Emergency Preparedness and Response

Staff Statement No. 13

Members of the Commission, with your help, your staff is prepared to report its preliminary findings regarding the emergency response in New York City on September 11, 2001. These initial findings may help frame some of the issues for this hearing and the development of your judgments and recommendations.

This report represents a summary of our work to date. We remain ready to revise our current understanding in light of new information as our work continues. We encourage those whose understanding differs from ours to come forward. Sam Caspersen, George Delgrosso, Jim Miller, Madeleine Blot, Cate Taylor, Joseph McBride, Emily Walker, and John Farmer conducted most of the investigative work reflected in this statement, and Allison Prince assisted with the audio-visual components.

Much of this work was conducted in conjunction with the National Institute of Standards and Technology (NIST), which is studying the building performance issues. We are indebted to NIST for its cooperation. We have also received cooperation from the Port Authority of New York and New Jersey and from the City of New York.

We have spoken with hundreds of people about the most painful moments of their lives. We thank them for their willingness to help us. As we have relived their stories, and the records left by those who no longer can help us, we have joined in the mourning for all those who were lost that day.

On the morning of September 11, 2001, the last best hope for the community of people working in or visiting the World Trade Center rested not with national policymakers but with private firms and local public servants, especially the first responders: fire, police, and emergency medical service professionals.

As we therefore focus on the choices they made on the morning of 9/11, we will not offer much commentary. We will offer more analysis and suggest some lessons that emerge for the future in Staff Statement No. 14, which we will present tomorrow. Today we concentrate just on presenting a reliable summary of what happened, to explain the day in its complexity without replicating its chaos.

We wish to advise the public that the details we will be presenting may be painful for you to see and hear. Please consider whether you wish to continue viewing.

Building Preparedness on 9/11

Emergency response is a product of preparedness. We begin with a brief discussion of measures taken to enhance safety and security at the World Trade Center after the 1993 bombing.

The World Trade Center (WTC) complex was built for the Port Authority of New York and New Jersey. Construction began in 1967, and tenants began to occupy its space in 1970. The Twin Towers came to occupy a unique and symbolic place in the culture of New York City and America.

The WTC actually consisted of seven buildings, including one hotel, spread across 16 acres of land. The buildings were connected by an underground mall one level below the plaza area. The Twin Towers ("1 WTC" or the "North Tower," and "2 WTC" or the "South Tower") were the signature structures, containing 10.4 million square feet of office space. On any given work day up to 50,000 office workers occupied the towers, and 40,000 visitors passed through the complex.

Both towers had 110 stories and were about 1,350 feet high. Both were square; each wall measured 208 feet in length. The outside of each tower was covered by a frame of 14-inch-wide steel columns; the centers of the steel columns were 40 inches apart. These exterior walls bore the majority of the weight of the building.

The interior core of the buildings was a hollow steel shaft, in which elevators and stairwells were grouped. Each tower contained three central stairwells, which ran essentially from top to bottom, and 99 elevators. Generally, elevators originating in the lobby ran to "sky lobbies" on upper floors, where further elevators carried passengers to the tops of the buildings.

Stairwells A and C ran from the 110th floor to the mezzanine level and Stairwell B ran from the 107th floor to level B6. All three stairwells ran essentially straight up and down, except for two deviations in Stairwells A and C where the staircase jutted out toward the perimeter of the building. These deviations were necessary because of the placement of heavy elevators and machine rooms. These areas were located between the 42nd and 48th floors and the 76th and 82nd floors in both towers.

On the upper and lower boundaries of these deviations were "transfer" hallways contained within the stairwell proper. Each hallway contained "smoke doors" to prevent smoke from rising from lower to upper portions of the building. Smoke doors were kept closed but not locked. Other than these slight deviations in Stairwells A and C, the stairs ran straight up and down.

Doors leading to the roof were kept locked. The Port Authority told us that this was because of structural and radiation hazards, and for security reasons. To access the roof in either towers required passing through three doors: one leading from the stairwell onto

the 110th floor, and two leading from the floor onto the roof itself. There was no rooftop evacuation plan. The roof was a cluttered surface that would be a challenging helipad even in good conditions and, in a fire, smoke from the building would travel upward.

Unlike most of America, both New York City and the World Trade Center had been the target of terrorist attacks before 9/11. On February 26, 1993, a 1,500-pound bomb stashed in a rental van was detonated on a parking garage ramp beneath the Twin Towers. The explosion killed six people, injured 1,000 more, and exposed vulnerabilities in the World Trade Center's and the City's emergency preparedness.

The towers lost power and communications capability. Generators had to be shut down to assure safety. Elevators stopped. The public address system and emergency lighting systems failed. The unlit stairwells filled with smoke and were so dark as to be impassable. Rescue efforts by the Fire Department of New York were hampered by the inability of its radios to function in buildings as large as the Twin Towers. The 9-1-1 emergency call system was overwhelmed. The explosion occurred at 12:17 p.m.; the last person was evacuated nearly ten hours later in a helicopter rescue by the New York Police Department.

To address the problems encountered during the response to the 1993 bombing, the Port Authority implemented $100 million in physical, structural, and technological changes to the WTC. In addition, the Port Authority enhanced its fire safety plan.

The Port Authority added battery-powered emergency lighting to the stairwells and back-up power to its alarm system. Other upgrades included glow-in-the-dark signs and markings. Upgrades to the elevator system included a redesign of each building's lobby command board to enable it to monitor all of the elevators.

To aid communications the Port Authority installed a "repeater system" for use by the Fire Department of New York. The "repeater" used an antenna on the top of 5 WTC to "repeat" and greatly amplify the wave strength of radio communications, so they could be heard more effectively by firefighters operating many floors apart.

The Port Authority also sought to prepare civilians better for future emergencies. Deputy fire safety directors conducted biannual fire drills, with advance notice to tenants. During a fire drill, designated fire wardens were instructed to lead people in their respective areas to the center of the floor where they would use an emergency intercom phone to obtain specific information on how to proceed.

Civilians were taught basic procedures such as to evacuate by the stairs and to check doors for heat before proceeding. Civilians who evacuated in both 1993 and 2001 have told us that they were better prepared in 2001.

Civilians were not, however, directed into the stairwells during these drills. Civilians were not provided with information about the configuration of the stairwells and the existence of transfer hallways or smoke doors. Neither full nor partial evacuation drills

were held. Participation in the drills that were held, moreover, varied greatly from tenant to tenant.

Civilians were never instructed not to evacuate up. The standard fire drill instructions advised participants that in the event of an actual emergency, they would be directed to descend to at least two floors below the fire. Most civilians recall simply being taught to await instructions which would be provided at the time of an emergency.

Civilians were not informed that rooftop evacuations were not part of the Port Authority's evacuation plan. They were not informed that access to the roof required a key. The Port Authority acknowledges that it had no protocol for rescuing people trapped above a fire in the towers.

Preparedness of First Responders on 9/11

On 9/11, the principal first responders were from the Fire Department of New York (FDNY), the New York Police Department (NYPD), the Port Authority Police Department (PAPD), and the Mayor's Office of Emergency Management (OEM).

