved in carrying out the procedure.

### **Utilization of Off-Duty Personnel**

Fire departments must address their use of off-duty members at incident scenes. It appears that the use of these off-duty members is common in some career fire departments throughout the state. Fire Departments should carefully consider such factors as firefighter accountability, the effect that one or more additional firefighters will have on the ability to exercise control over the incident, the availability of proper personal protective equipment (compliant with N.J.S.A. 12:100-10 *et. seq.*, *Safety and Health Standards for Public Employees, General Standards and Standards for Firefighters*), *etc.*, in making policies and decisions about the use of off duty members. This PPE is required for interior structural firefighting. Some of these same considerations must also be taken into account in volunteer departments where members may respond directly to an incident and not have their PPE.

### **High Voltage Proximity**

All fire departments should be aware of the risks and dangers involved when working near high voltage equipment. N.J.S.A. 34:6-47 *et. seq.*, *New Jersey Department of Labor High Voltage Proximity Act*, prohibits all tools, equipment or operations within six feet of any high voltage equipment. This recognizes the potential hazards involved when working near such equipment.

In some situations, the officer or incident commander must make careful consideration regarding the risks involved in carrying out assignments near high voltage electrical

equipment. When the risk-benefit analysis is made, the officer may elect to abandon the operation as being too hazardous. Alternate means should be found to accomplish the task, even if they are less practical and less likely of prompt success.

Buildings that are in close proximity to high voltage electric lines are a common urban occurrence. Operating close to high voltage electric lines of this nature without the proper equipment is a violation of N.J.S.A. 34:6-47 *et. seq.*, *New Jersey Department of Labor High Voltage Proximity Act*. The Division of Fire Safety recommends that fire departments facing this type of situation should consider utilizing non conductive ladders, such as fiberglass, to reduce the risk of electrocution.

### **Safety Officer**

The JCFD has a dedicated safety officer on each platoon. In this instance, the casualty event occurred prior to the arrival on scene of the safety officer. In such a situation, the incident commander (IC) retains the safety function unless it is delegated to another firefighter. Fire departments should consider establishing a policy to use an interim safety officer pending the arrival of the safety officer. This would relieve the IC of the safety function and would ensure a continual high level of consideration for safety. While commanding a complex or large incident the IC cannot be expected to give the attention needed to all elements of safety that a delegated safety officer can.

### **Critical Incident Stress Debriefing Team Use**

The use of the CISD Team in this instance was very helpful to the emergency services workers involved. The Division of Fire Safety recommends the notification and use of CISD teams when the CISD trigger events are found to be present. Such significant events may include<sup>6</sup>:

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<sup>6</sup>Trigger events information from Critical Incident Stress Debriefing Network of New Jersey.

- line of duty death of a co-worker
- mass casualty incidents
- death of a child
- death occurring after prolonged rescue efforts
- when a victim reminds an emergency worker of a loved one
- during highly dangerous or highly visible events
- when the emergency worker influences death or injury
- co-worker suicides
- any other unspecified highly traumatic event

Further information on critical incident stress debriefing is available by contacting your local CISD team. The statewide emergency 24-hour contact number for activation of a CISD team is (609) 395-3600.

## CONCLUSION

The Jersey City Fire Department responded to what was assumed to be a routine top floor fire in a taxpayer building with a reported trapped victim. They have handled many similar incidents in the past. The department's experience with these types of fires has led to the development of specific operations to effect rescues, and to ventilate and extinguish such fires. In this instance, however, the usual operations were compromised by the presence of the snow and ice on the sidewalk, as well as by the close proximity of utility lines in front of the building.