The 40,000-officer New York Police Department consisted of three primary divisions: operations, intelligence, and administration. The Special Operations Division supervised units critical in responding to a major event. This division included the aviation unit, which provided helicopters for the purpose of survey and/or rescue, and the Emergency Service Units (ESU), or rescue teams, which carried out specialized missions.

The NYPD had standard operating procedures for the dispatch of officers to an incident. Gradations in response were called "mobilization" levels and went from 1 (lowest) to 4 (highest). Level 3 and 4 mobilizations could not be ordered by someone below the rank of captain.

The NYPD ran the City's 9-1-1 emergency call center. 9-1-1 operators were civilians trained in the rudiments of emergency response. Fire emergencies were transferred to the FDNY dispatch center.

The 11,000-member Fire Department of New York was headed by a Fire Commissioner, who, unlike the Police Commissioner, lacked operational authority. Operations were controlled by the Chief of Department.

Basic operating units included ladder companies, to conduct standard rescue operations, and engine companies, to put out fires. The Department's Specialized Operations Command contained specialized units, including five rescue companies, to perform specialized and highly risky rescue operations, and one HAZMAT team.

The logistics of fire operations were coordinated by Fire Dispatch Operations division. 9-1-1 calls concerning fire emergencies were transferred to this division.

Alarm levels escalated from first (lowest) to fifth (highest) with a pre-established number of units associated with each. Prior to 9/11, it was common FDNY practice for units to arrive with extra personnel, and for off-duty firefighters to respond to major incidents.

The years leading up to 9/11 were successful ones for the FDNY. In 2000, fewer people died from fires in New York City—107—than in any year since 1946. Firefighter deaths—22 during the 1990s—compared favorably with the best periods in FDNY history. The FDNY had fought 153,000 fires in 1976; in 1999, that number had been reduced to 60,000.

In July 2001, Mayor Rudolph Giuliani signed a directive entitled "Direction and Control of Emergencies in the City of New York." Its purpose was "to ensure the optimum use of agency resources while ... eliminating potential conflict among responding agencies which may have areas of overlapping expertise and responsibility."

The directive designated, for different types of emergencies, an appropriate agency as "Incident Commander." The Incident Commander would be "responsible for the management of the City's response to the emergency." The role of the Mayor's Office of Emergency Management was supportive, to "coordinate the participation of all city agencies in resolving the event," and to "assist the Incident Commander in his/her efforts in the development and implementation of the strategy for resolving the event."

The Mayor's creation of the Office of Emergency Management and the issuance of his Incident Command Directive were attempts to address the long-standing rivalry between the NYPD and the FDNY. This rivalry has been acknowledged by every witness we have asked about it. Some characterized the more extreme manifestations of the rivalry—fistfights at the scenes of emergencies, for instance—as the actions of "a few knuckleheads." Some described the rivalry as the result of healthy organizational pride and competition. Others told us that the problem has escalated over time and has hampered the ability of the City to respond well in emergency situations.

The NYPD and the FDNY were two of the preeminent emergency response organizations in the United States. But each considered itself operationally autonomous. Each was accustomed to responding independently to emergencies. By September 11 neither had demonstrated the readiness to respond to an "Incident Commander" if that commander was an official outside of their Department. The Mayor's Office of Emergency Management had not overcome this problem.

As we turn to the events of September 11, we will try to describe what happened in the following one hundred minutes:

-- The 17 minutes from the crash of hijacked American Airlines Flight 11 into World Trade Center 1 (the North Tower) at 8:46 a.m. until the South Tower was hit

-- The 56 minutes from the crash of hijacked United Airlines Flight 175 into World Trade Center 2 (the South Tower) at 9:03 a.m. until the collapse of the South Tower

-- The 27 minutes from the collapse of the South Tower at 9:59 a.m. until the collapse of the North Tower at 10:26 a.m.

From 8:46 until 9:03 a.m.

At 8:46:40 a.m. the hijacked American Airlines Flight 11 flew into the upper portion of the North Tower.

Video: *AA 11 hits North Tower.*

The plane cut through floors 93/94 to 98/99 of the building. All three of the building's stairwells became impassable from the 92nd floor up. Hundreds of civilians were killed instantly by the impact. Hundreds more remained alive but trapped.

A jet fuel fireball erupted upon impact, and shot down at least one bank of elevators. The fireball exploded onto numerous lower floors, including the 77th, 50th, 22nd, West Street lobby level, and the B4 level, four stories below ground. The burning jet fuel immediately created thick, black smoke which enveloped the upper floors and roof of the North Tower. The roof of the South Tower was also engulfed in smoke because of prevailing light winds from the north.

Within minutes, New York City's 9-1-1 system was flooded with eyewitness accounts of the event. Most callers correctly identified the target of the attack. Some identified the plane as a commercial airliner.

The first response came from private firms and individuals—the people and companies in the building. Everything that would happen to them during the next few minutes would turn on their circumstances and their preparedness, assisted by building personnel on site.

Because all of the building's stairwells were destroyed in the impact zone, the hundreds of survivors trapped on or above the 92nd floor gathered in large and small groups, primarily between the 103rd and 106th floors. A large group was reported on the 92nd floor, technically below the impact but trapped by debris. Civilians were also reported trapped below the impact zone, mostly on floors in the eighties, though also on at least the 47th and 22nd floors, as well as in a number of elevators.

Because of damage to the building's systems, civilians did not receive instructions on how to proceed over the public address system. Many were unable to use the emergency intercom phones as instructed in fire drills. Many called 9-1-1.

9-1-1 operators and FDNY dispatchers had no information about either the location or magnitude of the impact zone and were therefore unable to provide information as fundamental as whether callers were above or below the fire. 9-1-1 operators were also not given any information about the feasibility of rooftop rescues. In most instances, 9-1-1 operators and FDNY dispatchers, to whom the 9-1-1 calls were transferred, therefore

relied on standard operating procedure for high-rise fires. Those procedures are to advise civilians to stay low, remain where they are, and wait for emergency personnel to reach them. This advice was given to callers from the North Tower for locations both above and below the impact.

The protocol of advising against evacuation, of telling people to stay where they were, was one of the lessons learned from the 1993 bombing. Fire chiefs told us that the evacuation of tens of thousands of people from skyscrapers can create many new problems, especially for disabled individuals or those in poor health. Many of the injuries after the 1993 bombing occurred during the evacuation. Evacuees also may complicate the movements and work of firefighters and other emergency workers.

Although the default guidance to stay in place may seem understandable in cases of conventional high rise fires, all the emergency officials that morning quickly judged that the North Tower should be evacuated. The acting fire safety director in the North Tower immediately ordered everyone to evacuate that building, but the public address system was damaged and no one apparently heard the announcement.

Hence, one of the few ways to communicate to people in the building was through calls to the 9-1-1 or other emergency operators. We found no protocol for communicating updated evacuation guidance to the 9-1-1 operators who were receiving calls for help. Improvising as they learned information from callers, some operators advised callers that they could break windows. Some operators were advising callers to evacuate if they could.

Below the impact zone in the North Tower, those civilians who could began evacuating down the stairs almost immediately.