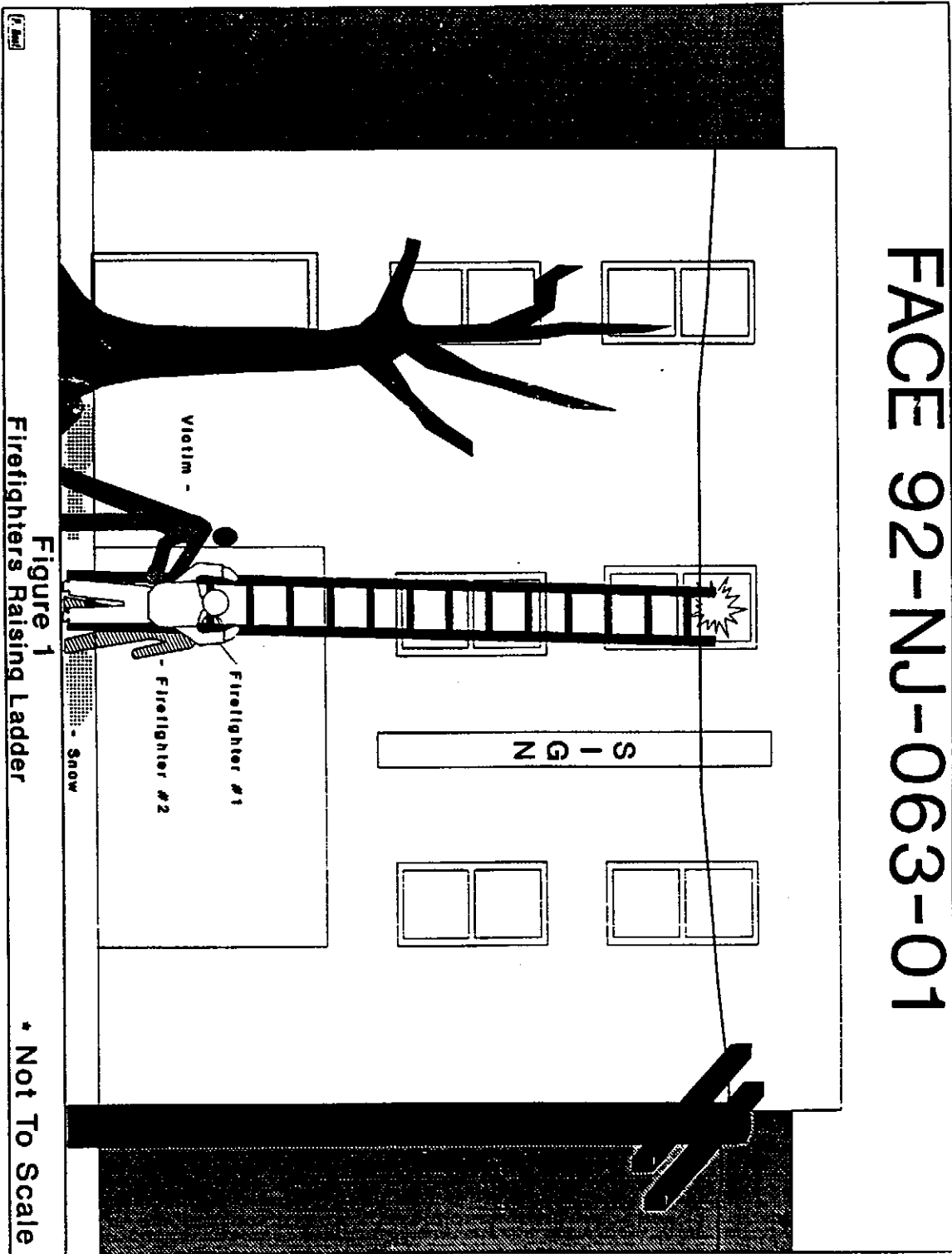
Fire departments must have standard operating procedures for safe and effective operations. In certain situations, however, normal tactics or strategies will have to be modified or abandoned in order to carry out the necessary operations in a safe manner. Firefighters and officers must also maintain situational awareness in order to notice previously unseen or changing factors and to compensate for them. Some equipment may have to be replaced with appropriate non-conductive equipment for use near high voltage electric equipment.

Recognition must also be made of the efforts of the firefighters, emergency medical technicians and paramedics who treated both critically injured firefighters. This incident had the potential for three firefighter fatalities. The initial sensation of electrical current and subsequent release of the ladder resulted in no injuries to one firefighter. The work of the fire service and emergency medical services personnel on the scene effected the revival of the second. They, and the emergency department staff at Christ Hospital, also made great efforts to revive the third firefighter. Unfortunately they were not successful.

**APPENDIX A**

**Casualty Incident Diagram**

# FACE 92-NJ-063-01



**APPENDIX B**

**Radio and Telephone Tape Transcript**



### Radio and Telephone Tape Transcript

The following is an edited chronology of pertinent radio and telephone transmissions and does not represent a complete text nor should text be considered verbatim. This chronology was prepared by the Jersey City Fire Department.

- 08:24:59 Central Office received first telephone call reporting the fire.
- 08:25:52 Central Office transmits District 420, 411 Palisade Ave.
- 08:27:01 Central Office received second telephone call reporting the fire.
- 08:27:15 Central to Division 1, *Central has received numerous calls.*  
Division 1 to Central, *Received.*
- 08:29:42 Engine 14 reports smoke condition.
- 08:29:50 *Truck 3 on scene, First-in report transmitted.*
- 08:30:12 *Division 1 on scene, Command report transmitted.*
- 08:30:40 Mask Service Unit / Car 20, responding.
- 08:34:18 Division 1, *2 firefighters down, hit with electric line.*
- 08:34:32 Central calls EMS. EMS was monitoring fire radio and was already on the way.
- 08:34:33 Division 1 to Central, *Transmit the second alarm.*  
Central dispatches second alarm over radio.
- 08:34:48 Central Office transmitted second alarm over station speakers.
- 08:34:52 Division 1 to Central, *2 firefighters down, ground ladder hit wire.*
- 08:35:?? EMS Arrives on location.
- 08:35:08 Division 1 to Central, *Transmit third alarm.*  
Third alarm transmitted over radio.

08:35:28 Truck 7 to Division 1, *Heavy fire venting through the roof.*

08:35:34 Battalion 3 to Central, *Have ambulance respond immediately, stat.*

08:35:45 Division 1 to Central, *I want another battalion chief on this box.*

08:36:13 Division 1 to Central, *Both these firefighters are unconscious but breathing. That's my report right now. Push EMS on this please.*

08:36:57 Central Office transmitted third alarm via station speakers.

08:37:13 Division 1 to Central, *I want someone at the Medical Center to meet these firefighters. I want somebody with them.*

08:37:14 Central to Division 1, *Central will make the arrangements.*

08:39:14 Division 1 to Central, *Notify all units responding on the second and third alarm that two extra alarms were transmitted at the same time . . . Use caution while responding.*

08:41:10 Division 1 to Central, *Notify Christ Hospital we have a firefighter injured, not breathing. Make sure someone from the department is at Christ Hospital, too.*

08:41:11 EMS to Central, *We notified Christ Hospital.*  
Central to EMS, *You have somebody there?*  
EMS to Central, *Yes.*

08:41:11 Car 2 to Central, *I'll head up to Christ Hospital.*