> ***Claire McIntyre, Manager, Administration Services, American Bureau of Shipping:*** *After going out into the hallway and yelling down that everyone get out, I went into my office to get my pocketbook and also I grabbed the flashlight and my whistle. The flashlight was useful for the first couple of flights going down because it was completely dark, and there was water flowing down so it was dangerous too, and there was some debris, even on the landings. The air quality wasn't too bad, there was some smoke, light, it was never heavy smoke, where you couldn't breathe. And the lights in the stairwells worked all the way down except for the first two or three flights.*

Civilians who called the Port Authority police desk at 5 WTC were advised to leave if they could. Most civilians began evacuating without waiting to obtain instructions over the intercom system. Some had trouble reaching the exits because of damage caused by the impact. While evacuating, they were confused by deviations in the increasingly crowded stairwells, and impeded by doors which were locked or jammed as a result of the impact. Despite these obstacles, the evacuation was relatively calm and orderly.

Ms. McIntyre: *We never really heard any announcements or received any information all the way down. It got more and more congested as we went further down. For some reason we had to go down a long hallway and then when we got to the end of it, it was a locked door. So, we couldn't go any further; so we went back and went back up to 78 because we knew that that was a sky lobby.*

Within ten minutes of impact, smoke was beginning to rise to the upper floors in debilitating volumes and isolated fires were reported, although there were some pockets of refuge. Faced with insufferable heat, smoke, and fire, and no prospect for relief, some jumped or fell from the building.

Many civilians in the South Tower were unaware initially of what happened in the other tower.

Brian Clark, President, Euro Brokers Relief Fund: *I heard a loud boom. The lights in my office buzzed and I glanced up at them and then my peripheral vision, behind me, caught something and I spun in my chair, and just two yards from me outside the glass, 84 floors in the air, was swirling flames. I assumed that there had been an explosion upstairs.*

Richard Fern, Vice President, Facilities, Euro Brokers: *When I was entering the trading floor, I noticed all of the brokers clamoring on the building side where One World Trade Center is. And they were just screaming that a bomb went off.*

Many people decided to leave. Some were advised to do so by fire wardens. In addition, some entire companies, including Morgan Stanley, which occupied over 20 floors of the South Tower, were evacuated by company security officials.

The evacuation standard operating procedures did not provide a specific protocol for when to evacuate one tower in the event of a major explosion in the other. At 8:49 a.m. the deputy fire safety director in the North Tower spoke with his counterpart in the South Tower. They agreed to wait for the FDNY to arrive before determining whether to evacuate the South Tower. According to one fire chief, it was unimaginable, "beyond our consciousness," that another plane might hit the the adjacent tower.

In the meantime, an announcement came over the public address system in the South Tower urging people to stay in place.

Mr. Clark: *Strobe lights flashed, the siren gave its little "whoop whoop." And I heard a familiar voice say: "Your attention please, ladies and gentlemen, Building 2 is secure. There is no need to evacuate Building 2. If you are in the midst of evacuation, you may use the re-entry doors and the elevators to return to your office. Repeat, Building 2 is secure." And then the announcement was repeated.*

Indeed, evacuees in the sky lobbies and the main lobby were advised by building personnel to return to their offices. The Port Authority told us that the advice may have been prompted by the safety hazard posed by falling debris and victims outside the building. Similar advice was given by security officials in the sky lobby of the South Tower. We do not know the reason for this advice, in part because the on-duty deputy fire safety director in charge of the South Tower perished in the tower's collapse.

As a result of the announcement, many civilians in the South Tower remained on their floors. Others reversed their evacuation and went back up.

> ***Mr. Fern:*** *After the first announcement, for the Port Authority or the PA system not evacuate the floor, I guess I kinda felt comfortable to stay on the floor.*
>
> ***Mr. Clark:*** *At three minutes after 9:00, at the time of impact, I was talking to a gentleman who said he had gone down half a dozen or ten floors and had come back up because of that announcement.*
>
> ***Stanley Praimnath, Assistant Vice President, Administration, Mizvho Corp. Bank:*** *As we were about to exit the building through the turnstile first, the security guard looks at me and says, "Where are you going?" I said, "Well, I am going home." "Why?" "I saw fireballs coming down." "No, your building is safe and secure. Go back to your office."*

The Port Authority Police desk in 5 WTC gave conflicting advice to people in the South Tower about whether to evacuate.

We have been fortunate, in learning about the FDNY's emergency response, to have had the cooperation of two of the principal commanders in the North Tower on 9/11, Joseph Pfeifer and Peter Hayden. The chiefs were filmed throughout the morning by Jules Naudet, a French filmmaker preparing a documentary about firefighters. We have reviewed Naudet's unedited footage and also filmed Chiefs Pfeifer and Hayden as they viewed the footage, commenting on events as they relived them.

The FDNY response began immediately after the crash.

> ***Joseph Pfeifer, Deputy Assistant Chief, FDNY:*** *Right from the beginning, before we even arrived at the Trade Center, what you see is the beginning of an Incident Command System, where things are placed in order, and command is taken immediately.*
>
> ***Mr. Pfeifer (on 9/11):*** *"We have a number of floors on fire, it looks like the plane was aiming towards the building. Transmit a Third Alarm. We will have a staging area. Vesey and West Street—have the Third Alarm assignment go into that area—Second Alarm assignment report to the building."*

Mr. Pfeifer: *So from the bullet point when the plane hit the building, we started our Incident Command System.*

Chief Pfeifer and four companies arrived at about 8:52 a.m. As they entered the lobby, they immediately encountered badly burned civilians who had been caught in the path of the fireball.

The initial FDNY incident commanders were briefed on building systems by building personnel.

Peter Hayden, Assistant Chief, FDNY: *When I entered the lobby here, Joe had already assumed command and I came in. I was receiving a briefing from Chief Pfeifer here, and he was giving me a status of the—what was the building systems. He was informing me that the elevators were not working at the time and that they had a report from the Fire Safety Director that the plane had crashed in around the 78th floor and Joe had started units up and had then report to the 78th floor. Here we're convening with the Fire Safety Director and the Port Authority personnel. Our main concern at this time was evacuation of the building. And we wanted to get everyone out of the building.*

Units began mobilizing in the increasingly crowded lobby.

Mr. Pfeifer: *You have to understand that in the Trade Center that we had ninety-nine elevators in each of the towers, and those had to be checked to see if they were operating. Without elevators, it meant that the firefighters carrying a hundred pounds of equipment would have to climb some ninety floors just to get to where we could start a rescue operation for people trapped above the damaged area.*

Mr. Hayden: *These are units coming in and they're awaiting assignment and, as I said, we're trying to get elevators working. We are conferring with the Port Authority personnel there—and this took a period of time for them to come back to and confirm to us that we had no elevators operating. Once we realized that we didn't have elevators operating, we began giving instruction to members to start ascending the stairs by way of the B Stairwell.*

It was challenging for the chiefs to keep track of arriving units. They were frustrated by the absence of working building systems and elevators.

Mr. Hayden: *My aide had arrived and he was setting up the Command Board. As you can see him in on the background, he was setting up the Board, which accounts for the units as they come in. Once they are given an assignment they are entered in on the Command Board. That's the way we keep track of the individuals.*

Mr. Hayden: *I am walking down off to the right here—left now— waiving my radio trying to get the Port Authority personnel and the chief fire to come with me off a little bit to have a private discussion regarding the building systems and particularly the elevators. That was a primary concern of ours at the time. That we didn't have the elevators available to us. You can see the damage that the planes caused. You can see the tiles on the floor there. Right now we are seeing more units come in.*

Shortly before 9:00 a.m., FDNY chiefs advised building personnel and a Port Authority Police Department officer to evacuate the adjacent South Tower. Impressed by the magnitude of the catastrophe, fire chiefs had decided to clear the whole WTC complex, including the South Tower.

By 9:00 a.m., many senior FDNY leaders, including seven of the eleven most highly ranked chiefs in the department, had begun responding from headquarters in Brooklyn. The Chief of Department and the Chief of Operations called a 5th alarm, which would bring additional engine and ladder companies; they also called two more FDNY Rescue teams. The Chief of Department arrived at approximately 9:00 a.m. He established an overall Incident Command Post on the median of the West Side Highway.

Emergency Medical Service (EMS) personnel were directed to one of four triage areas around the perimeter of the WTC. In addition, many private hospital ambulances were rushing to the WTC complex.

In the North Tower lobby, the chiefs quickly made the decision that the fire in the North Tower could not be fought.

Mr. Hayden: *Well, we realized that because of the impact of the plane that there was some structural damage to the building, and most likely that the fire suppression systems within the building were most likely damaged and possibly inoperable. We made that conclusion. We knew that at the height of the day there was as many as fifty thousand people in this building. We had a large volume of fire on the upper floors. Each floor was approximately an acre in size. Several floors of fire would have been beyond the fire extinguishing capability of the forces that we had on hand. So we determined very early on that this was going to be strictly a rescue mission. We were going to evacuate the building, get everybody out, and then we were going to get out.*

The chiefs decided to concentrate on evacuating civilians from the North Tower, although they held various views about whether anyone at or above the impact zone could be saved.

As of 9:00 a.m., if only those units dispatched had responded, and if those dispatched units were not "riding heavy" with extra men, 235 firefighters would be at the scene or en route. The vast majority of these would be expected to enter the North Tower.

Mr. Hayden: *This is Rescue One entering the lobby now. And at this time we were starting to get a number of distress calls coming in, particularly from the 9-1-1 and from Port Authority personnel of people in distress on various floors. As we got the information coming in, we would give the assignments out to the companies. If we had a report of people trapped in elevators we would send a company up to that specific floor. We had reports at one point in time of people in wheelchairs and we gave out assignments to go up and get the people out from on whatever particular floor they were calling from. These were difficult assignments. I had a strong inner sense throughout this entire operation that we were going to lose people this day.*

Mr. Pfeifer: *What we did know was that thousands of people, tens of thousands of people, were in their greatest moment of need and the firefighters came in and they received orders from our Command staff, and they turned around and they picked up their hose, and they picked up their tools, and they went upstairs. What you see here is, this footage, is actually my brother going upstairs. As so many other firefighters, this was the last time we saw them.*

The NYPD response also began seconds after the crash. At 8:47 a.m. the NYPD ordered a Level 3 Mobilization. An initial mobilization point for patrol officers was established on the west side of the intersection of West and Liberty Streets. NYPD rescue teams were directed to mobilize at the intersection of Church and Vesey Streets. The first of these officers arrived at Church and Vesey at 8:56 a.m. At 8:50 a.m., the aviation unit of the NYPD dispatched two helicopters to the WTC to report on conditions and assess the feasibility of a rooftop landing or special rescue operations.

Within ten minutes of the crash, NYPD and Port Authority Police personnel were assisting with the evacuation of civilians.

At 8:58 a.m., a helicopter pilot reported on rooftop conditions.

James Ciccone, Police Officer, NYPD Aviation Unit: *On the morning of September 11th, as I arrived at World Trade Tower 1, I was accessing the damage on the north side of the building, and the rooftop area for the possibility of rooftop extraction from one of our heavier lift helicopters. And at that point, a few passes, and slow passes, we made a determination that we didn't see anybody up on the roof, but more so we had problems with the heat and the smoke from the building. The heat actually made it difficult for us to hold the helicopters because it would interfere with the rotor system.*

At 8:58 a.m., while en route, the Chief of the NYPD raised the department's mobilization to Level 4—its highest level—which would result in the dispatch of approximately 30 lieutenants, 100 sergeants, and 800 police officers, in addition to rescue teams, which were already at the scene. The Chief of Department arrived at Church and Vesey at 9:00 a.m.

At 9:01 a.m., the NYPD patrol mobilization point at West and Liberty was moved to West and Vesey, in order to handle the greater number of patrol officers who would be responding to the Level 4 mobilization. These officers would be stationed around the perimeter of the complex to assist with evacuation and crowd control.

Around the city, the NYPD cleared routes along major thoroughfares for emergency vehicles responding to the WTC. The NYPD and Port Authority police coordinated the closing of bridges, subways, PATH trains, and tunnels into Manhattan.

The Port Authority's on-site commanding police officer was standing in the concourse when a fireball exploded out of the North Tower lobby, causing him to dive for cover. Within minutes of impact Port Authority police from bridge, tunnel, and airport commands began responding to the WTC. Officers from the WTC command began assisting in evacuating civilians. The Port Authority Police Department lacked clear standard operating procedures to guide personnel responding from one command to another during a major incident.

The fire safety director in charge of the complex arrived in the North Tower lobby at approximately 8:52 a.m. and was informed by the deputy fire safety director there that evacuation instructions had been announced over the public address system within one minute of impact. As mentioned earlier, to our knowledge, because the public address system had been damaged upon impact, no civilians heard that announcement.

At 9:00 a.m., the Port Authority Police commanding officer ordered an evacuation of civilians in the World Trade Center complex because of the danger posed by highly flammable jet fuel from Flight 11. The order was issued, however, over a radio channel which could be heard only by officers on the Port Authority WTC command channel. There is no evidence that this order was communicated to officers in other Port Authority Police commands or to members of other responding agencies. At 9:00 a.m., the Port Authority Police Superintendent and Chief of Department arrived together at the WTC complex, and made their way to the North Tower lobby. Some Port Authority officers immediately began climbing the stairs and assisting civilians.

> ***David Lim, Port Authority Police Department:*** *I went up the B Staircase now, and so I proceeded up on that one. While people were coming down on that staircase, there were some people that were burnt and injured—required assistance. So, I could have taken one person and brought that person down I guess, but I thought the greater good would be to get to the 44th floor and assist more people. So I assigned the people that were uninjured to help carry this person down. There is a triage area downstairs, and that seemed to work out. People were more than happy to help each other out.*

Officials in the Office of Emergency Management's headquarters at 7 WTC began to activate its emergency operation center immediately after the North Tower was hit. At approximately 8:50 a.m. a senior representative from that office arrived in the lobby of the North Tower and began to act as its field responder.

Summary

In the 17-minute period between 8:46 a.m. and 9:03 a.m. on September 11, New York City and the Port Authority of New York and New Jersey had mobilized the largest rescue operation in the City's history. Well over one thousand first responders had been deployed, evacuations had begun, and the critical decision that the fire could not be fought had been made.

The decision was made to evacuate the South Tower as well. At 9:02 a.m., a further announcement in the South Tower advised civilians to begin an orderly evacuation if conditions warranted.

One minute later, a plane hit the South Tower.

From 9:03 until 9:59 a.m.

At 9:03 a.m., the hijacked United Airlines Flight 175 hit 2 WTC (the South Tower) from the south, crashing through the 78th to 84th floors.

> ***Video:*** *UA 175 hits South Tower.*

What had been the largest and most complicated rescue operation in city history instantly doubled in magnitude.

The plane banked as it hit the building, leaving portions of the building undamaged on impact floors. As a consequence—and in contrast to the situation in the North Tower—one of the stairwells (Stairwell A) initially remained passable from top to bottom.

> ***Mr. Praimnath:*** *I am looking to the direction of the Statue of Liberty, and I am looking at an airplane coming, eye level, eye contact, towards me—giant gray airplane. I am still seeing the letter "U" on its tail, and the plane is bearing down on me. I dropped the phone and I screamed and I dove under my desk. It was the most ear-shattering sound ever. The plane just crashed into the building. The bottom wing sliced right through the office and it stuck in my office door twenty feet from where I am huddled under my desk.*

At the lowest point of impact, the 78th floor sky lobby, hundreds had been waiting to evacuate when the plane hit. Many were killed or injured severely; others were relatively unaffected. We know of at least one civilian who seized the initiative and shouted that anyone who could walk should walk to the stairs, and anyone who could help should help others in need of assistance. At least two small groups of civilians descended from that floor.

Others remained alive in the impact zone above the 78th floor, though conditions on these floors began to deteriorate within ten minutes.

Mr. Praimnath: *Upon impact, the ceiling caved in, part of the 82nd floor collapsed. I am trapped under a steel desk. The only desk that stood firm, everything else is broken up. It looked like a demolition crew came and just knocked everything. Every wall was broken up. Computers were broken up—everything.*

As in the North Tower, civilians became first responders.

Mr. Clark: *We went down the hallway on the 84th floor, and I happened to turn left to Stairway A. We descended only three floors, to the 81st floor—the group of seven of us—when we met a very heavy-set woman and she just emphatically told our group, "Stop, stop! We have just come off a floor in flames and we've got to get above the flames and smoke." That's about all I heard of her conversation because I heard somebody inside the 81st floor banging on the wall and screaming, "Help, help! I am buried. Is anyone there? Help, I can't breathe!" And, I noticed that my workmates, the heavy-set woman and her traveling companion were starting to go up the stairs. And that day they all perished unfortunately. But they were dealing with the information they had. None of us really had known what had happened or what was about to happen.*

Mr. Praimnath: *I am watching the plane, I am watching the floor, and somebody heard me scream on the other end. The person had a flashlight.*

Mr. Clark: *This person was directing me. This person who was trapped, saying, "You turn left, right," and I kept moving with my flashlight.*

Mr. Praimnath: *The man says, "Knock on the wall and I will know exactly where you are."*

Mr. Clark: *Somehow I grabbed him under the arms, or around the neck, pulled him up and over this, and what, as I say later, I learned was a wall. I didn't know what it was at the time. And we fell in a heap on the floor.*

Mr. Praimnath: *And Brian put his hand around my neck and said, "Come on, let's go home."*

Some civilians ascended the stairs and others remained on affected floors to assist colleagues.

Although Stairwell A in the South Tower remained passable from above the impact zone to the lobby, conditions were difficult and deteriorating.

Mr. Fern: *Upon entering Stairway A, I started to run down the stairs. The conditions in the stairs were smoky. There were no lights in the stairway, there was a glow strip on the floor in the center of the stairs. There was also a glow strip on the handrail.*

Mr. Praimnath: *Brian knew we had to take the Stairwell A, but there was so much rubble. I don't remember much. I think we just slid right from the 81st floor to the 80th floor. Because of all that sheet rock and ceiling tiles that was on there. We actually tried to walk, and we slid right down.*

Mr. Clark: *There was smoke, there was a lot of water flowing under foot. And in a couple of places, I'm guessing around the 78th, 77th floor, there was only one layer of dry wall left that was cracked, and the flames were licking up the other side of the wall.*

Many ascended in search of clearer air or to attempt to reach the roof. Those attempting to reach the roof were thwarted by locked doors. Others attempting to descend were frustrated by jammed or locked doors in stairwells or confused by the structure of the stairwell deviations.

Mr. Clark: *As we descended the stairways, one strange thing that I recalled happening is that the Stairway A at least, and I learned later that Stairway C is the same, the stairway just doesn't go back and forth all the way down. As you descend a few floors, you come to a situation where you must traverse down a hallway. You go down a hallway, you make a turn, the stairway continues, there's another transfer later. A bit of confusion, especially in the darkness. And especially when that was the distress area.*

By 9:35 a.m., the West Street lobby level of the South Tower was becoming overwhelmed by injured who had descended to the lobby but were having difficulty continuing.

Within 15 minutes after the impact, debilitating smoke had reached at least one location on the 100th floor, and severe smoke conditions were reported throughout floors in the nineties and hundreds over the course of the following half hour. By 9:30 a.m. a number of civilians who had failed to reach the roof and could not descend because of intensifying smoke became trapped on the 105th floor. There were reports of tremendous smoke in most areas of that floor, but at least one area remained less affected until shortly before the building collapsed.

Still, there were several areas between the impact zone and the uppermost floors where conditions were better. At least a hundred people remained alive on the 88th and 89th floors, in some cases calling 9-1-1 for direction. The 9-1-1 system remained plagued by the operators' lack of awareness of what was occurring and by the sheer volume of emergency calls.

Mr. Clark: *I had a very frustrating experience calling 9-1-1. It was, I am sure, over three minutes in duration my conversation with them. Not five minutes, but certainly over three minutes where I told them when they answered the phone, where I was, that I had passed somebody on the 44th floor, injured—they need to get a medic and a stretcher to this floor, and described the situation in brief, and*

the person then asked for my phone number, or something, and they said—they put me on hold. "You gotta talk to one of my supervisors"—and suddenly I was on hold. And so I waited a considerable amount of time. Somebody else came back on the phone, I repeated the story. And then it happened again. I was on hold a second time, and needed to repeat the story for a third time. But I told the third person that I am only telling you once. I am getting out of the building, here are the details, write it down, and do what you should do, and put the phone down. Stanley and I went back to the stairs, we continued all the way down to the plaza level.

No one in the first responder community knew that Stairwell A remained potentially passable. No callers were advised that helicopter rescues were not feasible. Civilians below the impact were also generally advised to remain where they were by 9-1-1 or FDNY dispatch operators.

Back in the North Tower, evacuation generally continued. Thousands of civilians continued to descend in an orderly manner. On the 91st floor, the highest floor with stairway access, all but one were uninjured and able to descend.

At 9:11 a.m., Port Authority workers at the 64th floor of the North Tower were told by the Port Authority Police desk in Jersey City to stay near the stairwells and wait for assistance. These workers eventually began to descend anyway, but most of them died in the collapse of the North Tower.

Those who descended Stairwell B of the North Tower exited between the elevator banks in the lobby. Those who descended the Stairwells A and C exited at the raised mezzanine level, where the smoky air was causing respiratory problems. All civilians were directed into the concourse at lobby level. Officers from the Port Authority and New York Police Departments continued to assist with the evacuation of civilians, for example, guiding them through the concourse in order to shelter the evacuees from falling debris and victims.

Ms. McIntyre: *When we went down into the concourse, it was just people trying to get out. The security or rescue people just still directing us to keep moving and go out towards Borders and then go out.*

By 9:55 a.m., those few civilians who were still evacuating consisted primarily of injured, handicapped, elderly, or severely overweight individuals.

Calls to 9-1-1 reflect that others remained alive above and below the impact zone, reporting increasingly desperate conditions.

Immediately after the second plane hit, the FDNY Chief of Department called a second 5th alarm. While nine Brooklyn units had been staged on the Brooklyn side of the Brooklyn Battery tunnel at 8:53 a.m., these units were not dispatched to the scene at this time. Instead, units from further away were dispatched.

Just after the South Tower impact, chiefs in the North Tower lobby huddled to discuss strategy for the operations and communication in the two towers.

At 9:05 a.m., two FDNY chiefs tested the WTC complex's repeater system. This was the system installed after the 1993 bombing in order to enable firefighters operating on upper floors to maintain consistent radio communication with the lobby command. The system had been activated for use on portable radios at 8:54 a.m., but a second button which would have enabled the master hand-set was not activated at that time. The chief testing the master handset at 9:05 a.m. did not realize that the master handset had not been activated. When he could not communicate, he concluded that the system was down. The system was working, however, and was used subsequently by firefighters in the South Tower.

The FDNY Chief of Safety agreed with the consensus that the only choice was to let the fires "burn up and out." The chiefs in the North Tower were forced to make decisions based on little or no information.

> ***Mr. Pfeifer:*** *One of the most critical things in a major operation like this is to have information. We didn't have a lot of information coming in. We didn't receive any reports of what was seen from the helicopters. It was impossible to know how much damage was done on the upper floors, whether the stairwells were intact or not. A matter of fact, what you saw on TV, we didn't have that information.*
>
> ***Mr. Hayden:*** *People watching on TV certainly had more knowledge of what was happening a hundred floors above us than we did in the lobby. Certainly without any information, without critical information coming in, the cumulative effect of the information coming in, it's very difficult to make informed critical decisions without that information. And it didn't exist that day. Our communication systems were down. Our building suppression systems were down, the elevators. We had no video capability throughout the entire operation.*

Climbing up the stairwells carrying heavy equipment was a laborious task even for physically fit firefighters. Though the lobby command post did not know it, one battalion chief in the North Tower found a working elevator, which he took to the 16th floor before beginning to climb. Just prior to 10:00 a.m., about an hour after firefighters first began streaming into the North Tower, at least two companies of firefighters had climbed to the sky lobby on the 44th floor of the North Tower. Numerous units were located between the 5th and 37th floors in the North Tower.

At approximately 9:07 a.m., two chiefs commenced operations in the South Tower lobby. Almost immediately they were joined by an Office of Emergency Management field responder. They were not immediately joined by a sizable number of fire companies, as most, if not all units which had been in the North Tower lobby remained there. One chief and a ladder company found a working elevator to the 40th floor. From there they

proceeded to climb Stairwell B. One member of the ladder company stayed behind to operate the elevator.

Unlike the commanders in the North Tower lobby, these chiefs in the South Tower kept their radios on the repeater channel. For the first 15 minutes of the operations in the South Tower, communications among them and the ladder company which ascended with the chief worked well. Upon learning from a company security official that the impact zone began at the 78th floor, a ladder company transmitted this information, and the chief directed an engine company on the 40th floor to attempt to find an elevator to reach that upper level.

Unfortunately, no FDNY chiefs outside the South Tower realized that the repeater channel was functioning and being used by units in the South Tower. Chiefs in the North Tower lobby and outside were unable to reach the South Tower lobby command post initially.

Communications also began to break down within the South Tower. Those units responding to the South Tower were advised to use tactical channel 3. From approximately 9:21 a.m. on, the ascending chief was unable to reach the South Tower lobby command post. The lobby chief ceased to transmit on repeater channel 7 at that time.

The first FDNY fatality of the day occurred at approximately 9:25 a.m. when a civilian landed on a fireman on West Street.

By 9:30 a.m., few of the units dispatched to the South Tower had arrived at their staging area. Many units were unfamiliar with the complex and could not enter the South Tower because of the danger of victims and debris falling on Liberty Street. Some units entered the Marriott Hotel and were given assignments there; others mistakenly responded to the North Tower. An additional 2nd alarm was requested at 9:37 a.m. because so few units had reported. At this time, units which had been staged on the Brooklyn side of the Brooklyn Battery Tunnel were sent, and many of them arrived at the WTC by 9:55 a.m.

At 9:50 a.m., a ladder company had made its way up to the 70th floor of the South Tower. There they encountered many seriously injured people. At 9:53 a.m. a group of civilians were found trapped in an elevator on the 78th floor sky lobby. By 9:58 a.m., the ascending chief had reached the 78th floor on Stairwell A, and reported that it looked open to the 79th floor. He reported numerous civilian fatalities in the area. A ladder company on the 78th floor was preparing to use hoses to fight the fire when the South Tower collapsed.

So far we have concentrated on the Fire Department's command set-up in the North and South Towers. The overall incident command was just outside the WTC complex. At approximately 9:10 a.m., because of the danger of falling debris, this command post was moved from the middle of West Street to its western edge by the parking garage in front

of 2 World Financial Center. The overall command post's ability to track all FDNY units was extremely limited.

At approximately 9:20 a.m., the Mayor and the NYPD Commissioner reached the FDNY overall command post. The FDNY Chief of Department briefed the Mayor on operations and stated that this was a rescue mission of civilians. He stated that he believed they could save everyone below the impact zones. He also advised that, in his opinion, rooftop rescue operations would be impossible. None of the chiefs present believed a total collapse of either tower was possible. Later, after the Mayor had left, one senior chief present did articulate his concern that upper floors could begin to collapse in a few hours, and so he said that firefighters thus should not ascend above floors in the sixties.

By 9:20 a.m., significantly more firemen than were dispatched were at the WTC complex or en route. Many off-duty firemen were given permission by company officers to "ride heavy." Others found alternative transportation and responded. In one case an entire company of off-duty firefighters managed to congregate and come to the WTC as a complete team, in addition to the on-duty team which already had been dispatched to the scene. Numerous fire marshals also reported to the WTC.

At 9:46 a.m., the Chief of Department called a third 5th alarm. This meant that over one-third of all of the FDNY units in New York City were at or en route to the WTC.

The Police Department was also responding massively after the attack on the South Tower. Almost 2,000 officers had been called to the scene. In addition, the Chief of the Department called for Operation Omega, to evacuate and secure sensitive locations around the city. At 9:06 a.m. the NYPD Chief of Department instructed that no units were to land on the roof of either tower.

An NYPD rescue team in the North Tower lobby prepared to climb at approximately 9:15 a.m. They attempted to check in with the FDNY chiefs present, but were rebuffed. Office of Emergency Management personnel present did not intercede. The team went to work anyway, climbing Stairwell B in order to set up a triage center on upper floors for victims who could not walk. Later, a second rescue team arrived in the North Tower and did not attempt to check-in with the FDNY command post.

NYPD rescue teams also entered the South Tower. The Office of Emergency Management field responder present ensured that they check-in with the lobby chief. In this case, both agreed that the rescue team would ascend in support of FDNY personnel. By 9:15 a.m., two more of these teams were preparing to leave the Church and Vesey mobilization point in order to enter the towers.

At approximately 9:30 a.m. one of the helicopters present advised that a rooftop evacuation still would not be possible.

> ***Mr. Ciccone:*** *After the Second Tower was hit, we tried to make our way towards that area, but the smoke from the first building, Tower 1, obscured the rooftop of*

Tower 2. It was the first hour-and-a-half that was critical for these observations—for rooftop rescue. We flew a horseshoe pattern—in that horseshoe pattern—for over a pattern of about an hour-and-a-half before the buildings collapsed. That, the same observations were made. There was no one on the roof. Our ability to get in that type position was still factored in by the heat, and made it difficult to even, to make it plausible, to get on the roof.

At 9:37 a.m., a civilian on the 106th floor of the South Tower reported to a 9-1-1 operator that a lower floor—"90-something floor"—was collapsing. This information was conveyed incorrectly by the 9-1-1 operator to an NYPD dispatcher. The NYPD dispatcher further confused the substance of the 9-1-1 call in conveying at 9:52 a.m. to NYPD officers that "the 106th floor is crumbling."

By 9:58 a.m., there were two NYPD rescue teams in each of the two towers, another approaching the North Tower, and approximately ten other NYPD officers climbing in the towers.

David Norman, Police Officer, NYPD Emergency Service Unit: *We went up to the 31st floor where we triaged probably, somewhere around six to a half dozen to a dozen firefighters for a random number of things, chest pains, difficulty breathing, things like that. Prior to that, we would notice that the amount of civilians had dwindled down to almost none. At that point, while we were continuing, or conducting this triage, the South Tower collapsed.*

In addition, there were numerous NYPD officers on the ground floors throughout the complex, assisting with evacuation, and patrolling and securing the WTC perimeter. A greater number of NYPD officers were staged throughout lower Manhattan, assisting in civilian evacuation, keeping roads clear, and conducting other operations in response to the attacks.

Prior to 9:59 a.m., no NYPD helicopter transmission predicted that either tower would collapse.

Initial responders from outside Port Authority Police commands proceeded to the police desk in 5 WTC or to the fire safety desk in the North Tower lobby. Officers were assigned to assist in stairwell evacuations and to expedite evacuation in the plaza, concourse, and PATH station. As reports of trapped civilians were received, Port Authority Police officers also started climbing stairs for rescue efforts. Others, including the Port Authority Police Superintendent, began climbing toward the impact zone in the North Tower. The Port Authority Police Chief and other senior officers began climbing in the North Tower with the purpose of reaching the Windows of the World restaurant on the 106th floor, where there were at least 100 people trapped.

The Port Authority Police Department lacked clear standard operating procedures for coordinating a multi-command response to the same incident. It also lacked a radio channel that all commands could access. Many officers remained on their local

command channels, which did not work once they were outside the immediate geographic area of their respective commands.

Many Port Authority Police officers from different commands responded on their own initiative. By 9:30 a.m. the Port Authority's central police desk requested that responding officers meet at West and Vesey and await further instructions. In the absence of pre-determined leadership roles for an incident of this magnitude, a number of Port Authority inspectors, captains, and lieutenants stepped forward at West and Vesey to formulate an on-site response plan. They were hampered by not knowing how many officers were responding to the site and where those officers were operating. Many of the officers who responded to this command post lacked suitable protective equipment to enter the complex.

By 9:58 a.m., one Port Authority Police officer had reached the sky lobby on the 44th floor of the North Tower. Also in the North Tower, two Port Authority teams had reached floors in the upper and lower twenties. Numerous officers also were climbing in the South Tower, including the Port Authority rescue team. Many also were on the ground floors of the complex assisting with evacuation, manning the Port Authority Police desk in 5 WTC, or supporting lobby command posts.

> ***Sue Keane, Port Authority Police Department:*** *When I got up to Stairwell C in the Mezzanine area, I was the only Port Authority police officer there at the time. There were two civilians there, one Port Authority employee, and there was a Secret Service Agent there. Afterwards, some NYPD officers showed up, and at that time everybody just basically worked together. There was no standard operating procedure. We just did whatever we had to do to guide people out of the stairwell.*

Summary

The emergency response effort escalated with the crash of United 175 into the South Tower. With that escalation, communications and command-and-control became increasingly critical and increasingly difficult. First responders assisted thousands of civilians in evacuating the towers, even as incident commanders from responding agencies lacked knowledge of what other agencies and, in some cases, their own responders were doing.

Then the South Tower collapsed.

From 9:59 until 10:26 a.m.

At 9:59 a.m., the South Tower collapsed in ten seconds.

> ***Video:*** *South Tower collapses.*

We believe that all of the people still inside the tower were killed, as well as a number of individuals—both first responders and civilians—in the concourse, the Marriott, and on neighboring streets.

The next emergency issue was to decide what to do in the North Tower, once the South Tower had collapsed. In the North Tower, 9-1-1 calls placed from above the impact zone grew increasingly desperate. The only civilians still evacuating above the 10th floor were those who were injured or handicapped. First responders were assisting those people in evacuating.

Every FDNY command post ceased to operate upon the collapse of the South Tower.

> ***Mr. Pfeifer:*** *We were in the North Tower communicating with some of our people, and all of a sudden we hear this load roar. And, we were able to go into a small alcove. Immediately to our left, just adjacent to the passageway to 6 World Trade Center. And as you see, everything goes black. And what we thought at this point is that we were the ones in trouble, that something happened, something fell off of the building and crashed into the lobby—that we in the lobby—or maybe the elevators had blown out. But we thought we were the guys in trouble. And when we couldn't maintain our command post in the lobby, we made a decision that we needed to regroup and pull people out of the building.*

> ***Mr. Hayden:*** *We were completely unaware that the South Tower had collapsed. I don't ever think it was in our realm of thought. We knew some significant event had occurred, whether it was another plane or a bomb, or one of the elevators crashing into the lobby. But certainly it was not in our thought process that the South Tower had collapsed.*

Lacking awareness of the South Tower's collapse, the chiefs in the North Tower nonetheless ordered an evacuation of the building.

> ***Mr. Pfeifer:*** *I got on the radio and I said, "Command to all units in Tower 1, evacuate the building." And I heard that message relayed up. And then a little later I repeated it: "Evacuate the building." At that point, we had firefighters many floors above, and it takes some time to come down. What we didn't know at that point was that we were running out of time.*

An FDNY marine unit radioed immediately that the South Tower had collapsed. To our knowledge, this information did not reach the chiefs at the scene.

Within minutes some firefighters began to hear evacuation orders over tactical 1, the channel being used in the North Tower. Some FDNY personnel also gave the evacuation instruction on command channel 2, which was much less crowded, as only chiefs were using it. Two battalion chiefs on upper floors heard the instruction on Command 2 and repeated it to everyone they encountered. At least one of them also repeated the evacuation order on tactical 1.

Other firefighters did not receive the transmissions. The reasons varied. Some FDNY radios may not have picked up the transmission in the difficult high-rise environment. The difficulty of that environment was compounded by the numerous communications all attempted on tactical 1 after the South Tower collapsed; the channel was overwhelmed, and evacuation orders may have been lost. Some of the firefighters in the North Tower were among those who had responded even though they were off-duty, and they did not have their radios. Finally, some of the firefighters in the North Tower were supposed to have gone to the South Tower and were using the tactical channel assigned to that Tower.

Many firefighters who did receive the evacuation order delayed their evacuation in order to assist victims who could not move on their own. Many perished.

Many chiefs on the scene were unaware that the South Tower collapsed. To our knowledge, none of the evacuation orders given to units in the North Tower followed the specific protocols—which would include stating "mayday, mayday, mayday"—to be given for the most urgent building evacuation. To our knowledge none of the evacuation orders mentioned that the South Tower had collapsed. Firefighters who received these orders lacked a uniform sense of urgency in their evacuation.

> ***Mr. Hayden:*** *Even with the order to evacuate, the firefighters themselves on the upper floors were not aware that the building had collapsed. They didn't realize the tremendous amount of danger they were in at that time.*
>
> ***Mr. Pfeifer:*** *I didn't know, even at this point, that the entire South Tower collapsed. What we were doing here was regrouping, and the firefighters were coming down, and they were coming down with people. And they were helping more people to get out of the building. Like us, they didn't know the building fell down.*

The Police Department had a better understanding of the situation. The South Tower's collapse disrupted the NYPD rescue team command post at Church and Vesey. Nonetheless, the NYPD command structure gave vital help to its units.

> ***Kenneth Winkler, Detective, NYPD Emergency Service Unit:*** *There was this tremendous roar—tremendous. I looked up and the South Tower was imploding. I got behind a vehicle and it went from white to gray to black, and then back again. As this was happening, I was calling units out of the North Tower. The units in the North Tower did not know that the South Tower had collapsed.*
>
> ***Mr. Norman:*** *We at that point—because we were in an area where there were no windows—didn't exactly know what was going on. Our building obviously violently shook. The noise from the collapse was heard by us, but we didn't know exactly what we were going through.*

Mr. Winkler: *The building was shaking, the ceiling tiles were falling, but we did not know why—this was the result of the South Tower collapsing.*

Mr. Norman: *As soon as that subsided somewhat, we were communicated from Officer Winkler, who was our command post operator, that the South Tower had completely collapsed and we were being called out of the building. At first, we kinda didn't understand it, that transmission. We clearly understood it, but to think that a building of one hundred and some stories was like, you know, almost, not believable at that moment. So we asked for him to confirm that and to repeat his message. He then explained that there was no South Tower, that it was absolutely gone, and our building was in imminent danger of collapse, and that we should come out of the building immediately.*

Mr. Winkler: *They descended down in a controlled manner, still checking the floors on the way down. They didn't rush out. As they got down and they got across West Street, the North Tower collapsed.*

Many NYPD radio frequencies became overwhelmed with transmissions relating to injured, trapped, or missing officers. By 10:10 a.m., the NYPD rescue team advised that they were moving their command post north and began moving vehicles in that direction.

NYPD Aviation radioed in immediately that the South Tower had collapsed. At 10:08 a.m., an aviation helicopter pilot advised that he did not believe the North Tower would last much longer. There was no ready way to relay this information to the fire chiefs in the North Tower.

Both NYPD rescue teams in the North Tower knew that the South Tower had collapsed and evacuated the building. One remained in the complex near 5 and 6 WTC in order to keep searching for people who needed help. A majority of these officers died.

At the time of the South Tower's collapse, a number of NYPD and Port Authority Police officers, as well as some FDNY personnel, were operating in different groups in the North Tower mezzanine, the WTC plaza, and the concourse, as well as on the neighboring streets. Many of these officers were thrown into the air and were enveloped in the total darkness of the debris cloud. Within minutes of the South Tower collapse, these officers began to regroup in the darkness and to lead the remaining civilians and injured officers out of the complex. Many of these officers continued rescue operations in the immediate vicinity of the North Tower and remained there until the North Tower collapsed. Many lost their lives.

The collapse of the South Tower also forced the evacuation of the Port Authority Police command post on West and Vesey, forcing its officers to move north. There is no evidence that Port Authority Police officers from outside the WTC command ever heard an evacuation order on their radios. Some of these officers in the North Tower determined to evacuate, either on their own, or in consultation with other first responders they came across. One Port Authority Police officer from the WTC command reported

that he heard an urgent evacuation instruction on his radio soon after the South Tower collapsed.

> ***Mr. Lim:*** *I remember stopping on the floors now, from forty-four down, to check the floors to see if there was anybody left behind. There were some people that were, I guess, elderly, or that required assistance, that were just starting to come down now, so I just gathered them. There was no time to wait for anyone. I felt that time was of essence. And I collected them, and with my party, we started going down.*

Other Port Authority police stayed in the WTC complex, assisting with the evacuation.

> ***Ms. Keane:*** *You can see into the plaza, but it's almost like an alley way between Tower One and I believe it was 6 the Immigrations Department, because I could see the Immigrations sign still. So I knew at that point where I was and that we could actually follow that wall down and go into 5. I had a clear view to look up and I would look up to see whether or not things were falling. You couldn't see too high up. It wasn't like I could—you could hear things. It was strange. You could hear whistling. You could almost tell when things were coming down. And if things were kinda quiet then I would holler, "send two over," and they would come across. And we probably got another ten or so people out. I honestly don't know what the count was.*

The North Tower collapsed at 10:26 a.m.

The FDNY Chief of Department and the Port Authority Police Department Superintendent and many of their senior staff were killed. The Fire Department of New York suffered the largest loss of life of any emergency response agency in U.S. history. The Port Authority Police Department suffered the largest loss of life of any American police force in history. The New York Police Department suffered the second largest loss of life of any police force in U.S. history, exceeded only by the loss of Port Authority police the same day.

The nation suffered the largest loss of civilian life on its soil as a result of a domestic attack in its history.

> ***Mr. Pfeifer:*** *At this point, we heard a load roar again and someone yelled that the building was collapsing. And, we started to run. With bunker gear, you can't run too far, especially when a building is a quarter mile high. And what happened inside the building now happened outside. This beautiful sunny day now turned completely black. We were unable to see the hand in front of our face. And there was an eerie sound of silence. That day we lost 2,752 people at the World Trade Center; 343 were firefighters. But we also saved 25,000 people. And that's what people should remember because firefighters and rescuers went in and they knew it was dangerous, but they went in to save people. And they saved many.*